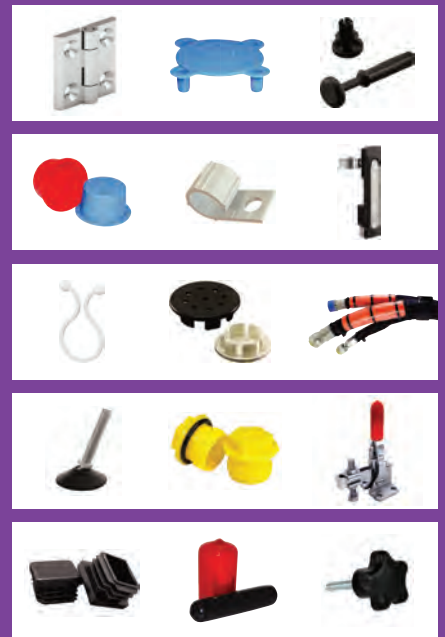


Essential Solutions

FULL RANGE CATALOG





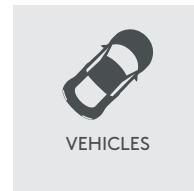
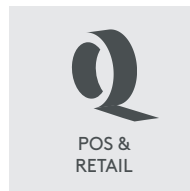
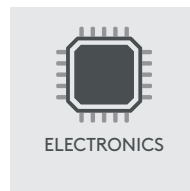
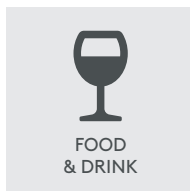
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COMPONENTS

WELCOME TO ESSENTRA

We are global manufacturers and distributors of vital component parts for hundreds of markets and thousands of products. We're proud of what we do and believe that even the smallest products have a big part to play.



OUR KEY MARKETS



50+ YEARS of GLOBAL
MANUFACTURING
EXCELLENCE

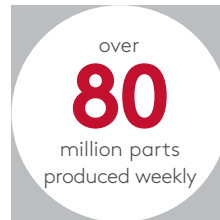
GLOBAL REACH WITH A LOCAL TOUCH

We bring together the best products, ideas and distribution.



WHO IS ESSENTRA COMPONENTS?

WHETHER YOU HAVE A GLOBAL OR LOCAL PERSPECTIVE, OUR COMBINED REACH AND COLLECTIVE INSIGHT CREATES SOLUTIONS DESIGNED FOR YOU



NEW PINS & LANYARDS



View
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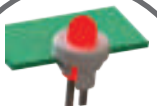
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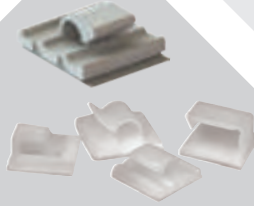
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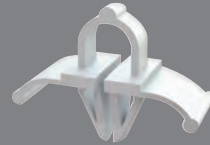
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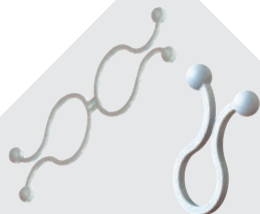
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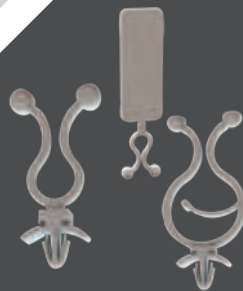
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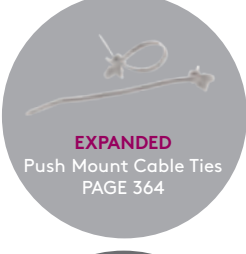
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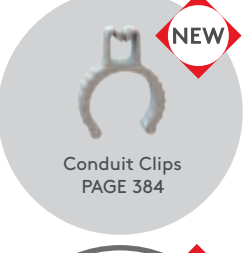
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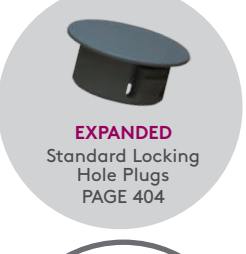
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NEW PRODUCTS & EXPANDED LINES

AREAS OF EXPERTISE

AUTOMOTIVE



Thousands of standard products are complemented by additional capabilities for custom solutions.

OIL & GAS



Protect against pipe contamination and damage to machined threads and flange faces.

FLUID POWER



A comprehensive line of protection products to protect fittings and hoses.

CONSTRUCTION & AGRICULTURAL MACHINERY



Heavy duty components provide numerous benefits including noise isolation and reducing vibration

ELECTRONICS



Components made from engineered resins provide excellent insulation while being lightweight and cost effective.

INDUSTRIAL MACHINERY



Cost effective machine safety products that provide real value.

ELECTRICAL ENCLOSURES




A wide range of locks, hinges and accessories for indoor and outdoor cabinets, all with excellent security

METAL FABRICATION



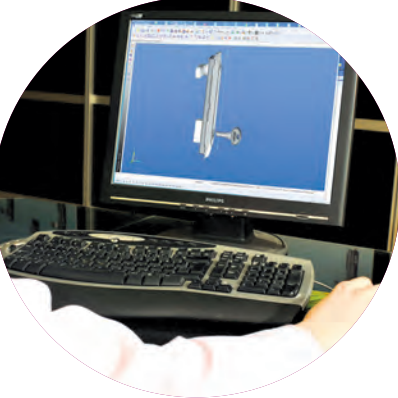
Thousands of components support your in-plant operations while our extensive range of hardware adds the perfect finishing touch.

R&D AND PRODUCTION



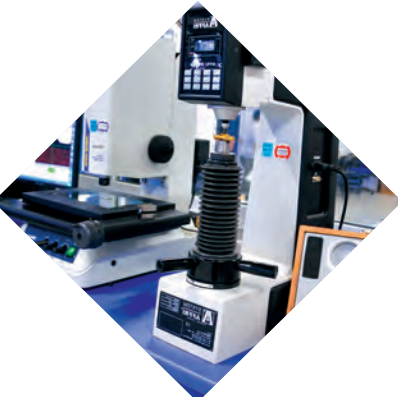
Essentra Components develops high-performance, innovative, ergonomic customer-oriented products, sensitive to the environment and human health, and which comply with national and international standards.

Our products are developed with the current and future needs of our customers in mind. Our main objective is to be a solutions partner for our customers, by delivering a full range of products with different styling, colors, materials and functionality.



We're committed to continually improving our products and helping our customers realize their full potential. As Essentra, we will continue to use our innovative technology and global distribution network to deliver the highest value to our customers.

QUALITY















We understand that continuous improvement in all of our processes drives customer satisfaction. We ensure our products meet customer expectations, and technical and legal requirements.

Our quality system is ISO 9001-2008 certified and our products are manufactured to comply with RoHS standards. We meet our obligations concerning the Registration, Evaluation, Authorisation, and Restriction of Chemicals (REACH).

We commit to:

- Products with superior quality
- A lean manufacturing approach to identify and eliminate waste
- Providing a modern, safe and peaceful working environment for our employees
- Continuous development of our processes
- Leading the industry with innovative concepts
- Designing and manufacturing high value-added products, delivering them on time at reasonable prices
- Ethical values and being sensitive to the environment

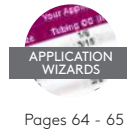
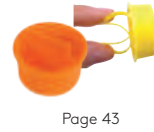
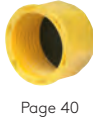
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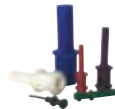
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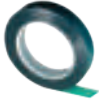
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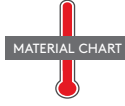
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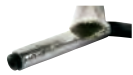
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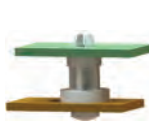
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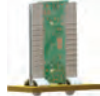
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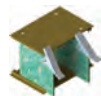
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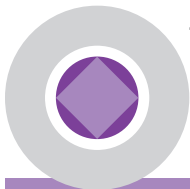
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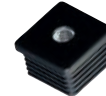
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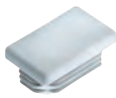
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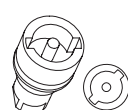
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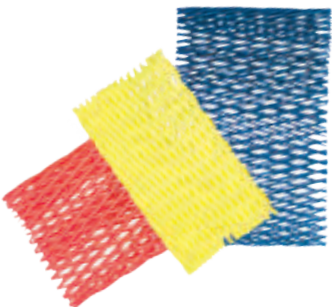
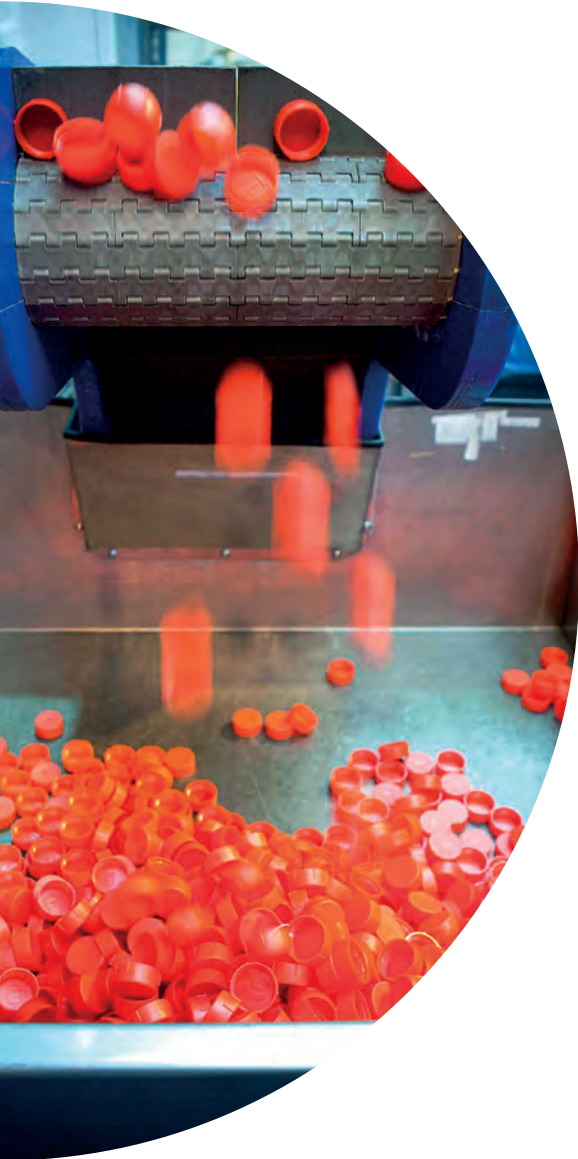





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CAPS, PLUGS & NETTING



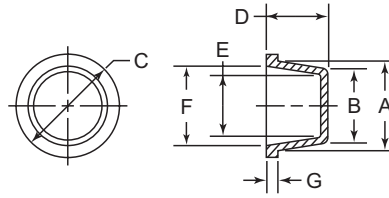
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CAPS, PLUGS & NETTING

TAPERED CAPS & PLUGS



LF Series Wide Flange Caps or Plugs



Specifications:

- Material: Low-Density Polyethylene
- Color: See Table

Features:

- Wider flange assures added protection on bearing surfaces
- Wider flange keeps plug from being accidentally pushed down through the mating part
- The tapered design allows the part to plug multiple inner diameters or cap multiple outside diameters

To Assure Proper Fit:

Plugs

Plug dimension "A" should be approx. 1% larger than the inner diameter of the part.
Minimum of .020"

Caps

Cap dimension "E" should be approx. 1% smaller than the outside diameter of the part.
Minimum of .020"

tem No.	Use as a Plug				Use as a Cap								Color	Bulk Pack Qty		
	A		B		C		D		E		F				G	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm		
LF2A	0.240	6.10	0.173	4.39	0.562	14.27	0.465	11.81	0.111	2.82	0.177	4.50	0.090	2.29	Blue	5500
LF3A	0.290	7.37	0.236	5.99	0.485	12.32	0.402	10.21	0.146	3.71	0.245	6.22	0.090	2.29	Blue	5000
LF5A	0.374	9.50	0.307	7.80	0.724	18.39	0.404	10.26	0.248	6.30	0.303	7.70	0.030	0.76	Red	5000
LF6A	0.418	10.62	0.367	9.32	0.740	18.80	0.402	10.21	0.298	7.57	0.354	8.99	0.090	2.29	Blue	5000
LF7A	0.447	11.35	0.397	10.08	0.795	20.19	0.402	10.21	0.328	8.33	0.383	9.73	0.090	2.29	Blue	5000
LF8A	0.475	12.07	0.427	10.85	0.812	20.62	0.402	10.21	0.356	9.04	0.422	10.72	0.090	2.29	Blue	4750
12433	0.484	12.30	0.421	10.70	0.866	22.00	0.404	10.26	0.358	9.10	0.421	10.70	0.030	0.76	Red	10000
LF9A	0.509	12.93	0.440	11.18	0.820	20.83	0.465	11.81	0.375	9.53	0.450	11.43	0.090	2.29	Blue	7500
10420	0.520	13.20	0.445	11.30	1.142	29.00	0.463	11.76	0.386	9.80	0.457	11.60	0.030	0.76	Red	10000
LF10A	0.547	13.89	0.481	12.22	0.870	22.10	0.460	11.68	0.409	10.39	0.493	12.52	0.090	2.29	Blue	7000
12434	0.610	15.50	0.531	13.50	1.181	30.00	0.404	10.26	0.449	11.40	0.520	13.20	0.030	0.76	Red	5000
LF11A	0.616	15.65	0.530	13.46	0.940	23.88	0.470	11.94	0.470	11.94	0.570	14.48	0.090	2.29	Blue	5000
LF11XA	0.631	16.03	0.565	14.35	0.950	24.13	0.491	12.47	0.500	12.70	0.580	14.73	0.090	2.29	Blue	5000
LF12A	0.659	16.74	0.580	14.99	0.983	24.97	0.527	13.39	0.518	13.16	0.605	15.37	0.090	2.29	Blue	4500
18351	0.665	16.90	0.579	14.70	1.000	25.40	0.545	13.84	0.520	13.20	0.606	15.40	0.045	1.14	Red	6000
LF12XA	0.687	17.45	0.610	15.49	1.031	26.19	0.527	13.39	0.548	13.92	0.635	16.13	0.090	2.29	Blue	4500
LF13XA	0.710	18.03	0.655	16.64	1.062	26.97	0.528	13.41	0.585	14.86	0.647	16.43	0.090	2.29	Yellow	4000
LF13A	0.725	18.42	0.628	15.95	1.062	26.97	0.528	13.41	0.558	14.17	0.667	16.94	0.090	2.29	Yellow	5000
LF15A	0.775	19.69	0.690	17.53	1.125	28.58	0.559	14.20	0.620	15.75	0.721	18.31	0.090	2.29	Blue	3500
12435	0.787	20.00	0.689	17.50	1.374	34.90	0.608	15.44	0.634	16.10	0.728	18.50	0.045	1.14	Red	3000
LF15XA	0.812	20.62	0.725	18.42	1.140	28.96	0.580	14.99	0.662	16.81	0.765	19.43	0.090	2.29	Blue	3000
18356	0.846	21.50	0.752	19.10	1.500	38.10	0.608	15.44	0.693	17.60	0.783	19.90	0.045	1.14	Red	2500
LF16A	0.870	22.10	0.755	19.18	1.185	30.10	0.580	14.99	0.693	17.60	0.808	20.52	0.090	2.29	Blue	3000
LF17A	0.920	23.37	0.820	20.83	1.250	31.75	0.621	15.77	0.741	18.82	0.865	21.97	0.090	2.29	Blue	2300
LF18A	0.975	24.77	0.867	22.02	1.281	32.54	0.650	16.51	0.805	20.45	0.913	23.19	0.090	2.29	Blue	4000
12436	0.984	25.00	0.862	21.90	1.890	48.00	0.734	18.64	0.744	18.90	0.866	22.00	0.045	1.14	Red	1500
LF19A	1.020	25.90	0.950	24.13	1.344	34.13	0.715	18.16	0.875	22.22	0.957	24.30	0.090	2.29	Blue	1500
18357	1.091	27.70	0.972	24.70	1.500	38.10	0.797	20.24	0.913	23.20	1.028	26.10	0.045	1.14	Red	1500
LF20A	1.105	28.07	0.984	24.99	1.437	36.50	0.746	18.95	0.920	23.37	1.040	26.42	0.090	2.29	Blue	3000
LF21A	1.323	33.60	1.197	30.40	1.862	47.29	0.643	16.33	1.094	27.79	1.209	30.71	0.045	1.14	Red	1400
18360	1.354	34.40	1.224	31.10	1.874	47.60	0.797	20.24	1.173	29.80	1.291	32.80	0.045	1.14	Red	1000
LF22A	1.382	35.10	1.237	31.42	1.687	42.85	0.746	18.95	1.167	29.64	1.312	33.32	0.090	2.29	Blue	2000
LF23XA	1.466	37.24	1.312	33.32	1.845	46.86	0.775	19.69	1.250	31.75	1.425	36.20	0.120	3.05	Blue	1700
LF24A	1.604	40.74	1.450	36.83	1.938	49.23	0.745	18.92	1.380	35.05	1.550	39.37	0.120	3.05	Blue	1500
LF26A	1.764	44.81	1.630	41.40	2.252	57.20	0.784	19.91	1.563	39.70	1.693	43.00	0.035	0.90	Red	700
LF28A	1.890	48.01	1.730	43.94	2.312	58.72	0.745	18.92	1.650	41.91	1.825	46.36	0.120	3.05	Blue	1100
LF30A	2.043	51.89	1.858	47.19	2.835	72.01	1.004	25.50	1.752	44.50	1.917	48.69	0.059	1.50	Red	400
LF32A	2.075	52.71	1.902	48.31	2.500	63.50	1.059	26.90	1.823	46.30	1.996	50.70	0.059	1.50	Red	1000
LF34A	2.130	54.10	2.028	51.51	2.626	66.70	0.768	19.50	1.953	49.61	2.047	51.99	0.039	1.00	Red	500
LF36A	2.402	61.01	2.146	54.51	3.012	76.50	1.024	26.00	2.055	52.20	2.323	59.00	0.039	1.00	Red	300
LF38A	2.614	66.40	2.441	62.00	3.267	83.00	1.152	29.26	2.323	59.00	2.531	64.30	0.050	1.27	Red	250

FREE SAMPLES

MASKING PLUGS

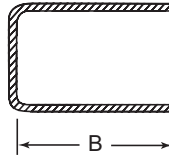
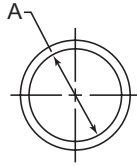
Temperature protection up to **600°F**

See our full range of Masking Solutions on page 66



PUSH-FIT CAPS

A & AR Series Round End Caps

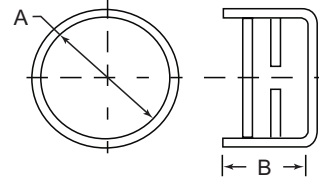


Specifications:

- Material: Low-Density Polyethylene
- Color: See Table

Features:

- Designed to protect outside diameters
- Parts with a W/R have an internal molded ring for extra gripping power
- Parts with AR prefix have internal ribs for superior retention



AR Prefix

See pages 64 and 65 for Application Wizards

Item No.	A		B		Color	Bulk Pack Qty
	in	mm	in	mm		
A3/32W/RA	0.094	2.38	0.625	15.88	Blue	5000
A1/8W/RA	0.125	3.18	0.625	15.88	Blue	5000
A5/32W/RA	0.156	3.97	0.625	15.88	Blue	5000
A3/16W/RA	0.187	4.76	0.625	15.88	Blue	5000
A1/4W/RA	0.250	6.35	0.875	22.23	Blue	5000
L1/4A	0.250	6.35	1.750	44.45	Blue	7500
AS9/32A	0.281	7.14	0.500	12.70	Blue	6500
A9/32A	0.281	7.14	0.875	22.23	Blue	6500
AC5/16W/RA	0.295	7.49	0.875	22.23	Blue	6000
A5/16W/RA	0.313	7.94	0.875	22.23	Blue	5000
L5/16A	0.313	7.94	1.750	44.45	Blue	4500
A3/8W/RA	0.375	9.53	0.875	22.23	Blue	4250
L3/8A	0.375	9.53	1.750	44.45	Blue	3800
AR100A	0.390	9.91	0.630	16.00	Red	10000
AS7/16A	0.437	11.11	0.500	12.70	Blue	6000
A7/16W/RA	0.437	11.11	0.875	22.23	Blue	7000
AR105A	0.450	11.43	0.630	16.00	Red	10000
A1/2BA	0.470	11.94	0.875	22.23	Blue	5000
A1/2A	0.495	12.57	0.875	22.23	Blue	5000
AS1/2A	0.500	12.70	0.500	12.70	Blue	5000
A1/2W/RA	0.500	12.70	0.875	22.23	Blue	5000
AS9/16A	0.563	14.29	0.563	14.29	Blue	6500
A9/16A	0.563	14.29	0.875	22.23	Blue	4000
A9/16W/RA	0.563	14.29	0.875	22.23	Blue	4000
AR110A	0.580	14.73	0.787	20.00	Red	5000
AS5/8A	0.625	15.88	0.375	9.53	Blue	4250
A5/8W/RA	0.625	15.88	0.875	22.23	Blue	3500
AR115A	0.630	16.00	0.787	20.00	Red	5000
AS11/16W/RA	0.687	17.46	0.750	19.05	Blue	4000
A11/16A	0.687	17.46	0.875	22.23	Blue	3000
A11/16W/RA	0.687	17.46	0.875	22.23	Blue	3000
A23/32A	0.720	18.29	1.310	33.27	Blue	1700
K505A	0.720	18.29	1.500	38.10	Blue	2800
K505W/RA	0.720	18.29	1.500	38.10	Natural	2800
AR120A	0.727	18.47	0.787	20.00	Red	2500
AS3/4A	0.750	19.05	0.375	9.53	Blue	6000
A3/4A	0.750	19.05	0.875	22.23	Blue	5000
A3/4W/RA	0.750	19.05	0.875	22.23	Blue	5000
AR125A	0.787	20.00	0.787	20.00	Red	2000
AS13/16W/RA	0.813	20.64	0.344	8.73	Blue	6000
A13/16A	0.813	20.64	0.875	22.23	Blue	4500
A13/16W/RA	0.813	20.64	0.875	22.23	Blue	4500
AR130A	0.866	22.00	0.787	20.00	Red	2500
AS7/8W/RA	0.875	22.23	0.500	12.70	Blue	3500
A7/8W/RA	0.875	22.23	0.875	22.23	Blue	4000
L7/8A	0.875	22.23	1.750	44.45	Blue	2000

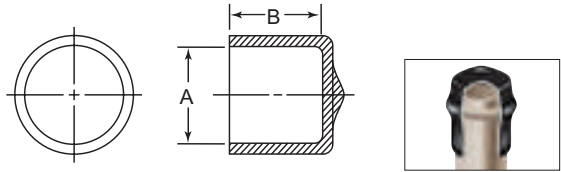
Item No.	A		B		Color	Bulk Pack Qty
	in	mm	in	mm		
A15/16A	0.937	23.81	0.813	20.64	Blue	3500
AR135A	0.961	24.41	0.827	21.01	Red	2000
A63/64A	0.980	24.89	1.310	33.27	Blue	2000
AS1A	1.000	25.40	0.375	9.53	Blue	4000
A1A	1.000	25.40	0.750	19.05	Blue	3500
A1W/RA	1.000	25.40	0.750	19.05	Blue	3500
AL1A	1.000	25.40	1.000	25.40	Blue	2500
L1B	1.000	25.40	1.750	45.72	Blue	1400
A1-1/16A	1.063	26.99	0.875	22.23	Blue	3000
A1-1/16W/RA	1.063	26.99	0.875	22.23	Blue	3000
AR140A	1.102	28.00	1.043	26.50	Red	1000
A1-1/8A	1.125	28.58	0.875	22.23	Blue	2500
A1-3/16W/RA	1.187	30.16	1.000	25.40	Blue	2000
AR145A	1.200	30.48	1.043	26.50	Red	800
AS1-1/4A	1.250	31.75	0.625	15.88	Blue	3000
A1-1/4A	1.250	31.75	0.875	22.23	Blue	2000
A1-5/16A	1.313	33.34	0.875	22.23	Blue	2000
A1-5/16W/RA	1.313	33.34	0.875	22.23	Blue	2000
A1-3/8A	1.375	34.93	0.875	22.23	Blue	1800
AR150A	1.378	35.00	1.043	26.50	Red	800
A1-7/16A	1.437	36.51	0.875	22.23	Blue	1600
AR155A	1.444	36.68	1.031	26.19	Red	500
A1-1/2A	1.500	38.10	0.875	22.23	Blue	1500
A1-9/16A	1.563	39.69	1.000	25.40	Blue	1200
A1-5/8A	1.625	41.28	1.000	25.40	Blue	1900
A1-11/16A	1.688	42.87	0.875	22.23	Blue	1200
A1-3/4A	1.750	44.45	0.875	22.23	Blue	1200
A1-7/8A	1.875	47.63	0.875	22.23	Blue	1000
A2A	2.000	50.80	0.875	22.23	Blue	1000
A2-1/8A	2.125	53.98	0.875	22.23	Blue	900
AR160A	2.125	54.00	1.094	27.80	Red	300
A2-1/4A	2.250	57.15	1.250	31.75	Blue	450
A2-3/4A	2.375	60.33	0.875	22.23	Blue	700
A2-1/2A	2.500	63.50	0.875	22.23	Blue	600
AS2-9/16A	2.563	65.09	0.375	9.53	Blue	1200
A2-19/32W/RA	2.575	65.40	1.000	25.40	Blue	500
A2-5/8A	2.615	66.42	1.000	25.40	Blue	425
A2-3/4A	2.725	69.22	1.090	27.68	Blue	450
A3A	2.980	75.69	1.000	25.40	Blue	400
A3-1/8A	3.125	79.38	1.375	34.93	Blue	250
A3-1/4A	3.250	82.55	1.875	47.63	Blue	150
A3-1/2A	3.500	88.90	1.000	25.40	Blue	300
A3-3/4A	3.740	94.99	1.000	25.40	Blue	225
A4A	3.990	101.34	1.000	25.40	Blue	200
A4-1/8A	4.115	104.52	1.000	25.40	Blue	200
AR165A	4.331	110.00	1.362	34.60	Yellow	150

PIPE CAPS & PLUGS

See Pages 92 - 95 | www.essentracomponents.com



**DM & DMS Series
Round Vinyl End Caps**



Specifications:

- Material: Vinyl (PVC)
- Color: DM – Black – 75 Durometer
DMS – Red – 63 Durometer
- Temperature Range: Up to 350°F (177°C)
- For high temperature up to 425°F (218°C) see page 71

See pages 64 and 65 for Application Wizards

Features:

- Flexible material can stretch onto larger dimensions for a snug fit without tearing, splitting or shredding
- Typically used to protect threaded or non-threaded tubing, rods, pipe or paper tubes
- Glossy and attractive finish makes this part ideal for use as a decorative end cap
- Red colored parts are highly visible

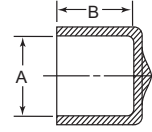
A = To Fit		Item No.			Color	Bulk Pack Qty		
in	mm	B Length				1/2 in	1 in	1 - 1/2 in
0.078	1.98	DM0080-1/2A	DM0080-1A	—	Black	5000	5000	—
0.094	2.38	DM0093-1/2A	DM0093-1A	—	Black	5000	10000	—
0.109	2.78	DM0110-1/2A	DM0110-1A	—	Black	5000	5000	—
0.125	3.18	DM0125-1/2A	DM0125-1A	—	Black	5000	5000	—
0.125	3.18	—	DMS0125-1A	—	Red	—	5000	—
0.141	3.57	DM0140-1/2A	DM0140-1A	DM0140-1-1/2A	Black	5000	5000	5000
0.141	3.57	—	DMS0140-1A	—	Red	—	5000	—
0.148	3.76	DM0148-1/2A	DM0148-1A	DM0148-1-1/2A	Black	5000	5000	5000
0.156	3.97	DM0156-1/2A	DM0156-1A	DM0156-1-1/2A	Black	5000	5000	5000
0.172	4.37	DM0172-1/2A	DM0172-1A	DM0172-1-1/2A	Black	5000	5000	5000
0.172	4.37	—	DMS0172-1A	—	Red	—	5000	—
0.180	4.57	DM0180-1/2A	DM0180-1A	DM0180-1-1/2A	Black	5000	5000	5000
0.187	4.75	DM0187-1/2A	DM0187-1A	DM0187-1-1/2A	Black	5000	5000	5000
0.187	4.75	—	DMS0187-1A	—	Red	—	5000	—
0.203	5.16	DM0203-1/2A	DM0203-1A	DM0203-1-1/2A	Black	5000	5000	5000
0.203	5.16	—	DMS0203-1A	—	Red	—	5000	—
0.207	5.26	DM0207-1/2A	DM0207-1A	DM0207-1-1/2A	Black	5000	5000	5000
0.218	5.54	DM0218-1/2A	DM0218-1A	DM0218-1-1/2A	Black	5000	5000	5000
0.224	5.69	DM0224-1/2A	DM0224-1A	DM0224-1-1/2A	Black	5000	5000	5000
0.230	5.84	DM0230-1/2A	DM0230-1A	DM0230-1-1/2A	Black	5000	7500	5000
0.234	5.95	DM0234-1/2A	DM0234-1A	DM0234-1-1/2A	Black	5000	5000	3000
0.234	5.95	—	DMS0234-1A	—	Red	—	5000	—
0.240	6.10	DM0240-1/2A	DM0240-1A	DM0240-1-1/2A	Black	5000	5000	5000
0.250	6.35	DM0250-1/2A	DM0250-1A	DM0250-1-1/2A	Black	5000	5000	5000
0.250	6.35	DMS0250-1/2A	DMS0250-1A	—	Red	5000	5000	—
0.281	7.14	DM0281-1/2A	DM0281-1A	DM0281-1-1/2A	Black	5000	5000	5000
0.281	7.14	DMS0281-1/2A	DMS0281-1A	—	Red	5000	5000	—
0.290	7.37	DM0290-1/2A	DM0290-1A	DM0290-1-1/2A	Black	5000	5000	5000
0.304	7.72	DM0304-1/2A	DM0304-1A	DM0304-1-1/2A	Black	5000	5000	2500
0.313	7.94	DM0313-1/2A	DM0313-1A	DM0313-1-1/2A	Black	5000	5000	4000
0.313	7.94	DMS0313-1/2A	DMS0313-1A	—	Red	5000	5000	—
0.343	8.71	DM0343-1/2A	DM0343-1A	DM0343-1-1/2A	Black	5000	5000	4000
0.343	8.71	—	DMS0343-1A	—	Red	—	5000	—
0.360	9.14	DM0360-1/2A	DM0360-1A	DM0360-1-1/2A	Black	5000	5000	2500
0.375	9.53	DM0375-1/2A	DM0375-1A	DM0375-1-1/2A	Black	5000	5000	2500
0.375	9.53	DMS0375-1/2A	DMS0375-1A	—	Red	5000	5000	—
0.406	10.32	DM0406-1/2A	DM0406-1A	DM0406-1-1/2A	Black	5000	5000	5000
0.420	10.66	DM0420-1/2A	DM0420-1A	DM0420-1-1/2A	Black	5000	5000	5000
0.437	11.10	DM0437-1/2A	DM0437-1A	DM0437-1-1/2A	Black	5000	5000	4000
0.437	11.10	DMS0437-1/2A	DMS0437-1A	DM0437-1-1/2A	Red	5000	5000	4000
0.460	11.68	DM0460-1/2A	DM0460-1A	DM0460-1-1/2A	Black	5000	3000	1500
0.470	11.94	DM0470-1/2A	DM0470-1A	DM0470-1-1/2A	Black	5000	5000	3000
0.470	11.94	—	DMS0470-1A	—	Red	—	5000	—
0.490	12.45	DM0490-1/2A	DM0490-1A	DM0490-1-1/2A	Black	5000	3000	1500
0.500	12.70	DM0500-1/2A	DM0500-1A	DM0500-1-1/2A	Black	5000	5000	2500
0.500	12.70	DMS0500-1/2A	DMS0500-1A	DMS0500-1-1/2A	Red	5000	5000	2500
0.523	13.28	DM0523-1/2A	DM0523-1A	DM0523-1-1/2A	Black	5000	2500	2500
0.531	13.49	DM0531-1/2A	DM0531-1A	DM0531-1-1/2A	Black	5000	5000	2500
0.531	13.49	—	DMS0531-1A	—	Red	—	5000	—
0.544	13.82	DM0544-1/2A	DM0544-1A	DM0544-1-1/2A	Black	5000	5000	2500
0.544	13.82	—	DMS0544-1A	—	Red	—	5000	—
0.562	14.27	DM0562-1/2A	DM0562-1A	DM0562-1-1/2A	Black	5000	2500	3000
0.562	14.27	DMS0562-1/2A	DMS0562-1A	DM0562-1-1/2A	Red	5000	2500	3000
0.587	14.90	DM0587-1/2A	DM0587-1A	DM0587-1-1/2A	Black	5000	2500	1200
0.600	15.24	DM0600-1/2A	DM0600-1A	DM0600-1-1/2A	Black	5000	2000	1200
0.625	15.88	DM0625-1/2A	DM0625-1A	DM0625-1-1/2A	Black	5000	2500	1250
0.625	15.88	DMS0625-1/2A	DMS0625-1A	DM0625-1-1/2A	Red	5000	2500	1250
0.640	16.26	DM0640-1/2A	DM0640-1A	DM0640-1-1/2A	Black	5000	5000	2500
0.665	16.89	DM0665-1/2A	DM0665-1A	DM0665-1-1/2A	Black	5000	2500	2500
0.687	17.45	DM0687-1/2A	DM0687-1A	DM0687-1-1/2A	Black	5000	2500	1500
0.687	17.45	DMS0687-1/2A	DMS0687-1A	DM0687-1-1/2A	Red	5000	2500	1500
0.725	18.42	DM0725-1/2A	DM0725-1A	DM0725-1-1/2A	Black	5000	2500	1000
0.750	19.05	DM0750-1/2A	DM0750-1A	DM0750-1-1/2A	Black	5000	2500	500
0.750	19.05	DMS0750-1/2A	DMS0750-1A	DMS0750-1-1/2A	Red	5000	2500	500
0.812	20.62	DM0812-1/2A	DM0812-1A	DM0812-1-1/2A	Black	2500	2500	1000
0.812	20.62	DMS0812-1/2A	DMS0812-1A	DM0812-1-1/2A	Red	2500	2500	1000
0.843	21.41	DM0843-1/2A	DM0843-1A	DM0843-1-1/2A	Black	5000	2500	1200
0.843	21.41	—	DMS0843-1A	—	Red	—	2500	—

(Continued on next page >)



PUSH-FIT CAPS

**DM & DMS Series
Round Vinyl End Caps (continued)**



See pages 64 and 65 for Application Wizards

A = To Fit		Item No.			Color	Bulk Pack Qty		
in	mm	B Length 1/2 in (12.70 mm)	1 in (25.40 mm)	1 - 1/2 in (38.10 mm)		1/2 in	1 in	1 - 1/2 in
0.875	22.23	DM0875-1/2A	DM0875-1A	DM0875-1-1/2A	Black	5000	2500	1250
0.875	22.23	DMS0875-1/2A	DMS0875-1A	DMS0875-1-1/2A	Red	5000	2500	1250
0.937	23.80	DM0937-1/2A	DM0937-1A	DM0937-1-1/2A	Black	2500	2500	1000
0.937	23.80	—	DMS0937-1A	—	Red	—	2500	—
0.985	25.02	DM0985-1/2A	DM0985-1A	DM0985-1-1/2A	Black	2500	1500	1250
1.000	25.40	DM1000-1/2A	DM1000-1A	DM1000-1-1/2A	Black	2500	2000	1250
1.000	25.40	DMS1000-1/2A	DMS1000-1A	DMS1000-1-1/2A	Red	2500	2000	1250
1.062	26.97	DM1062-1/2A	DM1062-1A	DM1062-1-1/2A	Black	3000	1500	1250
1.062	26.97	—	DMS1062-1A	—	Red	—	1500	—
1.090	27.69	DM1090-1/2A	DM1090-1A	DM1090-1-1/2A	Black	2000	1000	500
1.125	28.58	DM1125-1/2A	DM1125-1A	DM1125-1-1/2A	Black	1000	1000	500
1.125	28.58	DMS1125-1/2A	DMS1125-1A	DMS1125-1-1/2A	Red	1000	1000	500
1.187	30.15	DM1187-1/2A	DM1187-1A	DM1187-1-1/2A	Black	2500	1000	1000
1.187	30.15	—	DMS1187-1A	—	Red	—	1000	—
1.250	31.75	DM1250-1/2A	DM1250-1A	DM1250-1-1/2A	Black	2500	1000	700
1.250	31.75	DMS1250-1/2A	DMS1250-1A	DMS1250-1-1/2A	Red	2500	1000	700
1.312	33.32	DM1312-1/2A	DM1312-1A	DM1312-1-1/2A	Black	2000	1000	500
1.375	34.93	DM1375-1/2A	DM1375-1A	DM1375-1-1/2A	Black	2000	1000	650
1.375	34.93	—	DMS1375-1A	—	Red	—	1000	—
1.437	36.50	DM1437-1/2A	DM1437-1A	DM1437-1-1/2A	Black	1000	1000	600
1.500	38.10	DM1500-1/2A	DM1500-1A	DM1500-1-1/2A	Black	1000	1000	600
1.500	38.10	DMS1500-1/2A	DMS1500-1A	DMS1500-1-1/2A	Red	1000	1000	600
1.593	40.46	DM1593-1/2A	DM1593-1A	DM1593-1-1/2A	Black	1700	1000	500
1.625	41.28	DM1625-1/2A	DM1625-1A	DM1625-1-1/2A	Black	500	750	500
1.625	41.28	—	DMS1625-1A	DMS1625-1-1/2A	Red	—	750	500
1.687	42.85	DM1687-1/2A	DM1687-1A	DM1687-1-1/2A	Black	1000	500	400
1.687	42.85	—	DMS1687-1A	—	Red	—	500	—
1.750	44.45	DM1750-1/2A	DM1750-1A	DM1750-1-1/2A	Black	1000	500	500
1.750	44.45	—	DMS1750-1A	DMS1750-1-1/2A	Red	—	500	500
1.812	46.02	DM1812-1/2A	DM1812-1A	DM1812-1-1/2A	Black	1000	500	400
1.875	47.63	DM1875-1/2A	DM1875-1A	DM1875-1-1/2A	Black	700	625	400
1.875	47.63	—	DMS1875-1A	—	Red	—	625	—
1.937	49.19	DM1937-1/2A	DM1937-1A	DM1937-1-1/2A	Black	1000	550	400
2.000	50.80	DM2000-1/2A	DM2000-1A	DM2000-1-1/2A	Black	1000	550	400
2.000	50.80	DMS2000-1/2A	DMS2000-1A	DMS2000-1-1/2A	Red	1000	550	400
2.125	53.98	DM2125-1/2A	DM2125-1A	DM2125-1-1/2A	Black	500	400	300
2.125	53.98	—	DMS2125-1A	—	Red	—	400	—
2.156	54.76	DM2156-1/2A	DM2156-1A	DM2156-1-1/2A	Black	1000	550	250
2.250	57.15	DM2250-1/2A	DM2250-1A	DM2250-1-1/2A	Black	250	500	300
2.250	57.15	—	DMS2250-1A	DMS2250-1-1/2A	Red	—	500	300
2.375	60.33	DM2375-1/2A	DM2375-1A	DM2375-1-1/2A	Black	500	350	250
2.460	62.48	DM2460-1/2A	DM2460-1A	DM2460-1-1/2A	Black	1000	350	200
2.500	63.50	DM2500-1/2A	DM2500-1A	DM2500-1-1/2A	Black	500	300	200
2.500	63.50	—	DMS2500-1A	DMS2500-1-1/2A	Red	—	300	200
2.625	66.68	DM2625-1/2A	DM2625-1A	DM2625-1-1/2A	Black	500	250	250
2.687	68.25	DM2687-1/2A	DM2687-1A	DM2687-1-1/2A	Black	400	250	200
2.750	69.85	DM2750-1/2A	DM2750-1A	DM2750-1-1/2A	Black	500	250	250
2.750	69.85	—	DMS2750-1A	—	Red	—	250	—
2.875	73.03	DM2875-1/2A	DM2875-1A	DM2875-1-1/2A	Black	500	250	200
3.000	76.20	DM3000-1/2A	DM3000-1A	DM3000-1-1/2A	Black	500	300	200
3.000	76.20	—	DMS3000-1A	DMS3000-1-1/2A	Red	—	300	200
3.125	79.38	—	DM3125-1A	DM3125-1-1/2A	Black	—	250	150
3.125	79.38	—	DMS3125-1A	—	Red	—	250	150
3.250	82.55	—	DM3250-1A	DM3250-1-1/2A	Black	—	100	100
3.250	82.55	—	DMS3250-1A	—	Red	—	100	—
3.375	85.73	—	DM3375-1A	DM3375-1-1/2A	Black	—	200	150
3.500	88.90	DM3500-1/2A	DM3500-1A	DM3500-1-1/2A	Black	—	175	100
3.500	88.90	—	DMS3500-1A	—	Red	—	175	—
3.625	92.08	—	DM3625-1A	DM3625-1-1/2A	Black	—	150	100
3.750	95.25	—	DM3750-1A	DM3750-1-1/2A	Black	—	100	100
3.750	95.25	—	DMS3750-1A	—	Red	—	100	—
3.825	97.16	—	DM3825-1A	DM3825-1-1/2A	Black	—	150	100
3.875	98.43	—	DM3875-1A	DM3875-1-1/2A	Black	—	100	100
4.000	101.60	DM4000-1/2A	DM4000-1A	DM4000-1-1/2A	Black	—	150	100
4.000	101.60	—	DMS4000-1A	DMS4000-1-1/2A	Red	—	150	100
4.125	104.78	—	DM4125-1A	DM4125-1-1/2A	Black	—	100	100
4.187	106.35	—	DM4187-1A	DM4187-1-1/2A	Black	—	100	100
4.250	107.95	—	DM4250-1A	DM4250-1-1/2A	Black	—	150	100
4.375	111.13	—	DM4375-1A	DM4375-1-1/2A	Black	—	100	50
4.500	114.30	DM4500-1/2A	DM4500-1A	DM4500-1-1/2A	Black	—	150	75
4.750	120.65	—	DM4750-1A	DM4750-1-1/2A	Black	—	85	100
5.000	127.00	—	DM5000-1A	DM5000-1-1/2A	Black	—	125	50
5.187	131.75	—	DM5187-1A	DM5187-1-1/2A	Black	—	50	50
5.375	136.53	—	DM5375-1A	DM5375-1-1/2A	Black	—	100	50
5.500	139.70	DM5500-1/2A	DM5500-1A	DM5500-1-1/2A	Black	—	50	50
5.750	146.05	—	DM5750-1A	DM5750-1-1/2A	Black	—	50	50
6.000	152.40	—	DM6000-1A	DM6000-1-1/2A	Black	—	50	50
6.250	158.75	—	DM6250-1A	DM6250-1-1/2A	Black	—	50	50
6.500	165.10	DM6500-1/2A	DM6500-1A	DM6500-1-1/2A	Black	—	50	50
6.750	171.45	—	DM6750-1A	DM6750-1-1/2A	Black	—	25	50
7.000	177.80	—	DM7000-1A	DM7000-1-1/2A	Black	—	25	25
7.250	184.15	—	DM7250-1A	DM7250-1-1/2A	Black	—	50	50
7.500	190.50	—	DM7500-1A	DM7500-1-1/2A	Black	—	50	25
7.750	196.85	—	DM7750-1A	DM7750-1-1/2A	Black	—	50	50
8.000	203.20	—	DM8000-1A	DM8000-1-1/2A	Black	—	50	25

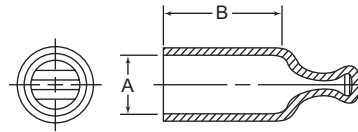


**DMPC Series
Easy-Pull Vinyl Caps**



Specifications:

- Material: Vinyl (PVC)
- Color: Black
- Temperature Range: Up to 350°F (177°C)
- For high temperature up to 425°F (218°C) see page 71



Features:

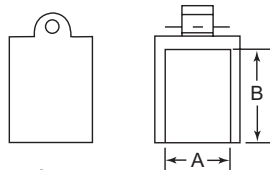
- The curved pull-tab design provides more surface contact area requiring less gripping force during installation and removal
- Flexible material can stretch onto larger dimensions for a snug fit without tearing, splitting or shredding
- Glossy and attractive finish makes this part ideal for use as a decorative end cap

A = To Fit		Item No.			Bulk Pack Qty		
In	mm	1/2 in (12.70 mm)	1 in (25.40 mm)	1 - 1/2 in (38.10 mm)	1/2 in	1 in	1 - 1/2 in
0.187	4.75	DMPC0180-1/2A	DMPC0180-1A	—	5000	5000	—
0.218	5.54	DMPC0207-1/2A	DMPC0207-1A	—	5000	5000	—
0.250	6.35	DMPC0240-1/2A	DMPC0240-1A	—	5000	5000	—
0.302	7.67	DMPC0302-1/2A	DMPC0302-1A	DMPC0302-1-1/2A	7500	5000	2500
0.320	8.13	DMPC0320-1/2A	DMPC0320-1A	DMPC0320-1-1/2A	5000	5000	2500
0.343	8.71	DMPC0343-1/2A	DMPC0343-1A	DMPC0343-1-1/2A	5000	3000	2500
0.375	9.53	DMPC0365-1/2A	DMPC0365-1A	DMPC0365-1-1/2A	5000	3000	2000
0.406	10.32	DMPC0396-1/2A	DMPC0396-1A	DMPC0396-1-1/2A	5000	5000	2500
0.420	10.67	DMPC0420-1/2A	DMPC0420-1A	DMPC0420-1-1/2A	5000	5000	2500
0.437	11.10	DMPC0427-1/2A	DMPC0427-1A	DMPC0427-1-1/2A	5000	4000	2500
0.450	11.43	DMPC0450-1/2A	DMPC0450-1A	DMPC0450-1-1/2A	5000	4000	2500
0.472	11.99	DMPC0470-1/2A	DMPC0470-1A	DMPC0470-1-1/2A	5000	4000	2500
0.500	12.70	DMPC0490-1/2A	DMPC0490-1A	DMPC0490-1-1/2A	5000	4000	2000
0.531	13.49	DMPC0521-1/2A	DMPC0521-1A	DMPC0521-1-1/2A	5000	4000	2500
0.562	14.27	DMPC0552-1/2A	DMPC0552-1A	DMPC0552-1-1/2A	2500	2500	2500
0.593	15.06	DMPC0590-1/2A	DMPC0590-1A	DMPC0590-1-1/2A	2500	1900	1500
0.600	15.24	DMPC0600-1/2A	DMPC0600-1A	DMPC0600-1-1/2A	5000	2500	2500
0.615	15.62	DMPC0615-1/2A	DMPC0615-1A	DMPC0615-1-1/2A	5000	2500	2000
0.625	15.88	DMPC0625-1/2A	DMPC0625-1A	DMPC0625-1-1/2A	2500	1350	1500
0.655	16.64	DMPC0655-1/2A	DMPC0655-1A	DMPC0655-1-1/2A	2000	2500	1500
0.677	17.20	DMPC0677-1/2A	DMPC0677-1A	DMPC0677-1-1/2A	5000	2500	1500
0.687	17.45	DMPC0687-1/2A	DMPC0687-1A	DMPC0687-1-1/2A	2500	2000	1500
0.708	17.98	DMPC0708-1/2A	DMPC0708-1A	DMPC0708-1-1/2A	2500	2000	1500
0.750	19.05	DMPC0740-1/2A	DMPC0740-1A	DMPC0740-1-1/2A	4000	2500	1500
0.812	20.62	DMPC0812-1/2A	DMPC0812-1A	DMPC0812-1-1/2A	2500	2000	750
0.875	22.23	DMPC0865-1/2A	DMPC0865-1A	DMPC0865-1-1/2A	1500	1500	750
0.937	23.79	DMPC0937-1/2A	DMPC0937-1A	DMPC0937-1-1/2A	1500	1500	750
1.000	25.40	DMPC0990-1/2A	DMPC0990-1A	DMPC0990-1-1/2A	1500	1500	750
1.060	26.92	—	DMPC1060-1A	DMPC1060-1-1/2A	—	1000	700
1.125	28.58	—	DMPC1125-1A	DMPC1125-1-1/2A	—	1000	700
1.250	31.75	—	DMPC1230-1A	DMPC1230-1-1/2A	—	1000	700
1.500	38.10	—	DMPC1500-1A	DMPC1500-1-1/2A	—	700	250
1.625	41.28	—	DMPC1605-1A	DMPC1605-1-1/2A	—	550	350

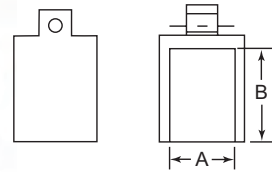
**FEC Series
Flexible End Caps**



Type 1



Type 2



Specifications:

- Material: Thermoplastic Elastomer
- Temperature Range: 203°F (95°C)
- Color: Black

Features:

- Flexible material can stretch onto larger diameters for a snug fit
- Good resistance to acids
- Can be used with Masking Hooks on page 85



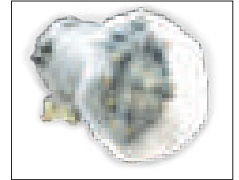
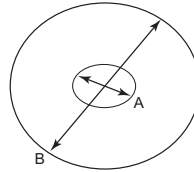
Item No.	Type	A		B		Bulk Pack Qty
		In	mm	In	mm	
1340242	2	0.157	4.0	0.945	24.0	10000
12200B	1	0.197	5.0	0.925	23.5	10000
1341946	2	0.236	6.0	0.984	25.0	10000
1287248	2	0.276	7.0	0.945	24.0	10000
1287251	2	0.315	8.0	0.965	24.5	8000
12204B	1	0.354	9.0	0.984	25.0	7000
1341978	2	0.394	10.0	1.161	29.5	5000
1341987	2	0.433	11.0	1.142	29.0	4500
12207B	1	0.472	12.0	1.142	29.0	4000
1341981	2	0.512	13.0	1.142	29.0	3500
12209B	1	0.551	14.0	1.161	29.5	3000
12210B	1	0.591	15.0	1.161	29.5	2500
12211B	1	0.630	16.0	1.102	28.0	2500
12212B	1	0.669	17.0	1.161	29.5	2000

Item No.	Type	A		B		Bulk Pack Qty
		In	mm	In	mm	
12213B	2	0.709	18.0	1.122	28.5	2000
1287245	2	0.748	19.0	1.161	29.5	2000
1341984	2	0.787	20.0	1.122	28.5	1600
12216B	1	0.827	21.0	1.358	34.5	1300
12217B	2	0.866	22.0	1.339	34.0	1200
12218B	2	0.906	23.0	1.358	34.5	1000
1341988	2	0.945	24.0	1.339	34.0	1000
12220B	2	0.984	25.0	1.358	34.5	1000
12221B	2	1.024	26.0	1.358	34.5	900
12222B	2	1.063	27.0	1.319	33.5	900
1287254	2	1.102	28.0	1.319	33.5	800
12224B	2	1.142	29.0	1.378	35.0	800
1287243	2	1.181	30.0	1.358	34.5	600



PUSH-FIT CAPS

MCP Series Stretch Fit Cover Caps



Specifications:

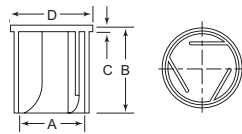
- Material: Polyethylene
- Color: See Table

Features:

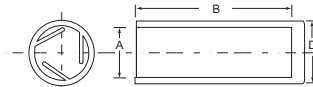
- Capable of covering a wide range of part diameters and shapes
- Protects against dirt and moisture during storage and shipping
- Reusable

Item No.		A= Elastic Ø		B= Flat Overall Ø		Bulk Pack Qty
Blue	Clear	in	mm	in	mm	
MCP050B	MCP050N	1.00	25.40	3.00	76.20	1000
MCP100B	MCP100N	1.22	30.99	3.78	96.01	1000
MCP105B	MCP105N	1.25	50.80	8.00	203.20	500
MCP110B	MCP110N	1.50	38.10	4.50	114.30	1000
MCP120B	MCP120N	2.00	50.80	5.75	146.05	1000
MCP125B	MCP125N	2.50	63.50	10.00	254.00	500
MCP130B	MCP130N	2.44	61.98	8.66	219.96	500
MCP140B	MCP140N	3.07	77.98	9.45	240.03	500
MCP145B	MCP145N	3.50	88.90	18.00	457.20	300
MCP150B	MCP150N	4.25	107.95	13.00	330.20	250
MCP155B	MCP155N	5.75	146.05	24.00	609.60	200
MCP160B	MCP160N	5.00	127.00	15.95	405.13	250
MCP165B	MCP165N	6.50	165.10	32.00	812.80	100

MFC Series Finned Stud Caps



Type 1



Type 2



Specifications:

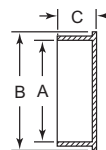
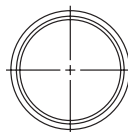
- Material: Low-Density Polyethylene
- Color: Natural

Features:

- Unique finned design enables each cap to fit a range of stud diameters
- The MFC010A* has beveled corners

Item No.	Stud Size Range		Type	A		B		C		D		Bulk Pack Qty
	in	mm		in	mm	in	mm	in	mm	in	mm	
MFC110A	0.255 - 0.314	6.5 - 8.0	1	0.394	10	0.866	22	0.059	1.5	0.551	14.0	500
MFC010A*	0.255 - 0.314	6.5 - 8.0	2	0.394	10	1.299	33	—	—	0.433	11.0	5000
MFC120A	0.314 - 0.354	8.0 - 9.0	1	0.433	11	0.866	22	0.059	1.5	0.591	15.0	500
MFC020A	0.314 - 0.354	8.0 - 9.0	2	0.433	11	0.866	22	—	—	0.472	12.0	5000
MFC030A	0.354 - 0.393	9.0 - 10	2	0.472	12	0.866	22	—	—	0.511	13.0	5000
MFC130A	0.354 - 0.413	9.0 - 10.5	1	0.492	12.5	0.866	22	0.059	1.5	0.650	16.5	250
MFC140A	0.433 - 0.512	11.0 - 13.0	1	0.630	16	0.866	22	0.059	1.5	0.787	20.0	250
MFC150A	0.551 - 0.629	14.0 - 16.0	1	0.709	18	0.866	22	0.059	1.5	0.866	22.0	250
MFC160A	0.669 - 0.748	17.0 - 19.0	1	0.866	22	0.866	22	0.059	1.5	1.024	26.0	100
MFC170A	0.787 - 0.866	20.0 - 22.0	1	0.984	25	0.984	25	0.059	1.5	1.142	29.0	100
MFC180A	0.944 - 1.023	24.0 - 26.0	1	1.142	29	1.181	30	0.059	1.5	1.299	33.0	100
MFC190A	1.102 - 1.181	28.0 - 30.0	1	1.299	33	1.339	34	0.059	1.5	1.457	37.0	100

MC Series Meter Caps



Specifications:

- Material: Low-Density Polyethylene
- Color: Black

Features:

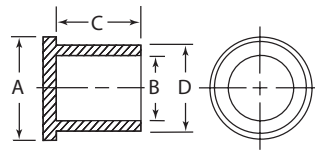
- Designed to protect threads on gas and water meters
- Remains on the unit until installation

Item No.	Thread Size	A		B		C		Bulk Pack Qty
		in	mm	in	mm	in	mm	
MC5LT	5LT	1.114	28.3	1.380	35.1	0.640	16.3	2500
MC10LT	10LT	1.415	35.9	1.670	42.4	0.640	16.3	1500
MC1S	#1 Sprague	1.600	40.6	1.820	46.2	0.610	15.5	1200
MC1P	#1 Pittsburgh	1.610	40.9	1.870	47.5	0.640	16.3	1200
MC20LT	20LT	1.808	45.9	2.070	52.6	0.640	16.3	1000
MC2S	#2 Sprague	1.850	47.0	2.110	53.6	0.640	16.3	1000
MC30LT	30 LT	2.028	51.5	2.290	58.2	0.670	17.0	750
MC45LT	45LT	2.252	57.2	2.510	63.8	0.870	22.1	500
MC3S	#3 Sprague	2.316	58.8	2.580	65.5	0.940	23.9	500

PUSH-FIT CAPS FOR THREADS



E Series Flanged Caps for Standard Threads



Specifications:

- Material: Low-Density Polyethylene
- Color: See Table

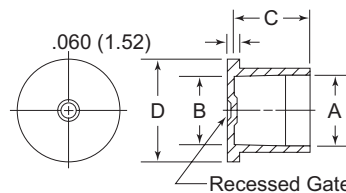
Features:

- Designed for easy assembly and removal either with automated equipment or by hand
- Typically used to protect standard threads with or without O-Rings



Item No.		To Cap	A		B		C		D		Bulk Pack Qty
Natural	Orange	Standard Thread	in	mm	in	mm	in	mm	in	mm	
E5/16C	E5/16A	5/16	0.510	12.95	0.315	8.00	0.840	21.33	0.377	9.57	5000
—	E3/8A	3/8	0.531	13.49	0.364	9.25	0.590	16.67	0.428	10.87	5000
E3/8AA	—	3/8	0.580	14.73	0.377	9.58	0.840	21.34	0.447	11.35	5000
EL3/8B	EL3/8A	3/8	0.520	13.21	0.370	9.40	1.280	32.51	0.440	11.18	5000
E7/16A	—	7/16	0.625	15.88	0.428	10.87	0.590	14.99	0.492	12.50	4250
E7/16CATB	—	7/16	0.625	15.88	0.429	10.90	0.600	15.24	0.491	12.47	4250
EL7/16B	EL7/16A	7/16	0.580	14.73	0.428	10.87	1.020	25.91	0.495	12.57	5000
—	EL7/16AA	7/16	0.580	14.73	0.425	10.79	1.330	33.98	0.487	12.37	2800
E1/2A	—	1/2	0.720	18.29	0.490	12.45	0.460	11.68	0.550	13.97	4000
EL1/2A	—	1/2	0.640	16.25	0.490	12.45	1.330	33.78	0.552	14.02	2800
EL9/16A	—	9/16	0.700	17.78	0.550	13.97	1.410	35.81	0.620	15.75	2500
E9/16A	—	9/16	0.810	20.57	0.551	14.00	0.490	12.45	0.621	15.77	5900
E5/8B	E5/8A	5/8	0.813	20.64	0.606	15.39	0.750	19.05	0.677	17.20	4000
EL5/8A	—	5/8	0.760	19.30	0.625	15.88	0.840	21.34	0.687	17.48	3000
E11/16B	—	11/16	0.935	23.75	0.675	17.14	0.500	17.15	0.745	12.70	4000
—	EL11/16A	11/16	0.840	21.33	0.678	17.22	0.880	22.35	0.748	18.99	2500
E3/4B	E3/4A	3/4	1.000	25.40	0.720	18.29	0.688	17.46	0.794	20.17	3000
E3/4CATA	—	3/4	1.000	25.40	0.729	18.52	0.625	15.88	0.786	19.96	3000
EL3/4D	EL3/4A	3/4	0.890	22.61	0.740	18.80	1.540	39.12	0.813	20.65	2500
E13/16A	—	13/16	1.060	26.92	0.800	20.32	0.570	14.48	0.870	22.10	2500
—	K324A	13/16	1.060	20.64	0.605	15.37	0.845	21.50	0.665	16.89	3500
E7/8SA	—	7/8	1.120	28.45	0.864	21.95	0.690	17.53	0.926	23.52	4000
—	E7/8A	7/8	1.096	27.84	0.860	21.84	0.875	22.23	0.933	23.70	3500
E7/8CATB	—	7/8	1.096	27.84	0.865	21.97	0.832	21.13	0.921	23.39	3500
EL7/8B	EL7/8A	7/8	1.010	25.65	0.860	21.84	1.700	43.18	0.929	23.60	2000
E1A	—	1	1.246	31.65	0.993	25.22	0.660	16.76	1.056	26.82	1500
—	E1-1/16A	1 - 1/16	1.187	30.15	1.030	26.16	1.062	27.98	1.092	27.74	2000
E1-1/16CATB	—	1 - 1/16	1.288	32.72	1.043	26.49	0.688	17.48	1.114	28.30	2800
E1-3/16B	—	1 - 3/16	1.432	36.37	1.172	29.77	0.760	19.30	1.242	31.55	2000
E1-5/16B	—	1 - 5/16	1.567	39.80	1.302	33.07	0.760	19.30	1.372	34.85	1800
E1-7/16B	—	1 - 7/16	1.697	43.10	1.432	36.37	0.760	19.30	1.502	38.15	1500
E1-5/8B	—	1 - 5/8	1.875	47.63	1.615	41.02	0.835	21.21	1.685	42.80	1100
E1-11/16B	—	1 - 11/16	1.928	48.97	1.668	42.37	0.835	21.21	1.738	44.15	1000
E1-7/8A	E1-7/8B	1 - 7/8	2.131	54.13	1.871	47.52	0.960	24.38	1.941	49.30	900
E2B	E2A	2	2.256	57.30	1.994	50.65	1.085	27.56	2.064	52.43	600
E2-1/2A	—	2 - 1/2	2.756	70.00	2.491	63.27	1.210	30.73	2.566	65.18	350

ECS Series Flanged Caps for NPT Threads



Specifications:

- Material: Low-Density Polyethylene
- Color: Natural

Features:

- Designed for easy assembly and removal either with automated equipment or by hand
- Typically used to protect NPT threads with or without O-Rings

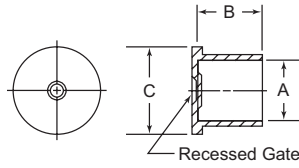


Item No.	To Cap NPT Thread	A		B		C		D		Bulk Pack Qty
		in	mm	in	mm	in	mm	in	mm	
ECS0125A	1/8"	0.399	10.13	0.383	9.73	0.380	9.65	0.660	16.76	10000
ECS0250A	1/4"	0.533	13.54	0.510	12.90	0.530	13.46	0.810	20.57	9000
ECS0375A	3/8"	0.669	16.99	0.644	16.36	0.530	13.46	0.940	23.88	5000
ECS0500A	1/2"	0.833	21.16	0.800	20.32	0.720	18.29	1.090	27.69	3000
ECS0750A	3/4"	1.045	26.54	1.011	25.68	0.750	19.05	1.310	33.27	2000
ECS1000A	1"	1.310	33.27	1.267	32.18	0.930	23.62	1.560	39.62	1000
ECS1250A	1 - 1/4"	1.655	42.04	1.611	40.92	0.970	24.64	1.940	49.28	800
ECS1500A	1 - 1/2"	1.893	48.08	1.848	46.94	0.970	24.64	2.160	54.86	600
ECS2000A	2"	2.370	60.20	2.323	59.00	1.030	26.16	2.620	66.55	500



PUSH-FIT CAPS FOR THREADS

ECM Series Flanged Caps for Metric Threads



Specifications:

- Material: Low-Density Polyethylene
- Color: Natural

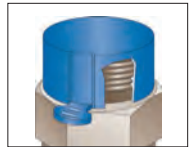
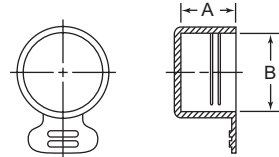
Features:

- Designed for easy assembly and removal either with automated equipment or by hand
- Typically used to protect metric threads with or without O-Rings

Item No.	To Cap Metric Thread	A		B		C		Bulk Pack Qty
		in	mm	in	mm	in	mm	
ECM10A	M10	0.385	9.78	0.665	16.89	0.530	13.50	8000
ECM12A	M12	0.463	11.75	0.470	11.95	0.768	19.50	7000
ECM14A	M14	0.540	13.72	0.470	11.95	0.846	21.50	5000
ECM16A	M16	0.617	15.67	0.470	11.95	0.925	23.50	5000
ECM18A	M18	0.696	17.68	0.470	11.95	1.004	25.50	3000

Item No.	To Cap Metric Thread	A		B		C		Bulk Pack Qty
		in	mm	in	mm	in	mm	
ECM20A	M20	0.774	19.66	0.553	14.05	1.083	27.50	2500
ECM22A	M22	0.855	21.72	0.553	14.05	1.161	29.50	3000
ECM33A	M33	1.285	32.64	0.687	17.45	1.590	40.39	2000
ECM38A	M38	1.481	37.62	0.748	19.00	1.751	44.50	1000
ECM42A	M42	1.640	41.68	0.748	19.00	1.948	49.50	1000

TS Series Tear Tab Caps for SAE/JIC Threads



Specifications:

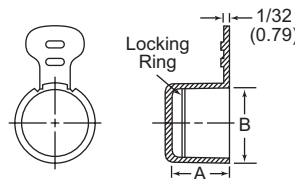
- Material: Low-Density Polyethylene
- Color: See Table

Features:

- Designed with a tear tab for easy removal
- Made to protect standard threads from damage but versatile enough to be used in numerous applications

Item No.	Natural	Blue	To Cap Standard Thread	SAE/JIC Fitting Size	A		B		Bulk Pack Qty
					in	mm	in	mm	
TS3B		TS3A	3/8" - 24	3	0.437	11.10	0.364	9.25	6500
TS4B		TS4A	7/16" - 20	4	0.460	11.68	0.433	11.00	5500
TS5B		TS5A	1/2" - 20	5	0.460	11.68	0.490	12.45	4500
TS6B		TS6A	9/16" - 18	6	0.475	12.07	0.551	14.00	7000
TS7B		TS7A	11/16" - 16	7	0.475	12.07	0.675	17.15	5000
TS8B		TS8A	3/4" - 16	8	0.560	14.22	0.740	18.80	3500
TS9B		TS9A	13/16" - 16	9	0.560	14.22	0.802	20.37	3000
TS10B		TS10A	7/8" - 14	10	0.650	16.51	0.873	22.17	4500
TS11B		TS11A	1" - 14	11	0.650	16.51	0.986	25.04	4000
TS12B		TS12A	1-1/16" - 12	12	0.750	19.05	1.053	26.75	3000
TS13B		TS13A	1-3/16" - 12	13	0.750	19.05	1.172	29.77	2700
TS16B		TS16A	1-5/16" - 12	16	0.750	19.05	1.302	33.07	2200
TS17B		TS17A	1-7/16" - 12	17	0.750	19.05	1.432	36.37	2000
TS20B		TS20A	1-5/8" - 12	20	0.825	20.96	1.615	41.02	1300
TS21B		TS21A	1-11/16" - 12	21	0.825	20.96	1.668	42.37	1200
TS24B		TS24A	1-7/8" - 12	24	0.950	24.13	1.871	47.52	900
TS32B		TS32A	2-1/2" - 12	32	1.200	30.48	2.491	63.27	400

Y Series Tear Tab Caps for NPT Threads



Specifications:

- Material: Low-Density Polyethylene
- Color: See Table

Features:

- Designed with a tear tab for easy removal
- Made to protect NPT threads from damage but versatile enough to be used in numerous applications

See pages 64 and 65 for Application Wizards

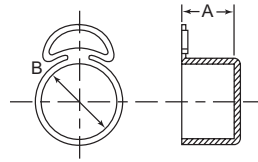
Item No.	Natural	Blue	To Cap NPT Thread	A		B		Bulk Pack Qty
				in	mm	in	mm	
Y1/8B		Y1/8A	1/8	0.320	8.13	0.386	9.80	5000
Y1/4N		Y1/4A	1/4	0.490	12.45	0.531	13.49	4000
Y3/8B		Y3/8A	3/8	0.490	12.45	0.665	16.89	5500
Y1/2B		Y1/2A	1/2	0.640	16.26	0.817	20.75	5500
Y3/4D		Y3/4A	3/4	0.630	16.00	1.033	26.24	4000
Y1B		Y1A	1	0.785	19.94	1.305	33.15	2000
Y1-1/4N		Y1-1/4A	1 - 1/4	0.840	21.34	1.643	41.73	1300
Y1-1/2E		Y1-1/2A	1 - 1/2	0.850	21.59	1.884	47.85	1000
Y2B		Y2A	2	0.890	22.61	2.339	59.41	600
Y2-1/2N		---	2 - 1/2	1.375	34.93	2.850	72.39	500
Y3N		---	3	1.437	36.50	3.475	88.27	250
Y3-1/2N		---	3 - 1/2	1.500	38.10	3.980	101.09	200
Y4N		---	4	1.500	38.10	4.480	113.79	150
Y5N		---	5	1.625	41.28	5.535	140.59	100
Y6N		---	6	1.700	43.18	6.600	167.64	50

PUSH-FIT CAPS FOR THREADS



TSM Series

Tear Tab Caps for Metric Threads



Specifications:

- Material: Low-Density Polyethylene
- Color: Refer to Chart

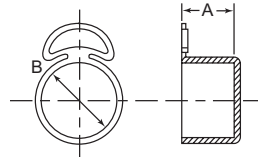
Features:

- Designed with a tear tab for easy removal
- Made to protect metric threads from damage but versatile enough to be used in numerous applications

Item No.	To Cap Metric Thread	A		B		Color	Bulk Pack Qty
		in	mm	in	mm		
TSM12A	M12	0.472	12.00	0.472	12.00	Yellow	5000
TSM14A	M14	0.551	14.00	0.555	14.10	Yellow	5000
TSM16A	M16	0.634	16.10	0.650	16.50	Yellow	5000
TSM18A	M18	0.709	18.00	0.709	18.00	Yellow	4000
TSM20B	M20	0.787	20.00	0.787	20.00	Natural	2000
TSM22A	M22	0.866	22.00	0.866	22.00	Yellow	2000

TSB Series

Tear Tab Caps for BSP Threads



Specifications:

- Material: Low-Density Polyethylene
- Color: Yellow

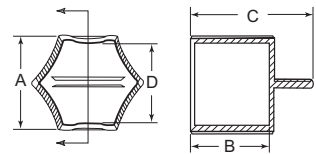
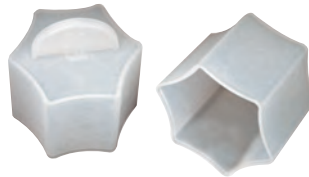
Features:

- Designed with a tear tab for easy removal
- Made to protect BSP/Gas threads from damage but versatile enough to be used in numerous applications

Item No.	To Cap BSP/Gas Thread	A		B		Bulk Pack Qty
		in	mm	in	mm	
TSB10351A	1/4" x 19	0.433	11.00	0.512	13.00	10000
TSB10492A	3/8" x 19	0.472	12.00	0.630	16.00	5000
TSB10308A	1/2" x 14	0.591	15.00	0.835	21.20	4000
TSB12373A	5/8" x 14	0.728	18.50	0.906	23.00	3000
TSB10701A	3/4" x 14	0.937	23.80	1.035	26.30	1500
TSB12375A	7/8" x 14	0.984	25.00	1.161	29.50	1500
TSB12376A	1" x 11	0.709	18.00	1.339	34.00	1500

HEX Series

Hexagonal Caps



Specifications:

- Material: Polyethylene
- Color: Natural

Features:

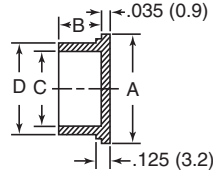
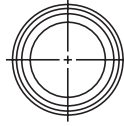
- Rigid design allows easy application and removal
- Available in all common hydraulic coupling sizes
- Also suitable for protecting round components

Item No.	To Fit Thread Sizes			A		B		C		D		Bulk Pack Qty
	UNF	Metric	BSP	in	mm	in	mm	in	mm	in	mm	
HEX100A	—	M10	—	0.433	11	0.630	16	1.102	28	0.421	10.7	500
HEX105A	7/16	M12	1/8	0.551	14	0.709	18	1.181	30	0.539	13.7	500
HEX110A	—	—	—	0.630	16	0.787	20	1.260	32	0.618	15.7	500
HEX115A	1/2	M14	—	0.669	17	0.787	20	1.260	32	0.657	16.7	500
HEX120A	9/16	M16	1/4	0.748	19	0.984	25	1.535	39	0.736	18.7	500
HEX125A	3/4	M18	3/8	0.866	22	0.984	25	1.535	39	0.850	21.6	500
HEX130A	—	—	—	0.945	24	1.102	28	1.654	42	0.929	23.6	500
HEX135A	—	—	—	0.984	25	1.102	28	1.654	42	0.969	24.6	250
HEX140A	7/8	M22	1/2	1.063	27	1.102	28	1.654	42	1.047	26.6	250
HEX145A	—	—	—	1.142	29	1.181	30	1.732	44	1.126	28.6	250
HEX150A	—	M24	5/8	1.181	30	1.181	30	1.732	44	1.165	29.6	250
HEX155A	1 - 1/16	M26	3/4	1.260	32	1.181	30	1.732	44	1.244	31.6	250
HEX160A	—	M30	—	1.417	36	1.181	30	1.732	44	1.398	35.5	250
HEX165A	—	—	—	1.496	38	1.220	31	1.772	45	1.476	37.5	100
HEX170A	1 - 5/16	M36	1	1.614	41	1.220	31	1.772	45	1.594	40.5	100
HEX175A	—	—	—	1.811	46	1.260	32	1.811	46	1.791	45.5	100
HEX180A	1 - 5/8	M45	1 - 1/4	1.969	50	1.260	32	1.811	46	1.949	49.5	100



PUSH-FIT CAPS FOR THREADS

FC CAP Series Circular Connector Caps

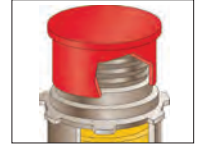


Specifications:

- Material: Low-Density Polyethylene
- Color: Red

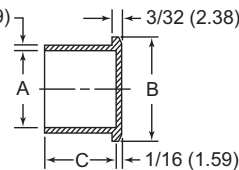
Features:

- Designed for easy assembly and removal either with automated equipment or by hand
- Typically used to protect electrical connectors per Mil Spec 90376
- See page 47 if plug is needed



Item No.	MS90376 Dash No.	To Cap Connector	A		B		C		D		Bulk Pack Qty
			in	mm	in	mm	in	mm	in	mm	
FC708A	MS90376-8R	1/2	0.740	18.80	0.500	12.70	0.480	12.19	0.540	13.72	5000
FC710A	MS90376-10R	5/8	0.840	21.34	0.500	12.70	0.605	15.37	0.665	16.89	6000
FC712A	MS90376-12R	3/4	0.970	24.62	0.500	12.70	0.720	18.29	0.775	19.69	5500
FC714A	MS90376-14R	7/8	1.125	28.58	0.500	12.70	0.850	21.59	0.905	22.99	3000
FC716A	MS90376-16R	1	1.220	30.99	0.500	12.70	0.973	24.71	1.035	26.29	3300
FC718A	MS90376-18R	1 - 1/8	1.330	33.78	0.562	14.27	1.093	27.76	1.155	29.34	2500
FC19RA	MS90376-19R	1 - 3/16	1.430	36.32	0.562	14.27	1.168	29.67	1.238	31.45	2300
FC720A	MS90376-20R	1 - 1/4	1.465	37.21	0.562	14.27	1.231	31.27	1.301	33.05	2200
FC722A	MS90376-22R	1 - 3/8	1.580	40.39	0.562	14.27	1.340	34.04	1.410	35.81	1800
FC23RA	MS90376-23R	1 - 7/16	1.650	41.91	0.562	14.27	1.408	35.76	1.478	37.54	1200
FC724A	MS90376-24R	1 - 1/2	1.709	43.41	0.562	14.27	1.463	37.16	1.533	38.94	1500
FC726A	MS90376-26R	1 - 5/8	1.810	45.97	0.562	14.27	1.590	40.39	1.660	42.16	1250
FC728A	MS90376-28R	1 - 3/4	1.950	49.53	0.562	14.27	1.715	43.56	1.790	45.47	1000
FC732A	MS90376-32R	2	2.220	56.39	0.562	14.27	1.965	49.91	2.040	51.82	900
FC736A	MS90376-36R	2 - 1/4	2.435	61.85	0.600	15.24	2.215	56.26	2.290	58.17	700
FC740A	MS90376-40R	2 - 1/2	2.660	67.56	0.600	15.24	2.440	61.98	2.530	64.26	550
FC744A	MS90376-44R	2 - 3/4	2.960	75.18	0.600	15.24	2.720	69.09	2.812	71.42	450

D Series Flanged Connector Caps

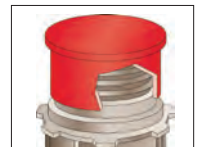


Specifications:

- Material: Low-Density Polyethylene
- Color: Red

Features:

- Designed for easy assembly and removal either with automated equipment or by hand
- Typically used to protect connectors with standard threads



Item No.	To Cap Std. Threaded Connector	A		B		C		Bulk Pack Qty
		in	mm	in	mm	in	mm	
D1/4A	1/4	0.240	6.10	0.480	12.19	0.500	12.70	5000
D3/8A	3/8	0.360	9.14	0.625	15.88	0.500	12.70	5000
D1/2A	1/2	0.477	12.12	0.750	19.05	0.500	12.70	7000
D9/16A	9/16	0.551	14.00	0.781	19.84	0.500	12.70	6000
D5/8A	5/8	0.593	15.06	0.875	22.23	0.500	12.70	4500
D3/4A	3/4	0.716	18.19	1.000	25.40	0.487	12.37	3500
D7/8A	7/8	0.841	21.36	1.125	28.58	0.491	12.47	2500
D15/16A	15/16	0.930	23.62	1.156	29.36	0.547	13.89	2000
D1A	1	0.960	24.38	1.250	31.75	0.500	12.70	2000
D1-1/8A	1 - 1/8	1.092	27.74	1.375	34.93	0.563	14.29	1500
D1-3/16A	1 - 3/16	1.176	29.87	1.438	36.51	0.563	14.29	3000
D1-1/4A	1 - 1/4	1.207	30.66	1.500	38.10	0.563	14.29	3000
D1-3/8A	1 - 3/8	1.348	34.24	1.625	41.28	0.563	14.29	2500
D1-7/16A	1 - 7/16	1.407	35.74	1.688	42.86	0.563	14.29	2200
D1-1/2A	1 - 1/2	1.458	37.03	1.719	43.66	0.563	14.29	2000
D1-3/4A	1 - 3/4	1.730	43.94	1.969	50.01	0.563	14.29	1500



OFR Series O-Ring Face-Fitting Caps for UNF/JIC Threads

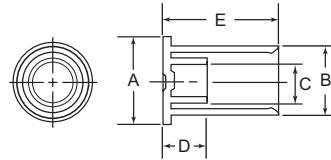


Specifications:

- Material: Low-Density Polyethylene
- Color: See Table

Features:

- Designed to protect O-Ring face seal connectors used on hydraulic connections
- Designed with a longer overall length and includes a molded retaining ring at the bottom that snaps under the connector for added security



Item No.	To Cap UNF Thread	A		B		C		D		E		Bulk Pack Qty
		in	mm	in	mm	in	mm	in	mm	in	mm	
Blue												
OFR4B	9/16" - 18	0.938	23.80	0.771	19.58	0.500	12.70	0.330	8.30	0.690	17.50	3000
OFR6B	11/16" - 16	1.125	28.40	0.903	22.93	0.625	16.00	0.370	9.40	0.770	19.60	2500
OFR8A	13/16" - 16	1.219	31.00	1.052	26.72	0.750	19.10	0.430	10.90	0.930	23.60	3000
OFR10A	1" - 14	1.438	36.50	1.255	31.50	0.906	23.00	0.530	13.50	1.040	26.40	2000
OFR12A	1 - 3/16" - 12	1.688	42.70	1.530	38.86	1.093	27.70	0.570	14.50	1.140	28.80	1200
OFR16A	1 - 7/16" - 12	2.000	50.80	1.804	45.82	1.343	34.10	0.580	14.70	1.210	30.70	900
OFR20A	1 - 11/16" - 12	2.250	57.20	2.093	53.16	1.593	40.50	0.580	14.70	1.210	30.70	700
OFR24A	2" - 12	2.719	69.00	2.520	64.01	1.875	47.60	0.580	14.70	1.210	30.70	450

Item No.	To Cap JIC Thread	JIC Fitting Size	A		B		C		D		E		Bulk Pack Qty	
			in	mm	in	mm	in	mm	in	mm	in	mm		
Blue														
OFR100A	OFR100B	7/16" - 20	4	0.770	19.60	0.712	18.08	0.370	9.40	0.420	10.67	0.710	18.03	3000
OFR110A	OFR110B	9/16" - 18	6	0.950	24.10	0.864	21.95	0.500	12.80	0.420	10.67	0.840	21.34	2500
OFR120A	OFR120B	3/4" - 16	8	1.160	29.30	1.067	27.10	0.670	17.00	0.430	10.92	0.930	23.62	1200
OFR130A	OFR130B	7/8" - 14	10	1.280	32.50	1.192	30.28	0.780	19.80	0.500	12.70	1.050	26.67	1200
OFR140A	OFR140B	1 - 1/16" - 12	12	1.580	40.10	1.489	37.82	0.960	24.40	0.570	14.48	1.150	29.21	1200
OFR150A	OFR150B	1 - 5/16" - 12	16	1.880	47.80	1.766	44.86	1.220	30.90	0.590	14.99	1.210	30.73	1000

OR Series O-Ring Face-Fitting Caps for UNF Threads

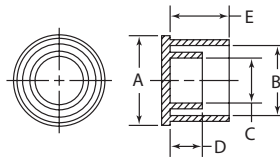


Specifications:

- Material: Low-Density Polyethylene
- Color: Blue

Features:

- Designed to protect O-Ring face seal connectors used on hydraulic connections



Item No.	To Cap UNF Thread	A		B		C		D		E		Bulk Pack Qty
		in	mm	in	mm	in	mm	in	mm	in	mm	
OR4A	9/16" - 18	0.875	22.23	0.768	19.51	0.500	12.70	0.326	8.28	0.578	14.68	3500
OR6A	11/16" - 16	1.000	25.40	0.901	22.89	0.594	15.08	0.370	9.40	0.672	17.07	2500
OR8A	13/16" - 16	1.156	29.37	1.053	26.75	0.750	19.05	0.430	10.92	0.828	21.03	3000
OR10A	1" - 14	1.375	34.93	1.260	32.00	0.906	23.02	0.530	13.46	0.922	23.42	2000
OR12A	1 - 3/16" - 12	1.625	41.28	1.535	38.99	1.094	27.78	0.560	14.48	1.031	26.19	1200
OR16A	1 - 7/16" - 12	1.844	46.83	1.804	45.82	1.344	34.13	0.580	14.73	1.094	27.78	900
OR20A	1 - 11/16" - 12	2.125	53.98	2.093	53.16	1.594	40.48	0.580	14.73	1.094	27.78	700
OR24B	2" - 12	2.688	68.26	2.520	64.01	1.875	47.63	0.580	14.73	1.094	27.78	450



PUSH-FIT CAPS

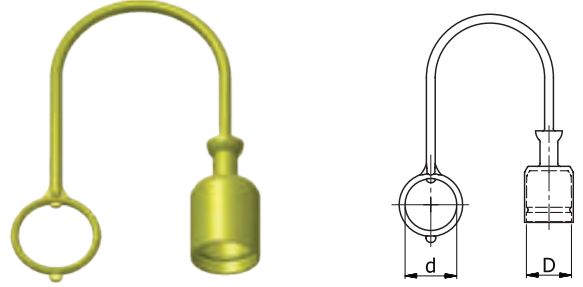
Hydraulic Quick Release Dust Caps

Specifications:

- Material: Thermoplastic Elastomer
- Color: See Table

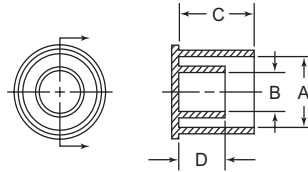
Features:

- Suitable to cap ISO 7241-1 Series A and B Quick Couplings
- Designed to remain attached to a hose
- Excellent protection from dirt, moisture and corrosion
- Temperature Range: -40°F - 275°F (-40°C - 135°C)
- See page 51 if plug is needed



Item No.					D		d		Bulk Pack Qty	
Red	Yellow	Green	Blue	Size	Series	mm	in	mm		in
498796	499736	499746	499756	1/4	ISO A	12.7	0.500	20.0	0.787	150
498797	499737	499747	499757	3/8	ISO A	18.3	0.720	25.0	0.984	150
498798	499738	499748	499758	1/2	ISO A	24.3	0.957	28.0	1.102	150
498799	499739	499749	499759	3/4	ISO A	30.7	1.209	35.0	1.378	150
498800	499740	499750	499760	1	ISO A	36.5	1.437	42.0	1.654	150
498801	499741	499751	499761	1/4	ISO B	15.5	0.610	20.0	0.787	150
498802	499742	499752	499762	3/8	ISO B	20.0	0.787	23.0	0.906	150
498803	499743	499753	499763	1/2	ISO B	25.7	1.012	28.0	1.102	150
498804	499744	499754	499764	3/4	ISO B	32.7	1.287	34.0	1.339	150
498805	499745	499755	499765	1	ISO B	40.5	1.594	43.0	1.693	150

M Series Tube and Nut Assembly Caps



Specifications:

- Materials: Low-Density Polyethylene
- Color: Red

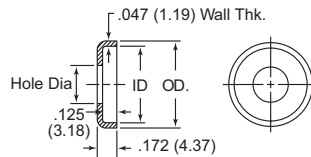
Features:

- Designed to protect flareless hydraulic tube and nut assemblies
- Features a double cap design; the outside cap conforms to the hex shape of the nut, the inside cap covers the tube and sleeve inside the nut to hold the assembly in place
- The MCA and MCM Series are frequently applied to automobile air conditioning tube and nut assemblies



Item No.	To Cap Tube Size	A		B		C		D		Bulk Pack Qty
		in	mm	in	mm	in	mm	in	mm	
M2A	1/8	0.391	9.93	0.172	4.37	0.580	14.73	0.400	10.16	6000
M3A	3/16	0.456	11.58	0.236	5.99	0.630	16.00	0.410	10.41	8500
M4A	1/4	0.606	15.39	0.283	7.19	0.650	16.51	0.380	9.65	5000
M5A	5/16	0.655	16.64	0.352	8.94	0.810	20.57	0.540	13.72	3500
M6A	3/8	0.740	18.80	0.440	11.18	0.845	21.46	0.545	13.84	2800
M8A	1/2	0.914	23.22	0.567	14.40	0.905	22.99	0.540	13.72	1800
M10A	5/8	1.044	26.52	0.670	17.02	1.030	26.16	0.647	16.43	2500
M12A	3/4	1.324	33.62	0.851	21.62	1.045	26.54	0.643	16.33	1600
M16A	1	1.564	39.73	1.060	26.92	1.097	27.86	0.550	13.97	1100
M20A	1 - 1/4	2.090	53.09	1.320	33.53	1.104	28.04	0.625	15.88	650
M24A	1 - 1/2	2.345	59.56	1.535	38.99	1.078	27.38	0.620	15.75	550
MCA10A	3/8 female	0.799	20.29	0.326	8.28	0.610	15.49	0.211	5.36	2800
MCA12A	1/2 female	0.930	23.62	0.450	11.43	0.750	19.05	0.315	8.00	3500
MCA17A	3/4 female	1.330	33.78	0.684	17.37	1.060	26.92	0.315	8.00	1500
MCM10A	3/8 male	0.612	15.54	0.326	8.28	0.800	20.32	0.211	5.36	3500
MCM12A	1/2 male	0.735	18.67	0.450	11.43	1.000	25.40	0.315	8.00	2000

W Series Hose Washer Caps

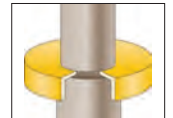


Specifications:

- Material: See Table
- Color: See Table

Features:

- Applied on hose and tube ends in order to prevent them from sliding over the fittings



Item No.	Ø Hole		I.D.		O.D.		Color	Material	Bulk Pack Qty
	in	mm	in	mm	in	mm			
W6A	0.320	8.13	0.589	14.96	0.685	17.40	Yellow	LDPE	4750
W6C	0.320	8.13	0.589	14.96	0.685	17.40	Black	TPE	4750
W8A	0.445	11.30	0.760	19.30	0.860	21.84	Yellow	LDPE	4000
W8C	0.445	11.30	0.760	19.30	0.860	21.84	Black	TPE	4000
W10A	0.575	14.61	0.870	22.10	0.968	24.59	Yellow	LDPE	5000
W10C	0.575	14.61	0.870	22.10	0.968	24.59	Black	TPE	5000

Item No.	Ø Hole		I.D.		O.D.		Color	Material	Bulk Pack Qty
	in	mm	in	mm	in	mm			
W13A	0.700	17.78	1.040	26.42	1.141	28.98	Yellow	LDPE	7000
W13C	0.700	17.78	1.040	26.42	1.141	28.98	Black	TPE	6500
W15A	0.828	21.03	1.165	29.59	1.266	32.16	Yellow	LDPE	5000
W15C	0.828	21.03	1.165	29.59	1.266	32.16	Black	TPE	5000
W20A	1.050	26.67	1.300	33.02	1.400	35.56	Yellow	LDPE	5000
W20C	1.050	26.67	1.300	33.02	1.400	35.56	Black	TPE	5000



THREADED CAPS

TSC Series

UNF/Metric Threaded Sealing Caps

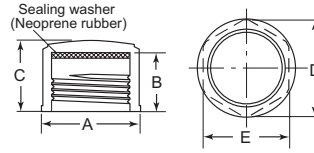


Specifications:

- Material: High-Density Polyethylene
- Color: Yellow

Features:

- This cap includes a neoprene sealing disk to limit fluid leakage
- The HDPE material reduces the potential of shearing



Unified Threads

Item No.	To Cap Thread Size	A		B		C		D		E		Bulk Pack Qty
		in	mm	in	mm	in	mm	in	mm	in	mm	
TSC467054A	1/4" - 28	0.393	10.00	0.452	11.50	0.531	13.50	0.346	8.80	0.314	8.00	500
TSC467055A	3/8" - 24	0.511	13.00	0.492	12.50	0.570	14.50	0.476	12.10	0.433	11.00	500
TSC467056A	7/16" - 24	0.610	15.50	0.492	12.50	0.570	14.50	0.562	14.30	0.511	13.00	500
TSC467057A	7/16" - 20	0.610	15.50	0.511	13.00	0.590	15.00	0.562	14.30	0.511	13.00	500
TSC467058A	1/4" - 28	0.689	17.50	0.511	13.00	0.590	15.00	0.649	16.50	0.590	15.00	500
TSC467059A	9/16" - 18	0.728	18.50	0.531	13.50	0.610	15.50	0.688	17.50	0.629	16.00	500
TSC467060A	5/8" - 18	0.826	21.00	0.531	13.50	0.610	15.50	0.775	19.70	0.708	18.00	500
TSC467061A	3/4" - 16	0.944	24.00	0.570	14.50	0.649	16.50	0.905	23.00	0.826	21.00	500
TSC467062A	13/16" - 16	1.043	26.50	0.570	14.50	0.649	16.50	0.992	25.20	0.905	23.00	500
TSC467063A	7/8" - 18	1.082	27.50	0.531	13.50	0.610	15.50	1.035	26.30	0.944	24.00	500
TSC467064A	7/8" - 14	1.082	27.50	0.610	15.50	0.688	17.50	1.035	26.30	0.944	24.00	250
TSC467065A	1" - 14	1.220	31.00	0.610	15.50	0.688	17.50	1.165	29.60	1.062	27.00	250
TSC467066A	1 - 1/16" - 12	1.358	34.50	0.649	16.50	0.728	18.50	1.295	32.90	1.181	30.00	250
TSC467067A	1 - 3/16" - 12	1.437	36.50	0.649	16.50	0.728	18.50	1.381	35.10	1.259	32.00	250
TSC467068A	1 - 5/16" - 12	1.614	41.00	0.649	16.50	0.728	18.50	1.555	39.50	1.417	36.00	250
TSC467069A	1 - 3/8" - 12	1.692	43.00	0.649	16.50	0.728	18.50	1.641	41.70	1.496	38.00	250
TSC467070A	1 - 7/16" - 12	1.791	45.50	0.649	16.50	0.728	18.50	1.728	43.90	1.574	40.00	250
TSC467071A	1 - 5/8" - 12	2.007	51.00	0.649	16.50	0.748	19.00	1.944	49.40	1.771	45.00	100
TSC467072A	1 - 3/4" - 16	2.145	54.50	0.570	14.50	0.669	17.00	2.070	52.60	1.889	48.00	100
TSC467073A	1-7/8" - 12	2.322	59.00	0.649	16.50	0.748	19.00	2.244	57.00	2.047	52.00	100

Metric Threads

Item No.	To Cap Thread Size	A		B		C		D		E		Bulk Pack Qty
		in	mm	in	mm	in	mm	in	mm	in	mm	
TSC467033A	M8 x 1	0.472	12.00	0.433	11.00	0.511	13.00	0.433	11.00	0.393	10.00	500
TSC467034A	M10 x 1	0.559	14.20	0.433	11.00	0.511	13.00	0.519	13.20	0.472	12.00	500
TSC467035A	M12 x 1	0.649	16.50	0.433	11.00	0.511	13.00	0.606	15.40	0.551	14.00	500
TSC467036A	M12 x 1.5	0.649	16.50	0.511	13.00	0.590	15.00	0.606	15.40	0.551	14.00	500
TSC467037A	M14 x 1.5	0.728	18.50	0.511	13.00	0.590	15.00	0.689	17.50	0.629	16.00	500
TSC467038A	M16 x 1.5	0.826	21.00	0.511	13.00	0.590	15.00	0.775	19.70	0.708	18.00	500
TSC467039A	M18 x 1.5	0.905	23.00	0.511	13.00	0.590	15.00	0.862	21.90	0.787	20.00	500
TSC467040A	M20 x 1.5	0.984	25.00	0.511	13.00	0.590	15.00	0.948	24.10	0.866	22.00	500
TSC467041A	M22 x 1.5	1.082	27.50	0.511	13.00	0.590	15.00	1.035	26.30	0.944	24.00	250
TSC467042A	M24 x 1.5	1.181	30.00	0.511	13.00	0.590	15.00	1.122	28.50	1.023	26.00	250
TSC467043A	M25 x 1.5	1.220	31.00	0.511	13.00	0.590	15.00	1.165	29.60	1.063	27.00	250
TSC467044A	M26 x 1.5	1.259	32.00	0.511	13.00	0.590	15.00	1.208	30.70	1.102	28.00	250
TSC467045A	M28 x 1.5	1.338	34.00	0.511	13.00	0.590	15.00	1.295	32.90	1.181	30.00	250
TSC467046A	M30 x 1.5	1.437	36.50	0.511	13.00	0.590	15.00	1.381	35.10	1.259	32.00	250
TSC467047A	M30 x 2	1.437	36.50	0.590	15.00	0.669	17.00	1.381	35.10	1.259	32.00	250
TSC467048A	M36 x 1.5	1.752	44.50	0.551	14.00	0.629	16.00	1.685	42.80	1.535	39.00	100
TSC467049A	M36 x 2	1.752	44.50	0.629	16.00	0.708	18.00	1.685	42.80	1.535	39.00	100
TSC467050A	M42 x 2	2.007	51.00	0.629	16.00	0.728	18.50	1.944	49.40	1.771	45.00	100
TSC467051A	M45 x 1.5	2.145	54.50	0.551	14.00	0.649	16.50	2.070	52.60	1.889	48.00	100
TSC467052A	M45 x 2	2.145	54.50	0.629	16.00	0.728	18.50	2.070	52.60	1.889	48.00	100
TSC467053A	M52 x 2	2.440	62.00	0.629	16.00	0.728	18.50	2.374	60.30	2.165	55.00	100



HOSE PROTECTION

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SPIRALGUARD



**BP Series
Barrel Plugs**

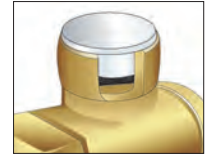
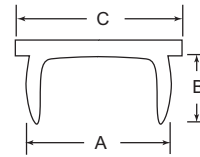


Specifications:

- Material: Low-Density Polyethylene
- Color: See Table

Features:

- General purpose plug for a wide range of applications
- Quick to fit and remove
- Convexed sides to ensure secure fit



See pages 64 and 65 for Application Wizards

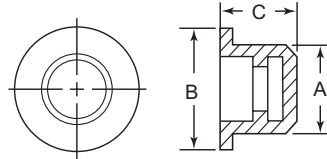
Item No.	Color	A		B		C		Bulk Pack Qty
		in	mm	in	mm	in	mm	
BP1000A	Natural	0.083	2.1	0.276	7.0	0.138	3.5	1000
BP1002A	Natural	0.102	2.6	0.157	4.0	0.472	12.0	1000
BP1004A	Natural	0.106	2.7	0.236	6.0	0.472	12.0	1000
BP1006A	Natural	0.130	3.3	0.236	6.0	0.472	12.0	1000
054044922003	Black	0.173	4.4	0.197	5.0	0.354	9.0	1000
BP1008A	Natural	0.173	4.4	0.205	5.2	0.354	9.0	1000
054047769903	Black	0.181	4.6	0.197	5.0	0.276	7.0	1000
BP1010A	Natural	0.181	4.6	0.197	5.0	0.276	7.0	1000
494365	Black	0.213	5.4	0.295	7.5	0.472	12.0	500
BP1012A	Natural	0.213	5.4	0.295	7.5	0.472	12.0	10000
BP1014A	Natural	0.248	6.3	0.157	4.0	0.378	9.6	1000
494366	Black	0.287	7.3	0.236	6.0	0.551	14.0	500
BP1018A	Natural	0.287	7.3	0.236	6.0	0.551	14.0	10000
494367	Black	0.331	8.4	0.236	6.0	0.551	14.0	500
BP1020A	Natural	0.331	8.4	0.236	6.0	0.551	14.0	10000
055008822003	Black	0.346	8.8	0.315	8.0	0.453	11.5	500
BP1022A	Natural	0.346	8.8	0.315	8.0	0.453	11.5	500
055009322003	Black	0.366	9.3	0.354	9.0	0.472	12.0	500
BP1024A	Natural	0.366	9.3	0.354	9.0	0.472	12.0	500
494368	Black	0.366	9.3	0.177	4.5	0.551	14.0	500
BP1026A	Natural	0.366	9.3	0.177	4.5	0.551	14.0	6000
BP1028A	Natural	0.366	9.3	0.268	6.8	0.630	16.0	6000
054100322003	Black	0.394	10.0	0.157	4.0	0.472	12.0	500
BP1030A	Natural	0.394	10.0	0.157	4.0	0.472	12.0	500
BP1032A	Natural	0.394	10.0	0.354	9.0	0.591	15.0	500
BP1034A	Natural	0.421	10.7	0.236	6.0	0.551	14.0	6000
494369	Black	0.421	10.7	0.236	6.0	0.551	14.0	500
BP1036A	Natural	0.421	10.7	0.354	9.0	0.583	14.8	500
BP1038A	Natural	0.445	11.3	0.217	5.5	0.567	14.4	1000
494370	Black	0.469	11.9	0.276	7.0	0.630	16.0	500
BP1040A	Natural	0.469	11.9	0.276	7.0	0.630	16.0	5000
494371	Black	0.484	12.3	0.276	7.0	0.630	16.0	500
BP1042A	Natural	0.484	12.3	0.276	7.0	0.630	16.0	5000
494372	Black	0.504	12.8	0.307	7.8	0.787	20.0	500
BP1044A	Natural	0.504	12.8	0.307	7.8	0.787	20.0	5000
BP1046A	Natural	0.539	13.7	0.276	7.0	0.736	18.7	1000
494373	Black	0.539	13.7	0.315	8.0	0.787	20.0	500
12787A	Natural	0.539	13.7	0.315	8.0	0.787	20.0	5000
125533Z	Natural	0.551	14.0	0.276	7.0	0.736	18.7	1000
494374	Black	0.571	14.5	0.217	5.5	0.787	20.0	500
BP1052A	Natural	0.571	14.5	0.217	5.5	0.787	20.0	5000
BP1054A	Natural	0.575	14.6	0.374	9.5	0.728	18.5	500
BP1056A	Natural	0.591	15.0	0.276	7.0	0.736	18.7	1000
494375	Black	0.614	15.6	0.315	8.0	0.787	20.0	500
BP1058A	Natural	0.614	15.6	0.315	8.0	0.787	20.0	5000
BP1060A	Natural	0.650	16.5	0.276	7.0	0.736	18.7	1000
12790A	Natural	0.669	17.0	0.323	8.2	0.866	22.0	5000
BP1064A	Natural	0.701	17.8	0.354	9.0	0.969	24.6	1000
494377	Black	0.724	18.4	0.315	8.0	0.984	25.0	500
BP1066A	Natural	0.724	18.4	0.315	8.0	0.984	25.0	5000
BP1068A	Natural	0.740	18.8	0.354	9.0	0.846	21.5	500
494378	Black	0.760	19.3	0.315	8.0	0.984	25.0	500
12792B	Natural	0.760	19.3	0.315	8.0	0.984	25.0	5000
BP1072A	Natural	0.768	19.5	0.354	9.0	0.969	24.6	1000
BP1074A	Natural	0.791	20.1	0.354	9.0	0.969	24.6	500
BP1076A	Natural	0.807	20.5	0.354	9.0	1.004	25.5	250

Item No.	Color	A		B		C		Bulk Pack Qty
		in	mm	in	mm	in	mm	
BP1078A	Natural	0.807	20.5	0.421	10.7	1.181	30.0	3000
055021022003	Black	0.827	21.0	0.496	12.6	1.007	25.6	500
BP1080A	Natural	0.827	21.0	0.496	12.6	1.007	25.6	250
BP1082A	Natural	0.835	21.2	0.295	7.5	0.984	25.0	5000
494379	Black	0.854	21.7	0.315	8.0	0.984	25.0	500
BP1084A	Natural	0.854	21.7	0.315	8.0	0.984	25.0	4000
494380	Black	0.882	22.4	0.354	9.0	1.102	28.0	500
BP1086A	Natural	0.882	22.4	0.354	9.0	1.102	28.0	4000
BP1088A	Natural	0.906	23.0	0.760	19.3	1.079	27.4	100
494381	Black	0.921	23.4	0.354	9.0	1.102	28.0	500
BP1090A	Natural	0.921	23.4	0.354	9.0	1.102	28.0	4000
BP1092A	Natural	0.945	24.0	0.504	12.8	1.063	27.0	100
494382	Black	0.969	24.6	0.354	9.0	1.102	28.0	500
BP1094A	Natural	0.969	24.6	0.354	9.0	1.102	28.0	3000
BP1096A	Natural	0.976	24.8	0.236	6.0	1.240	31.5	100
BP1098A	Natural	0.984	25.0	0.512	13.0	1.260	32.0	100
494383	Black	1.004	25.5	0.295	7.5	1.102	28.0	500
BP1100A	Natural	1.004	25.5	0.295	7.5	1.102	28.0	3000
494384	Black	1.043	26.5	0.354	9.0	1.102	28.0	500
BP1102A	Natural	1.043	26.5	0.354	9.0	1.102	28.0	4000
BP1104A	Natural	1.063	27.0	0.591	15.0	1.165	29.6	100
BP1106A	Natural	1.083	27.5	0.472	12.0	1.370	34.8	500
BP1108A	Natural	1.126	28.6	0.591	15.0	1.339	34.0	100
BP1110A	Natural	1.142	29.0	0.472	12.0	1.417	36.0	3000
494385	Black	1.201	30.5	0.472	12.0	1.417	36.0	500
BP1112A	Natural	1.201	30.5	0.472	12.0	1.417	36.0	2500
BP1114A	Natural	1.252	31.8	0.394	10.0	1.417	36.0	2000
BP1116A	Natural	1.283	32.6	0.472	12.0	1.370	34.8	500
494386	Black	1.319	33.5	0.472	12.0	1.417	36.0	500
BP1118A	Natural	1.319	33.5	0.472	12.0	1.417	36.0	2000
BP1120A	Natural	1.319	33.5	0.472	12.0	1.614	41.0	100
BP1122A	Natural	1.370	34.8	0.591	15.0	1.654	42.0	2000
BP1124A	Natural	1.398	35.5	0.591	15.0	1.831	46.5	100
BP1126A	Natural	1.437	36.5	0.591	15.0	1.654	42.0	1500
BP1128A	Natural	1.480	37.6	0.472	12.0	1.591	40.4	500
BP1130A	Natural	1.512	38.4	0.591	15.0	1.654	42.0	2000
BP1134A	Natural	1.598	40.6	0.591	15.0	1.732	44.0	1000
BP1136A	Natural	1.665	42.3	0.591	15.0	1.890	48.0	1000
BP1138A	Natural	1.705	43.3	0.591	15.0	1.988	50.5	100
BP1140A	Natural	1.811	46.0	0.709	18.0	2.165	55.0	1500
BP1142A	Natural	1.988	50.5	0.551	14.0	2.244	57.0	100
BP1144A	Natural	2.028	51.5	0.709	18.0	2.165	55.0	1500
BP1146A	Natural	2.067	52.5	0.551	14.0	2.362	60.0	100
BP1148A	Natural	2.130	54.1	0.709	18.0	2.311	58.7	500
BP1150A	Natural	2.177	55.3	0.768	19.5	2.343	59.5	100
BP1152A	Natural	2.283	58.0	0.709	18.0	2.520	64.0	750
BP1154A	Natural	2.346	59.6	0.709	18.0	2.894	73.5	500
BP1156A	Natural	2.756	70.0	0.709	18.0	3.071	78.0	500
BP1158A	Natural	2.902	73.7	0.685	17.4	3.240	82.3	500
BP1160A	Natural	3.181	80.8	0.685	17.4	3.642	92.5	250
BP1162A	Natural	3.346	85.0	0.709	18.0	3.681	93.5	50
BP1164A	Natural	3.406	86.5	0.685	17.4	3.909	99.3	250
BP1166A	Natural	3.890	98.8	0.685	17.4	4.409	112.0	250
BP1168A	Natural	4.350	110.5	0.709	18.0	5.118	130.0	50
BP1170A	Natural	4.398	111.7	0.685	17.4	4.843	123.0	250



PUSH-FIT PLUGS

FT Series TPR, PVC & Vinyl Plugs



Specifications:

- Materials: Thermoplastic Rubber, PVC or Vinyl
- Color: See Table

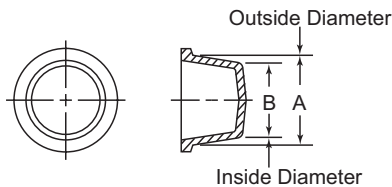
Features:

- Highly resistant to shredding
- Ideal for threaded applications
- Thermoplastic rubber is recommended for use wherever resistance to acid is required
- PVC is highly resistant to shredding and ideal for threaded applications
- Green Vinyl works well with oils and greases



Item No.			A		B		C		Bulk Pack Qty		
Black TPR	Black PVC	Green Vinyl	in	mm	in	mm	in	mm	Black TPR	Black PVC	Green Vinyl
18071B	10874A	—	0.125	3.20	0.276	7.00	0.354	9.00	10000	10000	10000
12049B	12665A	—	0.197	5.00	0.433	11.00	0.471	11.99	10000	10000	10000
12050B	12666A	11806	0.236	5.99	0.472	11.99	0.471	11.99	10000	10000	5000
12051B	12667A	11817	0.275	6.99	0.511	12.98	0.471	11.99	10000	10000	5000
12052B	12668A	11808	0.315	8.00	0.551	14.00	0.471	11.99	10000	10000	10000
12053B	12669A	11829	0.354	8.99	0.580	14.99	0.471	11.99	10000	10000	5000
12054B	12670A	11807	0.393	9.98	0.629	15.98	0.471	11.99	10000	10000	5000
12055B	12671A	11824	0.433	11.00	0.669	16.99	0.471	11.99	10000	10000	10000
12056B	12672A	11809	0.472	11.99	0.787	19.99	0.471	11.99	8000	8000	8000
12057B	12673A	11822	0.511	12.98	0.826	20.98	0.551	14.00	8000	8000	8000
12058B	12674A	11813	0.551	14.00	0.866	22.00	0.551	14.00	6000	7000	7000
12059B	12675A	11830	0.580	14.99	0.905	22.99	0.571	14.50	6000	5000	6000
12060B	12677A	11820	0.630	16.00	0.945	24.00	0.551	14.00	6000	6000	6000
FLP17A	12678A	11811	0.669	17.00	1.063	27.00	0.531	13.50	4000	5000	5000
12062B	12679A	11827	0.709	18.01	1.102	27.99	0.551	14.00	4000	4000	4000
12063B	12680A	11818	0.748	19.00	1.142	29.01	0.551	14.00	4000	2000	2000
12064B	12681A	11812	0.787	19.99	1.181	30.00	0.551	14.00	4000	2000	2000
12065B	12683A	11823	0.827	21.01	1.220	30.99	0.551	14.00	3000	2500	3000
FLP21A	12684A	11828	0.879	22.33	1.260	32.00	0.551	14.00	2500	3000	1500
12067B	12685A	11814	0.906	23.01	1.299	32.99	0.630	16.00	3000	1500	1500
12068B	12686A	11810	0.945	24.00	1.339	34.01	0.630	16.00	2500	2500	2500
12069B	12687A	11816	0.984	24.99	1.378	35.00	0.630	16.00	2000	2000	2000
12070B	12688A	11819	1.024	26.01	1.417	35.99	0.630	16.00	2000	2000	2000
12071B	12689A	11821	1.063	27.00	1.457	37.01	0.630	16.00	2000	2000	2000
12072B	12690A	11825	1.102	27.99	1.496	38.00	0.630	16.00	2000	2000	2000
FLP30A	12692A	11826	1.190	30.23	1.400	35.56	0.630	16.00	1500	1000	1000
12501B	12693A	12078	1.575	40.01	1.969	50.01	0.866	22.00	700	500	700
12502B	12694A	—	1.850	46.99	2.244	57.00	0.866	22.00	500	500	500

DMVP Series Vinyl Tapered Plugs



Specifications:

- Material: PVC
- Color: Black
- Temperature Range: Up to 350°F (177°C)

Features:

- The flexibility of the material allows these plugs to fit into smaller dimensions for a snug fit
- The tapered design allows the part to plug multiple inner diameters

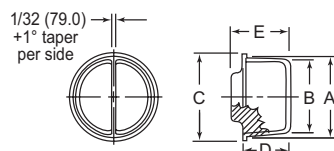
To Assure Proper Fit:

▢ Plugs

Plug dimension "A" should be approx. 1% larger than the inner diameter of the part.
Minimum of .020"

Item No.	A		B		Bulk Pack Qty
	in	mm	in	mm	
DMVP0285A	0.290	7.20	0.180	4.40	5000
DMVP0360A	0.360	9.10	0.250	6.40	5000
DMVP0405A	0.410	10.30	0.300	7.50	5000
DMVP0465A	0.470	11.80	0.360	9.00	5000
DMVP0530A	0.530	13.50	0.420	10.70	5000
DMVP0605A	0.610	15.40	0.500	12.60	5000
DMVP0750A	0.750	19.10	0.640	16.30	2000
DMVP0850A	0.850	21.60	0.740	18.80	2500
DMVP1015A	1.020	25.80	0.910	23.00	2500
DMVP1190A	1.190	30.20	1.060	27.40	2000

CP Series Center Pull Tab Plugs



Specifications:

- Material: Low-Density Polyethylene
- Color: See Table

Features:

- The integral center pull tab feature is designed for quick and easy removal
- The tapered design allows the part to plug multiple inner diameters

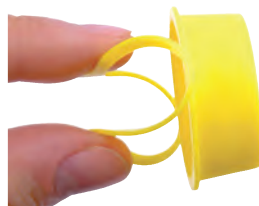
To Assure Proper Fit:

Plugs

Plug dimension "A" should be approx. 1% larger than the inner diameter of the part. Minimum of .020"

Item No.	A	B	C	D	E	Bulk Pack Qty						
Orange	in	mm	in	mm	in	mm						
CP4A	0.269	6.83	0.209	5.31	0.380	9.65	0.340	8.64	0.590	14.99	5000	
CP5A	0.303	7.69	0.239	6.07	0.469	11.91	0.370	9.39	0.630	16.00	5000	
CP6A	0.335	8.51	0.267	6.78	0.469	11.91	0.406	10.32	0.625	15.88	5000	
CP7A	0.370	9.40	0.302	7.67	0.531	13.49	0.375	9.53	0.750	19.05	5000	
CP8A	0.396	10.06	0.330	8.38	0.530	13.46	0.410	10.41	0.790	20.07	5000	
CP9A	0.428	10.87	0.362	9.19	0.594	15.08	0.375	9.53	0.750	19.05	7000	
CP10A	0.463	11.76	0.402	10.21	0.625	15.88	0.375	9.53	0.750	19.05	6000	
CP11A	0.486	12.34	0.422	10.72	0.625	15.88	0.406	10.32	0.781	19.84	5500	
CP12A	0.512	13.00	0.448	11.38	0.656	16.67	0.406	10.32	0.563	14.29	5000	
---	110033	0.539	13.70	0.461	11.70	0.677	17.20	0.433	11.00	0.866	22.00	5000
CP13A	0.548	13.92	0.471	11.96	0.690	17.53	0.470	11.94	0.850	21.59	5000	
CP14A	0.568	14.43	0.500	12.70	0.719	18.26	0.469	11.91	0.813	20.64	7500	
CP15B	0.608	15.44	0.532	13.51	0.750	19.05	0.470	11.94	0.780	19.81	6000	
CP16A	0.633	16.08	0.551	14.00	0.780	19.81	0.500	12.70	0.750	19.05	5000	
CP18A	0.668	16.97	0.580	14.73	0.813	20.64	0.531	13.49	0.750	19.05	5500	
CP19A	0.695	17.65	0.610	15.49	0.840	21.34	0.530	13.46	0.780	19.81	5000	
---	110035	0.720	18.30	0.646	16.40	0.874	22.20	0.484	12.30	0.925	23.50	5000
CP23A	0.787	19.99	0.691	17.55	0.938	23.81	0.594	15.08	0.750	19.05	3500	
CP24A	0.825	20.96	0.727	18.47	1.000	25.40	0.590	14.99	0.840	21.34	5000	
CP29A	0.933	23.70	0.819	20.80	1.125	28.58	0.750	19.05	1.000	25.40	4000	
CP31A	0.973	24.71	0.869	22.07	1.120	28.45	0.750	19.05	1.000	25.40	4000	
---	10418	1.004	25.50	0.886	22.50	1.138	28.90	0.701	17.80	1.142	29.00	2500
CP35A	1.074	27.28	0.935	23.75	1.156	29.37	0.750	19.05	0.938	23.81	3500	
CP37A	1.092	27.74	0.967	24.56	1.250	31.75	0.780	19.81	1.030	26.16	2500	
CP40A	1.146	29.11	1.026	26.06	1.340	34.04	0.750	19.05	1.000	25.40	2500	
CP42A	1.219	30.96	1.093	27.76	1.410	35.81	0.780	19.81	1.000	25.40	2500	
CP44A	1.286	32.66	1.150	29.21	1.550	39.37	0.750	19.05	1.000	25.40	2000	
CP46A	1.360	34.54	1.235	31.37	1.530	38.86	0.750	19.05	1.000	25.40	2000	
CP47A	1.356	33.22	1.292	32.82	1.500	38.10	0.781	19.84	1.000	25.40	1800	
CP49A	1.465	37.21	1.312	33.32	1.620	41.15	0.750	19.05	1.000	25.40	1800	
CP51A	1.527	38.79	1.344	34.14	1.750	44.45	0.880	22.35	1.000	25.40	1500	
CP55A	1.601	40.67	1.451	36.86	1.750	44.45	0.750	19.05	1.000	25.40	1500	
CP56A	1.735	44.07	1.615	41.02	1.906	48.42	0.719	18.26	1.125	28.58	1000	
CP59A	1.835	46.61	1.820	46.23	2.031	51.59	0.500	12.70	0.750	19.05	1500	
CP57A	1.938	49.23	1.807	45.90	2.160	54.86	1.000	25.40	1.250	31.75	1000	
---	110039	2.075	52.70	1.898	48.20	2.248	57.10	1.000	25.40	1.039	26.40	300
CP61A	2.243	56.97	2.067	52.50	2.440	61.98	1.030	26.16	1.250	31.75	1000	
CP63A	2.270	57.66	2.230	56.84	2.530	64.26	0.500	12.70	0.750	19.05	1000	
---	110040	2.402	61.00	2.165	55.00	2.559	65.00	0.984	25.00	1.024	26.00	400
CP65A	2.464	62.59	2.300	58.42	2.660	67.56	1.000	25.40	1.250	31.75	500	
---	110041	2.650	67.30	2.335	59.30	2.780	70.60	1.209	30.70	1.240	31.50	150
---	110042	2.764	70.20	2.654	67.40	2.937	74.60	0.984	25.00	1.024	26.00	300
CP71A	3.452	87.68	3.320	84.33	3.620	91.95	0.750	19.05	1.000	25.40	200	

Tapered Plug with Ring Tab

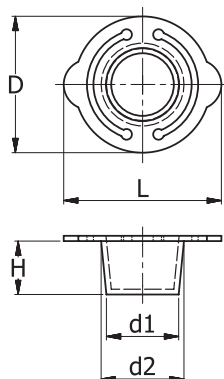


Specifications:

- Material: Low-Density Polyethylene
- Color: Yellow

Features:

- Tapered profile for extended dimensions
- Easy removal of the part with strong ring tab

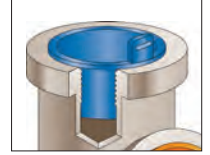
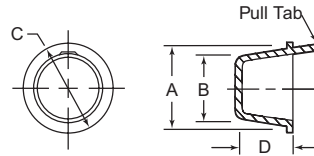


Item No.	d1		d2		H		D		L		Bulk Pack Qty
	mm	in	mm	in	mm	in	mm	in	mm	in	
498716	5.0	0.197	7.0	0.276	9.5	0.374	17.3	0.681	20.3	0.799	1000
498717	6.0	0.236	8.0	0.315	9.5	0.374	18.2	0.717	21.1	0.831	1000
498718	7.0	0.276	9.5	0.374	9.5	0.374	20.3	0.799	23.3	0.917	1000
498719	8.0	0.315	10.0	0.394	9.5	0.374	20.3	0.799	23.2	0.913	1000
498720	9.5	0.374	11.5	0.453	9.5	0.374	21.9	0.862	24.8	0.976	1000
498721	10.5	0.413	12.5	0.492	9.5	0.374	22.6	0.890	26.5	1.043	1000
498722	11.5	0.453	13.5	0.531	9.5	0.374	23.7	0.933	27.5	1.083	1000
498723	12.5	0.492	14.5	0.571	10.0	0.394	24.5	0.965	28.4	1.118	1000
498724	13.5	0.531	15.5	0.61	10.0	0.394	25.5	1.004	29.5	1.161	1000
498725	14.2	0.559	16.2	0.638	10.0	0.394	26.3	1.035	30.3	1.193	1000
498726	14.5	0.571	17.0	0.669	10.0	0.394	27.0	1.063	31.0	1.220	500
498727	15.5	0.610	18.0	0.709	10.0	0.394	28.3	1.114	32.0	1.260	500
498728	17.5	0.689	19.5	0.768	10.0	0.394	30.0	1.181	34.0	1.339	500
498729	18.0	0.709	20.0	0.787	10.0	0.394	30.0	1.181	34.0	1.339	500
498730	19.0	0.748	21.5	0.846	11.0	0.433	32.0	1.260	35.7	1.406	500
498731	21.0	0.827	24.2	0.953	11.0	0.433	34.7	1.366	38.7	1.524	500
498732	22.5	0.886	25.5	1.004	12.0	0.472	36.0	1.417	40.0	1.575	500
498733	25.0	0.984	28.0	1.102	12.0	0.472	38.5	1.516	42.2	1.661	500
498734	29.0	1.142	31.5	1.240	12.0	0.472	41.8	1.646	47.0	1.850	500
498735	29.5	1.161	32.0	1.260	12.0	0.472	42.5	1.673	47.6	1.874	500



PUSH-FIT PLUGS

P Series Side Pull Tab Plugs



Specifications:

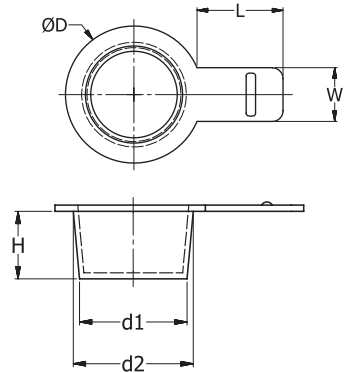
- Material: Low-Density Polyethylene
- Color: Blue

Features:

- The integral side pull tab feature is designed for easy removal in awkward locations
- The tapered design allows the part to plug multiple inner diameters

Item No.	A		B		C		D		Bulk Pack Qty
	in	mm	in	mm	in	mm	in	mm	
P7A	0.365	9.27	0.300	7.62	0.531	13.49	0.375	9.53	5000
P8A	0.398	10.11	0.330	8.38	0.563	14.30	0.375	9.53	5000
P11A	0.485	12.32	0.420	10.67	0.594	15.08	0.375	9.53	5000
P13A	0.548	13.92	0.471	11.96	0.690	17.53	0.470	11.94	5000
P16A	0.623	15.82	0.531	13.49	0.750	19.05	0.500	12.70	7000
P17A	0.634	16.10	0.550	13.97	0.781	19.84	0.500	12.70	7000
P18A	0.668	16.97	0.580	14.73	0.810	20.57	0.530	13.46	5000
P20A	0.729	18.52	0.640	16.26	0.880	22.35	0.500	12.70	5000
P23A	0.785	19.94	0.690	17.53	0.937	23.81	0.625	15.88	3500
P24A	0.805	20.44	0.717	18.21	0.937	23.81	0.625	15.88	5000
P26A	0.912	23.16	0.802	20.37	1.060	26.92	0.650	16.51	5000
P27A	0.933	23.70	0.815	20.70	1.120	28.45	0.620	15.75	5000
P31A	0.975	24.77	0.870	22.10	1.125	28.58	0.625	15.88	2500
P33A	1.040	26.42	0.915	23.24	1.160	29.46	0.720	18.29	5000
P40A	1.090	27.69	0.964	24.49	1.250	31.75	0.780	19.81	3000
P41A	1.145	29.08	0.995	25.27	1.310	33.27	0.780	19.81	2500
P42A	1.230	31.24	1.110	28.19	1.516	38.50	0.750	19.05	2500
P44A	1.275	32.39	1.165	29.59	1.405	35.69	0.750	19.05	2500
P46A	1.360	34.54	1.233	31.32	1.500	38.10	0.840	21.34	2500
P53A	1.600	40.64	1.450	36.83	1.750	44.45	0.750	19.05	2000
P55A	1.682	42.74	1.560	39.62	1.875	47.63	0.750	19.05	1500
P57A	1.750	44.45	1.633	41.48	1.940	49.28	0.750	19.05	1000
P59A	1.825	46.36	1.800	45.72	2.031	51.59	0.500	12.70	2000
P61A	1.950	49.53	1.780	45.21	2.120	53.85	1.000	25.40	1000
P63A	2.000	50.80	1.844	46.84	2.120	53.85	1.000	25.40	1000
P65A	2.083	52.91	1.920	48.77	2.250	57.15	1.000	25.40	1000
P68A	2.261	57.43	2.231	56.67	2.500	63.50	0.500	12.70	1000

Tapered Plugs with Lateral Pull Tabs



Specifications:

- Material: Thermoplastic Rubber
- Color: White

Features:

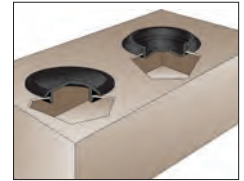
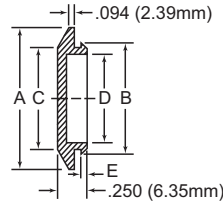
- The soft and flexible material provides a close fit
- The lateral pull tab makes for easy removal
- TPR is recommended wherever resistance to acid is required

Item No.	d1		d2		D		H		W		L		Bulk Pack Qty
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	
494297	5.0	0.197	7.0	0.276	11.0	0.433	9.5	0.374	7.0	0.276	15.0	0.591	5000
494298	6.0	0.236	8.0	0.315	12.0	0.472	9.5	0.374	7.0	0.276	15.0	0.591	5000
494299	7.0	0.276	9.5	0.374	13.5	0.531	9.5	0.374	7.0	0.276	15.0	0.591	5000
494300	8.0	0.315	10.0	0.394	14.0	0.551	9.5	0.374	8.0	0.315	15.0	0.591	5000
494301	9.5	0.374	11.5	0.453	15.5	0.610	9.5	0.374	8.0	0.315	15.0	0.591	5000
494302	10.5	0.413	12.5	0.492	16.5	0.650	9.5	0.374	8.0	0.315	15.0	0.591	5000
494303	11.5	0.453	13.5	0.531	17.5	0.689	9.5	0.374	8.0	0.315	15.0	0.591	5000
494304	12.5	0.492	14.5	0.571	18.5	0.728	10.0	0.394	8.0	0.315	15.0	0.591	5000
494305	13.5	0.531	15.5	0.610	19.5	0.768	10.0	0.394	10.0	0.394	15.0	0.591	5000
494306	14.2	0.559	16.2	0.638	20.2	0.795	10.0	0.394	10.0	0.394	15.0	0.591	5000
494307	14.5	0.571	17.0	0.669	21.0	0.827	10.0	0.394	10.0	0.394	15.0	0.591	2000
494308	15.5	0.61	18.0	0.709	22.0	0.866	10.0	0.394	10.0	0.394	15.0	0.591	2000
494309	17.5	0.689	19.5	0.768	23.5	0.925	10.0	0.394	10.0	0.394	15.0	0.591	2000
494310	19.0	0.748	21.5	0.846	25.5	1.004	11.0	0.433	10.0	0.394	15.0	0.591	2000
494311	21.0	0.827	23.5	0.925	27.5	1.083	11.0	0.433	10.0	0.394	15.0	0.591	2000
494312	22.5	0.886	25.5	1.004	29.5	1.161	12.0	0.472	12.0	0.472	15.0	0.591	2000
494313	25.0	0.984	28.0	1.102	32.0	1.260	12.0	0.472	12.0	0.472	15.0	0.591	2000
494314	29.0	1.142	31.5	1.240	35.5	1.398	12.0	0.472	12.0	0.472	15.0	0.591	2000

SHEET METAL PLUGS



S Series Sheet Metal Plugs



Specifications:

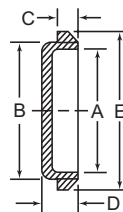
- Material: Low-Density Polyethylene
- Color: Black

Features:

- Economical snap-in plug that provides an attractive finish and a secure fit for entry holes in sheet metal

Item No.	Ø Hole		Max Panel Thickness		A		B		C		D		E		Bulk Pack Qty
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
S1/4A	0.250	0.110	2.79	0.500	12.70	0.280	7.11	0.250	6.35	0.188	4.78	0.250	6.35	5000	
SM3/8A	0.375	0.065	1.65	0.740	18.80	0.400	10.16	0.370	9.40	0.240	6.10	0.250	6.35	5000	
S3/8A	0.375	0.110	2.79	0.730	18.54	0.412	10.46	0.370	9.40	0.270	6.86	0.110	2.79	5000	
S7/16A	0.438	0.110	2.79	0.688	17.48	0.471	11.96	0.438	11.13	0.375	9.53	0.250	6.35	6000	
S1/2A	0.500	0.075	1.91	0.875	22.23	0.570	14.48	0.510	12.95	0.375	9.53	0.115	2.92	6000	
S9/16A	0.563	0.110	2.79	0.813	20.64	0.600	15.24	0.563	14.3	0.500	12.70	0.250	6.35	6000	
S5/8A	0.625	0.075	1.91	0.813	20.65	0.670	17.02	0.620	15.75	0.540	13.72	0.100	2.54	6000	
S11/16A	0.688	0.110	2.79	1.000	25.40	0.720	18.29	0.688	17.48	0.925	23.50	0.250	6.35	5000	
SM3/4A	0.750	0.094	2.39	1.120	28.45	0.810	20.57	0.760	19.30	0.610	15.49	0.250	6.35	5000	
S3/4A	0.750	0.110	2.79	1.125	28.58	0.790	20.07	0.760	19.30	0.623	15.82	0.115	2.92	6500	
S13/16A	0.813	0.110	2.79	1.125	28.58	0.845	21.46	0.813	20.65	0.750	19.05	0.250	6.35	5000	
S7/8A	0.875	0.110	2.79	1.250	31.75	0.900	22.86	0.870	22.10	0.745	18.92	0.094	2.39	5000	
S15/16A	0.937	0.111	2.80	1.251	31.76	0.980	24.9	0.937	23.8	0.875	22.23	0.250	6.35	5000	
S1A	1.000	0.110	2.79	1.438	36.53	1.040	26.42	1.010	25.65	0.875	22.23	0.110	2.79	3500	
S1-3/32A	1.094	0.110	2.79	1.375	34.93	1.150	29.21	1.094	27.79	1.031	26.19	0.250	6.35	4000	
S1-1/8A	1.125	0.110	2.79	1.500	38.10	1.180	29.97	1.125	28.58	1.063	27.00	0.250	6.35	3000	
S1-5/16A	1.313	0.110	2.79	1.688	42.88	1.360	34.54	1.313	33.35	1.250	31.75	0.250	6.35	2500	
S1-1/2A	1.500	0.110	2.79	1.875	47.63	1.540	39.12	1.500	38.10	1.400	35.56	0.110	2.79	2000	
S1-3/4A	1.750	0.110	2.79	2.130	54.10	1.835	46.61	1.730	43.94	1.610	40.89	0.105	2.67	1500	
S2A	2.000	0.110	2.79	2.375	60.33	2.060	52.32	2.000	50.80	1.938	49.23	0.250	6.35	1000	
S2-1/8A	2.125	0.110	2.79	2.500	63.50	2.175	55.25	2.125	53.98	2.063	52.40	0.250	6.35	1000	
S2-1/2A	2.500	0.110	2.79	3.000	76.20	2.560	65.02	2.500	63.50	2.438	61.93	0.250	6.35	700	
S2-5/8A	2.625	0.110	2.79	3.125	79.38	2.685	68.20	2.625	66.68	2.563	65.10	0.250	6.35	1200	
S3A	3.000	0.110	2.79	3.375	85.73	3.060	77.72	3.000	76.20	2.938	74.63	0.250	6.35	1000	
S3-3/8A	3.375	0.110	2.79	3.750	95.25	3.435	87.25	3.375	85.73	3.313	84.15	0.250	6.35	500	
S3-1/2A	3.500	0.110	2.79	3.875	98.43	3.560	90.42	3.500	88.90	3.438	87.33	0.250	6.35	600	

SR Series Recessed Sheet Metal Plugs



Specifications:

- Material: Low-Density Polyethylene
- Color: Black

Features:

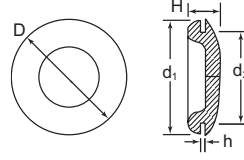
- Economical snap-in plug that provides an attractive finish and a secure fit for entry holes in sheet metal

Item No.	Ø Hole		Max Panel Thickness		A		B		C		D		E		Bulk Pack Qty
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
SR1/2A	0.500	0.110	2.79	0.510	12.95	0.550	13.97	0.090	2.29	0.290	7.37	0.850	21.59	3000	
SR3/4A	0.750	0.180	4.57	0.750	19.05	0.800	20.32	0.190	4.83	0.380	9.65	1.156	29.36	4000	
SR7/8A	0.875	0.180	4.57	0.875	22.23	0.920	23.37	0.190	4.83	0.380	9.65	1.250	31.75	3500	
SR1A	1.000	0.150	3.81	1.000	25.40	1.043	26.49	0.096	2.44	0.319	8.10	1.377	34.98	3500	
SR1-1/4A	1.250	0.120	3.04	1.280	32.51	1.330	33.78	0.120	3.05	0.350	8.89	1.615	41.02	2000	
SR1-3/8A	1.375	0.190	4.82	1.375	34.93	1.437	36.50	0.200	5.08	0.410	10.41	1.750	44.45	1800	
SR1-1/2A	1.500	0.125	3.17	1.515	38.48	1.555	39.50	0.120	3.05	0.350	8.89	1.875	47.63	1500	
SR1-5/8A	1.625	0.190	4.82	1.625	41.28	1.688	42.88	0.200	5.08	0.410	10.41	2.000	50.80	1000	
SR1-3/4A	1.750	0.190	4.82	1.750	44.45	1.812	46.02	0.200	5.08	0.410	10.41	2.125	53.98	1000	
SR1-7/8A	1.875	0.190	4.82	1.875	47.63	1.937	49.20	0.200	5.08	0.410	10.41	2.250	57.15	900	
SR2A	2.000	0.190	4.82	2.000	50.80	2.060	52.32	0.170	4.32	0.390	9.91	2.500	63.50	800	
SR3A	3.000	0.190	4.82	3.000	76.20	3.065	77.85	0.200	5.08	0.410	10.41	3.500	88.90	300	



SHEET METAL PLUGS

Blanking Plug Series PVC & TPE Hole Plugs



Specifications:

- Material: See Table
- Color: Black

Features:

- PVC Material: Non-staining; resistant to ozone, acids, and sunlight; with excellent aging qualities
- TPE Material: Very resistant to oils, acids and alkalies
- Resistant to temperatures up to 203°F (95°C)

Item No.		Ø Hole d2		Max Panel Thickness h		D= OD		Depth H		d1		Bulk Pack Qty
PVC	TPE	in	mm	in	mm	in	mm	in	mm	in	mm	
10860B	15150B	0.187	4.70	0.063	1.60	0.366	9.30	0.181	4.60	0.366	9.30	10000
10825B	15151B	0.250	6.40	0.063	1.60	0.374	9.50	0.197	5.00	0.374	9.50	10000
10832B	—	0.313	8.00	0.031	0.80	0.571	14.50	0.157	4.00	0.417	10.60	10000
10233B	—	0.313	8.00	0.063	1.60	0.571	14.50	0.177	4.50	0.417	10.60	10000
10488B	—	0.354	9.00	0.063	1.60	0.591	15.00	0.260	6.60	0.488	12.40	10000
10912B	15155B	0.438	11.10	0.063	1.60	0.697	17.70	0.244	6.20	0.504	12.80	10000
10768B	—	0.453	11.50	0.063	1.60	0.669	17.00	0.276	7.00	0.610	15.50	5000
15511B	—	0.469	11.90	0.047	1.20	0.689	17.50	0.280	7.10	0.626	15.90	10000
10502B	15157B	0.500	12.70	0.063	1.60	0.736	18.70	0.220	5.60	0.610	15.50	5000
11321B	15158B	0.587	14.90	0.051	1.30	0.787	20.00	0.276	7.00	0.724	18.40	10000
10213B	15159B	0.610	15.50	0.063	1.60	0.866	22.00	0.295	7.50	0.748	19.00	5000
40043B	—	0.625	15.90	0.063	1.60	0.748	19.00	0.280	7.10	0.748	19.00	10000
12914B	—	0.642	16.30	0.051	1.30	0.787	20.00	0.276	7.00	0.728	18.50	5000
10678B	15160B	0.750	19.00	0.063	1.60	0.984	25.00	0.256	6.50	0.846	21.50	5000
10499A	15161B	0.781	20.00	0.063	1.60	0.984	25.00	0.256	6.50	0.846	21.50	5000
11152B	15162B	0.866	22.00	0.094	2.40	1.122	28.50	0.323	8.20	1.047	26.60	3000
10902B	—	0.875	22.50	0.063	1.60	1.122	28.50	0.295	7.50	1.063	27.00	3000
11027B	15164B	0.968	24.50	0.094	2.40	1.181	30.00	0.343	8.70	1.083	27.50	2000
11323B	—	0.984	25.00	0.031	0.80	1.516	38.50	0.181	4.60	1.122	28.50	3000
10705B	15166B	1.000	25.40	0.063	1.60	1.260	32.00	0.354	9.00	1.114	28.30	3000
11148B	15165B	1.000	25.40	0.094	2.40	1.260	32.00	0.354	9.00	1.114	28.30	3000
11239B	—	1.250	31.50	0.031	0.80	1.504	38.20	0.276	7.00	1.240	31.50	2000
11059B	15168B	1.250	31.50	0.063	1.60	1.504	38.20	0.295	7.50	1.394	35.40	2000
11281B	15170B	1.260	32.00	0.122	3.10	1.504	38.20	0.354	9.00	1.394	35.40	2000
10877B	15171B	1.500	38.20	0.063	1.60	1.720	43.70	0.323	8.20	1.693	43.00	1500
10320B	15172B	2.031	51.50	0.063	1.60	2.264	57.50	0.488	12.40	2.071	52.60	500

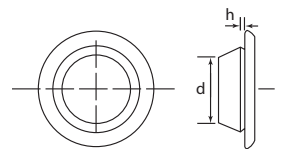
Body Series TPE Hole Plugs

Specifications:

- Material: TPE
- Color: Black

Features:

- Each size covers a range of panel thicknesses
- Designed to fit standard metric holes
- Very resistant to oils, acids and alkalies
- Resistant to temperatures up to 203°F (95°C)



Item No.	Ø Hole d		Max Panel Thickness h		Bulk Pack Qty
	in	mm	in	mm	
BP-16230	0.394	10.00	0.032 - 0.078	0.8 - 2.0	5000
BP-16231	0.472	12.00	0.031 - 0.078	0.8 - 2.0	5000
BP-16232	0.551	14.00	0.031 - 0.078	0.8 - 2.0	5000
BP-16233	0.630	16.00	0.031 - 0.078	0.8 - 2.0	5000
BP-16234	0.709	18.00	0.031 - 0.078	0.8 - 2.0	2500

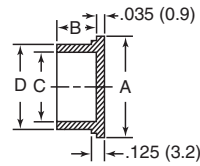
Item No.	Ø Hole d		Max Panel Thickness h		Bulk Pack Qty
	in	mm	in	mm	
16235B	0.787	20.00	0.031 - 0.078	0.8 - 2.0	2500
BP-16236	0.866	22.00	0.031 - 0.078	0.8 - 2.0	2500
16237B	0.984	25.00	0.031 - 0.078	0.8 - 2.0	3000
BP-16238	1.181	30.00	0.031 - 0.078	0.8 - 2.0	2000
10517B	1.772	45.00	0.031 - 0.078	0.8 - 2.0	1000

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FC PLUG Series Circular Connector Plugs

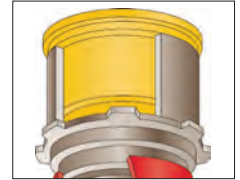


Specifications:

- Material: Low-Density Polyethylene
- Color: Yellow

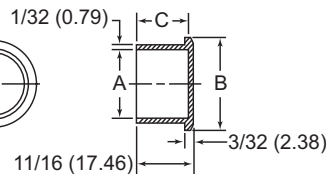
Features:

- Designed for easy assembly and removal either with automated equipment or by hand
- Typically used to protect electrical connectors per Mil Spec 90376
- See page 36 if cap is needed



Item No.	MS90376 Dash No	To Plug Connector	A		B		C		D		Bulk Pack Qty
			in	mm	in	mm	in	mm	in	mm	
FC707A	MS90376-8Y	1/2 - 18	0.670	17.02	0.625	15.88	0.413	10.49	0.483	12.27	10000
FC709B	MS90376-10Y	5/8 - 24	0.750	19.05	0.625	15.88	0.530	13.46	0.595	15.11	8000
FC711B	MS90376-12Y	3/4 - 20	0.860	21.84	0.625	15.88	0.655	16.64	0.715	18.16	5500
FC713B	MS90376-14Y	7/8 - 20	1.031	26.19	0.625	15.88	0.785	19.94	0.845	21.46	4000
FC715B	MS90376-16Y	1 - 20	1.125	28.58	0.625	15.88	0.893	22.68	0.963	24.46	3000
FC717C	MS90376-18Y	1 - 1/8 - 18	1.250	31.75	0.625	15.88	1.028	26.11	1.088	27.64	3000
FC719A	MS90376-20Y	1 - 1/4 - 18	1.406	35.71	0.625	15.88	1.150	29.21	1.215	30.86	2000
FC721A	MS90376-22Y	1 - 3/8 - 18	1.500	38.10	0.625	15.88	1.270	32.26	1.340	34.04	1500
FC723A	MS90376-24Y	1 - 1/2 - 18	1.640	41.66	0.625	15.88	1.390	35.31	1.460	37.08	1400
FC725B	MS90376-25Y	1 - 5/8 - 18	1.810	45.97	0.625	15.88	1.540	39.12	1.580	40.13	1300
FC727C	MS90376-28Y	1 - 3/4 - 18	1.875	47.63	0.625	15.88	1.648	41.86	1.718	43.64	1200
FC731B	MS90376-32Y	2 - 18	2.125	53.98	0.625	15.88	1.890	48.01	1.970	50.04	900
FC735A	MS90376-36Y	2 - 1/4 - 16	2.340	59.44	0.625	15.88	2.140	54.36	2.210	56.13	800

H Series Flanged Connector Plugs



Specifications:

- Material: Low-Density Polyethylene
- Color: Yellow

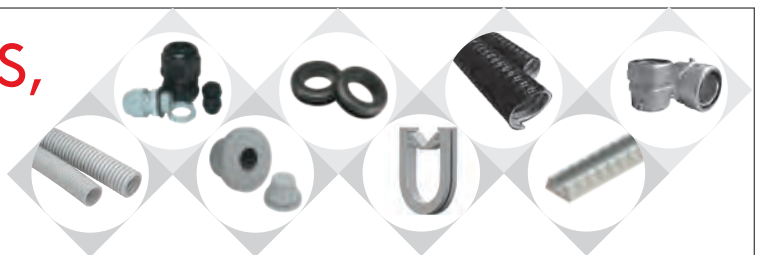
Features:

- Designed for easy assembly and removal either with automated equipment or by hand
- Typically used to protect connectors with standard threads



Item No.	To Plug Standard Thread	A		B		C		Bulk Pack Qty
		in	mm	in	mm	in	mm	
H1/2A	1/2" - 28	0.485	12.32	0.625	15.88	0.625	15.88	7000
H5/8A	5/8" - 24	0.601	15.27	0.750	19.05	0.625	15.88	5000
H3/4A	3/4" - 20	0.721	18.31	0.860	21.84	0.625	15.88	4000
H7/8A	7/8" - 20	0.850	21.59	1.000	25.40	0.625	15.88	2500
H1A	1" - 20	0.968	24.59	1.125	28.58	0.625	15.88	2000
H1-1/8A	1-1/8" - 18	1.097	27.86	1.250	31.75	0.625	15.88	1500
H1-1/4A	1-1/4" - 18	1.228	31.19	1.406	35.72	0.625	15.88	1500
H1-3/8A	1-3/8" - 18	1.345	34.16	1.500	38.10	0.625	15.88	2000
H1-1/2A	1-1/2" - 18	1.468	37.29	1.656	42.07	0.625	15.88	2000
H1-3/4A	1-3/4" - 18	1.732	43.99	1.906	48.42	0.625	15.88	1500

CABLE GLANDS, GROMMETS & CONDUIT

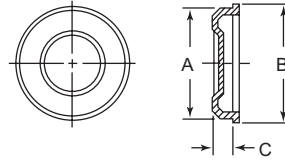


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PUSH-FIT PLUGS

TP/SP/FPL Series Packaging Tube Plugs



Specifications:

- Material: Low-Density Polyethylene
- Color: TP & SP: White, FPL: Black

Features:

- Designed for tube containers used in shipping, packaging and mail delivery
- Fits securely in the tube end
- SP Series has easy finger grip construction for convenient fast removal

Item No.	Tube ID in	A in	B in	C in	Bulk Pack Qty
TP1-1/2A	1.500	1.520	1.620	0.450	4000
SP1-1/2B	1.500	1.510	1.620	0.405	3500
TP2A	2.000	2.030	2.120	0.450	2300
SP2D	2.000	2.020	2.120	0.405	2100
TP2-1/8A	2.125	2.150	2.250	0.450	2000
TP2-1/4A	2.250	2.280	2.370	0.450	1800
TP2-1/2A	2.500	2.530	2.630	0.450	1400
SP2-1/2C	2.500	2.520	2.630	0.405	1500
TP2-3/4A	2.750	2.780	2.880	0.450	1250
TP3A	3.000	3.030	3.160	0.450	1000
SP3E	3.000	3.020	3.160	0.405	1000
TP3-1/4A	3.250	3.280	3.410	0.450	800
TP3-1/2A	3.500	3.530	3.660	0.450	700
SP3-1/2A	3.500	3.530	3.660	0.450	200
TP3-29/32A	3.900	3.940	4.060	0.450	600
TP4A	4.000	4.060	4.170	0.450	600
SP4A	4.000	4.030	4.160	0.450	500
TP4-3/4A	4.750	4.790	4.930	0.450	350
SP5A	5.000	5.040	5.170	0.450	300
SP6A	6.000	6.040	6.170	0.450	200
FPL6A	6.000	6.040	6.610	1.280	150
SP7A	7.000	7.040	7.170	0.450	200
FPL8A	8.000	8.025	8.610	1.290	100
FPL10A	10.000	10.150	10.730	1.350	50
FPL12A	12.000	12.140	12.700	1.350	30

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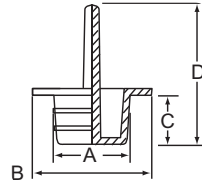
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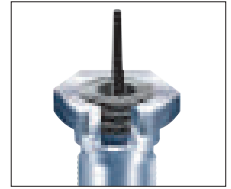
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PUSH-FIT PLUGS FOR THREADS


MPP Series
Flexible Pull Plugs


Type 1 – Center Pull

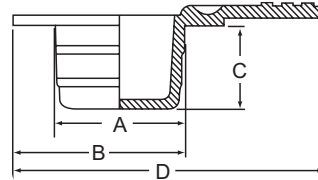


Specifications:

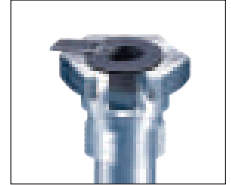
- Material: Thermoplastic Rubber
- Color: Black
- Temperature Range: -40°F to 275°F (-40°C to 135°C)

Features:

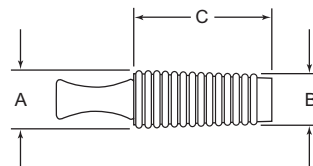
- The integral pull tab feature is designed for easy removal
- Protects threaded or non-threaded components
- Acid-resistant



Type 2 – Side Pull



Item No.	To Fit		Type	A		B		C		D		Bulk Pack Qty
	Standard Thread	Metric Thread		in	mm	in	mm	in	mm	in	mm	
MPP3A	1/4"	M6	2	0.216	5.5	0.610	15.5	0.315	8.0	0.913	23.20	500
MPP4A	5/16"	M8	1	0.295	7.5	0.610	15.5	0.315	8.0	0.944	24.00	500
MPP5A	5/16"	M8	2	0.295	7.5	0.591	15.0	0.315	8.0	0.994	25.25	7000
MPP10A	3/8"	M10	1	0.374	9.5	0.689	17.5	0.315	8.0	1.181	30.00	8000
MPP15A	3/8"	M10	2	0.374	9.5	0.669	17.0	0.315	8.0	1.073	27.25	7000
MPP20A	1/2"	M12	1	0.453	11.5	0.768	19.5	0.394	10.0	1.181	30.00	7000
MPP25A	1/2"	M12	2	0.453	11.5	0.669	17.0	0.315	8.0	1.112	28.24	7000
MPP30A	9/16"	M14	1	0.501	12.8	0.846	21.5	0.394	10.0	1.181	30.00	6000
MPP35A	9/16"	M14	2	0.512	13.0	0.827	21.0	0.394	10.0	1.220	30.99	6000
MPP40A	5/8"	M16	1	0.598	15.2	0.925	23.5	0.394	10.0	1.260	32.00	4000
MPP45A	5/8"	M16	2	0.610	15.5	0.906	23.0	0.394	10.0	1.309	33.25	4000
MPP50A	11/16"	M18	2	0.669	17.0	1.024	26.0	0.394	10.0	1.398	35.51	4000
MPP55A	3/4"	M18	1	0.693	17.6	1.004	25.5	0.394	10.0	1.024	26.00	500
MPP60A	13/16"	M20	1	0.764	19.4	1.083	27.5	0.472	12.0	1.024	26.00	500
MPP65A	13/16"	M20	2	0.764	19.4	1.083	27.5	0.472	12.0	1.461	37.10	500
MPP70A	7/8"	M22	1	0.843	21.4	1.161	29.5	0.472	12.0	1.024	26.00	250
MPP75A	7/8"	M22	2	0.843	21.4	1.161	29.5	0.472	12.0	1.551	39.40	250
MPP80A	1"	M24	1	0.925	23.5	1.122	28.5	0.472	12.0	1.024	26.00	250
MPP85A	1"	M24	2	0.925	23.5	1.122	28.5	0.472	12.0	1.606	40.80	250

SFP Series
Flangeless Tapered Plugs


Specifications:

- Material: Thermoplastic Rubber
- Color: Black

Features:

- Protects threaded or unthreaded holes without masking the surrounding areas
- Ergonomically-friendly pull tab allows for easy installation and removal
- For high temperature version see page 76

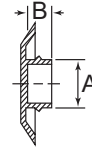
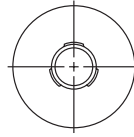
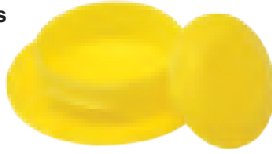


Item No.	Plugs Threads	M	A		B		C		Bulk Pack Qty	
			UN	M	in	mm	in	mm		in
10398B	#6 & #8	M3		0.196	5.0	0.118	3.0	0.59	15.0	10000
18409B	#10 & #12	M4		0.236	6.0	0.157	4.0	1.00	25.4	6000
18410B	1/4 & 5/16	M6		0.315	8.0	0.236	6.0	1.00	25.4	6000
18411B	3/8	M8		0.394	10.0	0.315	8.0	1.00	25.4	4000
18412B	7/16	M10		0.472	12.0	0.394	10.0	1.00	25.4	4000
18414B	5/8	M14		0.630	16.0	0.551	14.0	1.00	25.4	4000
18415B	11/16	M16		0.709	18.0	0.630	16.0	1.00	25.4	2000



PUSH-FIT PLUGS FOR THREADS

I Series Push In Plugs for SAE/NPT Threads



Specifications:

- Material: Low-Density Polyethylene
- Color: Yellow

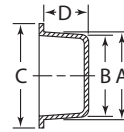
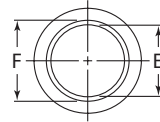
Features:

- Provides all the advantages of a threaded plug with the ease of a push in style
- Snaps into place providing an attractive finish while keeping contaminants away from the fittings

Item No.	To Fit		A		B		Bulk Pack Qty
	SAE Thread	NPT Thread	in	mm	in	mm	
I1/4A	1/4	—	0.206	5.23	0.220	5.59	5000
I5/16A	5/16	—	0.262	6.65	0.235	5.97	5000
I3/8A	3/8	1/8	0.324	8.23	0.235	5.97	3000
PP3/8A	3/8	1/8	0.310	7.87	0.340	8.64	5000
I7/16A	7/16	—	0.380	9.65	0.270	6.86	3000
I1/2A	1/2	1/4	0.437	11.10	0.270	6.86	5000
I9/16A	9/16	—	0.495	12.57	0.290	7.37	5000
PP9/16A	9/16	—	0.480	12.19	0.360	9.14	5000
I5/8A	5/8	3/8	0.558	14.17	0.290	7.37	7500
I11/16A	11/16	—	0.610	15.49	0.290	7.37	7000
I3/4A	3/4	—	0.676	17.17	0.290	7.37	6000
I13/16A	13/16	1/2	0.732	18.59	0.290	7.37	5000

Item No.	To Fit		A		B		Bulk Pack Qty
	SAE Thread	NPT Thread	in	mm	in	mm	
I7/8A	7/8	—	0.798	20.27	0.295	7.49	4500
I1A	1	3/4	0.922	23.42	0.290	7.37	3500
I1-1/16A	1 - 1/16	—	0.972	24.69	0.290	7.37	3000
I1-3/16A	1 - 3/16	—	1.090	27.69	0.340	8.64	2000
I1-1/4A	1 - 1/4	—	1.160	29.46	0.340	8.64	2000
I1-5/16A	1 - 5/16	1	1.215	30.86	0.340	8.64	2000
I1-7/16A	1 - 7/16	—	1.360	34.54	0.460	11.68	1200
I1-1/2A	1 - 1/2	—	1.405	35.69	0.460	11.68	1100
I1-5/8A	1 - 5/8	—	1.525	38.74	0.460	11.68	1000
I1-3/4A	1 - 3/4	—	1.650	41.91	0.460	11.68	800
I1-7/8A	1 - 7/8	—	1.775	45.09	0.460	11.68	800

NPT Series Plugs for NPT Threads



Specifications:

- Material: Low-Density Polyethylene
- Colors: See Table

Features:

- Designed specifically to be used to plug NPT tapered threaded fittings
- The tapered design allows the part to plug multiple inner diameters

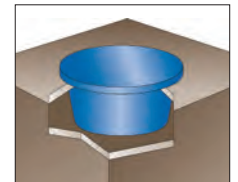
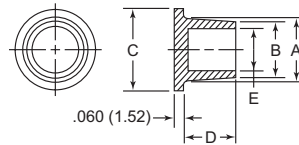
To Assure Proper Fit:



Plug dimension "A" should be approx. 1% larger than the inner diameter of the part. Minimum of .020"

Item No.	Color	A		B		C		D		E		F		Bulk Pack Qty
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
NPT3/8A	Yellow	0.615	15.62	0.570	14.48	0.750	19.05	0.285	7.24	0.497	12.62	0.535	13.59	5000
NPT3/4A	Red	0.955	24.26	0.922	23.42	1.125	28.58	0.363	9.22	0.849	21.56	0.872	22.15	5500
NPT1-1/4A	Red	1.560	39.62	1.510	38.35	1.750	44.45	0.435	11.05	1.401	35.59	1.481	37.62	2000
NPT2A	Blue	2.275	57.79	2.225	56.52	2.437	61.90	0.495	12.57	2.092	53.14	2.194	55.73	2500
NPT2-1/2A	Black	2.725	69.22	2.680	68.07	2.875	73.03	0.480	12.19	2.512	63.80	2.628	66.75	600
NPT3A	Blue	3.325	84.46	3.285	83.44	3.500	88.90	0.470	11.94	3.154	80.11	3.220	81.79	400
NPT3-1/2A	Black	3.785	96.14	3.775	95.89	4.062	103.17	0.750	19.05	3.665	93.09	3.675	93.35	550
NPT4A	Blue	4.315	109.61	4.295	109.09	4.687	119.05	0.790	20.07	4.077	103.56	4.115	104.52	500
NPT5A	Blue	5.360	136.14	5.350	135.89	5.750	146.05	0.850	21.59	5.205	132.21	5.215	132.46	275
NPT6A	Blue	6.425	163.20	6.390	162.31	6.750	171.45	0.895	22.73	6.252	158.80	6.272	159.31	180

EN Series Plugs for NPT Threads



Specifications:

- Material: Low-Density Polyethylene
- Color: Blue

Features:

- Designed specifically to be used to plug NPT tapered threaded fittings
- The tapered design allows the part to plug multiple inner diameters

To Assure Proper Fit:



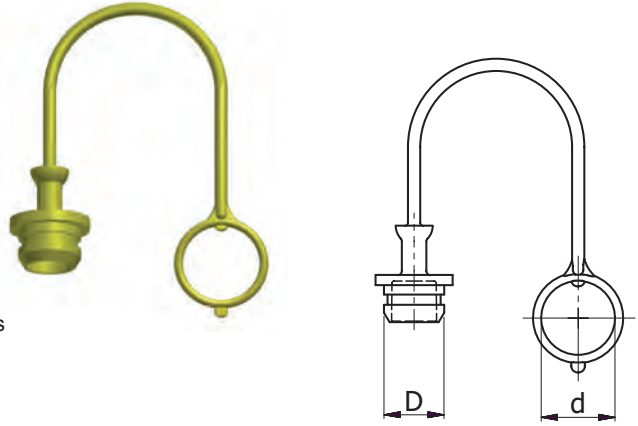
Plug dimension "A" should be approx. 1% larger than the inner diameter of the part. Minimum of .020"

Item No.	NPT Size I.D.	A		B		C		D		E		Bulk Pack Qty
		in	mm	in	mm	in	mm	in	mm	in	mm	
EN1/4A	1/4	0.485	12.32	0.420	10.67	0.609	15.48	0.281	7.14	0.355	9.02	5000
EN3/8A	3/8	0.640	16.26	0.550	13.97	0.766	19.45	0.500	12.70	0.500	12.70	6500
EN1/2A	1/2	0.785	19.94	0.690	17.53	0.906	23.02	0.500	12.70	0.625	15.88	4000
EN3/4A	3/4	0.975	24.77	0.870	22.10	1.094	27.78	0.625	15.88	0.812	20.63	2500
EN1A	1	1.200	30.48	1.090	27.69	1.344	34.13	0.656	16.67	1.301	26.19	1500

PUSH-FIT PLUGS FOR THREADS



Hydraulic Quick Release Dust Plugs



Specifications:

- Material: Thermoplastic Elastomer
- Color: See Table

Features:

- Suitable to plug ISO 7241-1 Series A and B Quick Couplings
- Designed to remain attached to the hose
- Excellent protection from dirt, moisture and corrosion
- Temperature Range: -40°F - 275°F (-40°C - 135°C)
- For cap version see page 38

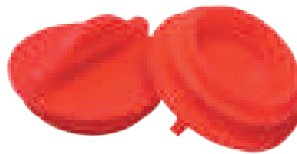
Item No.				Size	Series	D		d		Bulk Pack Qty
Red	Yellow	Green	Blue			mm	in	mm	in	
499766	499776	499786	499796	1/4"	ISO A	12.7	0.500	19.6	0.772	150
499767	499777	499787	499797	3/8"	ISO A	18.3	0.720	25.0	0.984	150
499768	499778	499788	499798	1/2"	ISO A	23.6	0.929	31.0	1.220	150
499769	499779	499789	499799	3/4"	ISO A	29.2	1.150	36.0	1.417	150
499770	499780	499790	499800	1"	ISO A	36.5	1.437	48.0	1.890	150
499771	499781	499791	499801	1/4"	ISO B	15.5	0.610	22.2	0.874	150
499772	499782	499792	499802	3/8"	ISO B	20.0	0.787	28.0	1.102	150
499773	499783	499793	499803	1/2"	ISO B	25.7	1.012	35.0	1.378	150
499774	499784	499794	499804	3/4"	ISO B	32.7	1.287	42.0	1.654	150
499775	499785	499795	499805	1"	ISO B	40.5	1.594	51.0	2.008	150

SF Series

Snap Fit Plugs for Standard/JIC/Metric/BSP Threads

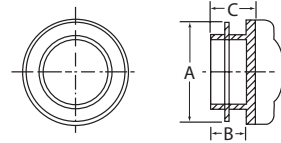
Specifications:

- Material: Low-Density Polyethylene
- Color: Red



Features:

- Once pushed into position, a single turn gives a tight fit
- Each plug covers a range of different thread sizes and styles
- The 12598A* has pull tab, not as illustrated



Item No.	To Fit Thread Sizes			A		B		C		Bulk Pack Qty
	Standard/JIC	Metric	BSP	in	mm	in	mm	in	mm	
10530A	7/16"	M10	1/8"	0.386	9.80	0.157	4.00	0.236	6.00	12000
12363A	1/2"	M12, M13, M14	1/4"	0.516	13.10	0.197	5.00	0.276	7.00	10000
12364A	5/8"	M16	3/8"	0.650	16.50	0.197	5.00	0.276	7.00	10000
10314B	3/4"	M18	1/2"	0.720	18.30	0.276	7.00	0.354	9.00	7000
12365A	—	M20	1/2"	0.839	21.30	0.276	7.00	0.354	9.00	5000
12366A	7/8"	M22	5/8"	0.882	22.40	0.276	7.00	0.354	9.00	5000
12621A	—	M24	—	0.925	23.50	0.276	7.00	0.354	9.00	3000
12367A	1 1/16"	M25, M26	3/4"	1.004	25.50	0.276	7.00	0.354	9.00	2000
12368A	1 - 1/8"	M28	7/8"	1.098	27.90	0.276	7.00	0.354	9.00	3000
12369A	1 - 5/16"	M32	1"	1.260	32.00	0.276	7.00	0.354	9.00	2500
12622A	1 - 1/2", 1 - 3/8"	M36	1-1/8"	1.406	35.70	0.276	7.00	0.354	9.00	2000
12598A*	1 - 5/8"	M40, M42	1-1/4"	1.634	41.50	0.276	7.00	0.354	9.00	2000

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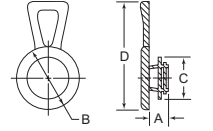
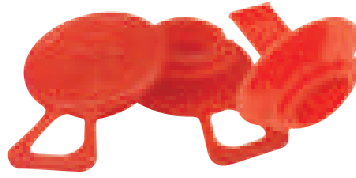




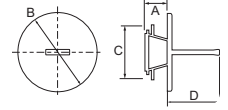
PUSH-FIT PLUGS FOR THREADS

EZP Series

Quick Fit Easy Pull Plugs for Unified Standard/Metric Threads



Type 1 - Lateral Pull



Type 2 - Central Pull

Specifications:

- Material: Low-Density Polyethylene
- Color: Red

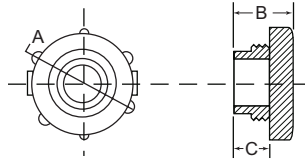
Features:

- Patented Quick Fit design easily locks the plug into place with a simple push
- Strong and flexible pull-tab for quick removal
- Seven sizes in two styles protect more than 25 popular threaded sizes

Item No.	To Fit		Type	A		B		C		D		Bulk Pack Qty
	Standard Thread	Metric Thread		in	mm	in	mm	in	mm	in	mm	
EZP1010A	5/16", 3/8"	M8	1	0.300	7.62	0.515	13.08	0.375	9.53	1.195	30.35	10000
EZP1020C	7/16"	M10, M12	1	0.300	7.62	0.748	19.05	0.520	13.20	1.340	34.04	5000
EZP2020A	7/16"	M10, M12	2	0.354	9.00	0.748	19.00	0.519	13.20	0.834	21.20	500
EZP1030A	1/2", 5/8", 9/16"	M14, M16	1	0.275	7.00	0.893	22.70	0.649	16.50	1.574	40.00	5000
EZP2030A	1/2", 5/8", 9/16"	M14, M16	2	0.275	7.00	0.893	22.70	0.649	16.50	0.834	21.20	500
EZP1040A	3/4"	M18, M20	1	0.314	8.00	1.181	30.00	0.767	19.50	1.850	47.00	4000
EZP2040A	3/4"	M18, M20	2	0.314	8.00	1.181	30.00	0.767	19.50	0.842	21.40	250
EZP1050A	7/8"	M22, M24	1	0.374	9.50	1.350	34.30	0.937	23.80	2.023	51.40	3000
EZP2050A	7/8"	M22, M24	2	0.374	9.50	1.350	34.30	0.937	23.80	0.842	21.40	250
EZP1060A	1 - 1/16", 1 - 1/8"	M26, M28	1	0.374	9.50	1.574	40.00	1.086	27.60	2.244	57.00	2000
EZP2060A	1 - 1/16", 1 - 1/8"	M26, M28	2	0.374	9.50	1.574	40.00	1.086	27.60	0.846	21.50	100
EZP1070A	1 - 1/4", 1 - 3/8"	M30, M36	1	0.393	10.00	1.771	45.00	1.358	34.50	2.440	62.00	1500

QFP Series

Quick Fit Plugs for UNF/JIC/Metric Threads



Specifications:

- Material: Low-Density Polyethylene
- Color: Red

Features:

- Fewer thread forms allow for quick application

UNF/JIC

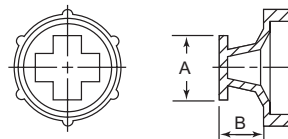
Item No.	To Fit UNF/JIC Thread Size	A		B		C		Bulk Pack Qty
		in	mm	in	mm	in	mm	
QFP005A	7/16" x 20	0.728	18.50	0.354	9.00	0.232	5.90	5000
QFP010A	1/2" x 20	0.811	20.60	0.358	9.10	0.232	5.90	5000
QFP015A	9/16" x 18	0.843	21.40	0.354	9.00	0.232	5.90	5000
QFP020A	3/4" x 16	1.051	26.70	0.366	9.30	0.232	5.90	3000
QFP025A	7/8" x 14	1.173	29.80	0.362	9.20	0.244	6.20	2500
QFP030A	1 - 1/16" x 12	1.335	33.90	0.354	9.00	0.232	5.90	2000
QFP035A	1 - 5/16" x 12	1.587	40.30	0.37	9.40	0.236	6.00	1500

Metric

Item No.	To Fit Metric Thread Size	A		B		C		Bulk Pack Qty
		in	mm	in	mm	in	mm	
QFP105A	M14 x 1.5	0.846	21.50	0.492	12.50	0.315	8.00	5000
QFP110A	M16 x 1.5	0.929	23.60	0.492	12.50	0.315	8.00	3000
QFP115A	M20 x 1.5	1.157	29.38	0.512	13.00	0.315	8.00	3000
QFP120A	M30 x 2.0	1.556	39.52	0.575	14.60	0.386	9.80	1500
QFP125A	M36 x 2.0	1.795	45.60	0.649	16.48	0.413	10.50	1000
QFP130A	M42 x 2.0	2.133	54.17	0.854	21.69	0.61	15.50	700
QFP135A	M45 x 2.0	2.232	56.69	0.728	18.50	0.500	12.70	700
QFP140A	M52 x 2.0	2.594	65.90	0.839	21.30	0.606	15.40	500

UN Series

Quick Fit Plugs for Standard/JIC/Metric/BSP Threads



Specifications:

- Material: Low-Density Polyethylene
- Color: Red

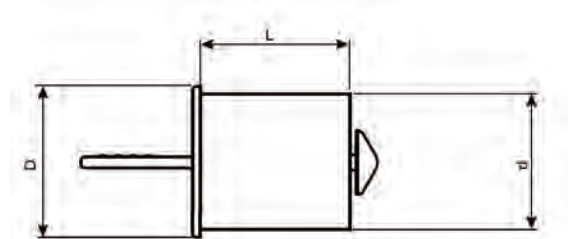
Features:

- This uniquely-designed range of plugs have sets of blades which will lock tight when pushed into a threaded hole and twisted
- Each plug covers a range of different thread sizes and styles
- Easily removes by simply unscrewing the plug from the thread

Item No.	To Fit Thread Sizes				A		B		Bulk Pack Qty
	NPT	Standard/JIC	Metric	BSP	in	mm	in	mm	
UN9995A	—	—	—	—	0.420	10.66	0.233	5.91	10000
UN9996A	1/8"	7/16"	M10	1/8"	0.438	11.12	0.240	6.09	10000
UN9997A	1/4"	9/16"	M14	—	0.575	14.60	0.285	7.23	10000
UN9998A	—	1/2"	M12	1/4"	0.485	12.31	0.325	8.25	10000
UN9763A	—	3/4"	M16 - 20	3/8"	0.780	19.81	0.375	9.52	5000
UN9764A	—	1"	M20 - 24	1/2" - 5/8"	0.990	25.14	0.445	11.30	2500
UN9774A	3/4"	1 - 3/16"	M30	3/4" - 7/8"	1.240	31.49	0.435	11.04	2000
UN9765A	—	1-7/16"	M33 - 36	1"	1.475	37.46	0.445	11.30	1000



Fluid Absorption Plugs



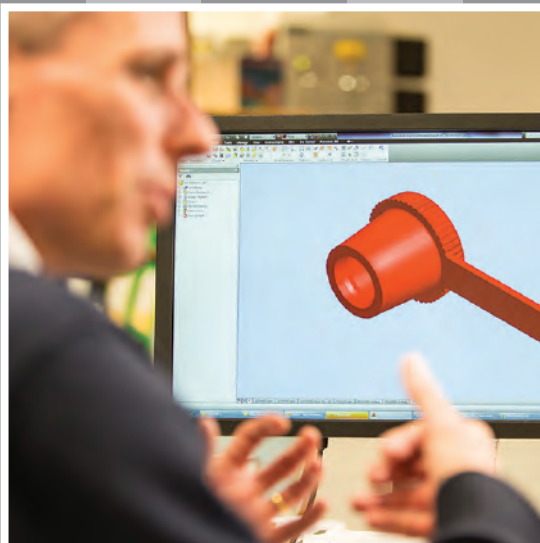
Specifications:

- Material: Polypropylene, Bi-Component Fiber
- Color: Yellow

Features:

- Control excess fluid residue from leaking
- Unique design allows quick, easy installation and removal to save time and cost
- Safer, easier and cleaner than a conventional plug; eliminates residue in the thread/hole

Item No.	To Fit Thread Sizes			D mm	d mm	l mm	Absorption** ml	Bulk Pack Qty
	Metric	BSP	UNF					
1342611	M10 x 1.5	1/8" x 28	3/8" x 24	10.7	8.5	15	0.54	1000
1342613	M12 x 1.5	—	—	12.5	10.5	15	0.86	1000
1342615	—	1/4" x 19	—	13.6	11.5	15	1.05	1000
1349120	M14 x 1.5	—	9/16" x 18	14.5	12.5	20	1.36	1000
1342618	M14 x 1.5	—	9/16" x 18	14.5	12.5	25	1.70	1000
1342619	M16 x 1.5	—	5/8" x 18	16.5	14.5	15	1.48	1000
1342622	M18 x 1.5	—	—	19.0	17.0	25	3.57	1000
1342624	—	3/8" x 19	—	17.2	15.0	25	2.75	1000
1349119	—	-	—	20.0	18.0	20	3.25	1000
1342625	M20 x 1.5	1/2" x 14	—	20.8	18.5	25	4.32	1000
1342626	M22 x 1.5	5/8" x 14	—	22.8	21.0	25	5.60	1000
1342627	—	3/4" x 14	1-1/16" x 12	26.5	24.6	25	8.04	1000
1342628	—	1" x 11	—	32.5	30.5	35	17.68	1000



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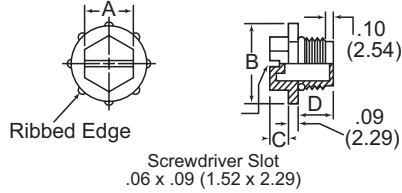
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BL Series

UNF Standard Threaded Plugs (O-Ring optional)



Specifications:

- Material: Polypropylene
- Color: Yellow

Features:

- Can be applied or removed by hand, hex wrench or screwdriver
- Optional O-Ring gives this part a water tight seal for superior leakage protection



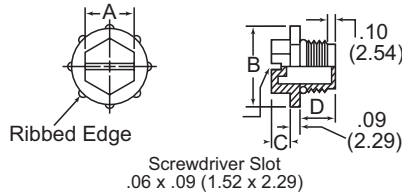
See pages 64 and 65 for Application Wizards

Item No.	Item No. w/ O-Ring	To Plug Standard Thread Size	A		B		C		D		Bulk Pack Qty
			in	mm	in	mm	in	mm	in	mm	
BL3A	BL3L	7/16" - 20	0.430	10.92	0.620	15.75	0.180	4.57	0.390	9.91	5000
*BL4A	*BL4B	1/2" - 13	0.500	12.70	0.687	17.46	0.281	7.14	0.410	10.41	3000
BL5A	BL5K	9/16" - 18	0.500	12.70	0.750	19.05	0.180	4.57	0.420	10.67	3000
BL7A	BL7J	3/4" - 16	0.680	17.27	0.940	23.88	0.190	4.83	0.520	13.21	1500
BL8A	BL8H	7/8" - 14	0.750	19.05	1.060	26.92	0.240	6.10	0.560	14.22	2100
BL10A	BL10I	1-1/16" - 12	0.870	22.10	1.310	33.27	0.250	6.35	0.660	16.76	600
BL11A	BL11D	1-3/16" - 12	1.000	25.40	1.500	38.10	0.300	7.62	0.700	17.78	425
BL12A	BL12H	1-5/16" - 12	1.070	27.18	1.610	40.89	0.290	7.37	0.700	17.78	700
BL13A	BL13D	1-5/8" - 12	1.125	28.58	1.880	42.75	0.300	7.62	0.770	19.56	500
BL14A	BL14C	1-7/8" - 12	1.500	38.10	2.125	53.98	0.300	7.62	0.750	19.05	700

*BL4A and BL4B are black and UNC Threaded

BL Nylon Series

UNF Standard Threaded Nylon Plugs (O-Ring optional)

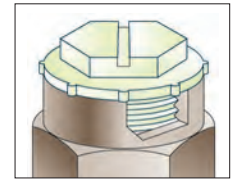


Specifications:

- Material: Nylon
- Color: Natural

Features:

- Can be applied or removed by hand, hex wrench or screwdriver
- Optional O-Ring gives this part a water tight seal for superior leakage protection
- Recommended when strength and abrasion resistance are desired
- The nylon material absorbs paint, keeping paint flakes to a minimum
- Nylon is able to withstand higher temperatures than Polypropylene
- Temperature Range: -40°F - 230°F (-40°C - 110°C)



Item No.	Item No. w/ O-Ring	To Plug Standard Thread Size	A		B		C		D		Bulk Pack Qty
			in	mm	in	mm	in	mm	in	mm	
BL3D	BL3I	7/16" - 20	0.430	10.92	0.620	15.75	0.180	4.57	0.390	9.91	10000
BL5C	BL5N	9/16" - 18	0.500	12.70	0.750	19.05	0.180	4.57	0.420	10.67	6000
BL7C	BL7G	3/4" - 16	0.680	17.27	0.940	23.88	0.190	4.83	0.520	13.21	3000
BL8B	BL8P	7/8" - 14	0.750	19.05	1.060	26.92	0.240	6.10	0.560	14.22	2100
BL10C	BL10M	1-1/16" - 12	0.870	22.10	1.310	33.27	0.250	6.35	0.660	16.76	1200
BL11E	BL11C	1-3/16" - 12	1.000	25.40	1.500	38.10	0.300	7.62	0.700	17.78	425
BL12B	BL12M	1-5/16" - 12	1.070	27.18	1.610	40.89	0.290	7.37	0.700	17.78	700
BL13G	BL13C	1-5/8" - 12	1.125	28.58	1.880	42.75	0.300	7.62	0.770	19.56	1000



HOSE PROTECTION

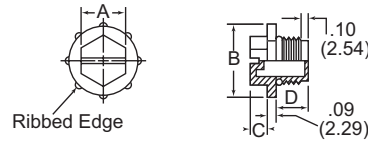
Wrap it. Cover it. Shield it. Secure it.



SPIRALGUARD
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### B Series UNF Standard Threaded Plugs

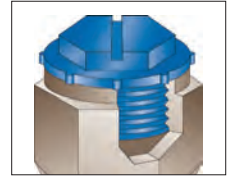


#### Specifications:

- Material: High-Density Polyethylene
- Color: Blue

#### Features:

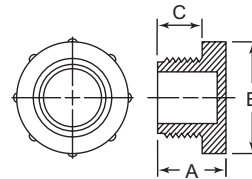
- Threaded plug with a serrated grip (used for a variety of applications)
- Can be applied or removed by hand, hex wrench or screwdriver



| Item No. | To Plug Standard Thread Size | A     |       | B     |       | C     |      | D     |       | Bulk Pack Qty |
|----------|------------------------------|-------|-------|-------|-------|-------|------|-------|-------|---------------|
|          |                              | in    | mm    | in    | mm    | in    | mm   | in    | mm    |               |
| B3A      | 7/16" - 20                   | 0.430 | 10.92 | 0.620 | 15.75 | 0.180 | 4.57 | 0.300 | 7.62  | 11000         |
| B4A      | 1/2" - 20                    | 0.500 | 12.70 | 0.680 | 12.27 | 0.180 | 4.57 | 0.360 | 9.14  | 7500          |
| B5A      | 9/16" - 18                   | 0.500 | 12.70 | 0.750 | 19.05 | 0.180 | 4.57 | 0.382 | 9.70  | 6000          |
| B6A      | 5/8" - 18                    | 0.560 | 14.22 | 0.810 | 20.57 | 0.180 | 4.57 | 0.350 | 8.89  | 5000          |
| B7A      | 3/4" - 16                    | 0.680 | 17.27 | 0.940 | 23.88 | 0.190 | 4.83 | 0.440 | 11.18 | 3500          |

| Item No. | To Plug Standard Thread Size | A     |       | B     |       | C     |      | D     |       | Bulk Pack Qty |
|----------|------------------------------|-------|-------|-------|-------|-------|------|-------|-------|---------------|
|          |                              | in    | mm    | in    | mm    | in    | mm   | in    | mm    |               |
| B8A      | 7/8" - 14                    | 0.750 | 19.05 | 1.060 | 26.92 | 0.240 | 6.10 | 0.500 | 12.70 | 2100          |
| B9A      | 1" - 14                      | 0.750 | 19.05 | 1.180 | 29.97 | 0.250 | 6.35 | 0.430 | 10.92 | 2000          |
| B10A     | 1-1/8" - 14                  | 0.870 | 22.10 | 1.310 | 33.27 | 0.250 | 6.35 | 0.645 | 16.38 | 1200          |
| B11A     | 1-1/16" - 12                 | 0.870 | 22.10 | 1.310 | 33.27 | 0.250 | 6.35 | 0.620 | 15.75 | 1300          |

### TPUNF Series UNF/JIC Knurled Head Threaded Plugs



#### Specifications:

- Material: Low-Density Polyethylene
- Color: Red

#### Features:

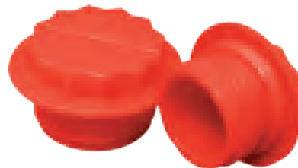
- Knurled head for easy hand installation or removal
- Secure fit for excellent protection against dirt, moisture and corrosion



| Item No. | To Plug UNF/JIC Thread Size | A     |       | B     |       | C     |       | Bulk Pack Qty |
|----------|-----------------------------|-------|-------|-------|-------|-------|-------|---------------|
|          |                             | in    | mm    | in    | mm    | in    | mm    |               |
| 10498A   | 5/16" - 18                  | 0.472 | 12.00 | 0.571 | 14.50 | 0.291 | 7.40  | 5000          |
| 10709A   | 5/16" - 24                  | 0.484 | 12.30 | 0.583 | 14.80 | 0.291 | 7.40  | 5000          |
| 10692A   | 3/8" - 24                   | 0.551 | 14.00 | 0.539 | 13.70 | 0.374 | 9.50  | 5000          |
| 10763A   | 7/16" - 20                  | 0.634 | 16.10 | 0.685 | 17.40 | 0.433 | 11.00 | 5000          |
| 12031A   | 7/16" - 24                  | 0.476 | 12.10 | 0.701 | 17.80 | 0.28  | 7.10  | 5000          |
| 10696A   | 1/2" - 20                   | 0.602 | 15.30 | 0.728 | 18.50 | 0.413 | 10.50 | 5000          |
| 10668A   | 9/16" - 18                  | 0.606 | 15.40 | 0.890 | 22.60 | 0.421 | 10.70 | 5000          |
| 12033A   | 9/16" - 24                  | 0.535 | 13.60 | 0.744 | 18.90 | 0.354 | 9.00  | 5000          |
| 10940A   | 5/8" - 18                   | 0.583 | 14.80 | 0.827 | 21.00 | 0.394 | 10.00 | 5000          |
| 12965A   | 5/8" - 24                   | 0.583 | 14.80 | 0.815 | 20.70 | 0.394 | 10.00 | 5000          |
| 12786A   | 11/16" - 16                 | 0.713 | 18.10 | 1.008 | 25.60 | 0.531 | 13.50 | 3000          |

| Item No. | To Plug UNF/JIC Thread Size | A     |       | B     |       | C     |       | Bulk Pack Qty |
|----------|-----------------------------|-------|-------|-------|-------|-------|-------|---------------|
|          |                             | in    | mm    | in    | mm    | in    | mm    |               |
| 10575A   | 3/4" - 16                   | 0.736 | 18.70 | 1.063 | 27.00 | 0.543 | 13.80 | 3000          |
| 12827A   | 13/16" - 16                 | 0.713 | 18.10 | 1.051 | 26.70 | 0.531 | 13.50 | 2500          |
| 10326A   | 7/8" - 14                   | 0.728 | 18.50 | 1.134 | 28.80 | 0.535 | 13.60 | 2500          |
| 12785A   | 1" - 14                     | 0.701 | 17.80 | 1.26  | 32.00 | 0.52  | 13.20 | 2000          |
| 10460A   | 1-1/16" - 12                | 0.724 | 18.40 | 1.315 | 33.40 | 0.543 | 13.80 | 2000          |
| 12359A   | 1-1/16" - 14                | 0.720 | 18.30 | 1.311 | 33.30 | 0.539 | 13.70 | 2000          |
| 11506A   | 1-3/16" - 12                | 0.72  | 18.30 | 1.449 | 36.80 | 0.531 | 13.50 | 1500          |
| 10671A   | 1-5/16" - 12                | 0.642 | 16.30 | 1.547 | 39.30 | 0.433 | 11.00 | 1500          |
| 11752A   | 1-5/8" - 12                 | 0.681 | 17.30 | 1.992 | 50.60 | 0.508 | 12.90 | 800           |
| 11755A   | 1-7/8" - 12                 | 0.886 | 22.50 | 2.299 | 58.40 | 0.657 | 16.70 | 400           |
| 12040A   | 2-1/2" - 12                 | 0.811 | 20.60 | 2.898 | 73.60 | 0.591 | 15.00 | 300           |

### BLM Series UNF Standard Threaded Molded O-Ring Plugs

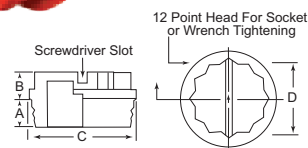


#### Specifications:

- Material: High-Density Polyethylene
- Color: Red

#### Features:

- Often used on flat-faced hydraulic fittings
- Integral O-Ring type bead prevents oil leakage or entrance of contaminants
- The flange lip compresses against the surface to keep contaminants out
- Can be applied or removed by hand, wrench, socket or screwdriver



| Item No. | To Plug Standard Thread Size | A     |       | B     |       | C     |       | D     |      | Bulk Pack Qty |
|----------|------------------------------|-------|-------|-------|-------|-------|-------|-------|------|---------------|
|          |                              | in    | mm    | in    | mm    | in    | mm    | i     | mm   |               |
| BLM3B    | 7/16" - 20                   | 0.344 | 8.74  | 0.281 | 7.14  | 0.660 | 16.76 | 3/8   | 8000 |               |
| BLM3-24B | 7/16" - 24                   | 0.344 | 8.74  | 0.281 | 7.14  | 0.660 | 16.76 | 3/8   | 8000 |               |
| BLM4B    | 1/2" - 20                    | 0.344 | 8.74  | 0.313 | 7.95  | 0.730 | 18.54 | 7/16  | 6000 |               |
| BLM5B    | 9/16" - 18                   | 0.350 | 8.89  | 0.323 | 8.20  | 0.800 | 20.32 | 1/2   | 6000 |               |
| BLM6B    | 5/8" - 18                    | 0.375 | 9.53  | 0.313 | 7.95  | 0.820 | 20.83 | 9/16  | 5000 |               |
| BLM7B    | 3/4" - 16                    | 0.406 | 10.31 | 0.406 | 10.31 | 1.020 | 25.91 | 11/16 | 3000 |               |
| BLM8B    | 7/8" - 14                    | 0.469 | 11.91 | 0.313 | 7.95  | 1.160 | 29.46 | 13/16 | 2000 |               |

| Item No. | To Plug Standard Thread Size | A     |       | B     |      | C     |       | D     |      | Bulk Pack Qty |
|----------|------------------------------|-------|-------|-------|------|-------|-------|-------|------|---------------|
|          |                              | in    | mm    | in    | mm   | in    | mm    | i     | mm   |               |
| BLM9B    | 1" - 14                      | 0.500 | 12.70 | 0.313 | 7.95 | 1.250 | 31.75 | 7/8   | 1500 |               |
| BLM10B   | 1-1/16" - 12                 | 0.594 | 15.09 | 0.313 | 7.95 | 1.450 | 36.83 | 1     | 1000 |               |
| BLM11B   | 1-3/16" - 12                 | 0.594 | 15.09 | 0.344 | 8.74 | 1.500 | 38.10 | 1-1/8 | 1000 |               |
| BLM12B   | 1-5/16" - 12                 | 0.594 | 15.09 | 0.344 | 8.74 | 1.740 | 44.20 | 1-1/4 | 1000 |               |
| BLM13B   | 1-5/8" - 12                  | 0.594 | 15.09 | 0.344 | 8.74 | 2.156 | 54.76 | 1-1/2 | 700  |               |
| BLM14B   | 1-7/8" - 12                  | 0.594 | 15.09 | 0.344 | 8.74 | 2.188 | 55.58 | 1-5/8 | 700  |               |



# THREADED PLUGS

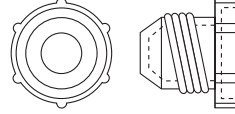
## TE Series

### Threaded Plugs for 37° JIC Flared Fittings



Specifications:

- Material: Low-Density Polyethylene
- Color: Red



Features:

- Designed with a knurled head for easy finger installation
- Used to seal light pressure requirements on 37° JIC flared fittings
- Functionally Equivalent to Spec: NAS-833, NAS-815 (MIL-C5501/1, MIL-C52078)

| Item No. | Tubing Size in | To Plug JIC Thread Size | JIC Fitting Size | Bulk Pack Qty |
|----------|----------------|-------------------------|------------------|---------------|
| TE1000A  | 1/8            | 5/16" - 24              | 2                | 5000          |
| TE1005A  | 3/16           | 3/8" - 24               | 3                | 5000          |
| TE1010A  | 1/4            | 7/16" - 20              | 4                | 5000          |
| TE1015A  | 5/16           | 1/2" - 20               | 5                | 5000          |
| TE1020A  | 3/8            | 9/16" - 18              | 6                | 5000          |
| TE1025A  | 3/8            | 5/8" - 18               | —                | 5000          |
| TE1030A  | 1/2            | 3/4" - 16               | 8                | 2500          |
| TE1035A  | 5/8            | 7/8" - 14               | 10               | 2500          |
| TE1040A  | 3/4            | 1 - 1/16" - 12          | 12               | 2500          |

| Item No. | Tubing Size in | To Plug JIC Thread Size | JIC Fitting Size | Bulk Pack Qty |
|----------|----------------|-------------------------|------------------|---------------|
| TE1045A  | 3/4            | 1 - 1/16" - 14          | —                | 1000          |
| TE1050A  | 7/8            | 1 - 3/16" - 12          | 14               | 2500          |
| TE1055A  | 1              | 1 - 5/16" - 12          | 16               | 1000          |
| TE1060A  | —              | 1 - 1/2 - 12            | —                | 1000          |
| TE1065A  | 1 - 1/4        | 1 - 5/8 - 12            | 20               | 1000          |
| TE1070A  | —              | 1 - 3/4 - 12            | —                | 1000          |
| TE1075A  | 1 - 1/2        | 1 - 7/8 - 12            | 24               | 500           |
| TE1080A  | 1 - 3/4        | 2 - 1/4 - 12            | 28               | 500           |
| TE1085A  | 2              | 2 - 1/2 - 12            | 32               | 500           |

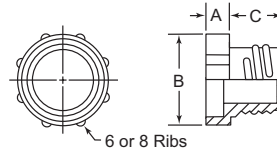
## TF Series

### Threaded Plugs for Flat Faced O-Ring Hydraulic Fittings



Specifications:

- Material: Polyethylene
- Color: Red



Features:

- Head designed with six or eight ribs for simple hand or mechanical installation
- Used to protect flat-faced O-Ring hydraulic fittings

| Item No. | Tubing Size in | To Plug Thread Size | A     |      | B     |       | C     |      | Bulk Pack Qty |
|----------|----------------|---------------------|-------|------|-------|-------|-------|------|---------------|
|          |                |                     | in    | mm   | in    | mm    | in    | mm   |               |
| TF10A    | 1/4            | 9/16" - 18          | 0.250 | 6.40 | 0.690 | 17.50 | 0.380 | 9.50 | 5000          |
| TF20B    | 3/8            | 11/16" - 16         | 0.250 | 6.40 | 0.870 | 22.10 | 0.410 | 10.4 | 5000          |
| TF30B    | 1/2            | 13/16" - 16         | 0.250 | 6.40 | 0.940 | 23.90 | 0.470 | 11.9 | 5000          |
| TF40B    | 5/8            | 1" - 14             | 0.250 | 6.40 | 1.160 | 29.50 | 0.570 | 14.5 | 2500          |
| TF50B    | 3/4            | 1 - 3/16" - 12      | 0.250 | 6.40 | 1.320 | 33.50 | 0.610 | 15.5 | 2500          |
| TF60B    | 1              | 1 - 7/16" - 12      | 0.250 | 6.40 | 1.630 | 41.40 | 0.690 | 17.5 | 1000          |
| TF80B    | 1-1/4          | 1 - 11/16" - 12     | 0.250 | 6.40 | 1.880 | 47.75 | 0.890 | 22.6 | 1000          |

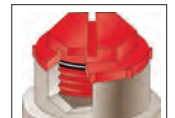
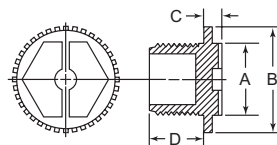
## FP Series

### NS & NF Class 1-2-3 Threaded Plugs (O-Ring Optional)



Specifications:

- Material: Polypropylene
- Color: Red



Features:

- Can be applied or removed by hand, hex wrench or screwdriver
- Will fit NS and NF Class 1-2-3 standard threads
- Optional O-Ring gives this part a watertight seal for superior leakage protection

| Item No. | Item No. w/ O-Ring | To Plug Standard Thread Size | A     |       | B     |       | C     |      | D     |       | Bulk Pack Qty |
|----------|--------------------|------------------------------|-------|-------|-------|-------|-------|------|-------|-------|---------------|
|          |                    |                              | in    | mm    | in    | mm    | in    | mm   | in    | mm    |               |
| FP104A   | FP104B             | 7/16" - 20                   | 0.438 | 11.11 | 0.625 | 15.88 | 0.188 | 4.76 | 0.300 | 7.62  | 9500          |
| FP108A   | FP108B             | 9/16" - 18                   | 0.500 | 12.70 | 0.781 | 19.84 | 0.188 | 4.76 | 0.350 | 8.89  | 5000          |
| FP110A   | FP110B             | 5/8" - 18                    | 0.563 | 14.29 | 0.813 | 20.64 | 0.188 | 4.76 | 0.350 | 8.89  | 4500          |
| FP115A   | FP115B             | 3/4" - 16                    | 0.688 | 17.46 | 0.938 | 23.81 | 0.188 | 4.76 | 0.440 | 11.18 | 2700          |
| FP120A   | FP120B             | 7/8" - 14                    | 0.750 | 19.05 | 1.063 | 26.99 | 0.250 | 6.35 | 0.500 | 12.70 | 1800          |
| FP122A   | FP122B             | 1" - 14                      | 0.750 | 19.05 | 1.188 | 30.16 | 0.250 | 6.35 | 0.470 | 11.94 | 1500          |





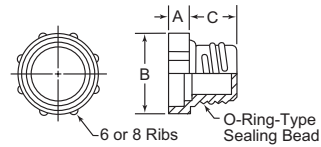
### TMO Series Threaded Plugs for SAE O-Ring Ports

#### Specifications:

- Material: High-Density Polyethylene
- Color: Red

#### Features:

- Designed with an easy to grip head for ease of hand installation
- Threads meet UN and UNS specifications
- Integral O-Ring type bead prevents leakage and entrance of contaminants
- Protects threaded components from dust, moisture and damage during production, storage and shipment



| Item No. | To Plug Standard Thread Size | A     |       | B     |       | C     |      | Bulk Pack Qty |
|----------|------------------------------|-------|-------|-------|-------|-------|------|---------------|
|          |                              | in    | mm    | in    | mm    | in    | mm   |               |
| TMO104A  | 7/16"-20                     | 0.320 | 8.13  | 0.650 | 16.51 | 0.380 | 9.65 | 5500          |
| TMO105A  | 1/2"-20                      | 0.320 | 8.13  | 0.720 | 18.29 | 0.380 | 9.65 | 7200          |
| TMO106A  | 9/16"-18                     | 0.360 | 9.14  | 0.780 | 19.81 | 0.380 | 9.65 | 6000          |
| TMO108A  | 3/4"-16                      | 0.400 | 10.16 | 0.980 | 24.89 | 0.380 | 9.65 | 3500          |

| Item No. | To Plug Standard Thread Size | A     |       | B     |       | C     |      | Bulk Pack Qty |
|----------|------------------------------|-------|-------|-------|-------|-------|------|---------------|
|          |                              | in    | mm    | in    | mm    | in    | mm   |               |
| TMO110A  | 7/8"-14                      | 0.450 | 11.43 | 1.110 | 28.19 | 0.380 | 9.65 | 2100          |
| TMO112A  | 1-1/16"-12                   | 0.620 | 15.75 | 1.310 | 33.27 | 0.380 | 9.65 | 1200          |
| TMO116A  | 1-5/16"-12                   | 0.620 | 15.75 | 1.560 | 39.62 | 0.380 | 9.65 | 700           |
| TMO120A  | 1-5/8"-12                    | 0.620 | 15.75 | 1.880 | 47.75 | 0.380 | 9.65 | 700           |

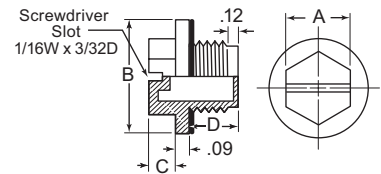
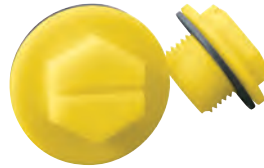
### BLWF Series UNF Standard Threaded Wide Flange Plugs

#### Specifications:

- Material: Plug – Nylon, Gasket – Nitrile
- Color: Plug – Yellow, Gasket – Black

#### Features:

- The wide flange design keeps any paint flakes away from the hole when removed
- The nylon material absorbs paint keeping paint flakes to a minimum
- The nitrile gasket seals the plug to the mating surface for a watertight seal
- Can be applied or removed by hand, screwdriver or with a torque wrench
- Temperature Range: -40°F - 230°F (-40°C - 110°C)



| Item No. | To Plug UNF Thread Size | A     |       | B     |       | C     |      | D     |       | Bulk Pack Qty |
|----------|-------------------------|-------|-------|-------|-------|-------|------|-------|-------|---------------|
|          |                         | in    | mm    | in    | mm    | in    | mm   | in    | mm    |               |
| BLWF100A | 7/16" - 20              | 0.500 | 12.70 | 0.775 | 19.69 | 0.180 | 4.57 | 0.390 | 9.91  | 5000          |
| BLWF105A | 1/2" - 20               | 0.500 | 12.70 | 0.853 | 21.67 | 0.180 | 4.57 | 0.405 | 10.29 | 5000          |
| BLWF110A | 9/16" - 18              | 0.500 | 12.70 | 0.917 | 23.29 | 0.180 | 4.57 | 0.420 | 10.67 | 2500          |
| BLWF115A | 3/4" - 16               | 0.750 | 19.05 | 1.130 | 28.70 | 0.190 | 4.83 | 0.520 | 13.21 | 2500          |
| BLWF120A | 7/8" - 14               | 0.750 | 19.05 | 1.284 | 32.61 | 0.240 | 6.10 | 0.560 | 14.22 | 2500          |
| BLWF125A | 1 - 1/16" - 12          | 1.000 | 25.40 | 1.577 | 40.06 | 0.250 | 6.35 | 0.660 | 16.76 | 1000          |
| BLWF130A | 1 - 3/16" - 12          | 1.000 | 25.40 | 1.722 | 43.74 | 0.300 | 7.62 | 0.700 | 17.78 | 1000          |
| BLWF135A | 1 - 5/16" - 12          | 1.000 | 25.40 | 1.867 | 47.42 | 0.290 | 7.37 | 0.700 | 17.78 | 1000          |
| BLWF140A | 1 - 5/8" - 12           | 1.125 | 28.57 | 2.217 | 56.31 | 0.300 | 7.62 | 0.770 | 19.56 | 500           |
| BLWF145A | 1 - 7/8" - 12           | 1.500 | 38.10 | 2.507 | 63.68 | 0.300 | 7.62 | 0.750 | 19.05 | 500           |

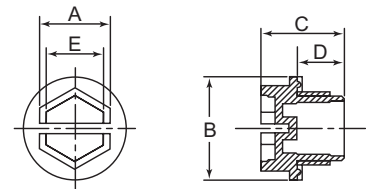
### TSSP Series Sealing Threaded Plugs For UNF Threads

#### Specifications:

- Material: Nylon
- Color: Yellow

#### Features:

- The double sealing ring design on the underside of the flange provides a positive seal
- Design includes five complete threads for a secure fit
- Can be manually applied or removed with a screwdriver, spanner, socket or allen key or with power tools
- Head designed not to trap liquid
- The nylon material absorbs paint, keeping paint flakes to a minimum
- Temperature Range: -40°F - 320°F (-40°C - 160°C)
- See page 60 for Metric and BSP Threads



See pages 64 and 65 for Application Wizards

| Item No.       | To Plug UNF Thread Size | A     |      | B     |      | C     |      | D     |      | E     |      | Bulk Pack Qty |
|----------------|-------------------------|-------|------|-------|------|-------|------|-------|------|-------|------|---------------|
|                |                         | in    | mm   | in    | mm   | in    | mm   | in    | mm   | in    | mm   |               |
| TSSP3/8-24A    | 3/8" - 24               | 0.354 | 9.0  | 0.630 | 16.0 | 0.689 | 17.5 | 0.394 | 10.0 | 0.236 | 6.0  | 5000          |
| TSSP7/16-20A   | 7/16" - 20              | 0.394 | 10.0 | 0.669 | 17.0 | 0.689 | 17.5 | 0.394 | 10.0 | 0.276 | 7.0  | 5000          |
| TSSP1/2-20A    | 1/2" - 20               | 0.512 | 13.0 | 0.748 | 19.0 | 0.689 | 17.5 | 0.394 | 10.0 | 0.394 | 10.0 | 3000          |
| TSSP9/16-18A   | 9/16" - 18              | 0.512 | 13.0 | 0.807 | 20.5 | 0.689 | 17.5 | 0.394 | 10.0 | 0.394 | 10.0 | 3000          |
| TSSP5/8-18A    | 5/8" - 18               | 0.591 | 15.0 | 0.866 | 22.0 | 0.689 | 17.5 | 0.394 | 10.0 | 0.472 | 12.0 | 3000          |
| TSSP3/4-16A    | 3/4" - 16               | 0.748 | 19.0 | 1.024 | 26.0 | 0.689 | 17.5 | 0.394 | 10.0 | 0.630 | 16.0 | 3000          |
| TSSP7/8-14A    | 7/8" - 14               | 0.827 | 21.0 | 1.122 | 28.5 | 0.768 | 19.5 | 0.472 | 12.0 | 0.709 | 18.0 | 3000          |
| TSSP1-14A      | 1" - 14                 | 0.945 | 24.0 | 1.240 | 31.5 | 0.768 | 19.5 | 0.472 | 12.0 | 0.827 | 21.0 | 1000          |
| TSSP1-1/16-12A | 1 - 1/16" - 12          | 0.945 | 24.0 | 1.299 | 33.0 | 0.768 | 19.5 | 0.472 | 12.0 | 0.827 | 21.0 | 1000          |
| TSSP1-3/16-12A | 1 - 3/16" - 12          | 1.181 | 30.0 | 1.437 | 36.5 | 0.886 | 22.5 | 0.591 | 15.0 | 1.063 | 27.0 | 1000          |
| TSSP1-5/16-12A | 1 - 5/16" - 12          | 1.181 | 30.0 | 1.575 | 40.0 | 0.886 | 22.5 | 0.591 | 15.0 | 1.063 | 27.0 | 1000          |
| TSSP1-5/8-12A  | 1 - 5/8" - 12           | 1.417 | 36.0 | 1.870 | 47.5 | 0.886 | 22.5 | 0.591 | 15.0 | 1.299 | 33.0 | 500           |
| TSSP1-7/8-12A  | 1 - 7/8" - 12           | 1.417 | 36.0 | 2.126 | 54.0 | 0.886 | 22.5 | 0.591 | 15.0 | 1.299 | 33.0 | 500           |



# THREADED PLUGS

## R Series NPT Threaded Square-Headed Plugs

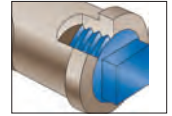
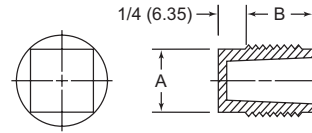


**Specifications:**

- Material: High-Density Polyethylene or Glass-Filled Nylon - See Table
- Color: See Table

**Features:**

- Square head design allows the user to install or remove these by hand or with a wrench
- Used to protect NPT threads against contaminants and moisture
- Nylon is recommended when strength and abrasion resistance are desired
- The nylon material absorbs paint, keeping paint flakes to a minimum
- Nylon is able to withstand higher temperatures than HDPE
- Temperature Range: -40°F - 320°F (-40°C - 160°C)



| Item No.  |             |                         | A     |       | B     |       | Bulk Pack Qty |
|-----------|-------------|-------------------------|-------|-------|-------|-------|---------------|
| Blue HDPE | Natural GFN | To Plug NPT Thread Size | in    | mm    | in    | mm    |               |
| R1/8A     | R1/8C       | 1/8" - 27               | 9/32  | 7.14  | 0.375 | 9.53  | 8500          |
| R1/4A     | R1/4C       | 1/4" - 18               | 11/32 | 8.73  | 0.437 | 11.11 | 9000          |
| R3/8A     | R3/8B       | 3/8" - 18               | 7/16  | 11.11 | 0.500 | 12.70 | 5000          |
| R1/2A     | R1/2D       | 1/2" - 14               | 9/16  | 14.28 | 0.562 | 14.29 | 3000          |
| R3/4A     | R3/4B       | 3/4" - 14               | 11/16 | 17.46 | 0.625 | 15.88 | 1900          |

| Item No.  |             |                         | A       |       | B     |       | Bulk Pack Qty |
|-----------|-------------|-------------------------|---------|-------|-------|-------|---------------|
| Blue HDPE | Natural GFN | To Plug NPT Thread Size | in      | mm    | in    | mm    |               |
| R1A       | R1B         | 1"-11 - 1/2             | 3/4     | 19.05 | 0.625 | 15.88 | 1000          |
| R1-1/4A   | R1-1/4C     | 1-1/4" - 11 - 1/2       | 15/16   | 23.81 | 0.625 | 15.88 | 500           |
| R1-1/2A   | R1-1/2C     | 1-1/2" - 11 - 1/2       | 1 - 1/8 | 28.57 | 0.625 | 15.88 | 500           |
| R2A       | R2C         | 2"-11 - 1/2             | 1 - 1/4 | 31.75 | 0.625 | 15.88 | 500           |

## PFP Series NPT Threaded Plugs (O-Ring Optional)

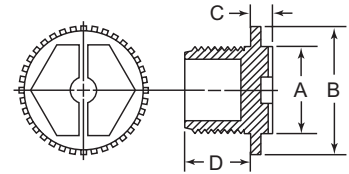


**Specifications:**

- Material: High-Density Polyethylene
- Color: Black

**Features:**

- Unique head design allows the user to apply or remove this plug by hand or with a 12 point socket head, screwdriver or wrench
- Used to protect NPT threaded ports
- Optional O-Ring gives this part a watertight seal for superior leakage protection



| Item No. | Item No. w/ O-Ring | To Plug NPT Thread Size | A     |       | B     |       | C     |      | D     |       | Bulk Pack Qty |
|----------|--------------------|-------------------------|-------|-------|-------|-------|-------|------|-------|-------|---------------|
|          |                    |                         | in    | mm    | in    | mm    | in    | mm   | in    | mm    |               |
| PFP1/8A  | PFP1/8B            | 1/8"                    | 0.348 | 8.84  | 0.560 | 14.22 | 0.250 | 6.35 | 0.250 | 6.35  | 5000          |
| PFP1/4A  | PFP1/4B            | 1/4"                    | 0.489 | 12.42 | 0.740 | 18.80 | 0.310 | 7.87 | 0.310 | 7.87  | 5000          |
| PFP3/8A  | PFP3/8B            | 3/8"                    | 0.562 | 14.27 | 0.850 | 21.59 | 0.320 | 8.13 | 0.350 | 8.89  | 5000          |
| PFP1/2A  | PFP1/2B            | 1/2"                    | 0.705 | 17.91 | 1.040 | 26.42 | 0.320 | 8.13 | 0.500 | 12.70 | 3000          |
| PFP3/4A  | PFP3/4B            | 3/4"                    | 0.987 | 25.07 | 1.310 | 33.27 | 0.320 | 8.13 | 0.630 | 16.00 | 1500          |
| PFP1A    | PFP1B              | 1"                      | 1.130 | 28.70 | 1.530 | 38.86 | 0.320 | 8.13 | 0.630 | 16.00 | 1000          |

## PFP Nylon Series NPT Threaded Nylon Plugs (O-Ring Optional)

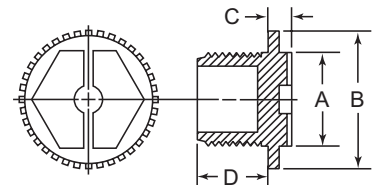


**Specifications:**

- Material: Nylon
- Color: Natural

**Features:**

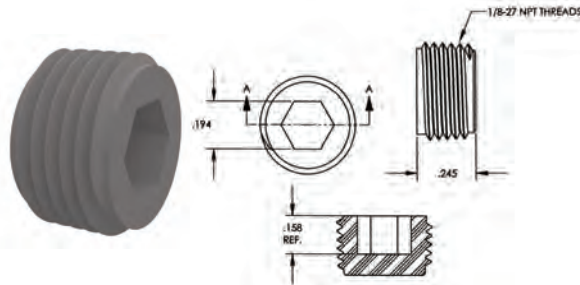
- Unique head design allows the user to apply or remove this plug by hand or with a 12 point socket head, screwdriver or wrench
- Used to protect NPT threaded ports
- Optional O-Ring gives this part a watertight seal for superior leakage protection
- Recommended when strength and abrasion resistance are desired
- The nylon material absorbs paint, keeping paint flakes to a minimum
- Nylon is able to withstand higher temperatures than HDPE
- Temperature Range: -40°F - 230°F (-40°C - 110°C)



| Item No. | Item No. w/ O-Ring | To Plug NPT Thread Size | A     |       | B     |       | C     |      | D     |       | Bulk Pack Qty |
|----------|--------------------|-------------------------|-------|-------|-------|-------|-------|------|-------|-------|---------------|
|          |                    |                         | in    | mm    | in    | mm    | in    | mm   | in    | mm    |               |
| PFP1/8C  | PFP1/8D            | 1/8" NPT                | 0.348 | 8.84  | 0.560 | 14.22 | 0.250 | 6.35 | 0.250 | 6.35  | 5000          |
| PFP1/4C  | PFP1/4D            | 1/4" NPT                | 0.489 | 12.42 | 0.740 | 18.80 | 0.310 | 7.87 | 0.310 | 7.87  | 5000          |
| PFP3/8C  | PFP3/8D            | 3/8" NPT                | 0.562 | 14.27 | 0.850 | 21.59 | 0.320 | 8.13 | 0.350 | 8.89  | 5000          |
| PFP1/2C  | PFP1/2D            | 1/2" NPT                | 0.705 | 17.91 | 1.040 | 26.42 | 0.320 | 8.13 | 0.500 | 12.70 | 3000          |
| PFP3/4C  | PFP3/4D            | 3/4" NPT                | 0.987 | 25.07 | 1.310 | 33.27 | 0.320 | 8.13 | 0.630 | 16.00 | 1500          |
| PFP1C    | PFP1D              | 1" NPT                  | 1.130 | 28.70 | 1.530 | 38.86 | 0.320 | 8.13 | 0.630 | 16.00 | 1000          |



### 62NPTH & 62NPT Series NPT Threaded Pipe Plugs



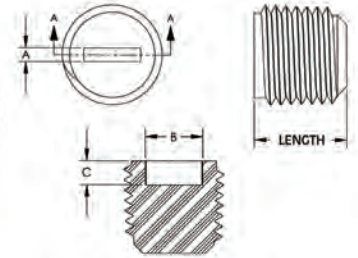
Hex Head

#### Specifications:

- Material: Nylon 6/6
- Color: Natural

#### Features:

- Used to protect valves, hydraulic and pneumatic devices from contamination and moisture
- Hex head drive allows installation and removal with a hex wrench
- Slot or grub head allows installation and removal with a common screwdriver
- Nylon is recommended when strength and abrasion resistance are desired



Slot Head

| Item No.    | To Plug NPT Thread Size | Head Style | A     |      | B     |       | C     |       | Length |       | Bulk Pack Qty |
|-------------|-------------------------|------------|-------|------|-------|-------|-------|-------|--------|-------|---------------|
|             |                         |            | in    | mm   | in    | mm    | in    | mm    | in     | mm    |               |
| 62NPTH01227 | 1/8-27                  | Hex        | 0.194 | 4.92 | 0.194 | 4.92  | 0.158 | 4.01  | 0.245  | 6.45  | 500           |
| 62NPT01227  | 1/8-27                  | Slot       | 0.072 | 1.83 | 0.240 | 6.10  | 0.130 | 3.30  | 0.390  | 9.91  | 500           |
| 62NPT02518  | 1/4-18                  | Slot       | 0.072 | 1.83 | 0.312 | 7.92  | 0.130 | 3.30  | 0.500  | 12.70 | 500           |
| 62NPT03718  | 3/8-18                  | Slot       | 0.150 | 3.81 | 0.380 | 9.10  | 0.358 | 9.65  | 0.550  | 13.97 | 500           |
| 62NPT05014  | 1/2-14                  | Slot       | 0.150 | 3.81 | 0.468 | 11.89 | 0.365 | 9.27  | 0.565  | 14.35 | 500           |
| 62NPT07514  | 3/4-14                  | Slot       | 0.175 | 4.44 | 0.550 | 13.97 | 0.435 | 11.05 | 0.610  | 15.49 | 500           |

### TP Metric & TPBSP Series Metric & BSP Threaded Plugs

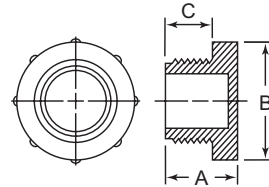


#### Specifications:

- Material: Low-Density Polyethylene
- Color: Red

#### Features:

- Series accommodates an extensive range of metric and BSP/Gas threaded sizes
- Knurled head for easy grip
- Secure fit for excellent protection against dirt, moisture and corrosion



#### Metric Threads

| Item No. | To Plug Metric Thread Size | A     |       | B     |       | C     |       | Bulk Pack Qty |
|----------|----------------------------|-------|-------|-------|-------|-------|-------|---------------|
|          |                            | in    | mm    | in    | mm    | in    | mm    |               |
| 12011A   | M8 x 1                     | 0.562 | 14.27 | 0.484 | 12.29 | 0.374 | 9.50  | 5000          |
| 12012A   | M10 x 1                    | 0.574 | 14.58 | 0.602 | 15.29 | 0.409 | 10.39 | 5000          |
| 12013A   | M12 x 1                    | 0.657 | 16.69 | 0.728 | 18.49 | 0.421 | 10.69 | 5000          |
| 12017A   | M12 x 1.5                  | 0.641 | 16.28 | 0.657 | 16.69 | 0.342 | 8.69  | 5000          |
| 12018A   | M14 x 1.5                  | 0.677 | 17.20 | 0.728 | 18.49 | 0.374 | 9.50  | 5000          |
| 12019A   | M16 x 1.5                  | 0.677 | 17.20 | 0.866 | 22.00 | 0.492 | 12.50 | 3000          |
| 10458A   | M18 x 1.5                  | 0.720 | 18.29 | 0.960 | 24.38 | 0.539 | 13.69 | 4000          |
| 12020A   | M20 x 1.5                  | 0.716 | 18.19 | 1.035 | 26.29 | 0.551 | 14.00 | 3000          |
| 10128A   | M22 x 1.5                  | 0.720 | 18.29 | 1.110 | 28.19 | 0.539 | 13.69 | 3000          |
| 12021A   | M24 x 1.5                  | 0.728 | 18.49 | 1.232 | 31.29 | 0.543 | 13.79 | 2000          |
| 12022A   | M25 x 1.5                  | 0.728 | 18.49 | 1.232 | 31.30 | 0.551 | 14.00 | 2500          |
| 12023A   | M26 x 1.5                  | 0.736 | 18.69 | 1.287 | 32.69 | 0.543 | 13.79 | 2000          |
| 12030A   | M52 x 1.5                  | 0.846 | 21.50 | 2.508 | 63.70 | 0.610 | 15.50 | 500           |

#### BSP/Gas Threads

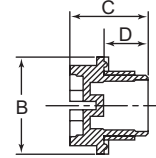
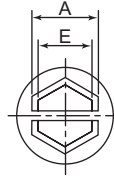
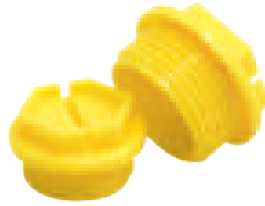
| Item No. | To Plug BSP/GAS Thread Size | A     |       | B     |        | C     |       | Bulk Pack Qty |
|----------|-----------------------------|-------|-------|-------|--------|-------|-------|---------------|
|          |                             | in    | mm    | in    | mm     | in    | mm    |               |
| 10651A   | 1/8" x 28                   | 0.413 | 10.50 | 0.646 | 16.40  | 0.165 | 4.20  | 5000          |
| 10588A   | 1/4" x 19                   | 0.504 | 12.80 | 0.740 | 18.80  | 0.256 | 6.50  | 5000          |
| 10996A   | 3/8" x 19                   | 0.472 | 12.00 | 0.902 | 22.90  | 0.217 | 5.50  | 5000          |
| 10590A   | 1/2" x 14                   | 0.681 | 17.30 | 1.102 | 28.00  | 0.406 | 10.30 | 3000          |
| 10511A   | 5/8" x 14                   | 0.724 | 18.40 | 1.232 | 31.30  | 0.547 | 13.90 | 2500          |
| 10731A   | 3/4" x 14                   | 0.669 | 17.00 | 1.272 | 32.30  | 0.433 | 11.00 | 2000          |
| 11429B   | 7/8" x 14                   | 0.713 | 18.10 | 1.496 | 38.00  | 0.531 | 13.50 | 1500          |
| 10810A   | 1" x 11                     | 0.665 | 16.90 | 1.567 | 39.80  | 0.425 | 10.80 | 1500          |
| 10459A   | 1-1/4" x 11                 | 0.823 | 20.90 | 1.965 | 49.90  | 0.591 | 15.00 | 800           |
| 11242A   | 1-1/2" x 11                 | 0.665 | 16.90 | 2.173 | 55.20  | 0.425 | 10.80 | 600           |
| 10496A   | 2" x 11                     | 0.689 | 17.50 | 2.902 | 73.70  | 0.421 | 10.70 | 400           |
| 10319A   | 3" x 11                     | 0.650 | 16.50 | 4.134 | 105.00 | 0.445 | 11.30 | 150           |



# THREADED PLUGS

## TSSP Series

Sealing Threaded Plugs For Metric/BSP Threads



**Specifications:**

- Material: Nylon
- Color: Yellow

**Features:**

- The double sealing ring design on the underside of the flange provides a positive seal
- Design includes five complete threads for a secure fit
- Can be manually applied or removed with a screwdriver, spanner, socket or allen key or with power tools
- Head designed not to trap liquid
- The nylon material absorbs paint, keeping paint flakes to a minimum
- Temperature Range: -40°F - 320°F (-40°C - 160°C)
- See page 57 for UNF Threads



See pages 64 and 65 for Application Wizards

### Metric Threads

| Item No.     | To Plug Metric Thread Size | A     |      | B     |      | C     |      | D     |      | E     |      | Bulk Pack Qty |
|--------------|----------------------------|-------|------|-------|------|-------|------|-------|------|-------|------|---------------|
|              |                            | in    | mm   | in    | mm   | in    | mm   | in    | mm   | in    | mm   |               |
| 462836A      | M8 x 1                     | 0.276 | 7.0  | 0.492 | 12.5 | 0.610 | 15.5 | 0.315 | 8.0  | 0.157 | 4.0  | 5000          |
| 462837A      | M10 x 1                    | 0.354 | 9.0  | 0.571 | 14.5 | 0.650 | 16.5 | 0.354 | 9.0  | 0.236 | 6.0  | 5000          |
| TSSPM10X1.5A | M10 x 1.5                  | 0.354 | 9.0  | 0.571 | 14.5 | 0.650 | 16.5 | 0.354 | 9.0  | 0.236 | 6.0  | 500           |
| TSSPM12X1A   | M12 x 1                    | 0.394 | 10.0 | 0.669 | 17.0 | 0.650 | 16.5 | 0.354 | 9.0  | 0.276 | 7.0  | 500           |
| 462838A      | M12 x 1.5                  | 0.394 | 10.0 | 0.669 | 17.0 | 0.650 | 16.5 | 0.354 | 9.0  | 0.276 | 7.0  | 5000          |
| 462839A      | M14 x 1.5                  | 0.512 | 13.0 | 0.748 | 19.0 | 0.689 | 17.5 | 0.394 | 10.0 | 0.394 | 10.0 | 5000          |
| 462840A      | M16 x 1.5                  | 0.591 | 15.0 | 0.878 | 22.3 | 0.689 | 17.5 | 0.366 | 9.3  | 0.472 | 12.0 | 5000          |
| 462841A      | M18 x 1.5                  | 0.669 | 17.0 | 0.945 | 24.0 | 0.689 | 17.5 | 0.394 | 10.0 | 0.551 | 14.0 | 3000          |
| 462842A      | M20 x 1.5                  | 0.748 | 19.0 | 1.024 | 26.0 | 0.689 | 17.5 | 0.394 | 10.0 | 0.630 | 16.0 | 3000          |
| 462843A      | M22 x 1.5                  | 0.827 | 21.0 | 1.102 | 28.0 | 0.689 | 17.5 | 0.394 | 10.0 | 0.709 | 18.0 | 3000          |
| TSSPM24X1.5A | M24 x 1.5                  | 0.945 | 24.0 | 1.181 | 30.0 | 0.689 | 17.5 | 0.394 | 10.0 | 0.827 | 21.0 | 500           |
| TSSPM26X1.5A | M26 x 1.5                  | 0.945 | 24.0 | 1.260 | 32.0 | 0.807 | 20.5 | 0.472 | 12.0 | 0.827 | 21.0 | 500           |
| 466977A      | M27 x 1.5                  | 0.945 | 24.0 | 1.299 | 33.0 | 0.807 | 20.5 | 0.472 | 12.0 | 0.827 | 21.0 | 500           |
| 466985A      | M27 x 2                    | 0.945 | 24.0 | 1.299 | 33.0 | 0.866 | 22   | 0.531 | 13.5 | 0.827 | 21.0 | 250           |
| TSSPM28X1.5A | M28 x 1.5                  | 0.945 | 24.0 | 1.339 | 34.0 | 0.807 | 20.5 | 0.472 | 12.0 | 0.827 | 21.0 | 500           |
| TSSPM30X1.5A | M30 x 1.5                  | 0.945 | 24.0 | 1.496 | 38.0 | 0.807 | 20.5 | 0.472 | 12.0 | 0.827 | 21.0 | 500           |
| TSSPM30X2A   | M30 x 2                    | 0.945 | 24.0 | 1.496 | 38.0 | 0.866 | 22   | 0.531 | 13.5 | 0.827 | 21.0 | 250           |
| TSSPM32X1.5A | M32 x 1.5                  | 0.945 | 24.0 | 1.575 | 40.0 | 0.807 | 20.5 | 0.472 | 12.0 | 0.827 | 21.0 | 500           |
| TSSPM33X2A   | M33 x 2                    | 0.945 | 24.0 | 1.575 | 40.0 | 0.866 | 22   | 0.531 | 13.5 | 0.827 | 21.0 | 250           |
| TSSPM36X1.5A | M36 x 1.5                  | 0.945 | 24.0 | 1.772 | 45.0 | 0.807 | 20.5 | 0.472 | 12.0 | 0.827 | 21.0 | 500           |
| TSSPM36X2A   | M36 x 2                    | 0.945 | 24.0 | 1.772 | 45.0 | 0.866 | 22   | 0.531 | 13.5 | 0.827 | 21.0 | 250           |
| TSSPM38X1.5A | M38 x 1.5                  | 0.945 | 24.0 | 1.890 | 48.0 | 0.807 | 20.5 | 0.472 | 12.0 | 0.827 | 21.0 | 250           |
| TSSPM42X2A   | M42 x 2                    | 1.181 | 30.0 | 1.969 | 50.0 | 0.866 | 22   | 0.531 | 13.5 | 1.063 | 27.0 | 250           |
| TSSPM45X1.5A | M45 x 1.5                  | 1.181 | 30.0 | 2.047 | 52.0 | 0.846 | 21.5 | 0.472 | 12.0 | 1.063 | 27.0 | 250           |
| TSSPM45X2A   | M45 x 2                    | 1.181 | 30.0 | 1.969 | 50.0 | 0.866 | 22   | 0.531 | 13.5 | 1.063 | 27.0 | 250           |
| TSSPM48X2A   | M48 x 2                    | 1.181 | 30.0 | 2.165 | 55.0 | 0.906 | 23   | 0.531 | 13.5 | 1.063 | 27.0 | 100           |
| TSSPM52X1.5A | M52 x 1.5                  | 1.181 | 30.0 | 2.362 | 60.0 | 0.866 | 22   | 0.472 | 12.0 | 1.063 | 27.0 | 250           |
| TSSPM52X2A   | M52 x 2                    | 1.181 | 30.0 | 2.362 | 60.0 | 0.906 | 23   | 0.531 | 13.5 | 1.063 | 27.0 | 100           |

### BSP/Gas Threads

| Item No. | To Plug BSP/GAS Thread Size | A     |       | B     |       | C     |       | D     |       | E     |       | Bulk Pack Qty |
|----------|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|
|          |                             | in    | mm    | in    | mm    | in    | mm    | in    | mm    | in    | mm    |               |
| 462882A  | 1/8" x 28                   | 0.472 | 12.00 | 0.630 | 16.00 | 0.610 | 15.50 | 0.315 | 8.00  | 0.354 | 9.00  | 5000          |
| 462848A  | 1/4" x 19                   | 0.512 | 13.00 | 0.748 | 19.00 | 0.689 | 17.50 | 0.394 | 10.00 | 0.394 | 10.00 | 5000          |
| 462849A  | 3/8" x 19                   | 0.591 | 15.00 | 0.866 | 22.00 | 0.689 | 17.50 | 0.394 | 10.00 | 0.472 | 12.00 | 5000          |
| 462850A  | 1/2" x 14                   | 0.748 | 19.00 | 1.063 | 27.00 | 0.768 | 19.50 | 0.472 | 12.00 | 0.630 | 16.00 | 3000          |
| 462851A  | 3/4" x 14                   | 0.945 | 24.00 | 1.260 | 32.00 | 0.768 | 19.50 | 0.472 | 12.00 | 0.827 | 21.00 | 2000          |
| 462852A  | 1" x 11                     | 1.181 | 30.00 | 1.575 | 40.00 | 0.886 | 22.50 | 0.591 | 15.00 | 1.063 | 27.00 | 1000          |
| 462853A  | 1-1/4" x 11                 | 1.417 | 36.00 | 1.969 | 50.00 | 0.886 | 22.50 | 0.591 | 15.00 | 1.299 | 33.00 | 400           |



### HDPE Metric Threaded O-Ring Plugs

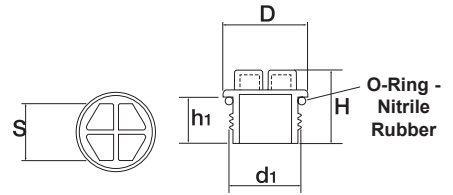


#### Specifications:

- Material: High-Density Polyethylene
- Color: Yellow

#### Features:

- Can be applied or removed by spanner, screwdriver or socket, or by hand



| Item No. | To Plug Metric Thread Size | D    | H    | h1   | S    | Bulk Pack Qty |
|----------|----------------------------|------|------|------|------|---------------|
|          | d1                         | mm   | mm   | mm   | mm   |               |
| 498659   | M8 x 1                     | 12.5 | 17.0 | 10.0 | 6.0  | 500           |
| 498660   | M10 x 1                    | 14.5 | 17.2 | 10.0 | 7.0  | 500           |
| 498661   | M12 x 1                    | 17.0 | 17.2 | 10.0 | 10.0 | 500           |
| 498662   | M10 x 1.5                  | 14.5 | 19.2 | 12.0 | 7.0  | 500           |
| 498663   | M12 x 1.5                  | 17.0 | 19.2 | 12.0 | 10.0 | 500           |
| 498664   | M14 x 1.5                  | 22.0 | 19.2 | 12.0 | 10.0 | 500           |
| 498540   | M16 x 1.5                  | 24.0 | 20.4 | 12.0 | 13.0 | 500           |
| 498541   | M18 x 1.5                  | 24.0 | 20.4 | 12.0 | 13.0 | 500           |
| 498542   | M20 x 1.5                  | 26.0 | 20.4 | 12.0 | 15.0 | 250           |
| 498665   | M22 x 1.5                  | 28.0 | 20.4 | 12.0 | 15.0 | 250           |
| 498543   | M24 x 1.5                  | 30.0 | 20.4 | 12.0 | 17.0 | 250           |
| 498544   | M26 x 1.5                  | 32.0 | 20.4 | 12.0 | 19.0 | 250           |
| 498546   | M30 x 1.5                  | 38.0 | 20.6 | 12.0 | 22.0 | 250           |
| 498547   | M32 x 1.5                  | 40.0 | 20.6 | 12.0 | 24.0 | 250           |
| 498666   | M36 x 1.5                  | 45.0 | 20.6 | 12.0 | 24.0 | 100           |
| 498667   | M38 x 1.5                  | 48.0 | 20.6 | 12.0 | 24.0 | 100           |
| 498668   | M27 x 2.0                  | 33.0 | 24.6 | 15.0 | 19.0 | 250           |
| 498548   | M30 x 2.0                  | 38.0 | 24.6 | 15.0 | 22.0 | 250           |
| 498549   | M33 x 2.0                  | 40.0 | 24.6 | 15.0 | 24.0 | 250           |
| 498550   | M36 x 2.0                  | 45.0 | 24.6 | 15.0 | 24.0 | 100           |
| 498669   | M42 x 2.0                  | 50.0 | 24.6 | 15.0 | 24.0 | 100           |
| 498551   | M45 x 2.0                  | 52.0 | 25.0 | 15.0 | 30.0 | 100           |
| 498670   | M48 x 2.0                  | 55.0 | 25.0 | 15.0 | 30.0 | 100           |
| 498671   | M52 x 2.0                  | 60.0 | 25.0 | 15.0 | 7.0  | 100           |

### Nylon Metric Threaded O-Ring Plugs

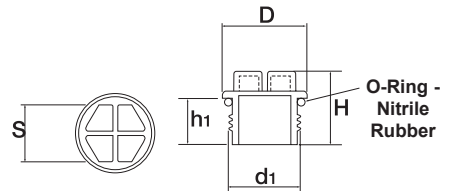


#### Specifications:

- Material: Nylon
- Color: Orange

#### Features:

- Metric thread
- Can be applied or removed by spanner, screwdriver or socket, or by hand
- Nylon is recommended where higher abrasion and slightly higher temperatures are needed where a polyethylene plug will not work



| Item No. | To Plug Metric Thread Size | D    | H    | h1   | S    | Bulk Pack Qty |
|----------|----------------------------|------|------|------|------|---------------|
|          | d1                         | mm   | mm   | mm   | mm   |               |
| 900535   | M8 x 1                     | 12.5 | 17.0 | 10.0 | 6.0  | 500           |
| 900536   | M10 x 1                    | 14.5 | 17.2 | 10.0 | 7.0  | 500           |
| 900537   | M12 x 1                    | 17.0 | 17.2 | 10.0 | 10.0 | 500           |
| 900538   | M10 x 1.5                  | 14.5 | 19.2 | 12.0 | 7.0  | 500           |
| 900539   | M12 x 1.5                  | 17.0 | 19.2 | 12.0 | 10.0 | 500           |
| 900540   | M14 x 1.5                  | 22.0 | 19.2 | 12.0 | 10.0 | 500           |
| 900541   | M16 x 1.5                  | 24.0 | 20.4 | 12.0 | 13.0 | 500           |
| 900542   | M18 x 1.5                  | 24.0 | 20.4 | 12.0 | 13.0 | 500           |
| 900543   | M20 x 1.5                  | 26.0 | 20.4 | 12.0 | 15.0 | 250           |
| 900544   | M22 x 1.5                  | 28.0 | 20.4 | 12.0 | 15.0 | 250           |
| 900545   | M24 x 1.5                  | 30.0 | 20.4 | 12.0 | 17.0 | 250           |
| 900546   | M26 x 1.5                  | 32.0 | 20.4 | 12.0 | 19.0 | 250           |
| 900547   | M30 x 1.5                  | 38.0 | 20.6 | 12.0 | 22.0 | 250           |
| 900548   | M32 x 1.5                  | 40.0 | 20.6 | 12.0 | 24.0 | 250           |
| 900549   | M36 x 1.5                  | 45.0 | 20.6 | 12.0 | 24.0 | 100           |
| 900550   | M38 x 1.5                  | 48.0 | 20.6 | 12.0 | 24.0 | 100           |
| 900551   | M27 x 2.0                  | 33.0 | 24.6 | 15.0 | 19.0 | 250           |
| 900552   | M30 x 2.0                  | 38.0 | 24.6 | 15.0 | 22.0 | 250           |
| 900553   | M33 x 2.0                  | 40.0 | 24.6 | 15.0 | 24.0 | 250           |
| 900554   | M36 x 2.0                  | 45.0 | 24.6 | 15.0 | 24.0 | 100           |
| 900555   | M42 x 2.0                  | 50.0 | 24.6 | 15.0 | 24.0 | 100           |
| 900556   | M45 x 2.0                  | 52.0 | 25.0 | 15.0 | 30.0 | 100           |
| 900557   | M48 x 2.0                  | 55.0 | 25.0 | 15.0 | 30.0 | 100           |
| 900558   | M52 x 2.0                  | 60.0 | 25.0 | 15.0 | 7.0  | 100           |

**PROPANE VALVE PRODUCT CAPS & THREADED PLUGS****PPC Series****Overfill Prevention Device Cylinder Valve Caps****PPC1A****PPC3RC**

## Specifications:

- Material: See Table
- Color: See Table

## Features:

- Protects threads from damage and contaminants during shipping and use
- Easy to apply
- PPC1A - dust cap and retaining strap with warning labels imprinted in English and Spanish
- PPC3RC is a protective cap with an internal ring and tear feature

| Item No. | Material | Color | Product Usage                  | Bulk Pack Qty |
|----------|----------|-------|--------------------------------|---------------|
| PPC1A    | LDPE     | Black | OPD Valve for Propane Cylinder | 550           |
| PPC3RC   | LLDPE    | Blue  | OPD Valve for Propane Cylinder | 900           |

**DP Series****UNJ/UNJS Threaded Plugs**

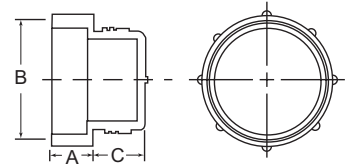
## Specifications:

- Material: High-Density Polyethylene
- Color: Red



## Features:

- Protects threaded components from dust, moisture and damage during production, storage and shipment
- Designed with an easy to grip head for ease of hand installation
- Threads meet UNJ and UNJS specifications



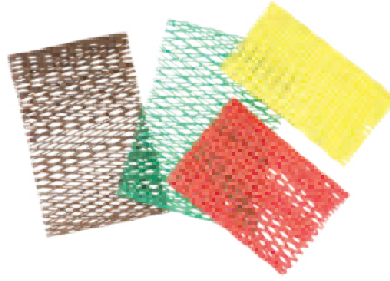
| Item No. | To Plug UNJ/UNJS Thread Size | Tubing Size |       | A    |       | B     |       | C     |      | Bulk Pack Qty |
|----------|------------------------------|-------------|-------|------|-------|-------|-------|-------|------|---------------|
|          |                              | in          | mm    | in   | mm    | in    | mm    |       |      |               |
| DP3A     | 3/8"-28                      | 3/16        | 0.250 | 6.35 | 0.440 | 11.18 | 0.280 | 7.11  | 5000 |               |
| DP4A     | 7/16"-24                     | 1/4         | 0.310 | 7.87 | 0.560 | 14.22 | 0.300 | 7.62  | 5000 |               |
| DP5A     | 1/2"-24                      | 5/16        | 0.310 | 7.87 | 0.620 | 15.75 | 0.300 | 7.62  | 5000 |               |
| DP6A     | 9/16"-20                     | 3/8         | 0.310 | 7.87 | 0.690 | 17.53 | 0.320 | 8.13  | 5000 |               |
| DP8A     | 23/32"-20                    | 1/2         | 0.310 | 7.87 | 0.880 | 22.35 | 0.320 | 8.13  | 5000 |               |
| DP10A    | 27/32"-18                    | 5/8         | 0.310 | 7.87 | 1.000 | 25.40 | 0.400 | 10.16 | 2500 |               |
| DP12A    | 1"-16                        | 3/4         | 0.310 | 7.87 | 1.120 | 28.45 | 0.420 | 10.67 | 2500 |               |
| DP14A    | 1-1/8"-16                    | 7/8         | 0.250 | 6.35 | 1.250 | 31.75 | 0.450 | 11.43 | 2500 |               |
| DP16A    | 1-1/4"-14                    | 1           | 0.250 | 6.35 | 1.380 | 35.05 | 0.450 | 11.43 | 2000 |               |
| DP20A    | 1-33/64"-14                  | 1-1/4       | 0.250 | 6.35 | 1.620 | 41.15 | 0.450 | 11.43 | 1000 |               |
| DP21SA   | 1-37/64"-14                  | 1-1/4       | 0.250 | 6.35 | 1.750 | 44.45 | 0.460 | 11.68 | 1000 |               |
| DP24A    | 1-25/32"-14                  | 1-1/2       | 0.250 | 6.35 | 2.000 | 50.80 | 0.550 | 13.97 | 1000 |               |
| DP25SA   | 1-27/32"-14                  | 1-1/2       | 0.250 | 6.35 | 2.120 | 53.85 | 0.550 | 13.97 | 1000 |               |

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## FNC Series Flexible Protective Netting (Tector-Net)

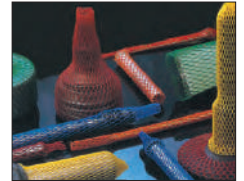


### Specifications:

- Material: Low-Density Polyethylene
- Color: See Table

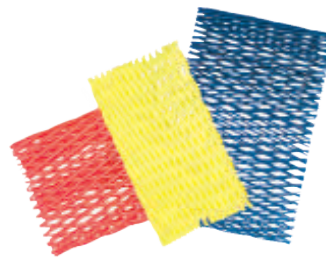
### Features:

- Easily applied and removed
- Reduces labor cost, inventory cost, damage claims and returns
- Does not trap or retain moisture
- Stretches and wraps snugly around virtually any form



| Item No.     | Color  | Ø Flexible Range |                 | Roll Length |     | Pack Qty |
|--------------|--------|------------------|-----------------|-------------|-----|----------|
|              |        | in               | mm              | Ft          | M   |          |
| FNC00250037S | Red    | 0.250 - 0.375    | 6.35 - 9.53     | 820         | 249 | 1        |
| FNC00250037L | Red    | 0.250 - 0.375    | 6.35 - 9.53     | 1500        | 457 | 1        |
| FNC00250050S | Orange | 0.375 - 0.500    | 6.35 - 12.70    | 820         | 249 | 1        |
| FNC00250050L | Orange | 0.375 - 0.500    | 6.35 - 12.70    | 1500        | 457 | 1        |
| FNC00500100S | Blue   | 0.500 - 1.000    | 12.70 - 25.40   | 820         | 249 | 1        |
| FNC00500100L | Blue   | 0.500 - 1.000    | 12.70 - 25.40   | 1500        | 457 | 1        |
| FNC01000200S | Yellow | 1.000 - 2.000    | 25.40 - 50.80   | 164         | 49  | 1        |
| FNC01000200L | Yellow | 1.000 - 2.000    | 25.40 - 50.80   | 1500        | 457 | 1        |
| FNC02000400S | Red    | 2.000 - 4.000    | 50.80 - 101.60  | 164         | 49  | 1        |
| FNC02000400L | Red    | 2.000 - 4.000    | 50.80 - 101.60  | 1500        | 457 | 1        |
| FNC04000600S | Green  | 4.000 - 6.000    | 101.60 - 152.40 | 164         | 49  | 1        |
| FNC06000800S | Brown  | 6.000 - 8.000    | 152.40 - 203.20 | 164         | 49  | 1        |
| FNC1000SRA   | Green  | 10.000 - 12.000  | 254.00 - 304.80 | 82          | 24  | 1        |

## FNH Series Heavy Gauge Protective Netting



### Specifications:

- Material: Low-Density Polyethylene
- Color: See Table

### Features:

- Easily applied and removed
- Reduces labor cost, inventory cost, damage claims and returns
- Does not trap or retain moisture
- Stretches and wraps snugly around virtually any form
- Has heavier gauge material for applications that need a more durable protection



| Item No.   | Color  | Ø Flexible Range |                 | Roll Length |     | Pack Qty |
|------------|--------|------------------|-----------------|-------------|-----|----------|
|            |        | in               | mm              | Ft          | M   |          |
| FNH0050LRA | Blue   | 0.500 - 1.000    | 12.70 - 25.40   | 820         | 249 | 1        |
| FNH0125A   | Yellow | 1.250 - 1.625    | 31.75 - 41.28   | 82          | 24  | 1        |
| FNH0200A   | Red    | 2.000 - 2.500    | 50.80 - 63.50   | 82          | 24  | 1        |
| FNH0250A   | Green  | 2.500 - 3.000    | 63.50 - 76.20   | 82          | 24  | 1        |
| FNH0300A   | Green  | 3.000 - 4.000    | 76.20 - 101.60  | 82          | 24  | 1        |
| FNH0400A   | Yellow | 4.000 - 4.500    | 101.60 - 114.30 | 82          | 24  | 1        |
| FNH0475A   | Red    | 4.750 - 5.500    | 120.65 - 139.70 | 82          | 24  | 1        |
| FNH0550A   | Blue   | 5.500 - 6.750    | 139.70 - 171.45 | 82          | 24  | 1        |
| FNH0675A   | Green  | 6.750 - 8.000    | 171.45 - 203.20 | 82          | 24  | 1        |



# APPLICATION WIZARDS

## Tube & Hydraulic Fittings

### Caps

#### Non-Threaded Caps Choices



**Numbered Series**  
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**E Series**  
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**TS Series**  
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**DM Series**  
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#### Threaded Cap Choices

**TCUNF Series**  
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**G Series**  
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| Your Application |           |              | Non-Threaded Cap Choices |           |           |             | Threaded Cap Choices |          |  |
|------------------|-----------|--------------|--------------------------|-----------|-----------|-------------|----------------------|----------|--|
| Thread Size      | Tube Size | Fitting Size | Numbered Series          | E Series  | TS Series | DM Series   | TCUNF Series         | G Series |  |
| 5/16 - 24        | 1/8       | -2           | 008A                     | —         | —         | DM0304-1/2A | —                    | —        |  |
| 3/8 - 24         | 3/16      | -3           | 011A                     | E3/8A     | TS3A      | DM0360-1/2A | 10251A               | G1A      |  |
| 7/16 - 20        | 1/4       | -4           | 013A                     | E7/16A    | TS4A      | DM0437-1/2A | 10332A               | G2A      |  |
| 1/2 - 20         | 5/16      | -5           | 017A                     | E1/2A     | TS5A      | DM0490-1/2A | 10528A               | G5A      |  |
| 9/16 - 18        | 3/8       | -6           | 020A                     | E9/16A    | TS6A      | DM0544-1/2A | 11041A               | G8A      |  |
| 5/8 - 18         | 3/8       | —            | 021A                     | E5/8A     | TS10348A  | DM0600-1A   | 10653A               | G11A     |  |
| 11/16 - 16       | —         | -7           | 026A                     | E11/16B   | TS7A      | DM0665-1A   | —                    | —        |  |
| 3/4 - 16         | 1/2       | -8           | 028A                     | E3/4A     | TS8A      | DM0725-1A   | 12847A               | G14A     |  |
| 13/16 - 16       | —         | -9           | 030A                     | E13/16A   | TS9A      | DM0750-1A   | 12825A               | —        |  |
| 7/8 - 14         | 5/8       | -10          | 035A                     | E7/8A     | TS10A     | DM0843-1A   | 11089A               | G17A     |  |
| 1 - 14           | —         | -11          | 041A                     | E1A       | TS11A     | DM0985-1A   | 12826A               | G21A     |  |
| 1 - 1/16 - 12    | 3/4       | -12          | 042A                     | E1-1/16A  | TS12A     | DM1000-1A   | 10685A               | G22A     |  |
| 1 - 3/16 - 12    | 7/8       | -13          | 1040A                    | E1-3/16B  | TS13A     | DM1125-1A   | 10163A               | G25A     |  |
| 1 - 5/16 - 12    | 1         | -16          | 049A                     | E1-5/16B  | TS16A     | DM1250-1A   | 10151A               | G27A     |  |
| 1 - 7/16 - 12    | —         | -17          | 053A                     | E1-7/16B  | TS17A     | DM1375-1A   | 10185A               | —        |  |
| 1 - 5/8 - 12     | 1-1/4     | -20          | 056A                     | E1-5/8B   | TS20A     | DM1593-1A   | 11053A               | G30A     |  |
| 1 - 11/16 - 12   | —         | -21          | 056A                     | E1-11/16B | TS21A     | DM1625-1A   | —                    | —        |  |
| 1 - 7/8 - 12     | 1-1/2     | -24          | 062A                     | E1-7/8B   | TS24A     | DM1875-1A   | 11804A               | —        |  |
| 2 - 1/4 - 12     | 1-3/4     | -28          | 072A                     | —         | —         | DM2156-1A   | —                    | —        |  |

### Plugs

#### Non-Threaded Plug Choices



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**CP Series**  
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#### Threaded Plug Choices



**TPUNF Series**  
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**BL Series**  
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**BLM Series**  
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**BLWF Series**  
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| Your Application |           |              | Non-Threaded Plug Choices |           | Threaded Plug Choices |           |            |             |  |
|------------------|-----------|--------------|---------------------------|-----------|-----------------------|-----------|------------|-------------|--|
| Thread Size      | Tube Size | Fitting Size | Numbered Series           | CP Series | TPUNF Series          | BL Series | BLM Series | BLWF Series |  |
| 5/16 - 24        | 1/8       | -2           | 005A                      | CP5A      | 10709A                | —         | —          | —           |  |
| 3/8 - 24         | 3/16      | -3           | 007A                      | CP7A      | 10692A                | —         | —          | —           |  |
| 7/16 - 20        | 1/4       | -4           | 008A                      | CP8A      | 10763A                | BL3A      | BLM3B      | BLWF100A    |  |
| 1/2 - 20         | 5/16      | -5           | 010A                      | CP10A     | 10696A                | B4A       | BLM4B      | BLWF105A    |  |
| 9/16 - 18        | 3/8       | -6           | 013A                      | CP14A     | 10668A                | BL5A      | BLM5B      | BLWF110A    |  |
| 5/8 - 18         | 3/8       | —            | 014A                      | CP15B     | 10940A                | B6A       | BLM6B      | —           |  |
| 3/4 - 16         | 1/2       | -8           | 021A                      | CP19A     | 10575A                | BL7A      | BLM7B      | BLWF115A    |  |
| 7/8 - 14         | 5/8       | -10          | 026A                      | CP24A     | 10326A                | BL8A      | BLM8B      | BLWF120A    |  |
| 1 - 14           | —         | —            | 030A                      | CP31A     | 12785A                | B9A       | BLM9B      | —           |  |
| 1 - 1/16 - 12    | 3/4       | -12          | 035A                      | CP35A     | 10460A                | BL10A     | BLM10B     | BLWF125A    |  |
| 1 - 3/16 - 12    | 7/8       | -13          | 041A                      | CP40A     | 11506A                | BL11A     | BLM11B     | BLWF130A    |  |
| 1 - 5/16 - 12    | 1         | -16          | 044A                      | CP44A     | 10671A                | BL12A     | BLM12B     | BLWF135A    |  |
| 1 - 5/8 - 12     | 1 - 1/4   | -20          | 052A                      | CP55A     | 11752A                | BL13A     | BLM13B     | BLWF140A    |  |
| 2 - 1/4 - 12     | 1 - 3/4   | -28          | 066A                      | CP61A     | —                     | —         | —          | —           |  |

### Threaded NPT Fittings

#### Caps



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**Y Series**  
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**DM Series**  
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**ECS Series**  
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| Your Application       |                 |           |             |            |
|------------------------|-----------------|-----------|-------------|------------|
| To Cap NPT Thread Size | Numbered Series | Y Series  | DM Series   | ECS Series |
| 1/8                    | 011A            | Y1/8A     | DM0375-1/2A | ECS0125A   |
| 1/4                    | 018A            | Y1/4A     | DM0500-1/2A | ECS0250A   |
| 3/8                    | 022A            | Y3/8A     | DM0625-1/2A | ECS0375A   |
| 1/2                    | 028A            | Y1/2A     | DM0843-1A   | ECS0500A   |
| 3/4                    | 040A            | Y3/4A     | DM1000-1A   | ECS0750A   |
| 1                      | 045A            | Y1A       | DM1250-1A   | ECS1000A   |
| 1 - 1/4                | 056A            | Y1 - 1/4A | DM1875-1A   | ECS1250A   |
| 1 - 1/2                | 060A            | Y1 - 1/2A | DM2375-1A   | ECS1500A   |
| 2                      | 071A            | Y2A       | DM2750-1A   | ECS2000A   |

#### Plugs



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**CP Series**  
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**R Series**  
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**PFP Series**  
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| Your Application        |                 |           |           |            |
|-------------------------|-----------------|-----------|-----------|------------|
| To Plug NPT Thread Size | Numbered Series | CP Series | R Series  | PFP Series |
| 1/8                     | 008A            | CP8A      | R1/8A     | PFP1/8A    |
| 1/4                     | 011A            | CP11A     | R1/4A     | PFP1/4A    |
| 3/8                     | 017A            | —         | R3/8A     | PFP3/8A    |
| 1/2                     | 023A            | CP23A     | R1/2A     | PFP1/2A    |
| 3/4                     | 035A            | CP35A     | R3/4A     | PFP3/4A    |
| 1                       | 042A            | CP44A     | R1A       | PFP1A      |
| 1 - 1/4                 | 054A            | CP55A     | R1 - 1/4A | —          |
| 1 - 1/2                 | 057A            | CP57A     | R1 - 1/2A | —          |
| 2                       | 066A            | —         | R2A       | —          |





Metric Threads

Caps



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**DM Series** Pages 29 - 30  
**A & AR Series** Page 28  
**TC Metric Series** Page 39

| Your Application |                 |             |               |                  |
|------------------|-----------------|-------------|---------------|------------------|
| Thread Size      | Numbered Series | DM Series   | A & AR Series | TC Metric Series |
| M4               | 004A            | DM0148-1/2A | A5/32W/RA     | —                |
| M5               | 005A            | DM0187-1/2A | —             | —                |
| M6               | 006A            | DM0224-1/2A | —             | —                |
| M8 x 1           | 009A            | DM0304-1/2A | A5/16W/RA     | 12100A           |
| M10 x 1          | 012A            | DM0375-1/2A | AR100A        | 12101A           |
| M12 x 1          | 014A            | DM0460-1/2A | A1/2BA        | 12102A           |
| M12 x 1.5        | 1015A           | DM0460-1/2A | A1/2BA        | 12103A           |
| M14 x 1.5        | 018A            | DM0531-1/2A | —             | 12104A           |
| M16 x 1.5        | 022A            | DM0600-1A   | A5/8W/RA      | 12105A           |
| M18 x 1.5        | 027A            | DM0687-1A   | A11/16W/RA    | 12106A           |
| M20 x 1.5        | 030A            | DM0750-1A   | AR125A        | 12107A           |
| M22 x 1.5        | 035A            | DM0843-1A   | AR130A        | 12108A           |
| M24 x 1.5        | 040A            | DM0937-1A   | A15/16A       | 12109A           |
| M25 x 1.5        | 041A            | —           | A63/64A       | 12110A           |
| M26 x 1.5        | 041A            | DM1000-1A   | A1W/RA        | 12111A           |
| M27              | 042A            | DM1062-1A   | A1-1/16W/RA   | —                |
| M28 x 1.5        | 044A            | DM1090-1A   | —             | 12967A           |
| M30 x 2          | 1050A           | DM1125-1A   | —             | 12122A           |
| M35              | 051A            | DM1375-1A   | A1-3/8A       | —                |
| M39              | 055A            | DM1500-1A   | A1-1/2A       | —                |
| M42 x 2          | 056A            | DM1625-1A   | A1-5/8A       | 12124A           |
| M45              | 058A            | DM1750-1A   | A1-3/4A       | —                |
| M48              | 064A            | DM1875-1A   | A1-7/8A       | —                |
| M52 x 2          | 1085A           | DM2125-1A   | —             | 12126A           |
| M58              | 075A            | DM2250-1A   | A2-1/4A       | —                |

Caps

Non-Threaded Studs



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**A Series** Page 28  
**DM Series** Pages 29 - 30

| To Cap OD |       |       | Numbered Series | A Series    | DM Series   |
|-----------|-------|-------|-----------------|-------------|-------------|
| in        | dec.  | mm    |                 |             |             |
| 1/8       | 0.125 | 3.17  | 002A            | A1/8W/RA    | DM0125-1/2A |
| 3/16      | 0.187 | 4.75  | 005A            | A3/16W/RA   | DM0187-1/2A |
| 1/4       | 0.250 | 6.35  | 007A            | A1/4W/RA    | DM0250-1/2A |
| 5/16      | 0.312 | 7.92  | 009A            | A5/16W/RA   | DM0313-1/2A |
| 3/8       | 0.375 | 9.53  | 011A            | A3/8W/RA    | DM0375-1/2A |
| 7/16      | 0.437 | 11.10 | 014A            | A7/16W/RA   | DM0437-1/2A |
| 1/2       | 0.500 | 12.70 | 1020A           | A1/2W/RA    | DM0500-1A   |
| 9/16      | 0.562 | 14.27 | 020A            | A9/16W/RA   | DM0562-1A   |
| 5/8       | 0.625 | 15.88 | 022A            | A5/8W/RA    | DM0625-1A   |
| 11/16     | 0.687 | 17.45 | 026A            | A11/16W/RA  | DM0687-1A   |
| 3/4       | 0.750 | 19.05 | 028A            | A3/4W/RA    | DM0750-1A   |
| 13/16     | 0.812 | 20.62 | 031A            | A13/16W/RA  | DM0812-1A   |
| 7/8       | 0.875 | 22.23 | 039A            | A7/8W/RA    | DM0875-1A   |
| 15/16     | 0.937 | 23.80 | 040A            | A15/16A     | DM0937-1A   |
| 1         | 1.000 | 25.40 | 041A            | A1W/RA      | DM1000-1A   |
| 1 - 1/16  | 1.062 | 26.97 | 042A            | A1-1/16W/RA | DM1062-1A   |
| 1 - 1/8   | 1.125 | 28.58 | 1040A           | A1-1/8A     | DM1125-1A   |
| 1 - 3/16  | 1.187 | 30.15 | 045A            | A1-3/16W/RA | DM1187-1A   |
| 1 - 1/4   | 1.250 | 31.75 | 048A            | A1-1/4A     | DM1250-1A   |
| 1 - 5/16  | 1.312 | 33.32 | 051A            | A1-5/16W/RA | DM1312-1A   |
| 1 - 3/8   | 1.375 | 34.93 | 052A            | A1-3/8A     | DM1375-1A   |
| 1 - 7/16  | 1.437 | 36.50 | 053A            | A1-7/16A    | DM1437-1A   |
| 1 - 1/2   | 1.500 | 38.10 | 055A            | A1-1/2A     | DM1500-1A   |
| 1 - 9/16  | 1.562 | 39.67 | 055A            | A1-9/16A    | —           |
| 1 - 5/8   | 1.625 | 41.28 | 056A            | A1-5/8A     | DM1625-1A   |
| 1 - 11/16 | 1.687 | 42.85 | 057A            | A1-11/16A   | DM1687-1A   |
| 1 - 3/4   | 1.750 | 44.45 | 059A            | A1-3/4A     | DM1750-1A   |
| 1 - 13/16 | 1.812 | 46.02 | 060A            | —           | DM1812-1A   |
| 1 - 7/8   | 1.875 | 47.63 | 062A            | A1-7/8A     | DM1875-1A   |
| 1 - 15/16 | 1.937 | 49.20 | 063A            | —           | DM1937-1A   |
| 2         | 2.000 | 50.80 | 065A            | A2A         | DM2000-1A   |

Plugs



**Numbered Series** Pages 24 - 26  
**BP Series** Pages 41  
**TP Metric Series** Page 59  
**TSSP Series** Page 57  
**SF Series** Page 51

| Your Application |                 |           |           |             |           |
|------------------|-----------------|-----------|-----------|-------------|-----------|
| Thread Size      | Numbered Series | BP Series | TP Metric | TSSP Series | SF Series |
| M6               | 002A            | BP1012A   | —         | —           | —         |
| M8 x 1           | 005A            | BP1018A   | 12011A    | 462836A     | —         |
| M10 x 1          | 007A            | BP1026A   | 12012A    | 462837A     | 10530A    |
| M12 x 1          | 010A            | BP1038A   | 12013A    | —           | 12363A    |
| M12 x 1.5        | 009A            | BP1034A   | 12017A    | 462838A     | 12363A    |
| M14 x 1.5        | 012A            | BP1044A   | 12018A    | 462839A     | 12363A    |
| M16 x 1.5        | 015A            | BP1056A   | 12019A    | 462840A     | 12364A    |
| M18 x 1.5        | 018A            | BP1060A   | 10458A    | 462841A     | 10314B    |
| M20 x 1.5        | 022A            | BP1068A   | 12020A    | 462842A     | 12365A    |
| M22 x 1.5        | 026A            | BP1074A   | 10128A    | 462843A     | 12366A    |
| M24 x 1.5        | 028A            | BP1086A   | 12021A    | —           | 12621A    |
| M26 x 1.5        | 030A            | BP1092A   | 12023A    | —           | 12367A    |
| M27              | 035A            | BP1100A   | —         | —           | —         |
| M28              | 040A            | BP1102A   | —         | —           | 12368A    |
| M30              | 041A            | BP1106A   | —         | —           | —         |
| M32              | 044A            | BP1112A   | —         | —           | 12369A    |
| M33              | 044A            | BP1114A   | —         | —           | —         |
| M36 x 2          | 045A            | BP1116A   | —         | —           | 12622A    |
| M38              | 048A            | BP1126A   | —         | —           | —         |
| M42 x 2          | 053A            | BP1134A   | —         | —           | 12598A    |
| M52 x 2          | 1080A           | BP1142A   | —         | —           | —         |

Plugs

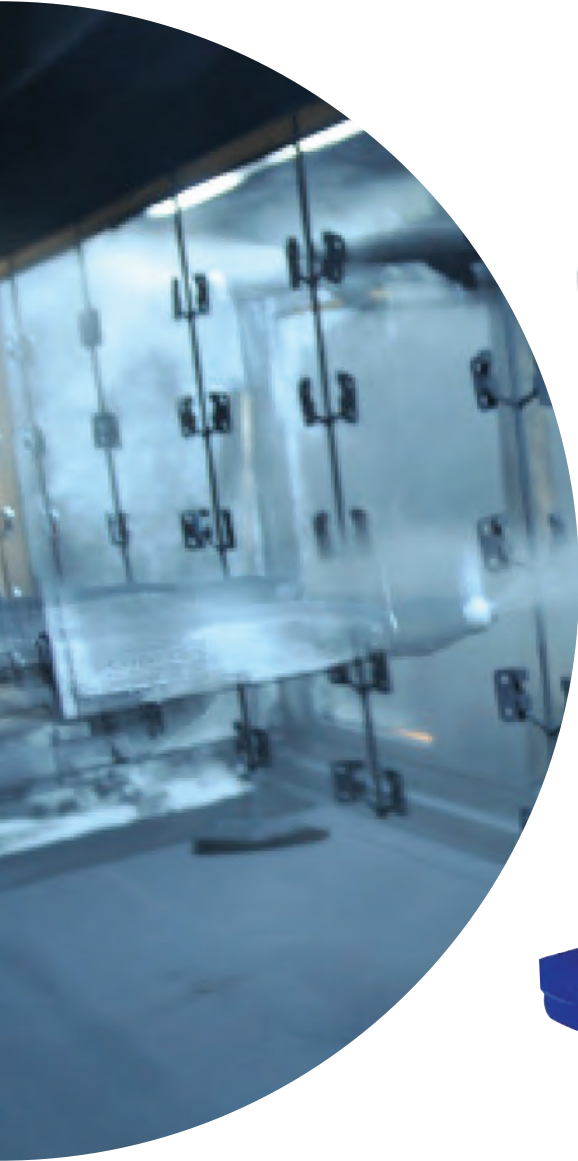
Non-Threaded Holes



**Numbered Series** Pages 24 - 26  
**FT Series** Page 42  
**CP Series** Page 43

| To Plug ID |       |       | Numbered Series | FT Series | CP Series |
|------------|-------|-------|-----------------|-----------|-----------|
| in         | dec.  | mm    |                 |           |           |
| 1/8        | 0.125 | 3.17  | 001A            | 10874A    | —         |
| 3/16       | 0.187 | 4.75  | 1000A           | 12665A    | —         |
| 1/4        | 0.250 | 6.35  | 003A            | 12667A    | CP4A      |
| 5/16       | 0.312 | 7.92  | 006A            | 12668A    | CP6A      |
| 3/8        | 0.375 | 9.53  | 008A            | 12670A    | CP8A      |
| 7/16       | 0.437 | 11.10 | 010A            | 12671A    | CP10A     |
| 1/2        | 0.500 | 12.70 | 012A            | 12673A    | CP12A     |
| 9/16       | 0.562 | 14.27 | 014A            | 12675A    | CP14A     |
| 5/8        | 0.625 | 15.88 | 017A            | 12677A    | CP16A     |
| 11/16      | 0.687 | 17.45 | 020A            | 12679A    | CP19A     |
| 3/4        | 0.750 | 19.05 | 023A            | 12680A    | CP23A     |
| 13/16      | 0.812 | 20.62 | 026A            | 12683A    | CP24A     |
| 7/8        | 0.875 | 22.23 | 028A            | 12684A    | CP29A     |
| 15/16      | 0.937 | 23.80 | 030A            | 12686A    | CP31A     |
| 1          | 1.000 | 25.40 | 035A            | 12688A    | CP35A     |
| 1 - 1/16   | 1.062 | 26.97 | 040A            | 12689A    | CP37A     |
| 1 - 1/8    | 1.125 | 28.58 | 041A            | 12691A    | CP40A     |
| 1 - 3/16   | 1.187 | 30.15 | 042A            | 12692A    | CP42A     |
| 1 - 1/4    | 1.250 | 31.75 | 044A            | —         | CP44A     |
| 1 - 5/16   | 1.312 | 33.32 | 045A            | —         | CP46A     |
| 1 - 3/8    | 1.375 | 34.93 | 1055A           | —         | CP49A     |
| 1 - 7/16   | 1.437 | 36.50 | 048A            | —         | CP49A     |
| 1 - 1/2    | 1.500 | 38.10 | 051A            | —         | CP51A     |
| 1 - 9/16   | 1.562 | 39.67 | 052A            | 12693A    | CP55A     |
| 1 - 5/8    | 1.625 | 41.28 | 055A            | —         | CP56A     |
| 1 - 11/16  | 1.687 | 42.85 | 056A            | —         | CP56A     |
| 1 - 3/4    | 1.750 | 44.45 | 1065A           | —         | CP59A     |
| 1 - 13/16  | 1.812 | 46.02 | 057A            | 12694A    | CP59A     |
| 1 - 7/8    | 1.875 | 47.63 | 1070A           | —         | CP57A     |
| 1 - 15/16  | 1.937 | 49.20 | 1075A           | —         | CP57A     |
| 2          | 2.000 | 50.80 | 1080A           | —         | —         |

# HIGH TEMPERATURE MASKING





HIGH TEMPERATURE CAPS ..... 68-71



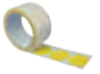
HIGH TEMPERATURE TUBING ..... 72-73



HIGH TEMPERATURE PLUGS .....74-81



MASKING TAPES ..... 82



MASKING DISCS .....83



MASKING HOOKS .....84



MASKING MATERIAL OPTIONS ..... 85



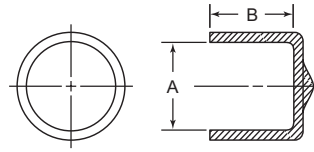
APPLICATION WIZARDS.....86-87

# HIGH TEMPERATURE MASKING



# HIGH TEMPERATURE CAPS

## DM(HT) Series High Temperature Vinyl Caps



**Specifications:**

- Material: High Temperature Soft Vinyl 425°F (218°C)
- Color: Yellow
- Hardness: Durameter of 85 +/-2
- For lower temperature Black Vinyl Caps & Plugs, see pages 29 - 30

**Features:**

- Excellent chemical resistance
- Economical solution for one-time uses
- Applications: Powder Coating, E-Coating, Plating and General Paint Lines

See pages 86 and 87 for Application Wizards

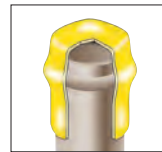
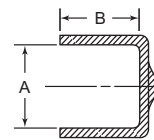
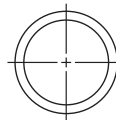
| A = To Fit |      | Item No. by Length of Cap (B Dimension) |              |                  |      | Bulk Pack Qty |        |  |
|------------|------|-----------------------------------------|--------------|------------------|------|---------------|--------|--|
| in         | mm   | 1/2" (12.70 mm)                         | 1" (24.4 mm) | 1-1/2" (38.1 mm) | 1/2" | 1"            | 1-1/2" |  |
| 0.078      | 2.0  | DM0080-1/2B                             | DM0080-1B    | —                | 5000 | 5000          | —      |  |
| 0.094      | 2.4  | DM0093-1/2C                             | DM0093-1B    | —                | 5000 | 5000          | —      |  |
| 0.109      | 2.8  | DM0110-1/2C                             | DM0110-1C    | —                | 5000 | 5000          | —      |  |
| 0.125      | 3.2  | DM0125-1/2D                             | DM0125-1D    | —                | 5000 | 5000          | —      |  |
| 0.141      | 3.6  | DM0140-1/2D                             | DM0140-1C    | DM0140-1-1/2B    | 5000 | 5000          | 5000   |  |
| 0.148      | 3.8  | DM0148-1/2B                             | DM0148-1B    | DM0148-1-1/2B    | 5000 | 5000          | 5000   |  |
| 0.156      | 4.0  | DM0156-1/2E                             | DM0156-1C    | DM0156-1-1/2B    | 5000 | 5000          | 5000   |  |
| 0.172      | 4.4  | DM0172-1/2D                             | DM0172-1C    | DM0172-1-1/2B    | 5000 | 5000          | 5000   |  |
| 0.180      | 4.6  | DM0180-1/2B                             | DM0180-1C    | DM0180-1-1/2B    | 5000 | 5000          | 5000   |  |
| 0.187      | 4.8  | DM0187-1/2C                             | DM0187-1E    | DM0187-1-1/2B    | 5000 | 5000          | 5000   |  |
| 0.203      | 5.2  | DM0203-1/2C                             | DM0203-1B    | DM0203-1-1/2B    | 5000 | 5000          | 5000   |  |
| 0.207      | 5.3  | DM0207-1/2G                             | DM0207-1B    | DM0207-1-1/2C    | 5000 | 5000          | 5000   |  |
| 0.218      | 5.5  | DM0218-1/2B                             | DM0218-1B    | DM0218-1-1/2B    | 5000 | 5000          | 5000   |  |
| 0.224      | 5.7  | DM0224-1/2B                             | DM0224-1B    | DM0224-1-1/2B    | 5000 | 5000          | 5000   |  |
| 0.230      | 5.8  | DM0230-1/2B                             | DM0230-1C    | DM0230-1-1/2B    | 5000 | 7500          | 5000   |  |
| 0.234      | 6.0  | DM0234-1/2D                             | DM0234-1D    | DM0234-1-1/2C    | 5000 | 5000          | 3000   |  |
| 0.240      | 6.1  | DM0240-1/2E                             | DM0240-1C    | DM0240-1-1/2C    | 5000 | 5000          | 5000   |  |
| 0.250      | 6.4  | DM0250-1/2E                             | DM0250-1D    | DM0250-1-1/2B    | 5000 | 5000          | 5000   |  |
| 0.281      | 7.1  | DM0281-1/2D                             | DM0281-1C    | DM0281-1-1/2C    | 5000 | 5000          | 5000   |  |
| 0.290      | 7.4  | DM0290-1/2B                             | DM0290-1B    | DM0290-1-1/2B    | 5000 | 5000          | 5000   |  |
| 0.304      | 7.7  | DM0304-1/2B                             | DM0304-1C    | DM0304-1-1/2B    | 5000 | 5000          | 2500   |  |
| 0.313      | 7.9  | DM0313-1/2E                             | DM0313-1F    | DM0313-1-1/2C    | 5000 | 5000          | 4000   |  |
| 0.343      | 8.7  | DM0343-1/2C                             | DM0343-1C    | DM0343-1-1/2B    | 5000 | 5000          | 4000   |  |
| 0.360      | 9.1  | DM0360-1/2B                             | DM0360-1C    | DM0360-1-1/2B    | 5000 | 5000          | 2500   |  |
| 0.375      | 9.5  | DM0375-1/2D                             | DM0375-1F    | DM0375-1-1/2D    | 5000 | 5000          | 2500   |  |
| 0.406      | 10.3 | DM0406-1/2C                             | DM0406-1E    | DM0406-1-1/2E    | 5000 | 5000          | 5000   |  |
| 0.437      | 11.1 | DM0437-1/2J                             | DM0437-1E    | DM0437-1-1/2E    | 5000 | 5000          | 4000   |  |
| 0.460      | 11.7 | DM0460-1/2B                             | DM0460-1B    | DM0460-1-1/2B    | 5000 | 3000          | 1500   |  |
| 0.470      | 11.9 | DM0470-1/2C                             | DM0470-1D    | DM0470-1-1/2E    | 5000 | 5000          | 3000   |  |
| 0.490      | 12.5 | DM0490-1/2B                             | DM0490-1B    | DM0490-1-1/2B    | 5000 | 3000          | 1500   |  |
| 0.500      | 12.7 | DM0500-1/2F                             | DM0500-1E    | DM0500-1-1/2F    | 5000 | 5000          | 2500   |  |
| 0.523      | 13.3 | DM0523-1/2B                             | DM0523-1B    | DM0523-1-1/2B    | 5000 | 2500          | 2500   |  |
| 0.531      | 13.5 | DM0531-1/2D                             | DM0531-1C    | DM0531-1-1/2C    | 5000 | 5000          | 2500   |  |
| 0.544      | 13.8 | DM0544-1/2B                             | DM0544-1C    | DM0544-1-1/2C    | 5000 | 5000          | 2500   |  |
| 0.562      | 14.3 | DM0562-1/2F                             | DM0562-1D    | DM0562-1-1/2E    | 5000 | 2500          | 3000   |  |
| 0.587      | 14.9 | DM0587-1/2B                             | DM0587-1B    | DM0587-1-1/2B    | 5000 | 2500          | 1200   |  |
| 0.600      | 15.2 | DM0600-1/2B                             | DM0600-1B    | DM0600-1-1/2B    | 5000 | 2000          | 1200   |  |
| 0.625      | 15.9 | DM0625-1/2E                             | DM0625-1F    | DM0625-1-1/2E    | 5000 | 2500          | 1250   |  |
| 0.640      | 16.3 | DM0640-1/2B                             | DM0640-1B    | DM0640-1-1/2B    | 5000 | 5000          | 2500   |  |
| 0.665      | 16.9 | DM0665-1/2B                             | DM0665-1B    | DM0665-1-1/2B    | 5000 | 2500          | 2500   |  |
| 0.687      | 17.5 | DM0687-1/2D                             | DM0687-1E    | DM0687-1-1/2B    | 5000 | 2500          | 1500   |  |
| 0.725      | 18.4 | DM0725-1/2B                             | DM0725-1B    | DM0725-1-1/2B    | 5000 | 2500          | 1000   |  |
| 0.750      | 19.1 | DM0750-1/2F                             | DM0750-1F    | DM0750-1-1/2D    | 5000 | 2500          | 500    |  |
| 0.812      | 20.6 | DM0812-1/2E                             | DM0812-1D    | DM0812-1-1/2D    | 2500 | 2500          | 1000   |  |
| 0.843      | 21.4 | DM0843-1/2B                             | DM0843-1B    | DM0843-1-1/2B    | 5000 | 2500          | 1200   |  |
| 0.875      | 22.2 | DM0875-1/2D                             | DM0875-1E    | DM0875-1-1/2B    | 5000 | 2500          | 1250   |  |
| 0.937      | 23.8 | DM0937-1/2C                             | DM0937-1J    | DM0937-1-1/2C    | 2500 | 2500          | 1000   |  |
| 0.985      | 25.0 | DM0985-1/2B                             | DM0985-1B    | DM0985-1-1/2B    | 2500 | 1500          | 1250   |  |
| 1.000      | 25.4 | DM1000-1/2D                             | DM1000-1E    | DM1000-1-1/2F    | 2500 | 2000          | 1250   |  |
| 1.062      | 27.0 | DM1062-1/2D                             | DM1062-1E    | DM1062-1-1/2B    | 3000 | 1500          | 1250   |  |
| 1.090      | 27.7 | DM1090-1/2B                             | DM1090-1B    | DM1090-1-1/2B    | 2000 | 1000          | 500    |  |
| 1.125      | 28.6 | DM1125-1/2B                             | DM1125-1D    | DM1125-1-1/2C    | 1000 | 1000          | 500    |  |
| 1.187      | 30.2 | DM1187-1/2B                             | DM1187-1B    | DM1187-1-1/2B    | 2500 | 1000          | 1000   |  |

(Continued on next page >)

HIGH TEMPERATURE CAPS



DM(HT) Series (Continued)  
High Temperature Vinyl Caps



See pages 86 and 87 for Application Wizards

| A = To Fit |       | Item No. by Length of Cap (B Dimension) |              |                  | Bulk Pack Qty |      |        |
|------------|-------|-----------------------------------------|--------------|------------------|---------------|------|--------|
| in         | mm    | 1/2" (12.70 mm)                         | 1" (24.4 mm) | 1-1/2" (38.1 mm) | 1/2"          | 1"   | 1-1/2" |
| 1.250      | 31.8  | DM1250-1/2C                             | DM1250-1D    | DM1250-1-1/2C    | 2500          | 1000 | 700    |
| 1.312      | 33.3  | DM1312-1/2B                             | DM1312-1B    | DM1312-1-1/2B    | 2000          | 1000 | 500    |
| 1.375      | 34.9  | DM1375-1/2B                             | DM1375-1D    | DM1375-1-1/2E    | 2000          | 1000 | 650    |
| 1.437      | 36.5  | DM1437-1/2B                             | DM1437-1B    | DM1437-1-1/2B    | 1000          | 1000 | 600    |
| 1.500      | 38.1  | DM1500-1/2C                             | DM1500-1E    | DM1500-1-1/2C    | 1000          | 1000 | 600    |
| 1.593      | 40.5  | DM1593-1/2B                             | DM1593-1B    | DM1593-1-1/2B    | 1700          | 1000 | 500    |
| 1.625      | 41.3  | DM1625-1/2D                             | DM1625-1H    | DM1625-1-1/2B    | 500           | 750  | 500    |
| 1.687      | 42.9  | DM1687-1/2B                             | DM1687-1B    | DM1687-1-1/2B    | 1000          | 500  | 400    |
| 1.750      | 44.5  | DM1750-1/2C                             | DM1750-1D    | DM1750-1-1/2E    | 1000          | 500  | 500    |
| 1.812      | 46.0  | DM1812-1/2B                             | DM1812-1B    | DM1812-1-1/2B    | 1000          | 500  | 400    |
| 1.875      | 47.6  | DM1875-1/2C                             | DM1875-1D    | DM1875-1-1/2F    | 700           | 625  | 400    |
| 1.937      | 49.2  | DM1937-1/2B                             | DM1937-1B    | DM1937-1-1/2B    | 1000          | 550  | 400    |
| 2.000      | 50.8  | DM2000-1/2C                             | DM2000-1E    | DM2000-1-1/2E    | 1000          | 550  | 400    |
| 2.125      | 54.0  | DM2125-1/2B                             | DM2125-1B    | DM2125-1-1/2B    | 500           | 400  | 300    |
| 2.156      | 54.8  | DM2156-1/2B                             | DM2156-1B    | DM2156-1-1/2B    | 1000          | 550  | 250    |
| 2.250      | 57.2  | DM2250-1/2B                             | DM2250-1C    | DM2250-1-1/2B    | 250           | 500  | 300    |
| 2.375      | 60.3  | DM2375-1/2B                             | DM2375-1C    | DM2375-1-1/2C    | 500           | 350  | 250    |
| 2.460      | 62.5  | DM2460-1/2B                             | DM2460-1B    | DM2460-1-1/2B    | 1000          | 350  | 200    |
| 2.500      | 63.5  | DM2500-1/2C                             | DM2500-1B    | DM2500-1-1/2B    | 500           | 300  | 200    |
| 2.625      | 66.7  | DM2625-1/2B                             | DM2625-1B    | DM2625-1-1/2D    | 500           | 250  | 250    |
| 2.687      | 68.3  | DM2687-1/2B                             | DM2687-1B    | DM2687-1-1/2B    | 400           | 250  | 200    |
| 2.750      | 69.9  | DM2750-1/2B                             | DM2750-1B    | DM2750-1-1/2B    | 500           | 250  | 250    |
| 2.875      | 73.0  | DM2875-1/2B                             | DM2875-1B    | DM2875-1-1/2B    | 500           | 250  | 200    |
| 3.000      | 76.2  | DM3000-1/2B                             | DM3000-1D    | DM3000-1-1/2B    | 500           | 300  | 200    |
| 1.812      | 46.0  | DM1812-1/2B                             | DM1812-1B    | DM1812-1-1/2B    | 1000          | 500  | 400    |
| 1.875      | 47.6  | DM1875-1/2C                             | DM1875-1D    | DM1875-1-1/2F    | 700           | 625  | 400    |
| 1.937      | 49.2  | DM1937-1/2B                             | DM1937-1B    | DM1937-1-1/2B    | 1000          | 550  | 400    |
| 2.000      | 50.8  | DM2000-1/2C                             | DM2000-1E    | DM2000-1-1/2E    | 1000          | 550  | 400    |
| 2.125      | 54.0  | DM2125-1/2B                             | DM2125-1B    | DM2125-1-1/2B    | 500           | 400  | 300    |
| 2.156      | 54.8  | DM2156-1/2B                             | DM2156-1B    | DM2156-1-1/2B    | 1000          | 550  | 250    |
| 2.250      | 57.2  | DM2250-1/2B                             | DM2250-1C    | DM2250-1-1/2B    | 250           | 500  | 300    |
| 2.375      | 60.3  | DM2375-1/2B                             | DM2375-1C    | DM2375-1-1/2C    | 500           | 350  | 250    |
| 2.460      | 62.5  | DM2460-1/2B                             | DM2460-1B    | DM2460-1-1/2B    | 1000          | 350  | 200    |
| 2.500      | 63.5  | DM2500-1/2C                             | DM2500-1B    | DM2500-1-1/2B    | 500           | 300  | 200    |
| 2.625      | 66.7  | DM2625-1/2B                             | DM2625-1B    | DM2625-1-1/2D    | 500           | 250  | 250    |
| 2.687      | 68.3  | DM2687-1/2B                             | DM2687-1B    | DM2687-1-1/2B    | 400           | 250  | 200    |
| 2.750      | 69.9  | DM2750-1/2B                             | DM2750-1B    | DM2750-1-1/2B    | 500           | 250  | 250    |
| 2.875      | 73.0  | DM2875-1/2B                             | DM2875-1B    | DM2875-1-1/2B    | 500           | 250  | 200    |
| 3.000      | 76.2  | DM3000-1/2B                             | DM3000-1D    | DM3000-1-1/2B    | 500           | 300  | 200    |
| 3.125      | 79.4  | —                                       | DM3125-1B    | DM3125-1-1/2B    | —             | 250  | 150    |
| 3.250      | 82.6  | —                                       | DM3250-1B    | DM3250-1-1/2B    | —             | 100  | 100    |
| 3.375      | 85.7  | —                                       | DM3375-1B    | DM3375-1-1/2B    | —             | 200  | 150    |
| 3.500      | 88.9  | —                                       | DM3500-1B    | DM3500-1-1/2B    | —             | 175  | 100    |
| 3.625      | 92.1  | —                                       | DM3625-1B    | DM3625-1-1/2B    | —             | 150  | 100    |
| 3.750      | 95.3  | —                                       | DM3750-1B    | DM3750-1-1/2B    | —             | 100  | 100    |
| 3.825      | 97.2  | —                                       | DM3825-1C    | DM3825-1-1/2B    | —             | 150  | 100    |
| 3.875      | 98.4  | —                                       | DM3875-1B    | DM3875-1-1/2B    | —             | 100  | 100    |
| 4.000      | 101.6 | —                                       | DM4000-1B    | DM4000-1-1/2B    | —             | 150  | 100    |
| 4.125      | 104.8 | —                                       | DM4125-1B    | DM4125-1-1/2B    | —             | 100  | 100    |
| 4.187      | 106.3 | —                                       | DM4187-1B    | DM4187-1-1/2B    | —             | 100  | 100    |
| 4.250      | 108.0 | —                                       | DM4250-1B    | DM4250-1-1/2B    | —             | 150  | 100    |
| 4.375      | 111.1 | —                                       | DM4375-1B    | DM4375-1-1/2B    | —             | 100  | 50     |
| 4.500      | 114.3 | —                                       | DM4500-1B    | DM4500-1-1/2B    | —             | 150  | 75     |
| 4.750      | 120.7 | —                                       | DM4750-1B    | DM4750-1-1/2B    | —             | 85   | 100    |
| 5.000      | 127.0 | —                                       | DM5000-1C    | DM5000-1-1/2B    | —             | 125  | 50     |
| 5.187      | 131.7 | —                                       | DM5187-1B    | DM5187-1-1/2B    | —             | 50   | 50     |
| 5.375      | 136.5 | —                                       | DM5375-1B    | DM5375-1-1/2B    | —             | 100  | 50     |
| 5.500      | 139.7 | —                                       | DM5500-1B    | DM5500-1-1/2B    | —             | 50   | 50     |
| 5.750      | 146.1 | —                                       | DM5750-1B    | DM5750-1-1/2B    | —             | 50   | 50     |
| 6.000      | 152.4 | —                                       | DM6000-1B    | DM6000-1-1/2B    | —             | 50   | 50     |
| 6.250      | 158.8 | —                                       | DM6250-1B    | DM6250-1-1/2B    | —             | 50   | 50     |
| 6.500      | 165.1 | —                                       | DM6500-1B    | DM6500-1-1/2B    | —             | 50   | 50     |
| 6.750      | 171.5 | —                                       | DM6750-1B    | DM6750-1-1/2B    | —             | 25   | 50     |
| 7.000      | 177.8 | —                                       | DM7000-1B    | DM7000-1-1/2B    | —             | 25   | 25     |
| 7.250      | 184.2 | —                                       | DM7250-1B    | DM7250-1-1/2B    | —             | 50   | 50     |
| 7.500      | 190.5 | —                                       | DM7500-1B    | DM7500-1-1/2B    | —             | 50   | 25     |
| 7.750      | 196.9 | —                                       | DM7750-1B    | DM7750-1-1/2B    | —             | 50   | 50     |
| 8.000      | 203.2 | —                                       | DM8000-1B    | DM8000-1-1/2B    | —             | 50   | 25     |

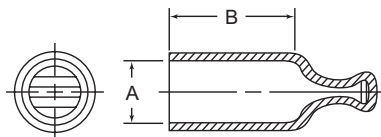




**DMPC(HT) Series**  
High Temperature Vinyl Pull Caps



See pages 86 and 87 for Application Wizards



**Specifications:**

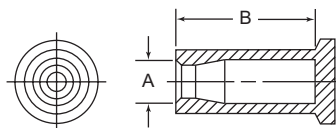
- High Temperature Soft Vinyl 425°F (218°C)
- Color: Yellow
- Hardness: Durometer of 85 +/-2
- Alternative Material: Lower Temp Black Vinyl available (see page 31)

**Features:**

- Ergonomic finger pull tab for easy removal
- Excellent chemical resistance
- Economical solution for one-time uses
- Applications: Powder Coating, E-Coating, Plating, and General Paint Lines

| A = To Fit |      | Item No. by Length of Cap (B Dimension) |              |                  | Bulk Pack Qty |      |        |
|------------|------|-----------------------------------------|--------------|------------------|---------------|------|--------|
| in         | mm   | 1/2" (12.70 mm)                         | 1" (24.4 mm) | 1-1/2" (38.1 mm) | 1/2"          | 1"   | 1-1/2" |
| 0.187      | 4.8  | DMPC0180-1/2B                           | DMPC0180-1B  | —                | 5000          | 5000 | —      |
| 0.218      | 5.5  | DMPC0207-1/2D                           | DMPC0207-1D  | —                | 5000          | 5000 | —      |
| 0.250      | 6.4  | DMPC0240-1/2E                           | DMPC0240-1C  | —                | 5000          | 5000 | —      |
| 0.313      | 7.9  | DMPC0302-1/2G                           | DMPC0302-1D  | DMPC0302-1-1/2B  | 7500          | 5000 | 2500   |
| 0.320      | 8.1  | DMPC0320-1/2B                           | DMPC0320-1B  | DMPC0320-1-1/2B  | 5000          | 5000 | 2500   |
| 0.343      | 8.7  | DMPC0343-1/2B                           | DMPC0343-1B  | DMPC0343-1-1/2B  | 5000          | 3000 | 2500   |
| 0.375      | 9.5  | DMPC0365-1/2E                           | DMPC0365-1G  | DMPC0365-1-1/2B  | 5000          | 3000 | 2000   |
| 0.406      | 10.3 | DMPC0396-1/2G                           | DMPC0396-1D  | DMPC0396-1-1/2B  | 5000          | 5000 | 2500   |
| 0.420      | 10.7 | DMPC0420-1/2B                           | DMPC0420-1B  | DMPC0420-1-1/2B  | 5000          | 5000 | 2500   |
| 0.437      | 11.1 | DMPC0427-1/2F                           | DMPC0427-1G  | DMPC0427-1-1/2C  | 5000          | 4000 | 2500   |
| 0.450      | 11.4 | DMPC0450-1/2B                           | DMPC0450-1B  | DMPC0450-1-1/2B  | 5000          | 4000 | 2500   |
| 0.472      | 12.0 | DMPC0470-1/2C                           | DMPC0470-1D  | DMPC0470-1-1/2C  | 5000          | 4000 | 2500   |
| 0.500      | 12.7 | DMPC0490-1/2D                           | DMPC0490-1F  | DMPC0490-1-1/2D  | 5000          | 4000 | 2000   |
| 0.531      | 13.5 | DMPC0521-1/2C                           | DMPC0521-1C  | DMPC0521-1-1/2B  | 5000          | 4000 | 2500   |
| 0.562      | 14.3 | DMPC0552-1/2D                           | DMPC0552-1C  | DMPC0552-1-1/2B  | 2500          | 2500 | 2500   |
| 0.593      | 15.1 | DMPC0590-1/2C                           | DMPC0590-1C  | DMPC0590-1-1/2B  | 2500          | 1900 | 1500   |
| 0.600      | 15.2 | DMPC0600-1/2D                           | DMPC0600-1F  | DMPC0600-1-1/2B  | 5000          | 2500 | 2500   |
| 0.625      | 15.9 | DMPC0625-1/2C                           | DMPC0625-1F  | DMPC0625-1-1/2D  | 2500          | 1350 | 1500   |
| 0.655      | 16.6 | DMPC0655-1/2D                           | DMPC0655-1D  | DMPC0655-1-1/2B  | 2000          | 2500 | 1500   |
| 0.677      | 17.2 | DMPC0677-1/2B                           | DMPC0677-1C  | DMPC0677-1-1/2B  | 5000          | 2500 | 1500   |
| 0.687      | 17.5 | DMPC0687-1/2G                           | DMPC0687-1E  | DMPC0687-1-1/2B  | 2500          | 2000 | 1500   |
| 0.708      | 18.0 | DMPC0708-1/2B                           | DMPC0708-1B  | DMPC0708-1-1/2B  | 2500          | 2000 | 1500   |
| 0.750      | 19.1 | DMPC0740-1/2C                           | DMPC0740-1D  | DMPC0740-1-1/2C  | 4000          | 2500 | 1500   |
| 0.812      | 20.6 | DMPC0812-1/2D                           | DMPC0812-1D  | DMPC0812-1-1/2C  | 2500          | 2000 | 750    |
| 0.875      | 22.2 | DMPC0865-1/2D                           | DMPC0865-1B  | DMPC0865-1-1/2B  | 1500          | 1500 | 750    |
| 0.937      | 23.8 | DMPC0937-1/2B                           | DMPC0937-1B  | DMPC0937-1-1/2B  | 1500          | 1500 | 750    |
| 1.000      | 25.4 | DMPC0990-1/2B                           | DMPC0990-1B  | DMPC0990-1-1/2B  | 1500          | 1500 | 750    |
| 1.060      | 26.9 | —                                       | DMPC1060-1D  | DMPC1060-1-1/2B  | —             | 1000 | 700    |
| 1.125      | 28.6 | —                                       | DMPC1125-1B  | DMPC1125-1-1/2B  | —             | 1000 | 700    |
| 1.230      | 31.8 | —                                       | DMPC1230-1B  | DMPC1230-1-1/2B  | —             | 1000 | 700    |
| 1.500      | 38.1 | —                                       | DMPC1500-1B  | DMPC1500-1-1/2B  | —             | 700  | 250    |
| 1.605      | 41.3 | —                                       | DMPC1605-1B  | DMPC1605-1-1/2C  | —             | 550  | 350    |

**SCE Series**  
Easy Pull Masking Caps



**Specifications:**

- Natural Silicone 600°F (316°C)
- Black EPDM 425°F (218°C)
- Hardness: Durometer (Shore A) 55 ± 5

**Features:**

- Wide flange design provides a positive seal and easy removal
- Silicone: premium masking material (due to high temperature and chemical resistance) can be used multiple times
- EPDM: a more economical material with reduced heat resistance; also reusable
- Applications: Powder Coating, E-Coating, Plating, Anodizing and Blasting

**To Assure Proper Fit Due to Design Features:**



I.D. of cap "A" dimension should be approx. 10% smaller than O.D. of part to be masked

| Item No.    |             | A     |     | B     |      | Bulk Pack Qty |
|-------------|-------------|-------|-----|-------|------|---------------|
| Silicone    | EPDM        | in    | mm  | in    | mm   |               |
| SCE0125A    | SCE0125B    | 0.125 | 3.2 | 2.000 | 50.8 | 200           |
| SCE0157A    | SCE0157B    | 0.157 | 4.0 | 1.180 | 30.0 | 500           |
| SCE0187A    | SCE0187B    | 0.187 | 4.7 | 1.377 | 34.0 | 1000          |
| SCE0236A    | SCE0236B    | 0.236 | 6.0 | 1.180 | 30.0 | 400           |
| SCE0255A    | SCE0255B    | 0.255 | 6.5 | 0.910 | 23.1 | 500           |
| SCE0255118A | SCE0255118C | 0.255 | 6.5 | 1.180 | 30.0 | 250           |
| SCE0294A    | SCE0294B    | 0.294 | 7.5 | 1.330 | 33.8 | 1000          |
| SCE0315A    | SCE0315B    | 0.315 | 8.0 | 0.974 | 24.7 | 250           |
| SCE0315118A | SCE0315118D | 0.315 | 8.0 | 1.180 | 30.0 | 250           |
| SCE0355A    | SCE0355B    | 0.355 | 9.0 | 1.500 | 38.1 | 250           |
| SCE0375A    | SCE0375B    | 0.375 | 9.5 | 1.421 | 36.1 | 250           |

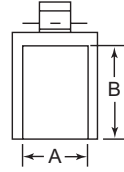
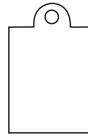
| Item No.    |             | A     |      | B     |      | Bulk Pack Qty |
|-------------|-------------|-------|------|-------|------|---------------|
| Silicone    | EPDM        | in    | mm   | in    | mm   |               |
| SCE0433A*   | SCE0433C    | 0.433 | 11.0 | 1.180 | 30.0 | 500           |
| SCE0438A    | SCE0438C    | 0.438 | 11.1 | 0.950 | 24.1 | 500           |
| SCE0451A    | SCE0451B    | 0.451 | 11.5 | 1.215 | 30.9 | 200           |
| SCE0485A    | SCE0485B    | 0.485 | 12.3 | 1.013 | 25.7 | 500           |
| SCE0492118A | SCE0492118B | 0.492 | 12.5 | 1.180 | 30.0 | 200           |
| SCE0531A    | SCE0531B    | 0.531 | 13.5 | 1.180 | 30.0 | 250           |
| SCE0608A    | SCE0608B    | 0.608 | 15.4 | 1.180 | 30.0 | 200           |
| SCE0608099A | SCE0608099B | 0.608 | 15.4 | 0.990 | 25.1 | 200           |
| SCE0622A    | SCE0622B    | 0.622 | 15.8 | 1.575 | 40.0 | 200           |
| SCE0725A    | SCE0725B    | 0.725 | 18.4 | 1.500 | 38.1 | 100           |

\* Has 2nd internal rib near closed end of cap



# HIGH TEMPERATURE CAPS

## FEC Series Flexible End Caps



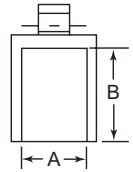
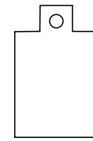
Type 1

**Specifications:**

- Material: Thermoplastic Elastomer
- Temperature Range: 203°F (95°C)
- Color: Black

**Features:**

- Flexible material can stretch onto larger diameters for a snug fit
- Good resistance to acids
- Can be used with Masking Hooks on page 86

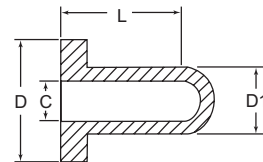


Type 2

| Item No. | Type | A     |      | B     |      | Bulk Pack Qty |
|----------|------|-------|------|-------|------|---------------|
|          |      | in    | mm   | in    | mm   |               |
| 1340242  | 2    | 0.157 | 4.0  | 0.945 | 24.0 | 10000         |
| 12200B   | 1    | 0.197 | 5.0  | 0.925 | 23.5 | 10000         |
| 1341946  | 2    | 0.236 | 6.0  | 0.984 | 25.0 | 10000         |
| 1287248  | 2    | 0.276 | 7.0  | 0.945 | 24.0 | 10000         |
| 1287251  | 2    | 0.315 | 8.0  | 0.965 | 24.5 | 8000          |
| 12204B   | 1    | 0.354 | 9.0  | 0.984 | 25.0 | 7000          |
| 1341978  | 2    | 0.394 | 10.0 | 1.161 | 29.5 | 5000          |
| 1341987  | 2    | 0.433 | 11.0 | 1.142 | 29.0 | 4500          |
| 12207B   | 1    | 0.472 | 12.0 | 1.142 | 29.0 | 4000          |
| 1341981  | 2    | 0.512 | 13.0 | 1.142 | 29.0 | 3500          |
| 12209B   | 1    | 0.551 | 14.0 | 1.161 | 29.5 | 3000          |
| 12210B   | 1    | 0.591 | 15.0 | 1.161 | 29.5 | 2500          |
| 12211B   | 1    | 0.630 | 16.0 | 1.102 | 28.0 | 2500          |
| 12212B   | 1    | 0.669 | 17.0 | 1.161 | 29.5 | 2000          |

| Item No. | Type | A     |      | B     |      | Bulk Pack Qty |
|----------|------|-------|------|-------|------|---------------|
|          |      | in    | mm   | in    | mm   |               |
| 12213B   | 2    | 0.709 | 18.0 | 1.122 | 28.5 | 2000          |
| 1287245  | 2    | 0.748 | 19.0 | 1.161 | 29.5 | 2000          |
| 1341984  | 2    | 0.787 | 20.0 | 1.122 | 28.5 | 1600          |
| 12216B   | 1    | 0.827 | 21.0 | 1.358 | 34.5 | 1300          |
| 12217B   | 2    | 0.866 | 22.0 | 1.339 | 34.0 | 1200          |
| 12218B   | 2    | 0.906 | 23.0 | 1.358 | 34.5 | 1000          |
| 1341988  | 2    | 0.945 | 24.0 | 1.339 | 34.0 | 1000          |
| 12220B   | 2    | 0.984 | 25.0 | 1.358 | 34.5 | 1000          |
| 12221B   | 2    | 1.024 | 26.0 | 1.358 | 34.5 | 900           |
| 1222B    | 2    | 1.063 | 27.0 | 1.319 | 33.5 | 900           |
| 1287254  | 2    | 1.102 | 28.0 | 1.319 | 33.5 | 800           |
| 12224B   | 2    | 1.142 | 29.0 | 1.378 | 35.0 | 800           |
| 1287243  | 2    | 1.181 | 30.0 | 1.358 | 34.5 | 600           |

## WC Series Washer Caps



**Specifications:**

- Natural Silicone 600°F (316°C)
- Black EPDM 425°F (218°C)

**Features:**

- Designed as a cap with an added washer to mask off grounding
- Although designed as a cap, can be used to plug holes if inverted

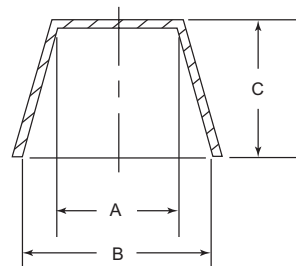
| Item No.   |            | Caps Std Threads |      | C     |      | D     |      | D1    |      | L     |      | Bulk Pack Qty |
|------------|------------|------------------|------|-------|------|-------|------|-------|------|-------|------|---------------|
| Silicone   | EPDM       | UN               | M    | in    | mm   | in    | mm   | in    | mm   | in    | mm   |               |
| WC0100050A | WC0100050B | #4               | M2.5 | 0.100 | 2.5  | 0.500 | 12.7 | 0.225 | 5.7  | 1.000 | 25.4 | 500           |
| WC0125050A | WC0125050B | #6               | —    | 0.125 | 3.2  | 0.500 | 12.7 | 0.252 | 6.4  | 1.000 | 25.4 | 500           |
| WC0156050A | WC0156050B | #8               | M4   | 0.156 | 4.0  | 0.500 | 12.7 | 0.315 | 8.0  | 1.000 | 25.4 | 500           |
| WC0172050A | WC0172050B | #10              | —    | 0.172 | 4.4  | 0.500 | 12.7 | 0.382 | 9.7  | 1.000 | 25.4 | 500           |
| WC0220059A | WC0220059B | —                | M6   | 0.220 | 5.6  | 0.590 | 15.0 | 0.358 | 9.1  | 1.000 | 25.4 | 500           |
| WC0240050A | WC0240050B | 1/4              | —    | 0.240 | 6.1  | 0.500 | 12.7 | 0.358 | 9.1  | 1.000 | 25.4 | 250           |
| WC0295070A | WC0295070B | 5/16             | M8   | 0.295 | 7.5  | 1.700 | 17.8 | 0.413 | 10.5 | 1.000 | 25.4 | 250           |
| WC0375082A | WC0375082B | 3/8              | M10  | 0.375 | 9.5  | 0.825 | 21.0 | 0.512 | 13.0 | 1.500 | 38.1 | 250           |
| WC0453098A | WC0453098B | —                | M12  | 0.453 | 11.5 | 0.984 | 25.0 | 0.650 | 16.5 | 1.500 | 38.1 | 250           |
| WC0500100A | WC0500100B | 1/2              | —    | 0.500 | 12.7 | 1.000 | 25.4 | 0.606 | 15.4 | 1.000 | 25.4 | 250           |
| WC0615118A | WC0615118B | 5/8              | M16  | 0.615 | 15.6 | 1.180 | 30.0 | 0.815 | 20.7 | 1.500 | 38.1 | 100           |





# HIGH TEMPERATURE CAPS / HIGH TEMPERATURE TUBING

## EFTC Series Tapered Paper Caps



**Specifications:**

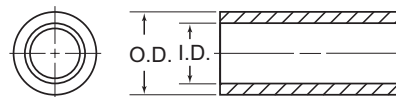
- Temp Range: 400°F/205°C
- Color: Tan

**Features:**

- Environmentally friendly masking solution: recyclable
- Made of a blend of post consumer and virgin materials
- Paper does not promote condensation
- Economical solution compared to rubber and silicone products
- Applications: painting or powder coating
- Paper is hygroscopic, meaning there will be minor dimensional variations with changes in humidity
- Dimensional tolerances: A typically +/- 0.010" (0.25mm), B typically +/- 0.025" (0.63mm), C & D typically +/- 0.050" (1.27mm)

| Item No.    | NPT Size | A    |      | B    |      | C    |      | Bulk Pack Qty. |
|-------------|----------|------|------|------|------|------|------|----------------|
|             |          | In   | mm   | In   | mm   | In   | mm   |                |
| EFTC035040A | 1/8"     | 0.35 | 9.0  | 0.4  | 10.1 | 0.40 | 10.1 | 25000          |
| EFTC047049A | 1/4"     | 0.47 | 11.9 | 0.49 | 12.4 | 0.53 | 13.5 | 12000          |
| EFTC048075A | —        | 0.48 | 12.3 | 0.75 | 19.0 | 0.88 | 22.4 | 5800           |
| EFTC065065A | 3/8"     | 0.65 | 16.5 | 0.65 | 16.5 | 0.52 | 13.1 | 16000          |
| EFTC078083A | 1/2"     | 0.78 | 19.7 | 0.83 | 21.2 | 0.77 | 19.5 | 7000           |
| EFTC081095A | —        | 0.81 | 20.6 | 0.95 | 24.2 | 0.84 | 21.2 | 5500           |
| EFTC087105A | —        | 0.87 | 22.1 | 1.05 | 26.7 | 0.66 | 16.7 | 6200           |
| EFTC095108A | 3/4"     | 0.95 | 24.1 | 1.08 | 27.3 | 0.89 | 22.5 | 4000           |
| EFTC113130A | —        | 1.13 | 28.6 | 1.3  | 33.0 | 0.72 | 18.2 | 3500           |
| EFTC126127A | 1"       | 1.27 | 32.2 | 1.26 | 32.0 | 1.00 | 25.3 | 3300           |
| EFTC131152A | —        | 1.31 | 33.3 | 1.52 | 38.6 | 0.70 | 17.8 | 3200           |
| EFTC145162A | —        | 1.45 | 36.7 | 1.62 | 41.2 | 0.81 | 20.6 | 3000           |
| EFTC162169A | 1-1/4"   | 1.62 | 41.0 | 1.69 | 42.8 | 0.85 | 21.5 | 2700           |
| EFTC168201A | —        | 1.68 | 42.5 | 2.01 | 51.1 | 0.72 | 18.3 | 2500           |
| EFTC183189A | 1-1/2"   | 1.83 | 46.4 | 1.89 | 48.0 | 0.94 | 23.9 | 1800           |
| EFTC233234A | 2"       | 2.33 | 59.1 | 2.34 | 59.5 | 0.87 | 22.0 | 1400           |
| EFTC259285A | —        | 2.59 | 65.7 | 2.85 | 72.3 | 0.98 | 24.9 | 1000           |
| EFTC283285A | 2-1/2"   | 2.83 | 71.8 | 2.85 | 72.3 | 0.97 | 24.6 | 800            |
| EFTC332363A | 3"       | 3.32 | 84.2 | 3.63 | 92.2 | 1.12 | 28.3 | 500            |

## ST Series Silicone Tubing



**Specifications:**

- 600°F (315°C)
- Hardness: Durometer (Shore A) 55 ± 5
- Material: Silicone
- Color: Natural

**Features:**

- Excellent solution to fit over longer parts where standard caps are too short (can use with cap if required)
- Masking off thru hole, by utilizing the O.D. of silicone tube and pulling it through
- Can be cut to required length (cutting long creates easy pull tab)
- Conforms to irregularities
- Reusable and will not melt or harden
- Applications: Powder Coating, E-Coating, Plating and Anodizing

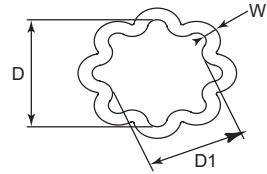
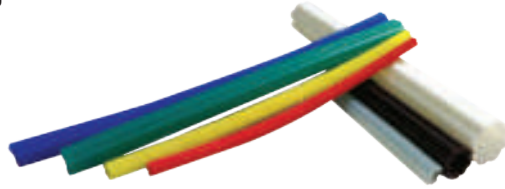
| Item No. | ID    |     | OD    |      | Roll Length |       | Pack Qty |
|----------|-------|-----|-------|------|-------------|-------|----------|
|          | in    | mm  | in    | mm   | Ft          | m     |          |
| ST0040A  | 0.040 | 1.0 | 0.165 | 4.2  | 100         | 30.48 | 1        |
| ST0062A  | 0.062 | 1.6 | 0.187 | 4.8  | 100         | 30.48 | 1        |
| ST0080A  | 0.080 | 2.0 | 0.205 | 5.2  | 100         | 30.48 | 1        |
| ST0093A  | 0.093 | 2.4 | 0.218 | 5.6  | 100         | 30.48 | 1        |
| ST0109A  | 0.109 | 2.8 | 0.234 | 6.0  | 100         | 30.48 | 1        |
| ST0125A  | 0.125 | 3.2 | 0.250 | 6.4  | 100         | 30.48 | 1        |
| ST0140A  | 0.140 | 3.6 | 0.265 | 6.8  | 100         | 30.48 | 1        |
| ST0156A  | 0.156 | 4.0 | 0.281 | 7.2  | 100         | 30.48 | 1        |
| ST0172A  | 0.172 | 4.4 | 0.297 | 7.6  | 100         | 30.48 | 1        |
| ST0187A  | 0.187 | 4.7 | 0.312 | 7.9  | 100         | 30.48 | 1        |
| ST0203A  | 0.203 | 5.2 | 0.328 | 8.4  | 100         | 30.48 | 1        |
| ST0218A  | 0.218 | 5.5 | 0.343 | 8.7  | 100         | 30.48 | 1        |
| ST0234A  | 0.234 | 5.9 | 0.359 | 9.1  | 100         | 30.48 | 1        |
| ST0250A  | 0.250 | 6.3 | 0.375 | 9.5  | 100         | 30.48 | 1        |
| ST0281A  | 0.281 | 7.1 | 0.406 | 10.3 | 50          | 15.24 | 1        |
| ST0312A  | 0.312 | 7.9 | 0.437 | 11.1 | 50          | 15.24 | 1        |
| ST0343A  | 0.343 | 8.7 | 0.468 | 11.9 | 50          | 15.24 | 1        |

| Item No. | ID    |      | OD    |      | Roll Length |       | Pack Qty |
|----------|-------|------|-------|------|-------------|-------|----------|
|          | in    | mm   | in    | mm   | Ft          | m     |          |
| ST0375A  | 0.375 | 9.5  | 0.500 | 12.7 | 50          | 15.24 | 1        |
| ST0406A  | 0.406 | 10.3 | 0.531 | 13.5 | 50          | 15.24 | 1        |
| ST0437A  | 0.437 | 11.1 | 0.562 | 14.3 | 50          | 15.24 | 1        |
| ST0500A  | 0.500 | 12.7 | 0.625 | 15.9 | 50          | 15.24 | 1        |
| ST0625A  | 0.625 | 15.9 | 0.750 | 19.1 | 50          | 15.24 | 1        |
| ST0750A  | 0.750 | 19.1 | 0.875 | 22.3 | 50          | 15.24 | 1        |
| ST0875A  | 0.875 | 22.2 | 1.000 | 25.4 | 50          | 15.24 | 1        |
| ST0937A  | 0.937 | 23.8 | 1.062 | 27.0 | 50          | 15.24 | 1        |
| ST1000A  | 1.000 | 25.4 | 1.125 | 28.6 | 50          | 15.24 | 1        |
| ST1125A  | 1.125 | 28.6 | 1.250 | 31.8 | 25          | 7.62  | 1        |
| ST1250A  | 1.250 | 31.8 | 1.375 | 35.0 | 25          | 7.62  | 1        |
| ST1375A  | 1.375 | 34.9 | 1.500 | 38.1 | 25          | 7.62  | 1        |
| ST1500A  | 1.500 | 38.1 | 1.625 | 41.3 | 25          | 7.62  | 1        |
| ST1625A  | 1.625 | 41.3 | 1.750 | 44.5 | 25          | 7.62  | 1        |
| ST1750A  | 1.750 | 44.4 | 1.875 | 47.6 | 25          | 7.62  | 1        |
| ST1875A  | 1.875 | 47.6 | 2.000 | 50.8 | 25          | 7.62  | 1        |
| ST2000A  | 2.000 | 50.8 | 2.125 | 54.0 | 25          | 7.62  | 1        |



# HIGH TEMPERATURE TUBING

## STFL Series Flexible Silicone Star Tubing



**Specifications:**

- Silicone 600°F (315°C)
- Color: See Table

**Features:**

- Flexible enough for each to fit several ranges
- Fits over threaded studs, unthreaded tubes or irregular shapes

See pages 86 and 87 for Application Wizards

| Item No.    | Color   | D     |      | D1    |      | W    |     | Fits Std. Threads                       | Roll Length |       | Pack Qty |
|-------------|---------|-------|------|-------|------|------|-----|-----------------------------------------|-------------|-------|----------|
|             |         | in    | mm   | in    | mm   | in   | mm  |                                         | Ft          | m     |          |
| STFL011020A | Red     | 0.209 | 5.3  | 0.110 | 2.8  | 0.06 | 1.5 | 4 - 40, 6 - 32, 8 - 32, 10 - 24, M4, M5 | 100         | 30.48 | 1        |
| STFL018028A | Yellow  | 0.287 | 7.3  | 0.189 | 4.8  | 0.06 | 1.5 | 10 - 24, 12 - 24, 1/4 - 20, M5, M6      | 100         | 30.48 | 1        |
| STFL025037A | Clear   | 0.374 | 9.5  | 0.256 | 6.5  | 0.06 | 1.5 | 5/16 - 18, M8                           | 100         | 30.48 | 1        |
| STFL033045A | Blue    | 0.452 | 11.5 | 0.335 | 8.5  | 0.06 | 1.5 | 3/8 - 16, M10                           | 100         | 30.48 | 1        |
| STFL042055A | Green   | 0.551 | 14.0 | 0.421 | 10.7 | 0.06 | 1.5 | 7/16 - 14, 1/2 - 13, M12, M14           | 100         | 30.48 | 1        |
| STFL050062A | Purple  | 0.625 | 15.9 | 0.500 | 12.7 | 0.06 | 1.5 | 9/16 - 12, 5/8 - 11                     | 100         | 30.48 | 1        |
| STFL062075A | Rust    | 0.750 | 19.1 | 0.625 | 15.9 | 0.06 | 1.5 | 5/8 - 11, 11/16, M16, M18               | 50          | 15.24 | 1        |
| STFL072087A | Blue    | 0.875 | 22.2 | 0.725 | 18.4 | 0.06 | 1.5 | 3/4 - 10, 7/8 - 9, M20                  | 50          | 15.24 | 1        |
| STFL085100A | White   | 1.000 | 25.4 | 0.850 | 21.6 | 0.06 | 1.5 | 1 - 8, M20, M24, M25                    | 50          | 15.24 | 1        |
| 1426282     | Natural | 1.250 | 31.7 | 1.000 | 25.4 | 0.06 | 1.5 | 1 - 1/4-7,M33                           | 25          | 7.62  | 1        |
| 1426284     | Purple  | 1.500 | 38.1 | 1.250 | 31.7 | 0.06 | 1.5 | 1 - 1/2-6,M39                           | 25          | 7.62  | 1        |
| 1426286     | Rusty   | 1.750 | 44.4 | 1.500 | 38.1 | 0.06 | 1.5 | 1 - 3/4 - 5                             | 25          | 7.62  | 1        |
| 1426288     | Orange  | 2.000 | 50.8 | 1.750 | 44.4 | 0.06 | 1.5 | 2 - 4 - 1/2                             | 25          | 7.62  | 1        |

## Flexible Silicone Foam Cord

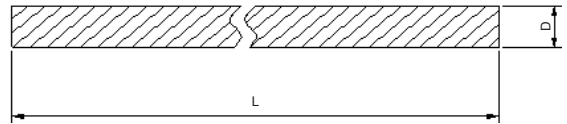


**Specifications:**

- Silicone Foam 600°F (315°C)
- Color: Natural

**Features:**

- Can be used like a gasket to mask off threads, grooves, slots, or keyways
- Can be cut to length and is reusable
- Applications: Powder Coating, E-Coating, Plating and Anodizing

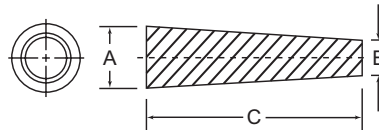


| Item No. | D     |      | Roll Length |     | Pack Qty |
|----------|-------|------|-------------|-----|----------|
|          | in    | mm   | Ft          | m   |          |
| 1426383  | 0.125 | 3.2  | 50          | 15  | 1        |
| 1426385  | 0.187 | 4.7  | 50          | 15  | 1        |
| 1426387  | 0.250 | 6.4  | 50          | 15  | 1        |
| 1426389  | 0.312 | 7.9  | 50          | 15  | 1        |
| 1426391  | 0.500 | 12.7 | 25          | 7.5 | 1        |
| 1426393  | 0.625 | 15.9 | 25          | 7.5 | 1        |
| 1426395  | 0.750 | 19.1 | 25          | 7.5 | 1        |
| 1426397  | 0.875 | 22.2 | 25          | 7.5 | 1        |
| 1426399  | 1.000 | 25.4 | 25          | 7.5 | 1        |
| 1426401  | 1.250 | 31.8 | 25          | 7.5 | 1        |
| 1426403  | 1.500 | 38.1 | 25          | 7.5 | 1        |
| 1426405  | 1.750 | 44.5 | 25          | 7.5 | 1        |
| 1426407  | 2.000 | 50.8 | 25          | 7.5 | 1        |

# HIGH TEMPERATURE PLUGS



## STP Series Tapered Masking Plugs



### Specifications:

- Silicone 600°F (316°C)
- EPDM 425°F (218°C)
- Hardness: Durometer (Shore A) 55 ± 5
- Color: See Table

### Features:

- Plugs threaded or unthreaded holes
- Silicone: premium masking material (due to high temperature rating) can be used multiple times
- Silicone available in natural and mixed colors for color coding applications
- EPDM: reusable, economical material with slightly reduced heat resistance, but superior chemical resistance
- Applications: Powder Coating, E-Coating, Plating and Anodizing
- For Hollow Tapered Masking Plugs see HSTP Series on page 79

### To Assure Proper Fit and Easy Handling:

#### Plugs

We suggest that you select "A" dimension to be approximately 15% larger than the hole diameter



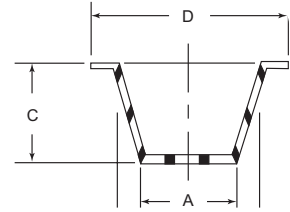
See pages 86 and 87 for Application Wizards

| Item No.           | Item No. Color | Item No. | Plugs Std Threads | A       |     | B     |       | C     |      | Bulk Pack Qty | Color Bulk Pack Qty |      |      |
|--------------------|----------------|----------|-------------------|---------|-----|-------|-------|-------|------|---------------|---------------------|------|------|
| Silicone (Natural) | Silicone       | Color    | EPDM (Black)      | UNC     | M   | in    | mm    | in    | mm   | in            | mm                  |      |      |
| STP001006A         | —              | —        | STP001006B        | —       | —   | 0.062 | 1.6   | 0.016 | 0.4  | 0.625         | 15.9                | 1000 | —    |
| STP002007A         | —              | —        | STP002007B        | —       | —   | 0.078 | 2.0   | 0.020 | 0.5  | 0.750         | 19.1                | 1000 | —    |
| STP003012A         | —              | —        | STP003012B        | 2-56    | M2  | 0.125 | 3.2   | 0.031 | 0.8  | 0.625         | 15.9                | 1000 | —    |
| STP006012A         | STP006012      | Green    | STP006012C        | 4-40    | —   | 0.125 | 3.2   | 0.063 | 1.6  | 0.625         | 15.9                | 1000 | 1000 |
| STP006018A         | STP006018      | Pink     | STP006018C        | 6-32    | —   | 0.187 | 4.7   | 0.063 | 1.6  | 0.625         | 15.9                | 1000 | 1000 |
| STP006018-07A      | —              | —        | STP006018-07C     | 8-32    | —   | 0.187 | 4.7   | 0.062 | 1.6  | 0.750         | 19.1                | 1000 | —    |
| STP004019-11A      | —              | —        | STP004019-11B     | 8-32    | M4  | 0.197 | 5.0   | 0.049 | 1.2  | 1.100         | 27.9                | 1000 | —    |
| STP006020A         | —              | —        | STP006020D        | 10-24   | M4  | 0.200 | 5.1   | 0.062 | 1.6  | 0.750         | 19.1                | 1000 | —    |
| STP012025A         | STP012025      | Grey     | STP012025D        | 12-24   | M6  | 0.250 | 6.3   | 0.125 | 3.2  | 0.750         | 19.1                | 1000 | 1000 |
| STP012025-10A      | —              | —        | STP012025-10C     | 1/4-20  | M6  | 0.250 | 6.3   | 0.125 | 3.2  | 1.000         | 25.4                | 1000 | —    |
| STP001027A         | —              | —        | STP001027B        | —       | —   | 0.279 | 7.1   | 0.016 | 0.4  | 0.984         | 25.0                | 1000 | —    |
| STP018034A         | STP018034      | Blue     | STP018034D        | 5/16-18 | M8  | 0.343 | 8.7   | 0.187 | 4.7  | 0.625         | 15.9                | 1000 | 1000 |
| STP018034-10A      | —              | —        | STP018034-10C     | 5/16-18 | M8  | 0.343 | 8.7   | 0.187 | 4.7  | 1.000         | 25.4                | 1000 | —    |
| STP012037-12A      | —              | —        | STP012037-12B     | 5/16-18 | —   | 0.375 | 9.5   | 0.125 | 3.2  | 1.250         | 31.8                | 1000 | —    |
| STP025037A         | STP025037      | Yellow   | STP025037D        | 3/8-16  | M10 | 0.375 | 9.5   | 0.250 | 6.3  | 0.750         | 19.1                | 1000 | 500  |
| STP025043A         | —              | —        | STP025043C        | 7/16-14 | M10 | 0.437 | 11.1  | 0.250 | 6.3  | 1.000         | 25.4                | 1000 | —    |
| STP035047A         | —              | —        | STP035047B        | 1/2-13  | —   | 0.472 | 12.0  | 0.354 | 9.0  | 0.708         | 18.0                | 500  | —    |
| STP012050-20A      | —              | —        | STP012050-20B     | —       | —   | 0.500 | 12.7  | 0.125 | 3.2  | 2.000         | 50.8                | 1000 | —    |
| STP031050A         | —              | —        | STP031050C        | —       | M12 | 0.500 | 12.7  | 0.312 | 7.9  | 1.000         | 25.4                | 200  | —    |
| STP039059A         | STP039059      | Purple   | STP039059B        | 9/16-12 | M14 | 0.590 | 15.0  | 0.393 | 10.0 | 1.000         | 25.4                | 500  | 250  |
| STP043062A         | STP043062      | Green    | STP043062D        | 5/8-11  | M16 | 0.625 | 15.9  | 0.437 | 11.1 | 0.813         | 20.7                | 200  | 250  |
| STP051067A         | STP051067      | Pink     | STP051067E        | —       | —   | 0.669 | 17.0  | 0.512 | 13.0 | 1.000         | 25.4                | 200  | 250  |
| STP055075A         | STP055075      | Grey     | STP055075D        | 3/4-10  | —   | 0.748 | 19.0  | 0.562 | 14.3 | 1.000         | 25.4                | 200  | 100  |
| STP062078A         | STP062078      | Red      | STP062078D        | —       | M20 | 0.787 | 20.0  | 0.625 | 15.9 | 1.000         | 25.4                | 100  | 100  |
| STP053079A         | —              | —        | STP053079B        | —       | —   | 0.797 | 20.2  | 0.538 | 13.7 | 0.984         | 25.0                | 200  | —    |
| STP071094A         | STP071094      | Yellow   | STP071094C        | —       | —   | 0.938 | 23.8  | 0.719 | 18.2 | 1.000         | 25.4                | 100  | 100  |
| STP062094A         | —              | —        | STP062094B        | 7/8-9   | —   | 0.945 | 24.0  | 0.625 | 15.9 | 1.000         | 25.4                | 100  | —    |
| STP075094A         | —              | —        | STP075094C        | —       | —   | 0.945 | 24.0  | 0.750 | 19.2 | 0.750         | 19.1                | 100  | —    |
| STP078102A         | —              | —        | STP078102B        | 1-8     | —   | 1.024 | 26.0  | 0.787 | 20.0 | 1.000         | 25.4                | 100  | —    |
| STP090106A         | STP090106      | Green    | STP090106C        | —       | —   | 1.063 | 27.0  | 0.906 | 23.0 | 1.000         | 25.4                | 100  | 100  |
| STP094110A         | —              | —        | STP094110C        | —       | —   | 1.102 | 28.0  | 0.945 | 24.0 | 1.000         | 25.4                | 100  | —    |
| STP109118A         | —              | —        | STP109118B        | 1-1/8-7 | —   | 1.181 | 30.0  | 1.094 | 27.8 | 1.000         | 25.4                | 50   | —    |
| STP102126A         | STP102126      | Purple   | STP102126B        | 1 1/4-7 | —   | 1.250 | 31.8  | 1.031 | 26.1 | 1.000         | 25.4                | 100  | 100  |
| STP106134A         | —              | —        | STP106134B        | 1 3/8-6 | —   | 1.338 | 34.0  | 1.063 | 27.0 | 1.000         | 25.4                | 100  | —    |
| STP118145A         | STP118145      | Blue     | STP118145B        | 1 1/2-6 | —   | 1.456 | 36.9  | 1.188 | 30.2 | 1.000         | 25.4                | 50   | 100  |
| STP122153A         | —              | —        | STP122153B        | —       | —   | 1.535 | 39.0  | 1.220 | 31.0 | 1.000         | 25.4                | 50   | —    |
| STP130161A         | —              | —        | STP130161B        | —       | —   | 1.614 | 41.0  | 1.300 | 33.0 | 1.000         | 25.4                | 50   | —    |
| STP141169A         | —              | —        | STP141169C        | —       | —   | 1.693 | 43.0  | 1.417 | 36.0 | 1.000         | 25.4                | 50   | —    |
| STP145177A         | STP145177      | Red      | STP145177C        | 1 3/4-5 | —   | 1.772 | 45.0  | 1.457 | 37.0 | 1.000         | 25.4                | 50   | 50   |
| STP149181A         | —              | —        | STP149181C        | —       | —   | 1.810 | 46.0  | 1.496 | 38.0 | 1.000         | 25.4                | 50   | —    |
| STP165196A         | —              | —        | STP165196B        | 2-4 1/2 | —   | 1.968 | 50.0  | 1.653 | 42.0 | 1.000         | 25.4                | 25   | —    |
| STP177208A         | —              | —        | STP177208B        | —       | —   | 2.086 | 53.0  | 1.770 | 45.0 | 1.000         | 25.4                | 25   | —    |
| STP189220A         | STP189220      | Blue     | STP189220C        | —       | —   | 2.203 | 56.0  | 1.875 | 47.6 | 1.000         | 25.4                | 25   | 25   |
| STP196248A         | —              | —        | STP196248B        | —       | —   | 2.480 | 63.0  | 1.968 | 50.0 | 1.000         | 25.4                | 25   | —    |
| STP212252A         | STP212252      | Yellow   | STP212252B        | —       | —   | 2.500 | 63.5  | 2.125 | 54.0 | 1.000         | 25.4                | 25   | 25   |
| STP228267A         | —              | —        | STP228267B        | —       | —   | 2.677 | 68.0  | 2.283 | 58.0 | 1.000         | 25.4                | 25   | —    |
| STP244295A         | —              | —        | STP244295B        | —       | —   | 2.953 | 75.0  | 2.440 | 62.0 | 1.377         | 35.0                | 25   | —    |
| STP295354A         | —              | —        | STP295354B        | —       | —   | 3.543 | 90.0  | 2.953 | 75.0 | 1.535         | 39.0                | 25   | —    |
| STP326405A         | —              | —        | STP326405B        | —       | —   | 4.055 | 103.0 | 3.267 | 83.0 | 1.535         | 39.0                | 20   | —    |
| STP354500A         | —              | —        | STP354500B        | —       | —   | 5.000 | 127.0 | 3.543 | 90.0 | 1.968         | 50.0                | 10   | —    |



# HIGH TEMPERATURE PLUGS

## EFTP Series Tapered Paper Plugs



**Specifications:**

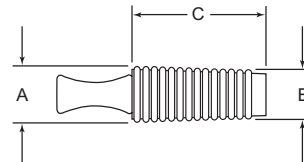
- Temp Range: 400°F/205°C
- Color: Tan

**Features:**

- Environmentally friendly masking solution: recyclable
- Made of a blend of post consumer and virgin materials
- Paper does not promote condensation
- Economical solution compared to rubber and silicone products
- Applications: painting or powder coating
- Paper is hygroscopic, meaning there will be minor dimensional variations with changes in humidity
- Dimensional tolerances: A typically +/- 0.010" (0.25mm), B typically +/- 0.025" (0.63mm), C & D typically +/- 0.050" (1.27mm)

| Item No.    | NPT Size | UNC Size      | A    |      | B    |      | C    |      | D    |       | Bulk Pack Qty |
|-------------|----------|---------------|------|------|------|------|------|------|------|-------|---------------|
|             |          |               | In   | mm   | In   | mm   | In   | mm   | In   | mm    |               |
| EFTP035042A | 1/8"     | 7/16 - 14     | 0.35 | 9.0  | 0.42 | 10.5 | 0.34 | 8.7  | 0.56 | 14.3  | 30000         |
| EFTP037047A | —        | 1/2 - 13      | 0.37 | 9.4  | 0.47 | 11.9 | 0.36 | 9.1  | 0.63 | 16.0  | 22000         |
| EFTP046050A | 1/4"     | 9/16 - 12     | 0.46 | 11.7 | 0.50 | 12.8 | 0.36 | 9.2  | 0.68 | 17.4  | 18000         |
| EFTP047057A | —        | 5/8 - 11      | 0.47 | 11.9 | 0.57 | 14.6 | 0.42 | 1.6  | 0.76 | 19.3  | 13500         |
| EFTP052064A | —        | 3/4 - 10      | 0.52 | 13.2 | 0.64 | 16.1 | 0.42 | 1.7  | 0.87 | 22.1  | 9000          |
| EFTP058070A | 3/8"     | —             | 0.58 | 14.7 | 0.70 | 17.7 | 0.48 | 12.2 | 0.87 | 22.0  | 16000         |
| EFTP065078A | —        | 7/8 - 10      | 0.65 | 16.5 | 0.78 | 19.7 | 0.45 | 11.5 | 1.01 | 25.5  | 13000         |
| EFTP068082A | 1/2"     | —             | 0.68 | 17.2 | 0.82 | 20.8 | 0.53 | 13.5 | 1.04 | 26.3  | 10500         |
| EFTP078088A | —        | —             | 0.78 | 19.8 | 0.88 | 22.3 | 0.58 | 14.8 | 1.18 | 30.0  | 7200          |
| EFTP086095A | —        | 1-8           | 0.86 | 21.8 | 0.95 | 24.1 | 0.69 | 17.5 | 1.29 | 32.9  | 5000          |
| EFTP092111A | 3/4"     | 1-1/8 - 7     | 0.92 | 23.3 | 1.11 | 28.3 | 0.54 | 13.8 | 1.38 | 35.0  | 6200          |
| EFTP100124A | —        | 1-3/8 - 6     | 1.00 | 25.4 | 1.24 | 31.4 | 0.76 | 19.3 | 1.53 | 38.8  | 3500          |
| EFTP118144A | 1"       | 1-1/2 - 6     | 1.18 | 29.8 | 1.44 | 36.5 | 0.64 | 16.1 | 1.73 | 44.0  | 5000          |
| EFTP136160A | —        | 1-3/4 - 5     | 1.36 | 34.6 | 1.60 | 40.7 | 0.58 | 14.6 | 1.88 | 47.8  | 4700          |
| EFTP150178A | 1-1/4"   | —             | 1.50 | 38.0 | 1.78 | 45.1 | 0.69 | 17.5 | 2.12 | 53.8  | 3000          |
| EFTP173206A | 1-1/2"   | 2 - 4-1/2     | 1.73 | 43.8 | 2.06 | 52.4 | 0.68 | 17.2 | 2.43 | 61.7  | 2700          |
| EFTP188221A | —        | 2-1/4 - 4-1/2 | 1.88 | 47.6 | 2.21 | 56.1 | 0.70 | 17.8 | 2.7  | 68.6  | 2200          |
| EFTP198230A | —        | 2-1/2 - 4     | 1.98 | 50.2 | 2.30 | 58.4 | 1.03 | 26.1 | 2.92 | 74.2  | 1200          |
| EFTP222250A | 2"       | —             | 2.22 | 56.3 | 2.50 | 63.5 | 0.64 | 16.3 | 2.93 | 74.5  | 1800          |
| EFTP264315A | 2-1/2"   | —             | 2.64 | 67.0 | 3.15 | 79.9 | 0.75 | 19.1 | 3.57 | 90.7  | 1300          |
| EFTP328360A | 3"       | —             | 3.28 | 83.2 | 3.60 | 91.4 | 0.74 | 18.7 | 4.09 | 103.9 | 1000          |

## SFP Series Flangeless Tapered Plugs



**Specifications:**

- Silicone 600°F (316°C)  
Hardness: Durometer (Shore A) 55 ± 5
- EPDM 425°F (218°C)  
Hardness: Durometer (Shore A) 50 ± 5
- Color: See Table

**Features:**

- Protects threaded or unthreaded holes without masking the surrounding areas
- Ergonomically-friendly pull tab allows for easy installation and removal
- Silicone: premium masking material (due to high temperature rating) can be used multiple times
- EPDM: reusable, economical material with slightly reduced heat resistance, but superior chemical resistance
- Applications: Powder Coating, E-Coating, Plating and Anodizing
- For TPR version, see page 49



| Item No.     | Plug Threads       |              | A   |       | B    |       | C    |     | Bulk Pack Qty |      |
|--------------|--------------------|--------------|-----|-------|------|-------|------|-----|---------------|------|
|              | Silicone (Natural) | EPDM (Black) | UN  | M     | In   | mm    | In   | mm  |               |      |
| SFP157236A   | SFP157236B         | #10 and #12  | M4  | 0.236 | 6.0  | 0.157 | 4.0  | 1.0 | 25.4          | 1000 |
| SFP236315A   | SFP236315D         | 1/4 and 5/16 | M6  | 0.315 | 8.0  | 0.236 | 6.0  | 1.0 | 25.4          | 1000 |
| SFP315394A   | SFP315394C         | 3/8          | M8  | 0.394 | 10.0 | 0.315 | 8.0  | 1.0 | 25.4          | 1000 |
| SFP188415A   | SFP188415B         | —            | —   | 0.415 | 10.5 | 0.188 | 4.8  | 1.0 | 25.4          | 1000 |
| SFP394472A   | SFP394472C         | 7/16         | M10 | 0.472 | 12.0 | 0.394 | 10.0 | 1.0 | 25.4          | 500  |
| SFP472551A   | SFP472551B         | 1/2          | M12 | 0.551 | 14.0 | 0.472 | 12.0 | 1.0 | 25.4          | 500  |
| SFP551630A   | SFP551630C         | 5/8          | M14 | 0.630 | 16.0 | 0.551 | 14.0 | 1.0 | 25.4          | 200  |
| SFP415641A   | SFP415641B         | —            | —   | 0.641 | 16.3 | 0.415 | 10.5 | 1.0 | 25.4          | 500  |
| SFP630709A   | SFP630709C         | 11/16        | M16 | 0.709 | 18.0 | 0.630 | 16.0 | 1.0 | 25.4          | 200  |
| SFP709787A   | SFP709787C         | 3/4          | M18 | 0.787 | 20.0 | 0.709 | 18.0 | 1.0 | 25.4          | 200  |
| SFP641868A   | SFP641868B         | —            | —   | 0.868 | 22.1 | 0.641 | 16.3 | 1.0 | 25.4          | 200  |
| SFP787886A   | SFP787886B         | 7/8          | M20 | 0.886 | 22.5 | 0.787 | 20.0 | 1.0 | 25.4          | 200  |
| SFP886945A   | SFP886945C         | —            | —   | 0.945 | 24.0 | 0.886 | 22.5 | 1.0 | 25.4          | 200  |
| SFP9541024A  | SFP9541024B        | 1            | M24 | 1.024 | 26.0 | 0.945 | 24.0 | 1.0 | 25.4          | 100  |
| SFP8681094A  | SFP8681094B        | —            | —   | 1.094 | 27.8 | 0.868 | 22.1 | 1.0 | 25.4          | 100  |
| SFP10241102A | SFP10241102C       | —            | M25 | 1.102 | 28.0 | 1.024 | 26.0 | 1.0 | 25.4          | 100  |
| SFP10001125A | SFP10001125B       | —            | —   | 1.125 | 28.5 | 1.000 | 25.4 | 1.0 | 25.4          | 100  |
| SFP10941320A | SFP10941320B       | —            | —   | 1.320 | 33.5 | 1.094 | 27.8 | 1.0 | 25.4          | 100  |
| SFP11251250A | SFP11251250B       | 1-1/8        | —   | 1.250 | 31.8 | 1.125 | 28.6 | 1.0 | 25.4          | 100  |
| SFP13201547A | SFP13201547B       | 1-1/2        | —   | 1.547 | 39.3 | 1.320 | 33.5 | 1.0 | 25.4          | 100  |
| SFP15471774A | SFP15471774B       | 1-3/4        | —   | 1.774 | 45.1 | 1.547 | 39.3 | 1.0 | 25.4          | 50   |
| SFP17742000A | SFP17742000B       | 2            | M45 | 2.000 | 50.8 | 1.774 | 45.1 | 1.0 | 25.4          | 50   |

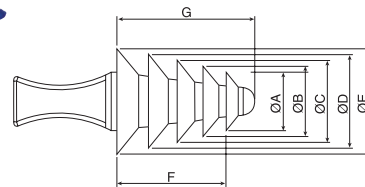
# HIGH TEMPERATURE PLUGS



## Multi-Flanged Plugs

Specifications:

- Silicone 600°F (315°C)
- Hardness: Durometer (Shore A) 60 ± 5
- Color: See Table



Features:

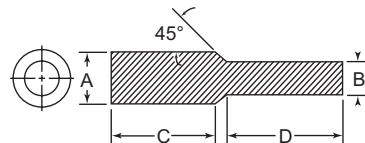
- Multi-Flange plugs are designed to mask plain or threaded holes
- Part will mask off the hole while allowing painting up to the hole
- Can fit into a range of holes due to the flexible fin design
- Parts are reusable
- Applications: Powder Coating, E-Coating, Plating and Anodizing

| Item No. | Color     | A     |      | B     |      | C     |      | D     |      | E     |      | F     |      | G     |      | Bulk Pack Qty |
|----------|-----------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|---------------|
|          |           | in    | mm   | in    | mm   | in    | mm   | in    | mm   | in    | mm   | in    | mm   | in    | mm   |               |
| 1426291  | Blue      | 0.157 | 4.0  | 0.236 | 6.0  | 0.315 | 8.0  | 0.394 | 10.0 | —     | —    | 0.419 | 10.6 | 0.535 | 13.6 | 500           |
| 1426293  | Rusty Red | 0.315 | 8.0  | 0.394 | 10.0 | 0.472 | 12.0 | 0.551 | 14.0 | 0.630 | 16.0 | 0.748 | 19.0 | 0.925 | 23.5 | 200           |
| 1426295  | Green     | 0.394 | 10.0 | 0.472 | 12.0 | 0.551 | 14.0 | 0.630 | 16.0 | 0.709 | 18.0 | 0.748 | 19.0 | 0.945 | 24.0 | 200           |

## SPP Series Straight Pull Plugs for Thru Holes

Specifications:

- Natural Silicone 600°F (315°C)  
Hardness: Durometer (Shore A) 55 ± 5
- Black EPDM 425°F (218°C)  
Hardness: Durometer (Shore A) 50 ± 5
- Color: See Table



Features:

- Used to mask threaded or non-threaded through holes
- Used by pulling the thin end through the hole, stretching the larger end through the hole then releasing to let it compress and make a tight seal
- Silicone: premium masking material (due to high temperature and chemical resistance) can be used multiple times
- EPDM: reusable, economical material with slightly reduced heat resistance, but superior chemical resistance
- Applications: Powder Coating, E-Coating, Plating and Anodizing



### To Assure Proper Fit:

Plugs

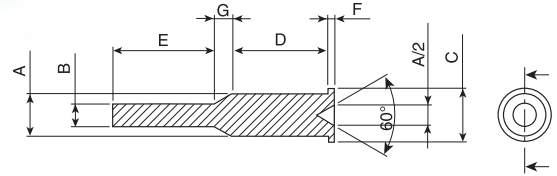
"A" dimension (major I.D.) must be about 4–10% larger than the thru hole to be plugged as the material will stretch during installation for easy insertion

| Item No. | Fits Through Holes |              |               | A         |           | B     |      | C     |      | D     |      | Bulk Pack Qty |      |      |
|----------|--------------------|--------------|---------------|-----------|-----------|-------|------|-------|------|-------|------|---------------|------|------|
|          | Silicone (Natural) | EPDM (Black) | Unthreaded ID | UN Thread | M Threads | in    | mm   | in    | mm   | in    | mm   |               |      |      |
| SPP0062A | SPP0062B           | —            | —             | 0-80      | —         | 0.062 | 1.6  | 0.047 | 1.2  | 0.375 | 9.5  | 0.337         | 8.6  | 1000 |
| SPP0067A | SPP0067B           | —            | —             | —         | —         | 0.067 | 1.7  | 0.047 | 1.2  | 0.625 | 15.9 | 0.610         | 15.5 | 1000 |
| SPP0073A | SPP0073C           | 1/16         | —             | —         | M2        | 0.073 | 1.9  | 0.047 | 1.2  | 0.612 | 15.5 | 0.590         | 15.0 | 1000 |
| SPP0091A | SPP0091C           | —            | —             | —         | —         | 0.091 | 2.3  | 0.062 | 1.6  | 0.625 | 15.9 | 0.625         | 15.9 | 1000 |
| SPP0093A | SPP0093B           | —            | —             | 2-56      | —         | 0.093 | 2.4  | 0.062 | 1.6  | 0.700 | 17.8 | 0.700         | 17.8 | 1000 |
| SPP0105A | SPP0105C           | —            | —             | —         | M3        | 0.105 | 2.7  | 0.070 | 1.8  | 1.000 | 25.4 | 1.000         | 25.4 | 1000 |
| SPP0109A | SPP0109C           | —            | —             | 4-40      | —         | 0.109 | 2.8  | 0.062 | 1.6  | 1.000 | 25.4 | 1.000         | 25.4 | 1000 |
| SPP0118A | SPP0118C           | —            | —             | —         | —         | 0.118 | 3.0  | 0.082 | 2.1  | 1.000 | 25.4 | 1.000         | 25.4 | 1000 |
| SPP0125A | SPP0125B           | —            | —             | —         | —         | 0.125 | 3.2  | 0.082 | 2.1  | 0.625 | 15.9 | 0.625         | 15.9 | 500  |
| SPP0130A | SPP0130B           | 1/8          | —             | 6-32      | —         | 0.130 | 3.3  | 0.082 | 2.1  | 0.650 | 16.5 | 0.700         | 17.8 | 1000 |
| SPP0140A | SPP0140C           | —            | —             | —         | M4        | 0.140 | 3.6  | 0.082 | 2.1  | 0.625 | 15.9 | 0.558         | 14.2 | 500  |
| SPP0154A | SPP0154B           | —            | —             | —         | —         | 0.154 | 3.9  | 0.082 | 2.1  | 0.632 | 16.1 | 0.625         | 15.9 | 500  |
| SPP0156A | SPP0156B           | —            | —             | 8-32      | —         | 0.156 | 4.0  | 0.082 | 2.1  | 0.625 | 15.9 | 0.610         | 15.5 | 1000 |
| SPP0158A | SPP0158C           | —            | —             | —         | —         | 0.158 | 4.0  | 0.093 | 2.4  | 1.250 | 31.8 | 1.250         | 31.8 | 500  |
| SPP0162A | SPP0162C           | —            | —             | —         | —         | 0.162 | 4.1  | 0.093 | 2.4  | 0.625 | 15.9 | 0.581         | 14.8 | 1000 |
| SPP0187A | SPP0187C           | —            | —             | —         | —         | 0.187 | 4.7  | 0.110 | 2.8  | 0.625 | 15.9 | 0.600         | 15.2 | 1000 |
| SPP0195A | SPP0195B           | —            | —             | 10-32     | M5        | 0.195 | 5.0  | 0.110 | 2.8  | 0.625 | 15.9 | 0.625         | 15.9 | 500  |
| SPP0197A | SPP0197C           | —            | —             | —         | —         | 0.197 | 5.0  | 0.110 | 2.8  | 1.000 | 25.4 | 1.000         | 25.4 | 500  |
| SPP0218A | SPP0218C           | 3/16         | —             | 1/4-20    | M6        | 0.218 | 5.5  | 0.110 | 2.8  | 1.000 | 25.4 | 1.000         | 25.4 | 1000 |
| SPP0225A | SPP0225B           | —            | —             | —         | —         | 0.225 | 5.7  | 0.125 | 3.2  | 1.000 | 25.4 | 1.000         | 25.4 | 500  |
| SPP0257A | SPP0257B           | 1/4          | —             | —         | —         | 0.257 | 6.5  | 0.130 | 3.3  | 1.000 | 25.4 | 1.000         | 25.4 | 500  |
| SPP0275A | SPP0275C           | —            | —             | 5/16-18   | M8        | 0.275 | 7.0  | 0.130 | 3.3  | 0.937 | 23.8 | 0.920         | 23.4 | 200  |
| SPP0281A | SPP0281C           | —            | —             | —         | —         | 0.281 | 7.1  | 0.138 | 3.5  | 1.000 | 25.4 | 0.920         | 23.4 | 200  |
| SPP0312A | SPP0312C           | —            | —             | —         | —         | 0.312 | 7.9  | 0.147 | 3.7  | 1.250 | 31.8 | 1.250         | 31.8 | 200  |
| SPP0332A | SPP0332B           | 5/16         | —             | —         | —         | 0.332 | 8.4  | 0.250 | 6.4  | 0.757 | 19.2 | 1.100         | 27.9 | 200  |
| SPP0335A | SPP0335C           | —            | —             | —         | —         | 0.335 | 8.5  | 0.157 | 4.0  | 1.000 | 25.4 | 1.000         | 25.4 | 200  |
| SPP0350A | SPP0350C           | —            | —             | 3/8-16    | —         | 0.350 | 8.9  | 0.157 | 4.0  | 0.881 | 22.4 | 0.925         | 23.5 | 500  |
| SPP0388A | SPP0388B           | 3/8          | —             | —         | M10       | 0.388 | 9.9  | 0.157 | 4.0  | 1.000 | 25.4 | 1.000         | 25.4 | 200  |
| SPP0400A | SPP0400C           | —            | —             | —         | —         | 0.400 | 10.2 | 0.191 | 4.9  | 1.009 | 25.6 | 1.000         | 25.4 | 200  |
| SPP0414A | SPP0414B           | —            | —             | —         | —         | 0.414 | 10.5 | 0.157 | 4.0  | 0.525 | 13.3 | 0.755         | 19.2 | 200  |
| SPP0440A | SPP0440B           | —            | —             | —         | —         | 0.440 | 11.2 | 0.255 | 6.5  | 1.000 | 25.4 | 0.990         | 25.2 | 200  |
| SPP0445A | SPP0445C           | 7/16         | —             | 1/2-13    | M12       | 0.445 | 11.3 | 0.157 | 4.0  | 1.000 | 25.4 | 1.000         | 25.4 | 200  |
| SPP0468A | SPP0468C           | —            | —             | 1/2-20    | —         | 0.468 | 11.9 | 0.250 | 6.4  | 1.000 | 25.4 | 1.000         | 25.4 | 250  |
| SPP0500A | SPP0500B           | —            | —             | —         | —         | 0.500 | 12.7 | 0.250 | 6.4  | 1.000 | 25.4 | 1.000         | 25.4 | 200  |
| SPP0510A | SPP0510B           | 1/2          | —             | —         | —         | 0.510 | 13.0 | 0.250 | 6.4  | 1.000 | 25.4 | 0.956         | 24.3 | 200  |
| SPP0530A | SPP0530B           | —            | —             | 5/8-11    | M14       | 0.530 | 13.5 | 0.250 | 6.4  | 1.000 | 25.4 | 1.000         | 25.4 | 200  |
| SPP0612A | SPP0612B           | —            | —             | —         | —         | 0.612 | 15.5 | 0.250 | 6.4  | 1.000 | 25.4 | 1.000         | 25.4 | 200  |
| SPP0640A | SPP0640C           | 5/8          | —             | 3/4-10    | —         | 0.640 | 16.3 | 0.375 | 9.5  | 1.000 | 25.4 | 1.000         | 25.4 | 100  |
| SPP0700A | SPP0700C           | 11/16        | —             | —         | —         | 0.700 | 17.8 | 0.375 | 9.5  | 1.250 | 31.8 | 1.326         | 33.7 | 100  |
| SPP0770A | SPP0770C           | 3/4          | —             | —         | M20       | 0.770 | 19.6 | 0.375 | 9.5  | 1.000 | 25.4 | 0.927         | 23.6 | 100  |
| SPP0896A | SPP0896B           | 7/8          | —             | —         | —         | 0.896 | 22.8 | 0.375 | 9.5  | 1.000 | 25.4 | 1.000         | 25.4 | 100  |
| SPP1020A | SPP1020B           | 1            | —             | —         | —         | 1.020 | 25.9 | 0.375 | 9.5  | 1.000 | 25.4 | 0.970         | 24.6 | 100  |
| SPP1380A | SPP1380B           | 1-3/8        | —             | —         | —         | 1.380 | 35.1 | 0.500 | 12.7 | 1.000 | 25.4 | 1.000         | 25.4 | 100  |



## HIGH TEMPERATURE PLUGS

## Flanged Pull Plugs



## Specifications:

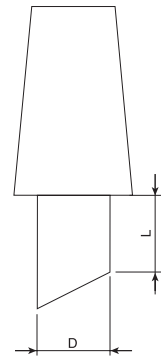
- Silicone 600°F (315°C)
- Hardness: Durometer (Shore A) 40 ± 5
- Color: See Table

## Features:

- Flanged Pull Plugs are designed to mask plain or threaded holes
- Different color per size allows color coding product for easy identification
- Parts are reusable
- Applications: Ideal for Powder Coating, E-Coating, Plating and Anodizing

| Item No. | Color     | A     |      | B     |     | C     |      | D     |      | E     |      | F     |     | G     |     | Bulk Pack Qty |
|----------|-----------|-------|------|-------|-----|-------|------|-------|------|-------|------|-------|-----|-------|-----|---------------|
|          |           | in    | mm   | in    | mm  | in    | mm   | in    | mm   | in    | mm   | in    | mm  | in    | mm  |               |
| 1426297  | Red       | 0.173 | 4.4  | 0.098 | 2.5 | 0.250 | 6.4  | 1.000 | 25.4 | 1.000 | 25.4 | 0.060 | 1.5 | 0.025 | 0.6 | 500           |
| 1426299  | Blue      | 0.218 | 5.5  | 0.125 | 3.2 | 0.340 | 8.6  | 1.000 | 25.4 | 1.031 | 26.2 | 0.070 | 1.8 | 0.068 | 1.7 | 500           |
| 1426301  | Grey      | 0.230 | 5.8  | 0.125 | 3.2 | 0.350 | 8.9  | 1.000 | 25.4 | 1.031 | 26.2 | 0.070 | 1.8 | 0.099 | 2.5 | 500           |
| 1426303  | Yellow    | 0.285 | 7.2  | 0.160 | 4.1 | 0.400 | 10.2 | 1.000 | 25.4 | 1.062 | 27.0 | 0.070 | 1.8 | 0.098 | 2.5 | 500           |
| 1426305  | Orange    | 0.335 | 8.5  | 0.160 | 4.1 | 0.460 | 11.7 | 1.000 | 25.4 | 1.031 | 26.2 | 0.070 | 1.8 | 0.128 | 3.3 | 500           |
| 1426307  | Pink      | 0.350 | 8.9  | 0.187 | 4.7 | 0.473 | 12.0 | 1.000 | 25.4 | 1.062 | 27.0 | 0.070 | 1.8 | 0.148 | 3.8 | 500           |
| 1426309  | Green     | 0.420 | 10.7 | 0.235 | 6.0 | 0.540 | 13.7 | 1.000 | 25.4 | 1.062 | 27.0 | 0.070 | 1.8 | 0.168 | 4.3 | 250           |
| 1426311  | Purple    | 0.445 | 11.3 | 0.240 | 6.1 | 0.560 | 14.2 | 1.000 | 25.4 | 1.062 | 27.0 | 0.070 | 1.8 | 0.190 | 4.8 | 250           |
| 1426313  | White     | 0.490 | 12.4 | 0.255 | 6.5 | 0.610 | 15.5 | 1.000 | 25.4 | 1.000 | 25.4 | 0.078 | 2.0 | 0.118 | 3.0 | 250           |
| 1426315  | Grey      | 0.518 | 13.2 | 0.256 | 6.5 | 0.636 | 16.2 | 1.000 | 25.4 | 1.000 | 25.4 | 0.071 | 1.8 | 0.215 | 5.5 | 250           |
| 1426317  | Rusty Red | 0.545 | 13.8 | 0.275 | 7.0 | 0.663 | 16.8 | 1.000 | 25.4 | 1.000 | 25.4 | 0.071 | 1.8 | 0.138 | 3.5 | 250           |
| 1426319  | Red       | 0.580 | 14.7 | 0.295 | 7.5 | 0.700 | 17.8 | 1.000 | 25.4 | 1.000 | 25.4 | 0.071 | 1.8 | 0.142 | 3.6 | 250           |

## Sloping Edge Plugs



## Specifications:

- Silicone 600°F (315°C)
- Hardness: Durometer (Shore A) 55 ± 5
- Color: See Table

## Features:

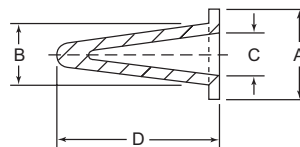
- Used to mask metric threaded holes
- Place the sloping end of the plug into the appropriate threaded hole; once centered and located, screw the plug down into place until the whole thread is filled
- Easy removal by pulling on protruding plug
- Used to mask blind holes with limited access to the reverse side
- Parts are reusable
- Applications: Powder Coating, E-Coating, Plating and Anodizing

| Item No. | Color  | Fits Threaded Hole | D    |      | L    |      | Bulk Pack Qty |
|----------|--------|--------------------|------|------|------|------|---------------|
|          |        |                    | mm   | mm   | mm   | mm   |               |
| 1426343  | Blue   | M3                 | 2.5  | 5.0  | 5.0  | 1000 |               |
| 1426345  | Yellow | M4                 | 3.4  | 6.7  | 6.7  | 1000 |               |
| 1426347  | Black  | M5                 | 4.3  | 7.5  | 7.5  | 1000 |               |
| 1426349  | Green  | M6                 | 5.1  | 7.5  | 7.5  | 1000 |               |
| 1426351  | Orange | M8                 | 6.9  | 10.0 | 10.0 | 500  |               |
| 1426353  | Blue   | M10                | 8.5  | 13.0 | 13.0 | 500  |               |
| 1426355  | Grey   | M12                | 10.5 | 14.5 | 14.5 | 250  |               |

# HIGH TEMPERATURE PLUGS



## SCON Series Tapered Flexible Cone Plugs



**Specifications:**

- Natural Silicone 600°F (316°C)  
Hardness: Durometer (Shore A) 55 ± 5
- Black EPDM 425°F (218°C)  
Hardness: Durometer (Shore A) 50 ± 5

See pages 86 and 87 for Application Wizards

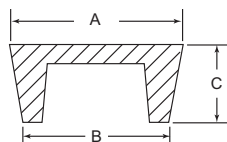
**Features:**

- The tapered cone design allows the part to plug multiple inner diameter or cap multiple outside diameters
- Silicone: premium masking material (due to high temperature rating) can be used multiple times
- EPDM: reusable, economical material with slightly reduced heat resistance, but superior chemical resistance
- Applications: Powder Coating, E-Coating, Plating and Anodizing



| Item No.           |              | A     |      | B     |      | C     |      | D     |      | Bulk Pack Qty |
|--------------------|--------------|-------|------|-------|------|-------|------|-------|------|---------------|
| Silicone (Natural) | EPDM (Black) | in    | mm   | in    | mm   | in    | mm   | in    | mm   |               |
| SCON250130A        | SCON250130B  | 0.500 | 12.7 | 0.250 | 6.3  | 0.130 | 3.3  | 0.906 | 23.0 | 1000          |
| SCON316216A        | SCON316216B  | 0.500 | 12.7 | 0.316 | 8.0  | 0.216 | 5.5  | 1.000 | 25.4 | 1000          |
| SCON335177A        | SCON335177C  | 0.625 | 15.9 | 0.335 | 8.5  | 0.177 | 4.5  | 1.000 | 25.4 | 1000          |
| SCON394197A        | SCON394197B  | 0.650 | 16.5 | 0.394 | 10.0 | 0.197 | 5.0  | 1.102 | 27.0 | 1000          |
| SCON400230A        | SCON400230B  | 0.635 | 16.1 | 0.400 | 10.2 | 0.230 | 5.8  | 1.100 | 27.9 | 1000          |
| SCON551315A        | SCON551315C  | 0.750 | 19.1 | 0.551 | 13.0 | 0.315 | 8.0  | 1.417 | 35.0 | 1000          |
| SCON689453A        | SCON689453C  | 0.980 | 24.9 | 0.689 | 17.5 | 0.453 | 11.5 | 1.500 | 38.1 | 250           |
| SCON767532A        | SCON767532B  | 1.100 | 27.9 | 0.767 | 19.5 | 0.532 | 13.5 | 2.009 | 51.0 | 200           |
| SCON819583A        | SCON819583C  | 1.000 | 25.4 | 0.819 | 20.8 | 0.583 | 14.8 | 1.929 | 48.0 | 200           |
| SCON866630A        | SCON866630C  | 1.220 | 30.0 | 0.866 | 21.0 | 0.630 | 16.0 | 2.087 | 53.0 | 200           |

## HSTP Series Hollow Tapered Masking Plugs



**Specifications:**

- Natural Silicone 600°F (316°C)  
Hardness: Durometer (Shore A) 55 ± 5
- Black EPDM 425°F (218°C)  
Durometer (Shore A) 50 ± 5

**Features:**

- Plugs threaded or unthreaded holes
- Hollow cores provide economical solution for large diameter holes
- Hollow core aids compression for improved sealing
- Silicone: premium masking material (due to high temperature rating) can be used multiple times
- EPDM: reusable, economical material with slightly reduced heat resistance, but superior chemical resistance
- Applications: Powder Coating, E-Coating, Plating and Anodizing
- For non-hollow Tapered Masking Plugs see STP Series on page 74



**To Assure Proper Fit and Easy Handling:**



We suggest that you select "A" dimension to be approximately 15% larger than the hole diameter

| Item No.           |              | A     |       | B     |      | C     |      | Bulk Pack Qty |
|--------------------|--------------|-------|-------|-------|------|-------|------|---------------|
| Silicone (Natural) | EPDM (Black) | In    | mm    | In    | mm   | In    | mm   |               |
| HSTP079106A        | HSTP079106C  | 1.061 | 27.0  | 0.797 | 20.3 | 1.000 | 25.4 | 200           |
| HSTP109118A        | HSTP109118C  | 1.181 | 30.0  | 1.094 | 27.8 | 1.000 | 25.4 | 50            |
| HSTP118145A        | HSTP118145C  | 1.456 | 37.0  | 1.180 | 30.0 | 1.000 | 25.4 | 50            |
| HSTP122153A        | HSTP122153C  | 1.535 | 39.0  | 1.220 | 31.0 | 1.000 | 25.4 | 50            |
| HSTP130161A        | HSTP130161C  | 1.614 | 41.0  | 1.300 | 33.0 | 1.000 | 25.4 | 50            |
| HSTP141169A        | HSTP141169C  | 1.693 | 43.0  | 1.417 | 36.0 | 1.000 | 25.4 | 50            |
| HSTP145177A        | HSTP145177C  | 1.772 | 45.0  | 1.457 | 37.0 | 1.000 | 25.4 | 50            |
| HSTP149181A        | HSTP149181C  | 1.810 | 46.0  | 1.496 | 38.0 | 1.000 | 25.4 | 50            |
| HSTP165196A        | HSTP165196C  | 1.968 | 50.0  | 1.653 | 42.0 | 1.000 | 25.4 | 25            |
| HSTP177208A        | HSTP177208C  | 2.086 | 53.0  | 1.770 | 45.0 | 1.000 | 25.4 | 25            |
| HSTP189220A        | HSTP189220C  | 2.203 | 56.0  | 1.890 | 48.0 | 1.000 | 25.4 | 25            |
| HSTP196248A        | HSTP196248C  | 2.480 | 63.0  | 1.968 | 50.0 | 1.000 | 25.4 | 25            |
| HSTP212252A        | HSTP212252C  | 2.520 | 64.0  | 2.125 | 54.0 | 1.000 | 25.4 | 25            |
| HSTP228267A        | HSTP228267C  | 2.677 | 68.0  | 2.283 | 58.0 | 1.000 | 25.4 | 25            |
| HSTP244295A        | HSTP244295C  | 2.953 | 75.0  | 2.440 | 62.0 | 1.377 | 35.0 | 25            |
| HSTP295354A        | HSTP295354D  | 3.543 | 90.0  | 2.953 | 75.0 | 1.535 | 39.0 | 25            |
| HSTP326405A        | HSTP326405C  | 4.055 | 103.0 | 3.267 | 83.0 | 1.535 | 39.0 | 20            |
| HSTP354500A        | HSTP354500C  | 5.000 | 127.0 | 3.543 | 90.0 | 1.968 | 50.0 | 10            |



# HIGH TEMPERATURE PLUGS

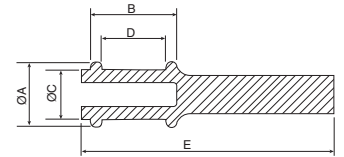
## First and Last Thread Protection Plugs

**Specifications:**

- Silicone 600°F (315°C)
- Hardness: Durometer (Shore A) 40 ± 5
- Color: See Table

**Features:**

- Designed to protect weld nuts for various metric thread sizes
- Masks off the chamfer and protects both the first turn through the last turn of threads from contamination
- Will not blow out due to air pressure
- Parts are reusable
- Applications: Powder Coating, E-Coating, Plating and Anodizing



| Item No. | Color  | Thread Size | A     |      | B     |      | C     |      | D     |      | E     |      | Bulk Pack Qty |
|----------|--------|-------------|-------|------|-------|------|-------|------|-------|------|-------|------|---------------|
|          |        |             | in    | mm   | in    | mm   | in    | mm   | in    | mm   | in    | mm   |               |
| 1426321  | Black  | M5          | 0.273 | 6.9  | 0.369 | 9.4  | 0.160 | 4.1  | 0.245 | 6.2  | 1.657 | 42.1 | 500           |
| 1426323  | Green  | M6          | 0.307 | 7.8  | 0.404 | 10.3 | 0.197 | 5.0  | 0.265 | 6.7  | 1.164 | 29.6 | 500           |
| 1426325  | Red    | M8          | 0.374 | 9.5  | 0.455 | 11.6 | 0.264 | 6.7  | 0.315 | 8.0  | 1.218 | 30.9 | 500           |
| 1426327  | Green  | M10         | 0.445 | 11.3 | 0.494 | 12.5 | 0.335 | 8.5  | 0.354 | 9.0  | 1.254 | 31.9 | 500           |
| 1426329  | Purple | M12         | 0.512 | 13.0 | 0.597 | 15.2 | 0.406 | 10.3 | 0.457 | 11.6 | 1.612 | 40.9 | 250           |
| 1426331  | White  | M16         | 0.685 | 17.4 | 0.690 | 17.5 | 0.535 | 13.6 | 0.550 | 14.0 | 1.880 | 47.8 | 100           |
| 1426333  | Blue   | M20         | 0.827 | 21.0 | 0.850 | 21.6 | 0.669 | 17.0 | 0.709 | 18.0 | 2.162 | 54.9 | 100           |

## SPFT Series

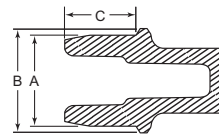
### First-Thread Protection Plugs

**Specifications:**

- Natural Silicone 600°F (316°C)  
Hardness: Durometer (Shore A) 55 ± 5
- Black EPDM 425°F (218°C)  
Hardness: Durometer (Shore A) 50 ± 5

**Features:**

- Provides masking to the first thread of standard female threads
- Ergonomically-friendly pull tab for simple installation and removal
- Silicone: premium masking material (due to high temperature rating) can be used multiple times
- EPDM: reusable, economical material with slightly reduced heat resistance, but superior chemical resistance
- Applications: Powder Coating, E-Coating, Plating and Anodizing



See pages 86 and 87 for Application Wizards

| Item No.  | Thread Size |         | A   |   | B     |      | C     |      | Bulk Pack Qty |      |     |
|-----------|-------------|---------|-----|---|-------|------|-------|------|---------------|------|-----|
|           | Silicone    | EPDM    | UNC | M | in    | mm   | in    | mm   |               | in   | mm  |
| SPFT1/4A  | SPFT1/4B    | 1/4-20  | —   | — | 0.218 | 5.5  | 0.260 | 6.6  | 0.200         | 5.1  | 500 |
| SPFT5/16A | SPFT5/16B   | 5/16-18 | —   | — | 0.278 | 7.1  | 0.320 | 8.1  | 0.200         | 5.1  | 500 |
| SPFT3/8A  | SPFT3/8B    | 3/8-16  | —   | — | 0.340 | 8.6  | 0.420 | 10.7 | 0.260         | 6.6  | 250 |
| SPFT7/16A | SPFT7/16B   | 7/16-14 | —   | — | 0.392 | 10.0 | 0.440 | 11.2 | 0.350         | 8.9  | 250 |
| SPFT1/2A  | SPFT1/2B    | 1/2-13  | —   | — | 0.451 | 11.5 | 0.510 | 13.0 | 0.350         | 8.9  | 250 |
| SPFTM6A   | SPFTM6B     | —       | M6  | — | 0.208 | 5.3  | 0.248 | 6.3  | 0.197         | 5.0  | 500 |
| SPFTM8A   | SPFTM8B     | —       | M8  | — | 0.283 | 7.2  | 0.331 | 8.4  | 0.197         | 5.0  | 500 |
| SPFTM10A  | SPFTM10B    | —       | M10 | — | 0.358 | 9.1  | 0.409 | 10.4 | 0.276         | 7.0  | 250 |
| SPFTM12A  | SPFTM12B    | —       | M12 | — | 0.426 | 10.8 | 0.489 | 12.4 | 0.346         | 8.8  | 250 |
| SPFTM16A  | SPFTM16B    | —       | M16 | — | 0.570 | 14.5 | 0.670 | 17.0 | 0.450         | 11.4 | 100 |
| SPFTM20A  | SPFTM20B    | —       | M20 | — | 0.724 | 18.4 | 0.811 | 20.6 | 0.512         | 13.0 | 100 |

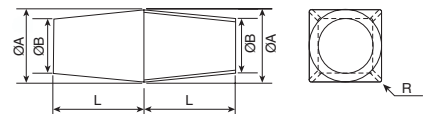
## Dual Purpose Plugs

**Specifications:**

- Silicone 600°F (315°C)
- Hardness: Durometer (Shore A) 40 ± 5
- Color: See Table

**Features:**

- Designed to plug both square or round holes and plain or threaded holes
- Will mask off the hole and allow finishing up to it
- Tapered to fit into a range of round or square hole sizes
- Parts are reusable
- Applications: Powder Coating, E-Coating, Plating and Anodizing



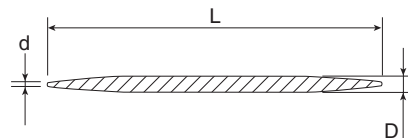
| Item No. | Color | A     |      | B     |      | L     |      | R    |     | Bulk Pack Qty |
|----------|-------|-------|------|-------|------|-------|------|------|-----|---------------|
|          |       | in    | mm   | in    | mm   | in    | mm   | in   | mm  |               |
| 1426335  | Blue  | 0.500 | 12.7 | 0.375 | 9.5  | 0.625 | 15.9 | 0.02 | 0.5 | 250           |
| 1426337  | Green | 0.625 | 15.9 | 0.500 | 12.7 | 0.750 | 19.1 | 0.02 | 0.5 | 100           |
| 1426339  | Black | 0.750 | 19.1 | 0.625 | 15.9 | 0.750 | 19.1 | 0.03 | 0.8 | 100           |
| 1426341  | Red   | 1.000 | 25.4 | 0.875 | 22.2 | 1.000 | 25.4 | 0.04 | 1.0 | 50            |



# HIGH TEMPERATURE PLUGS



## Mousetail Pull Plugs



**Specifications:**

- Silicone 600°F (315°C)
- Hardness: Durometer (Shore A) 75 ± 5
- Color: Natural

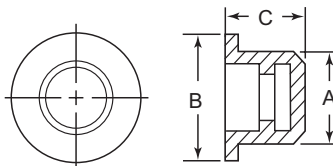
**Features:**

- Ideal for plugging small holes
- Capable of stretching to provide a leak-proof seal
- Parts are reusable
- Applications: Powder Coating, E-Coating, Plating and Anodizing



| Item No. | D     |     | d     |     | L     |      | Bulk Pack Qty |
|----------|-------|-----|-------|-----|-------|------|---------------|
|          | in    | mm  | in    | mm  | in    | mm   |               |
| 1426357  | 0.079 | 2.0 | 0.022 | 0.6 | 1.330 | 33.8 | 1000          |
| 1426359  | 0.080 | 2.0 | 0.023 | 0.6 | 2.080 | 52.8 | 1000          |
| 1426361  | 0.083 | 2.1 | 0.031 | 0.8 | 1.930 | 49.0 | 1000          |
| 1426363  | 0.100 | 2.5 | 0.031 | 0.8 | 2.080 | 52.8 | 1000          |
| 1426365  | 0.125 | 3.2 | 0.023 | 0.6 | 2.000 | 50.8 | 1000          |

## FT Series TPE Plugs



**Specifications:**

- Thermoplastic Elastomer 203°F (95°C)
- Color: Black

**Features:**

- Highly resistant to shredding
- Ideal for threaded applications
- Good resistance to acids



| Item No. | A     |       | B     |       | C     |       | Bulk Pack Qty |
|----------|-------|-------|-------|-------|-------|-------|---------------|
|          | in    | mm    | in    | mm    | in    | mm    |               |
| 18071B   | 0.125 | 3.20  | 0.276 | 7.00  | 0.354 | 9.00  | 10000         |
| 12049B   | 0.197 | 5.00  | 0.433 | 11.00 | 0.471 | 11.99 | 10000         |
| 12050B   | 0.236 | 5.99  | 0.472 | 11.99 | 0.471 | 11.99 | 10000         |
| 12051B   | 0.275 | 6.99  | 0.511 | 12.98 | 0.471 | 11.99 | 10000         |
| 12052B   | 0.315 | 8.00  | 0.551 | 14.00 | 0.471 | 11.99 | 10000         |
| 12053B   | 0.354 | 8.99  | 0.580 | 14.99 | 0.471 | 11.99 | 10000         |
| 12054B   | 0.393 | 9.98  | 0.629 | 15.98 | 0.471 | 11.99 | 10000         |
| 12055B   | 0.433 | 11.00 | 0.669 | 16.99 | 0.471 | 11.99 | 10000         |
| 12056B   | 0.472 | 11.99 | 0.787 | 19.99 | 0.471 | 11.99 | 8000          |
| 12057B   | 0.511 | 12.98 | 0.826 | 20.98 | 0.551 | 14.00 | 8000          |
| 12058B   | 0.551 | 14.00 | 0.866 | 22.00 | 0.551 | 14.00 | 6000          |
| 12059B   | 0.580 | 14.99 | 0.905 | 22.99 | 0.571 | 14.50 | 6000          |
| 12060B   | 0.630 | 16.00 | 0.945 | 24.00 | 0.551 | 14.00 | 6000          |
| FLP17A   | 0.669 | 17.00 | 1.063 | 27.00 | 0.531 | 13.50 | 4000          |
| 12062B   | 0.709 | 18.01 | 1.102 | 27.99 | 0.551 | 14.00 | 4000          |
| 12063B   | 0.748 | 19.00 | 1.142 | 29.01 | 0.551 | 14.00 | 4000          |
| 12064B   | 0.787 | 19.99 | 1.181 | 30.00 | 0.551 | 14.00 | 4000          |
| 12065B   | 0.827 | 21.01 | 1.220 | 30.99 | 0.551 | 14.00 | 3000          |
| FLP21A   | 0.879 | 22.33 | 1.260 | 32.00 | 0.551 | 14.00 | 2500          |
| 12067B   | 0.906 | 23.01 | 1.299 | 32.99 | 0.630 | 16.00 | 3000          |
| 12068B   | 0.945 | 24.00 | 1.339 | 34.01 | 0.630 | 16.00 | 2500          |
| 12069B   | 0.984 | 24.99 | 1.378 | 35.00 | 0.630 | 16.00 | 2000          |
| 12070B   | 1.024 | 26.01 | 1.417 | 35.99 | 0.630 | 16.00 | 2000          |
| 12071B   | 1.063 | 27.00 | 1.457 | 37.01 | 0.630 | 16.00 | 2000          |
| 12072B   | 1.102 | 27.99 | 1.496 | 38.00 | 0.630 | 16.00 | 2000          |
| 12073B   | 1.142 | 29.01 | 1.535 | 38.99 | 0.630 | 16.00 | 1300          |
| FLP30A   | 1.190 | 30.23 | 1.400 | 35.56 | 0.630 | 16.00 | 1500          |
| 12501B   | 1.575 | 40.01 | 1.969 | 50.01 | 0.866 | 22.00 | 700           |
| 12502B   | 1.850 | 46.99 | 2.244 | 57.00 | 0.866 | 22.00 | 500           |

**MASKING TAPES****MTK Series  
Polyimide Tapes**

## Specifications:

- Material: 1-Mil Polyimide Film with Silicone Adhesive
- 500°F (260°C)
- Color: Amber

## Features:

- Excellent heat and solvent resistance, dielectric strength (6500 volts) and highly conformable
- Cleanly removes in one piece after use
- Applications: High Temperature Processes, Powder Coating, Soldering, Electrical Insulation and PC Boards



| Item No. | Roll Width |       | Roll Length |      | Pack Qty |
|----------|------------|-------|-------------|------|----------|
|          | in         | mm    | Yds         | m    |          |
| MTK0102A | 1/4        | 6.4   | 36          | 32.9 | 1        |
| MTK0103A | 3/8        | 9.5   | 36          | 32.9 | 1        |
| MTK0105A | 1/2        | 12.7  | 36          | 32.9 | 1        |
| MTK0107A | 3/4        | 19.1  | 36          | 32.9 | 1        |
| MTK0110A | 1          | 25.4  | 36          | 32.9 | 1        |
| MTK0115A | 1 - 1/2    | 38.1  | 36          | 32.9 | 1        |
| MTK0120A | 2          | 50.8  | 36          | 32.9 | 1        |
| MTK0130A | 3          | 76.2  | 36          | 32.9 | 1        |
| MTK0140A | 4          | 101.6 | 36          | 32.9 | 1        |

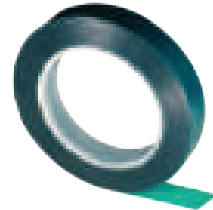
**MTP Series  
Green Polyester Tapes**

## Specifications:

- Material: 2-Mil Polyester Film with Silicone Adhesive
- 400°F (204°C)
- Color: Green

## Features:

- Excellent heat and solvent resistance
- Industry standard
- No shrinkage
- Cleanly removes in one piece after use, without leaving residue
- Applications: Powder Coating, E-Coating, Plating and Anodizing



| Item No. | Roll Width |       | Roll Length |      | Pack Qty |
|----------|------------|-------|-------------|------|----------|
|          | in         | mm    | Yds         | m    |          |
| MTP0202A | 1/4        | 6.4   | 72          | 65.8 | 1        |
| MTP0203A | 3/8        | 9.5   | 72          | 65.8 | 1        |
| MTP0205A | 1/2        | 12.7  | 72          | 65.8 | 1        |
| MTP0206A | 5/8        | 12.7  | 72          | 65.8 | 1        |
| MTP0207A | 3/4        | 19.1  | 72          | 65.8 | 1        |
| MTP0208A | 7/8        | 22.2  | 72          | 65.8 | 1        |
| MTP0210A | 1          | 25.4  | 72          | 65.8 | 1        |
| MTP0215A | 1 - 1/2    | 38.1  | 72          | 65.8 | 1        |
| MTP0220A | 2          | 50.8  | 72          | 65.8 | 1        |
| MTP0230A | 3          | 76.2  | 72          | 65.8 | 1        |
| MTP0240A | 4          | 101.6 | 72          | 65.8 | 1        |
| MTP0250A | 5          | 127.0 | 72          | 65.8 | 1        |
| MTP0260A | 6          | 152.4 | 72          | 65.8 | 1        |

**MTHC Series  
High Temperature Crepe Tapes**

## Specifications:

- Material: 7.3-Mil Crepe Tape with High Temperature Rubber Adhesive
- 325°F (163°C)
- Color: Tan

## Features:

- A thick pressure sensitive masking tape that is easy to apply and remove with clean lines
- Best removed when it is warm or hot, but can also be removed when cold
- Applications: Low Temperature Liquid and Powder Coatings



| Item No.  | Roll Width |       | Roll Length |      | Pack Qty |
|-----------|------------|-------|-------------|------|----------|
|           | in         | mm    | Yds         | m    |          |
| MTHC0025A | 1/4        | 6.4   | 60          | 54.9 | 1        |
| MTHC0037A | 3/8        | 9.5   | 60          | 54.9 | 1        |
| MTHC0050A | 1/2        | 12.7  | 60          | 54.9 | 1        |
| MTHC0062A | 5/8        | 12.7  | 60          | 54.9 | 1        |
| MTHC0075A | 3/4        | 19.1  | 60          | 54.9 | 1        |
| MTHC0087A | 7/8        | 22.2  | 60          | 54.9 | 1        |
| MTHC0100A | 1          | 25.4  | 60          | 54.9 | 1        |
| MTHC0150A | 1 - 1/2    | 38.1  | 60          | 54.9 | 1        |
| MTHC0200A | 2          | 50.8  | 60          | 54.9 | 1        |
| MTHC0250A | 2 - 1/2    | 63.5  | 60          | 54.9 | 1        |
| MTHC0300A | 3          | 76.2  | 60          | 54.9 | 1        |
| MTHC0400A | 4          | 101.6 | 60          | 54.9 | 1        |
| MTHC0500A | 5          | 127.0 | 60          | 54.9 | 1        |
| MTHC0600A | 6          | 152.4 | 60          | 54.9 | 1        |

**MASKING DISCS**



**MTPD Series  
Green Polyester Discs**

Specifications:

- Material: 2-Mil Polyester Film with 1.4 Mils of Silicone Adhesive
- Temp Rating: 400°F (204°C)
- Color: Green

Features:

- Excellent heat and solvent resistance
- Industry standard product
- No shrinkage
- Supplied with split-back liner for easy removal from roll (unless marked\*)
- Cleanly removes in one piece after use, without leaving residue
- Applications: Powder Coating, E-Coating, Plating and Anodizing



| Item No.    | Disc Diameter |          | Discs Per Roll |      |
|-------------|---------------|----------|----------------|------|
|             | in            | mm       |                |      |
| MTPD020187A | 0.187         | 3/16     | 4.75           | 5000 |
| MTPD020250A | 0.250         | 1/4      | 6.35           | 5000 |
| MTPD020312A | 0.312         | 5/16     | 7.92           | 5000 |
| MTPD020375A | 0.375         | 3/8      | 9.53           | 5000 |
| MTPD020406A | 0.406         | 13/32    | 10.31          | 5000 |
| MTPD020437A | 0.437         | 7/16     | 11.10          | 5000 |
| MTPD020500A | 0.500         | 1/2      | 12.70          | 2500 |
| MTPD020562A | 0.562         | 9/16     | 14.27          | 2500 |
| MTPD020625A | 0.625         | 5/8      | 15.88          | 2000 |
| MTPD020687A | 0.687         | 11/16    | 17.45          | 2000 |
| MTPD020750A | 0.750         | 3/4      | 19.05          | 2000 |
| MTPD020781A | 0.781         | 25/32    | 19.84          | 4000 |
| MTPD020787A | 0.787         | —        | 20.00          | 4000 |
| MTPD020812B | 0.812         | 13/16    | 20.63          | 1000 |
| MTPD020875A | 0.875         | 7/8      | 22.23          | 2000 |
| MTPD020937A | 0.937         | 15/16    | 23.80          | 2000 |
| MTPD021000A | 1.000         | 1        | 25.40          | 2000 |
| MTPD021062A | 1.062         | 1 - 1/16 | 26.95          | 2000 |
| MTPD021125A | 1.125         | 1 - 1/8  | 28.58          | 1000 |
| MTPD021188A | 1.188         | 1 - 3/16 | 30.18          | 1000 |
| MTPD021250A | 1.250         | 1 - 1/4  | 31.75          | 1000 |

| Item No.     | Disc Diameter |          | Discs Per Roll |      |
|--------------|---------------|----------|----------------|------|
|              | in            | mm       |                |      |
| MTPD021312A  | 1.312         | 1 - 5/16 | 33.32          | 1000 |
| MTPD021375A  | 1.375         | 1 - 3/8  | 34.93          | 1000 |
| MTPD021500A  | 1.500         | 1 - 1/2  | 38.10          | 1000 |
| MTPD021562A* | 1.562         | 1 - 9/16 | 39.67          | 1000 |
| MTPD021625A  | 1.625         | 1 - 5/8  | 41.28          | 1000 |
| MTPD021750A  | 1.750         | 1 - 3/4  | 44.45          | 1000 |
| MTPD021875A  | 1.875         | 1 - 7/8  | 47.63          | 1000 |
| MTPD022000A  | 2.000         | 2        | 50.80          | 500  |
| MTPD022125A  | 2.125         | 2 - 1/8  | 53.98          | 500  |
| MTPD022250A  | 2.250         | 2 - 1/4  | 57.15          | 500  |
| MTPD022375A  | 2.375         | 2 - 3/8  | 60.33          | 500  |
| MTPD022500A  | 2.500         | 2 - 1/2  | 63.50          | 500  |
| MTPD022750A  | 2.750         | 2 - 3/4  | 69.85          | 500  |
| MTPD023000A  | 3.000         | 3        | 76.20          | 500  |
| MTPD023250A  | 3.250         | 3 - 1/4  | 82.55          | 500  |
| MTPD023500A  | 3.500         | 3 - 1/2  | 88.90          | 500  |
| MTPD023625A  | 3.625         | 3 - 5/8  | 92.08          | 500  |
| MTPD023750A  | 3.750         | 3 - 3/4  | 95.25          | 100  |
| MTPD024000A  | 4.000         | 4        | 101.60         | 250  |
| MTPD025000A  | 5.000         | 5        | 127.00         | 250  |
| MTPD026000A  | 6.000         | 6        | 152.40         | 250  |

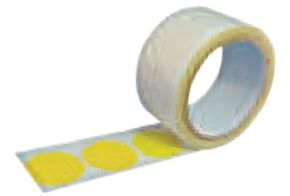
**MTHCD Series  
High Temperature Crepe Discs**

Specifications:

- Material: 7.3-Mil Crepe Tape with High-Temperature Rubber Adhesive
- Temperature Rating: 325°F (163°C)
- Color: Tan

Features:

- A thick pressure sensitive masking tape that is easy to apply and remove with clean lines
- Best removed when warm or hot, but can be removed when cold
- Applications: low-temperature paints and powder coatings



| Item No.   | Disc Diameter |         | Discs Per Roll |      |
|------------|---------------|---------|----------------|------|
|            | in            | mm      |                |      |
| MTHCD0250A | 0.250         | 1/4     | 6.35           | 5000 |
| MTHCD0375A | 0.375         | 3/8     | 9.53           | 5000 |
| MTHCD0500A | 0.500         | 1/2     | 12.70          | 5000 |
| MTHCD0625A | 0.625         | 5/8     | 15.88          | 5000 |
| MTHCD0750A | 0.750         | 3/4     | 19.05          | 4000 |
| MTHCD0875A | 0.875         | 7/8     | 22.23          | 2000 |
| MTHCD1000A | 1.000         | 1       | 25.40          | 2000 |
| MTHCD1125A | 1.125         | 1 - 1/8 | 28.58          | 2000 |

| Item No.   | Disc Diameter |         | Discs Per Roll |      |
|------------|---------------|---------|----------------|------|
|            | in            | mm      |                |      |
| MTHCD1250A | 1.250         | 1 - 1/4 | 31.75          | 2000 |
| MTHCD1375A | 1.375         | 1 - 3/8 | 34.93          | 2000 |
| MTHCD1500A | 1.500         | 1 - 1/2 | 38.10          | 2000 |
| MTHCD1625A | 1.625         | 1 - 5/8 | 41.28          | 1000 |
| MTHCD1750A | 1.750         | 1 - 3/4 | 44.45          | 1000 |
| MTHCD1875A | 1.875         | 1 - 7/8 | 47.63          | 1000 |
| MTHCD2000A | 2.000         | 2       | 50.80          | 500  |

**MTKD Series  
Polyimide Discs**

Specifications:

- Material: 1-Mil Polyimide Film with Silicone Adhesive
- Temperature Rating: 500°F (260°C)
- Color: Amber

Features:

- Excellent heat and solvent resistance, dielectric strength (6500 volts) and highly conformable
- Cleanly removes in one piece after use
- Applications: high-temperature processes, powder coating, soldering, electrical insulation and PC boards



| Item No.    | Disc Diameter |       | Discs Per Roll |      |
|-------------|---------------|-------|----------------|------|
|             | in            | mm    |                |      |
| MTKD010187A | 0.187         | 3/16  | 4.75           | 5000 |
| MTKD010250A | 0.250         | 1/4   | 6.35           | 5000 |
| MTKD010312A | 0.312         | 5/16  | 7.92           | 5000 |
| MTKD010375A | 0.375         | 3/8   | 9.53           | 5000 |
| MTKD010437A | 0.437         | 7/16  | 11.10          | 5000 |
| MTKD010500A | 0.500         | 1/2   | 12.70          | 2500 |
| MTKD010562A | 0.562         | 9/16  | 14.27          | 2500 |
| MTKD010625A | 0.625         | 5/8   | 15.88          | 2000 |
| MTKD010687A | 0.687         | 11/16 | 17.45          | 2000 |
| MTKD010750A | 0.750         | 3/4   | 19.05          | 2000 |
| MTKD010875A | 0.875         | 7/8   | 22.23          | 2000 |
| MTKD011000A | 1.000         | 1     | 25.40          | 2000 |

| Item No.    | Disc Diameter |          | Discs Per Roll |      |
|-------------|---------------|----------|----------------|------|
|             | in            | mm       |                |      |
| MTKD011125A | 1.125         | 1 - 1/8  | 28.58          | 1000 |
| MTKD011188A | 1.188         | 1 - 3/16 | 30.18          | 1000 |
| MTKD011250A | 1.250         | 1 - 1/4  | 31.75          | 1000 |
| MTKD011375A | 1.375         | 1 - 3/8  | 34.93          | 1000 |
| MTKD011500A | 1.500         | 1 - 1/2  | 38.10          | 1000 |
| MTKD011625A | 1.625         | 1 - 5/8  | 41.28          | 1000 |
| MTKD011750A | 1.750         | 1 - 3/4  | 44.45          | 1000 |
| MTKD011875A | 1.875         | 1 - 7/8  | 47.63          | 1000 |
| MTKD012000A | 2.000         | 2        | 50.80          | 500  |
| MTKD012500A | 2.500         | 2 - 1/2  | 63.50          | 500  |
| MTKD013000A | 3.000         | 3        | 76.20          | 500  |
| MTKD014000A | 4.000         | 4        | 101.60         | 250  |



# MASKING HOOKS

## HV, HS and HC Series V, S and C Style Hooks



HV Series



HS Series



HC Series

**Specifications:**

- Material: Cold drawn spring steel

**Features:**

- The HV-style hook design retains its ground longer
- The HS-style and HC-style hooks are ideal for wider parts or multiple styles of parts with varying thicknesses

| HC Style |               | HS Style |               | HV Style |               | Length |       | Wire Size |     | Capacity (Approx) |      |
|----------|---------------|----------|---------------|----------|---------------|--------|-------|-----------|-----|-------------------|------|
| Item No. | Bulk Pack Qty | Item No. | Bulk Pack Qty | Item No. | Bulk Pack Qty | in     | mm    | in        | mm  | Lbs               | kgs  |
| —        | —             | —        | —             | HV2044A  | 3000          | 2      | 50.8  | 0.044     | 1.1 | 4                 | 1.8  |
| HC2062A  | 3000          | HS2062A  | 3000          | HV2062A  | 3000          | 2      | 50.8  | 0.062     | 1.6 | 8                 | 3.6  |
| HC2076A  | 3000          | HS2076A  | 3000          | HV2076A  | 3000          | 2      | 50.8  | 0.076     | 1.9 | 20                | 9.1  |
| HC3044A  | 3000          | HS3044A  | 3000          | —        | —             | 3      | 76.2  | 0.044     | 1.1 | 4                 | 1.8  |
| HC3062A  | 3000          | HS3062A  | 3000          | HV3062A  | 3000          | 3      | 76.2  | 0.062     | 1.6 | 8                 | 3.6  |
| HC3076A  | 2000          | HS3076A  | 2000          | HV3076A  | 2000          | 3      | 76.2  | 0.076     | 1.9 | 20                | 9.1  |
| HC4044A  | 2000          | HS4044A  | 2000          | HV4044A  | 2000          | 4      | 101.6 | 0.044     | 1.1 | 4                 | 1.8  |
| HC4062A  | 2000          | HS4062A  | 2000          | HV4062A  | 2000          | 4      | 101.6 | 0.062     | 1.6 | 8                 | 3.6  |
| HC4076A  | 1000          | HS4076A  | 1000          | HV4076A  | 1000          | 4      | 101.6 | 0.076     | 1.9 | 20                | 9.1  |
| HC4120A  | 2000          | HS4120A  | 2000          | HV4120A  | 2000          | 4      | 101.6 | 0.120     | 3.0 | 40                | 18.1 |
| HC4180A  | 500           | HS4180A  | 500           | HV4180A  | 1000          | 4      | 101.6 | 0.180     | 4.6 | 80                | 36.3 |
| —        | —             | —        | —             | HV6044A  | 1000          | 6      | 152.4 | 0.044     | 1.1 | 4                 | 1.8  |
| HC6062A  | 1000          | HS6062A  | 1000          | HV6062A  | 1000          | 6      | 152.4 | 0.062     | 1.6 | 8                 | 3.6  |
| HC6076A  | 1000          | HS6076A  | 1000          | HV6076A  | 1000          | 6      | 152.4 | 0.076     | 1.9 | 20                | 9.1  |
| HC6120A  | 1000          | HS6120A  | 1000          | HV6120A  | 1000          | 6      | 152.4 | 0.120     | 3.0 | 40                | 18.1 |
| HC6180A  | 500           | HS6180A  | 500           | HV6180A  | 500           | 6      | 152.4 | 0.180     | 4.6 | 80                | 36.3 |
| HC8076A  | 1500          | HS8076A  | 1000          | HV8076A  | 500           | 8      | 203.2 | 0.076     | 1.9 | 20                | 9.1  |
| HC8120A  | 500           | HS8120A  | 500           | HV8120A  | 500           | 8      | 203.2 | 0.120     | 3.0 | 40                | 18.1 |
| HC8180A  | 250           | HS8180A  | 250           | HV8180A  | 250           | 8      | 203.2 | 0.180     | 4.6 | 80                | 36.3 |
| HC10076A | 500           | HS10076A | 500           | HV10076A | 500           | 10     | 254.0 | 0.076     | 1.9 | 20                | 9.1  |
| —        | —             | HS10120A | 500           | HV10120A | 500           | 10     | 254.0 | 0.120     | 3.0 | 40                | 18.1 |
| HC10180A | 250           | HS10180A | 250           | HV10180A | 250           | 10     | 254.0 | 0.180     | 4.6 | 80                | 36.3 |
| HC12076A | 500           | HS12076A | 500           | HV12076A | 500           | 12     | 304.8 | 0.076     | 1.9 | 20                | 9.1  |
| —        | —             | HS12120A | 500           | HV12120A | 500           | 12     | 304.8 | 0.120     | 3.0 | 40                | 18.1 |
| HC12180A | 250           | HS12180A | 250           | HV12180A | 250           | 12     | 304.8 | 0.180     | 4.6 | 80                | 36.3 |
| HC15076A | 500           | —        | —             | HV15076A | 500           | 15     | 381.0 | 0.076     | 1.9 | 20                | 9.1  |
| —        | —             | HS15120A | 500           | HV15120A | 500           | 15     | 381.0 | 0.120     | 3.0 | 40                | 18.1 |
| —        | —             | —        | —             | HV18076A | 500           | 18     | 457.2 | 0.076     | 1.9 | 20                | 9.1  |
| —        | —             | —        | —             | HV18120A | 250           | 18     | 457.2 | 0.120     | 3.0 | 40                | 18.1 |
| HC24120A | 250           | —        | —             | —        | —             | 24     | 609.6 | 0.120     | 3.0 | 40                | 18.1 |
| —        | —             | HS24180A | 250           | —        | —             | 24     | 609.6 | 0.180     | 4.6 | 80                | 36.3 |

## HCV, HVSQ and HV90° CV, V90° and V (Square Bar Stock) Style Hooks



HCV Series



HV-90° Series



HVSQ Series

**Specifications:**

- Material: Cold drawn spring steel

**Features:**

- The HCV-style hooks are ideal for wider parts or multiple styles of parts with varying thickness
- The HVSQ-style hooks are designed for heavy products and manufactured out of square bar stock
- The HV90°-style hooks are used for maximum load bearing and repeated usage

| HCV Style |               | HV-90° Style |               | HVSQ Style |               | Length |       | Wire Size |     | Holding Capacity (Approx) |       |
|-----------|---------------|--------------|---------------|------------|---------------|--------|-------|-----------|-----|---------------------------|-------|
| Item No.  | Bulk Pack Qty | Item No.     | Bulk Pack Qty | Item No.   | Bulk Pack Qty | in     | mm    | in        | mm  | Lbs                       | kgs   |
| HCV4120A  | 2000          | HV904120A    | 2000          | —          | —             | 4      | 101.6 | 0.120     | 3.0 | 40                        | 18.1  |
| HCV4180A  | 500           | HV904180A    | 500           | —          | —             | 4      | 101.6 | 0.180     | 4.6 | 80                        | 36.3  |
| —         | —             | —            | —             | HVSQ4250A  | 250           | 4      | 101.6 | 0.250     | 6.4 | 220                       | 100.0 |
| HCV6076A  | 1000          | —            | —             | —          | —             | 6      | 152.4 | 0.076     | 1.9 | 20                        | 9.1   |
| HCV6120A  | 1000          | HV906120A    | 1000          | —          | —             | 6      | 152.4 | 0.120     | 3.0 | 40                        | 18.1  |
| HCV6180A  | 500           | HV906180A    | 500           | —          | —             | 6      | 152.4 | 0.120     | 3.0 | 40                        | 18.1  |
| HCV8180A  | 250           | HV908180A    | 250           | —          | —             | 8      | 203.2 | 0.180     | 4.6 | 80                        | 36.3  |
| —         | —             | —            | —             | HVSQ8250A  | 250           | 8      | 203.2 | 0.250     | 6.4 | 220                       | 100.0 |
| HCV10120A | 1000          | HV9010120A   | 500           | —          | —             | 10     | 254.0 | 0.120     | 3.0 | 40                        | 18.1  |
| HCV10180A | 500           | HV9010180A   | 500           | —          | —             | 10     | 254.0 | 0.180     | 4.6 | 80                        | 36.3  |
| HCV12076A | 500           | —            | —             | —          | —             | 12     | 304.8 | 0.076     | 1.9 | 20                        | 9.1   |
| HCV12120A | 500           | HV9012120A   | 500           | —          | —             | 12     | 304.8 | 0.120     | 3.0 | 40                        | 18.1  |
| HCV12180A | 500           | HV9012180A   | 250           | —          | —             | 12     | 304.8 | 0.180     | 4.6 | 80                        | 36.3  |
| HCV15076A | 500           | —            | —             | —          | —             | 15     | 381.0 | 0.076     | 1.9 | 20                        | 9.1   |
| HCV15120A | 500           | HV9015120A   | 500           | —          | —             | 15     | 381.0 | 0.120     | 3.0 | 40                        | 18.1  |
| —         | —             | —            | —             | HVSQ16250A | 125           | 16     | 406.4 | 0.250     | 6.4 | 220                       | 100.0 |
| —         | —             | HV9018120A   | 250           | —          | —             | 18     | 457.2 | 0.120     | 3.0 | 40                        | 18.1  |
| HCV18180A | 250           | —            | —             | —          | —             | 18     | 457.2 | 0.180     | 4.6 | 80                        | 36.3  |
| —         | —             | —            | —             | HVSQ24250A | 125           | 24     | 609.6 | 0.250     | 6.4 | 220                       | 100.0 |

# MASKING MATERIAL OPTIONS

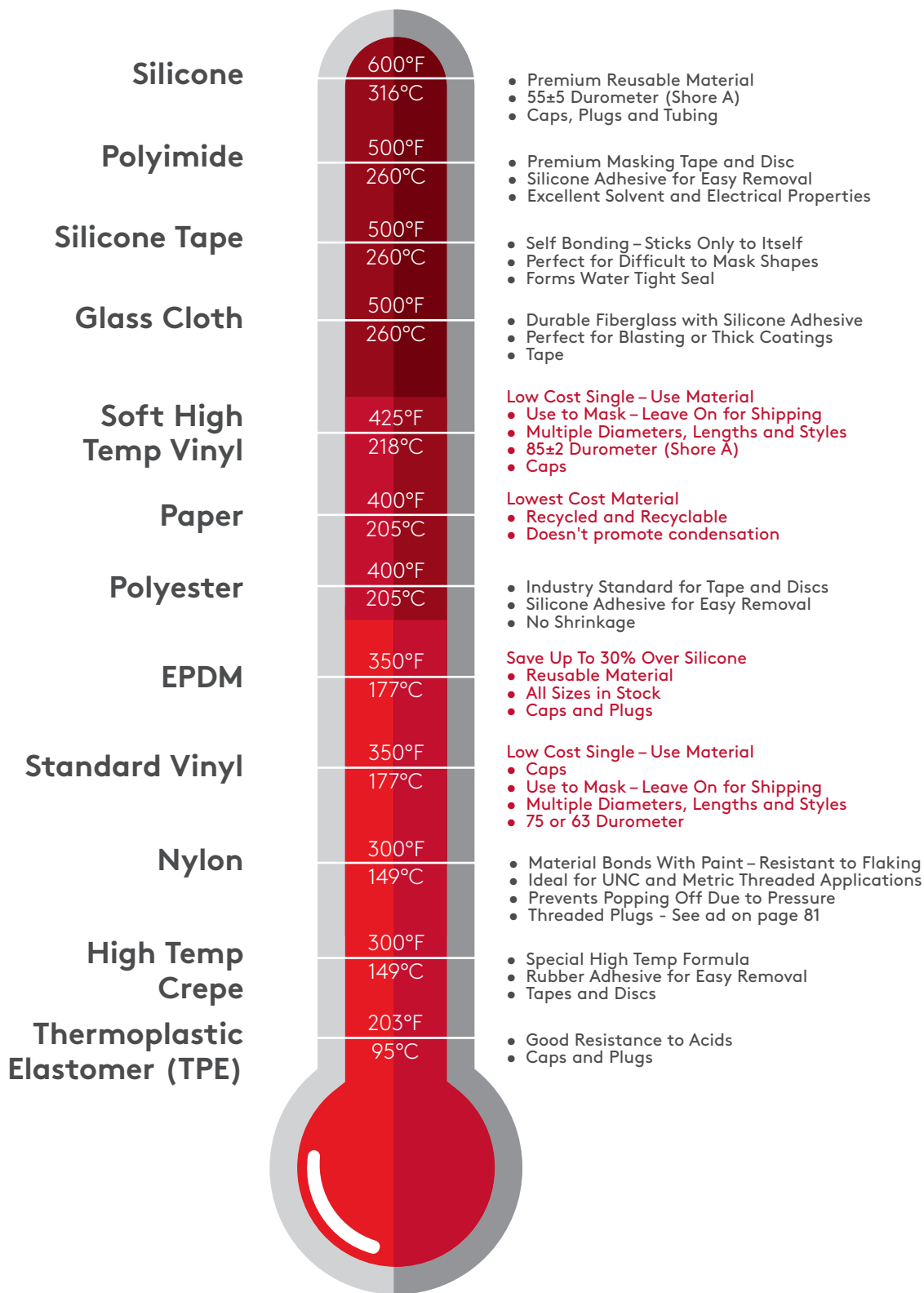


Chart is a guide for typical applications for masking products. Due to the number of variables in each process, some products may not work for the application shown above, we recommend sampling to ensure. Material data contained in this chart is for reference only. Essentra Components reserves the right to change this information at any time without notification. Please consult factory for more information.

\*Silicone and EPDM products can be used above rated temp in some applications.



**Material Selection by Process**

Chart is a guide for typical applications for masking products. Due to the number of variables in each process, some products may not work for the application shown, we recommend sampling to ensure.

\*Silicone and EPDM products can be used above rated temp in some applications.

| Material        | Powder Coating | E-Coating | Anodizing | Plating | Wet Paint | Blasting | PC Boards |
|-----------------|----------------|-----------|-----------|---------|-----------|----------|-----------|
| Silicone*       | X              | X         | X         | X       | X         | X        |           |
| Polyimide       | X              | X         | X         | X       | X         |          | X         |
| Silicone Tape   | X              | X         | X         | X       | X         |          |           |
| Glass Cloth     | X              | X         |           |         | X         | X        |           |
| EPDM*           | X              | X         | X         | X       | X         | X        |           |
| High Temp Vinyl | X              | X         | X         | X       | X         |          |           |
| Paper           | X              |           |           |         | X         |          |           |
| Polyester       | X              | X         | X         | X       | X         |          |           |
| High Temp Crepe | X              |           |           |         | X         |          |           |

**Caps for Threaded and Unthreaded Studs**



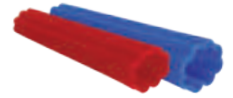
Silicone and EPDM End Caps Page 70



High Temp Vinyl End Caps Page 68-69



High Temp Vinyl Pull Caps Page 71



Silicone Tubing Page 73

| Your Application     |             |        |                                 |                             |                                        |                                         |                               |
|----------------------|-------------|--------|---------------------------------|-----------------------------|----------------------------------------|-----------------------------------------|-------------------------------|
| Unthreaded Stud (in) | Thread Size |        | Silicone End Caps 600°F (315°C) | EPDM End Caps 425°F (218°C) | High Temp Vinyl End Caps 425°F (218°C) | High Temp Vinyl Pull Caps 425°F (218°C) | Silicone Tubing 600°F (315°C) |
|                      | UNC         | Metric |                                 |                             |                                        |                                         |                               |
| —                    | 2 - 56      | M2     | SC007010A                       | SC007010B                   | —                                      | —                                       | —                             |
| 3/32                 | 3 - 48      | —      | SC009307A                       | SC009307B                   | DM0093-1/2B                            | —                                       | —                             |
| —                    | 4 - 40      | —      | SC010010A                       | SC010010C                   | —                                      | —                                       | STFL011020A                   |
| —                    | 5 - 40      | M3     | SC010907A                       | SC010907C                   | DM0110-1/2                             | —                                       | STFL011020A                   |
| 1/8                  | 6 - 32      | —      | SC012510A                       | SC012510C                   | DM0125-1/2D                            | —                                       | STFL011020A                   |
| —                    | —           | M4     | SC014810A                       | SC014810C                   | DM0148-1/2B                            | —                                       | STFL011020A                   |
| 5/32                 | 8 - 32      | M4     | SC015610A                       | SC015610C                   | DM0156-1/2E                            | —                                       | STFL011020A                   |
| —                    | 10 - 24     | —      | SC017210A                       | SC017210B                   | DM0172-1/2D                            | —                                       | STFL011020A                   |
| 3/16                 | 12 - 24     | M5     | SC018710A                       | SC018710B                   | DM0187-1/2C                            | DMPC0180-1/2B                           | STFL0108028A                  |
| —                    | —           | —      | SC022310A                       | SC022310B                   | DM0224-1/2B                            | —                                       | STFL0108028A                  |
| —                    | 1/4         | M6     | SC023410A                       | SC023410C                   | DM0234-1/2D                            | —                                       | STFL0108028A                  |
| 1/4                  | —           | —      | SC025010A                       | SC025010C                   | DM0250-1D                              | DMPC0240-1C                             | STFL0108028A                  |
| 9/32                 | 5/16        | —      | SC028110A                       | SC028110B                   | DM0281-1C                              | —                                       | STFL025037A                   |
| —                    | —           | M8     | SC029510A                       | SC029510B                   | DM0304-1C                              | —                                       | STFL025037A                   |
| 5/16                 | —           | —      | SC031210A                       | SC031210C                   | DM0313-1F                              | DMPC0302-1D                             | STFL025037A                   |
| —                    | 3/8         | —      | SC035515A                       | SC035515B                   | DM0360-1/2C                            | —                                       | STFL033045A                   |
| 3/8                  | —           | M10    | SC037510A                       | SC037510B                   | DM0375-1/2C                            | DMPC0365-1G                             | STFL033045A                   |
| 13/32                | 7/16        | —      | SC040610A                       | SC040610B                   | DM0406-1E                              | DMPC0396-1G                             | STFL042055A                   |
| 7/16                 | —           | —      | SC043710A                       | SC043710B                   | DM0437-1/2J                            | DMPC0427-1D                             | STFL042055A                   |
| —                    | —           | M12    | SC045615A                       | SC045615B                   | DM0460-1/2B                            | —                                       | STFL042055A                   |
| —                    | 1/2         | —      | SC048015A                       | SC048015B                   | DM0490-1B                              | —                                       | STFL042055A                   |
| 1/2                  | —           | —      | SC050015A                       | SC050015C                   | DM0500-1D                              | DMPC0490-1F                             | STFL042055A                   |
| —                    | 9/16        | M14    | SC053515A                       | SC053515B                   | DM0531-1C                              | —                                       | STFL042055A                   |
| 9/16                 | —           | M15    | SC056215A                       | SC056215B                   | DM0562-1D                              | DMPC0552-1C                             | STFL050062A                   |
| —                    | 5/8         | —      | SC060015A                       | SC060015C                   | DM0600-1B                              | —                                       | STFL050062A                   |
| 5/8                  | —           | M17    | SC062515A                       | SC062515B                   | DM0625-1F                              | DMPC0625-1E                             | STFL050062A                   |
| 11/16                | —           | —      | SC068715A                       | SC068715B                   | DM0687-1D                              | DMPC0687-1E                             | STFL062075A                   |
| —                    | 3/4         | M19    | SC073015A                       | SC073015B                   | DM0750-1F                              | DMPC0740-1D                             | STFL062075A                   |
| 3/4                  | —           | —      | SC075015A                       | SC075015B                   | DM0750-1F                              | DMPC0740-1D                             | STFL062075A                   |
| 13/16                | —           | —      | SC081215A                       | SC081215B                   | DM0812-1D                              | DMPC0812-1C                             | STFL072087A                   |
| 7/8                  | —           | —      | SC087515A                       | SC087515B                   | DM0875-1D                              | DMPC0865-1B                             | STFL072087A                   |
| 15/16                | —           | M24    | SC093715A                       | SC093715B                   | DM0937-1J                              | DMPC0937-1B                             | STFL085100A                   |
| —                    | 1           | —      | SC097015A                       | SC097015B                   | DM0985-1B                              | —                                       | STFL085100A                   |
| 1                    | —           | M27    | SC100015A                       | SC100015B                   | DM1000-1E                              | DMPC0990-1B                             | STFL085100A                   |
| 1 - 1/16             | —           | —      | SC106215A                       | SC106215B                   | DM1062-1D                              | DMPC1060-1D                             | STFL085100A                   |
| 1 - 1/8              | —           | M30    | SC112515A                       | SC112515B                   | DM1125-1D                              | DMPC1125-1B                             | ST1125A                       |
| 1 - 3/16             | —           | —      | SC118715A                       | SC118715B                   | DM1187-1B                              | —                                       | —                             |
| 1 - 1/4              | 1 - 1/4     | M33    | SC125015A                       | SC125015B                   | DM1250-1D                              | DMPC1230-1B                             | ST1250A                       |
| 1 - 5/16             | —           | —      | —                               | —                           | DM1312-1B                              | —                                       | —                             |
| 1 - 3/8              | —           | —      | —                               | —                           | DM1375-1D                              | —                                       | ST1375A                       |
| 1 - 7/16             | —           | —      | —                               | —                           | DM1437-1B                              | DMPC1437-1B                             | —                             |
| 1 - 1/2              | 1 - 1/2     | M39    | SC150017A                       | SC150017B                   | DM1500-1C                              | DMPC1500-1B                             | ST1500A                       |
| 1 - 5/8              | —           | —      | SC162520A                       | SC162520B                   | DM1625-1H                              | DMPC1605-1B                             | ST1625A                       |
| 1 - 11/16            | —           | —      | —                               | —                           | DM1687-1B                              | —                                       | —                             |
| 1 - 3/4              | 1 - 3/4     | —      | SC175020A                       | SC175020B                   | DM1750-1D                              | —                                       | ST1750A                       |
| 1 - 13/16            | —           | —      | —                               | —                           | DM1812-1B                              | —                                       | —                             |
| 1 - 7/8              | —           | —      | SC187520A                       | SC187520B                   | DM1875-1D                              | —                                       | ST1875A                       |
| 1 - 15/16            | —           | —      | —                               | —                           | DM1937-1B                              | —                                       | —                             |
| 2                    | 2           | —      | SC200020A                       | SC200020B                   | DM2000-1B                              | —                                       | ST2000A                       |



Masking Plug Selection Guide for Unthreaded ID's



Silicone and EPDM  
Tapered Plugs  
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Silicone and EPDM  
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Silicone and EPDM  
Cone Plugs  
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| Your Application |         |       | Silicone<br>Tapered Plug<br>600°F (315°C) | EPDM<br>Tapered Plug<br>425°F (218°C) | Silicone<br>Flangeless Plug<br>600°F (315°C) | EPDM<br>Flangeless Plug<br>425°F (218°C) | Silicone<br>Cone Plugs<br>600°F (315°C) | EPDM<br>Cone Plugs<br>425°F (218°C) |
|------------------|---------|-------|-------------------------------------------|---------------------------------------|----------------------------------------------|------------------------------------------|-----------------------------------------|-------------------------------------|
| Inches           | Decimal | mm    |                                           |                                       |                                              |                                          |                                         |                                     |
| 1/8              | 0.125   | 3.17  | STP004019-11A                             | STP004019-11B                         | —                                            | —                                        | SCON250130A                             | SCON250130B                         |
| 3/16             | 0.187   | 4.75  | STP004019-11A                             | STP004019-11B                         | SFP157236A                                   | SFP157236B                               | SCON250130A                             | SCON250130B                         |
| 1/4              | 0.250   | 6.35  | STP018034A                                | STP018034D                            | SFP236315A                                   | SFP236315D                               | SCON250130A                             | SCON250130B                         |
| 5/16             | 0.312   | 7.92  | STP018034A                                | STP018034D                            | SFP236315A                                   | SFP236315D                               | SCON316216A                             | SCON316216B                         |
| 3/8              | 0.375   | 9.53  | STP025043A                                | STP025043C                            | SFP315394A                                   | SFP315394C                               | SCON394197A                             | SCON394197B                         |
| 7/16             | 0.437   | 11.10 | STP035047A                                | STP025043C                            | SFP394472A                                   | SFP394472C                               | SCON551315A                             | SCON551315C                         |
| 1/2              | 0.500   | 12.70 | STP039059A                                | STP039059B                            | SFP472551A                                   | SFP472551B                               | SCON551315A                             | SCON551315C                         |
| 9/16             | 0.562   | 14.27 | STP039059A                                | STP039059B                            | SFP551630A                                   | SFP551630C                               | SCON689453A                             | SCON689453C                         |
| 5/8              | 0.625   | 15.88 | STP051067A                                | STP051067E                            | SFP415641A                                   | SFP415641B                               | SCON689453A                             | SCON689453C                         |
| 11/16            | 0.687   | 17.45 | STP055075A                                | STP055075D                            | SFP630709A                                   | SFP630709C                               | SCON689453A                             | SCON689453C                         |
| 3/4              | 0.750   | 19.05 | STP062078A                                | STP062078D                            | SFP709787A                                   | SFP709787C                               | SCON767532A                             | SCON767532B                         |
| 13/16            | 0.812   | 20.62 | STP071094A                                | STP071094C                            | SFP787886A                                   | SFP787886B                               | SCON819583A                             | SCON819583C                         |
| 7/8              | 0.875   | 22.23 | STP071094A                                | STP071094C                            | SFP787886A                                   | SFP787886B                               | —                                       | —                                   |
| 15/16            | 0.937   | 23.80 | STP075094A                                | STP075094C                            | SFP886945A                                   | SFP886945C                               | —                                       | —                                   |
| 1                | 1.000   | 25.40 | STP090106A                                | STP090106C                            | SFP9541024A                                  | SFP9541024B                              | —                                       | —                                   |
| 1-1/16           | 1.062   | 26.97 | STP094110A                                | STP094110C                            | SFP8681094A                                  | SFP8681094B                              | —                                       | —                                   |
| 1-1/8            | 1.125   | 28.58 | STP102126A                                | STP102126B                            | SFP10001125A                                 | SFP10001125B                             | —                                       | —                                   |
| 1-3/16           | 1.187   | 30.15 | STP102126A                                | STP102126B                            | SFP11251250A                                 | SFP11251250B                             | —                                       | —                                   |
| 1-1/4            | 1.250   | 31.75 | STP106134A                                | STP106134B                            | SFP10941320A                                 | SFP10941320B                             | —                                       | —                                   |
| 1-5/16           | 1.312   | 33.32 | STP106134A                                | STP106134B                            | SFP10941320A                                 | SFP10941320B                             | —                                       | —                                   |
| 1-3/8            | 1.375   | 34.93 | STP118145A                                | H STP118145B                          | H SFP13201547A                               | H SFP13201547B                           | —                                       | —                                   |
| 1-7/16           | 1.437   | 36.50 | STP118145A                                | H STP118145B                          | H SFP13201547A                               | H SFP13201547B                           | —                                       | —                                   |
| 1-1/2            | 1.500   | 38.10 | STP122153A                                | H STP122153B                          | H SFP13201547A                               | H SFP13201547B                           | —                                       | —                                   |
| 1-9/16           | 1.562   | 39.67 | STP130161A                                | H STP130161B                          | H SFP15471774A                               | H SFP15471774B                           | —                                       | —                                   |
| 1-5/8            | 1.625   | 41.28 | STP141169A                                | H STP141169C                          | H SFP15471774A                               | H SFP15471774B                           | —                                       | —                                   |
| 1-11/16          | 1.687   | 42.85 | STP145177A                                | H STP145177C                          | H SFP15471774A                               | H SFP15471774B                           | —                                       | —                                   |
| 1-3/4            | 1.750   | 44.45 | STP149181A                                | H STP149181C                          | H SFP15471774A                               | H SFP15471774B                           | —                                       | —                                   |
| 1-13/16          | 1.812   | 46.02 | STP165196A                                | H STP165196B                          | H SFP15471774A                               | H SFP15471774B                           | —                                       | —                                   |
| 1-7/8            | 1.875   | 47.63 | STP165196A                                | H STP165196B                          | H SFP17742000A                               | H SFP17742000B                           | —                                       | —                                   |
| 1-15/16          | 1.937   | 49.20 | STP177208A                                | H STP177208B                          | H SFP17742000A                               | H SFP17742000B                           | —                                       | —                                   |
| 2                | 2.000   | 50.80 | STP177208A                                | H STP177208B                          | H SFP17742000A                               | H SFP17742000B                           | —                                       | —                                   |
| 2-1/4            | 2.250   | 57.15 | STP196248A                                | H STP196248B                          | H                                            | —                                        | —                                       | —                                   |
| 2-1/2            | 2.500   | 63.50 | STP228267A                                | H STP228267B                          | H                                            | —                                        | —                                       | —                                   |

Note: H Denotes that Hollow (cost saving) version of plug is available. See the HSTP Series on page 79.

Masking Plug Selection Guide for Threaded Holes



Silicone and EPDM  
Plug with 1st  
Thread Protection  
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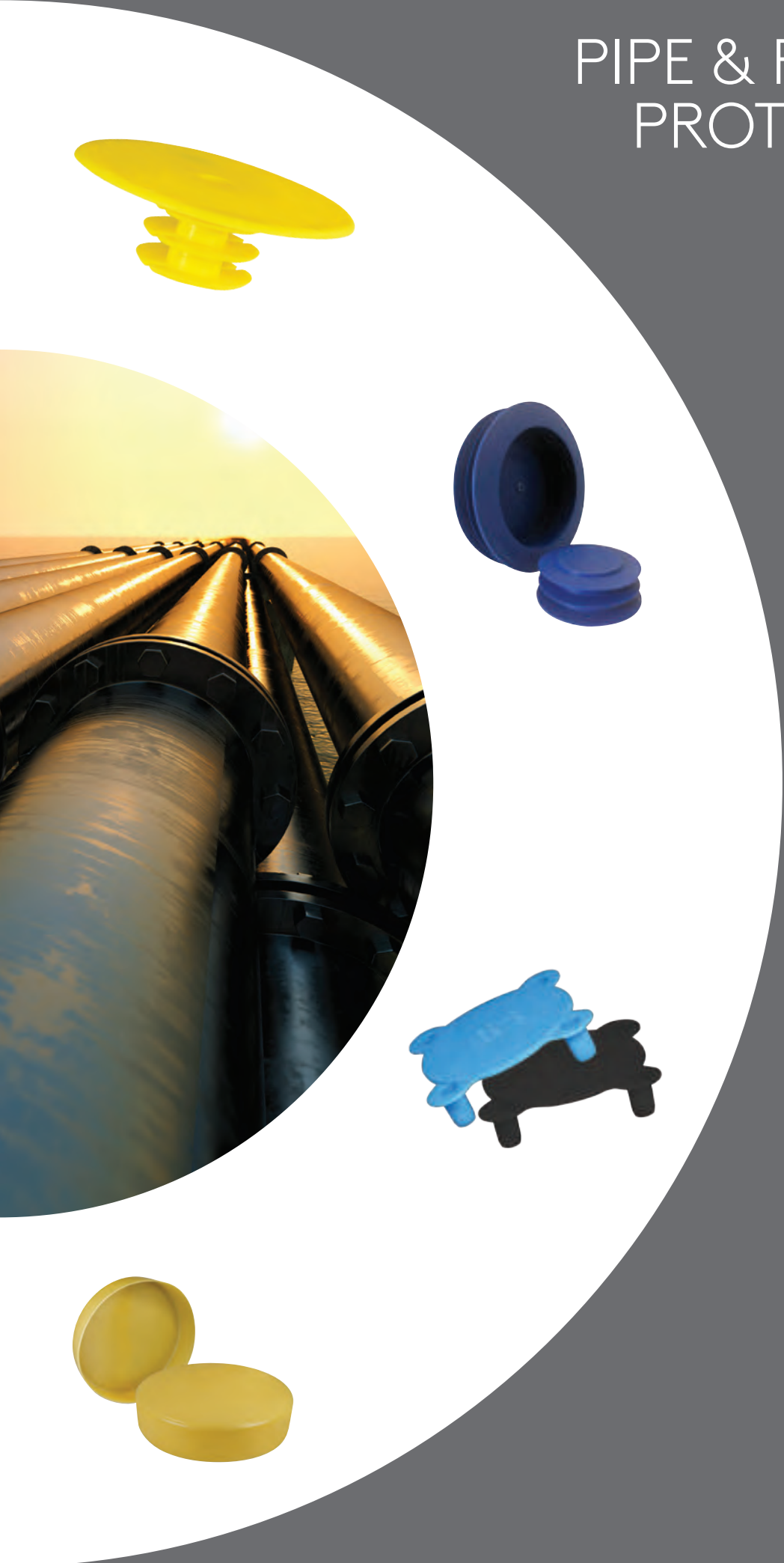
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Flangeless Plug  
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Silicone and EPDM  
Tapered Plugs  
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| Your Application |        | Plug with 1st Thread Protection |                       | Flangeless Plug           |                       | Tapered Plugs             |                       |
|------------------|--------|---------------------------------|-----------------------|---------------------------|-----------------------|---------------------------|-----------------------|
| UNC              | Metric | Silicone<br>600°F (315°C)       | EPDM<br>425°F (218°C) | Silicone<br>600°F (315°C) | EPDM<br>425°F (218°C) | Silicone<br>600°F (315°C) | EPDM<br>425°F (218°C) |
| 2 - 56           | M2     | —                               | —                     | —                         | —                     | STP003012A                | STP003012B            |
| 8 - 32           | —      | —                               | —                     | —                         | —                     | STP006018-07A             | STP006018-07C         |
| 10 - 24          | M4     | —                               | —                     | SFP157236A                | SFP157236B            | STP006020A                | STP006020D            |
| 12 - 24          | —      | —                               | —                     | SFP157236A                | SFP157236B            | STP012025A                | STP012025D            |
| —                | M6     | SPFTM6A                         | SPFTM6B               | SFP236315A                | SFP236315D            | STP012025-10A             | STP012025-10C         |
| 1/4 - 20         | —      | SPFT1/4A                        | SPFT1/4B              | SFP236315A                | SFP236315D            | STP012025-10A             | STP012025-10C         |
| 5/16 - 18        | —      | SPFT5/16A                       | SPFT5/16B             | SFP236315A                | SFP236315D            | STP012037-12A             | STP012037-12B         |
| —                | M8     | SPFTM8A                         | SPFTM8B               | SFP315394A                | SFP315394C            | STP018034-10A             | STP018034-10C         |
| 3/8 - 16         | —      | SPFT3/8A                        | SPFT3/8B              | SFP315394A                | SFP315394C            | STP025037A                | STP025037D            |
| —                | M10    | SPFTM10A                        | SPFTM10B              | SFP394472A                | SFP394472C            | STP025037A                | STP025037D            |
| 7/16 - 14        | —      | SPFT7/16A                       | SPFT7/16B             | SFP394472A                | SFP394472C            | STP025043A                | STP025043C            |
| —                | M12    | SPFTM12A                        | SPFTM12B              | SFP472551A                | SFP472551B            | STP031050A                | STP031050C            |
| 1/2 - 13         | —      | SPFT1/2A                        | SPFT1/2B              | SFP472551A                | SFP472551B            | STP035047A                | STP035047B            |
| 9/16 - 12        | —      | —                               | —                     | —                         | —                     | STP039059A                | STP039059B            |
| 5/8 - 11         | —      | —                               | —                     | SFP551630A                | SFP551630C            | STP043062A                | STP043062D            |
| —                | M16    | SPFTM16A                        | SPFTM16B              | SFP630709A                | SFP630709C            | STP043062A                | STP043062D            |
| 3/4 - 10         | —      | —                               | —                     | SFP709787A                | SFP709787C            | STP055075A                | STP055075D            |
| —                | M20    | SPFTM20A                        | SPFTM20B              | SFP787886A                | SFP787886B            | STP062078A                | STP062078D            |
| 7/8 - 9          | —      | —                               | —                     | SFP787886A                | SFP787886B            | STP062094A                | STP062094B            |
| 1 - 8            | —      | —                               | —                     | SFP9541024A               | SFP9541024B           | STP078102A                | STP078102B            |
| 1 - 1/8 - 7      | —      | —                               | —                     | SFP11251250A              | SFP11251250B          | STP109118A                | STP109118B            |

# PIPE & FLANGE PROTECTION







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PIPE PLUGS ..... 92 - 93



SUCKER ROD PROTECTORS ..... 93



STATOR CAPS ..... 93



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RAISED-FACE FLANGE PROTECTORS ..... 95 - 96



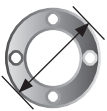
FULL-FACE FLANGE PROTECTORS ..... 97 - 103



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# PIPE & FLANGE PROTECTION



# PIPE CAPS

## RRC Series

### Closed End or Vented Pipe Caps

**Specifications:**

- Material: Polyethylene
- Color: See Table

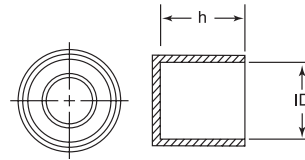
**Features:**

- Protects threaded or non-threaded pipe ends
- Sized and designed for positive-gripping power over the outside diameter of the pipe
- Eliminates foreign materials from entering the pipe



How to Measure a Pipe & Pick a Cap  
See Page 105

| Item No.  | Nominal Pipe Size | ID     | Height (h) | Color  | Bulk Pack Qty |
|-----------|-------------------|--------|------------|--------|---------------|
|           | in                | in     | in         |        |               |
| RRC1/8A   | 1/8               | 0.385  | 0.485      | Yellow | 5500          |
| RRC1/4A   | 1/4               | 0.516  | 0.490      | Red    | 13000         |
| RRC3/8A   | 3/8               | 0.660  | 0.538      | Yellow | 9500          |
| RRC1/2A   | 1/2               | 0.840  | 0.717      | Black  | 4000          |
| RRC3/4A   | 3/4               | 1.045  | 0.750      | Red    | 2500          |
| RRC1A     | 1                 | 1.290  | 0.877      | Blue   | 1500          |
| RRC1-1/4A | 1-1/4             | 1.660  | 0.920      | Red    | 1000          |
| RRC1-1/2A | 1-1/2             | 1.910  | 0.925      | Black  | 1000          |
| RRC2A     | 2                 | 2.378  | 1.080      | Blue   | 1000          |
| RRC2-1/2A | 2-1/2             | 2.860  | 1.580      | Black  | 500           |
| RRC3A     | 3                 | 3.470  | 1.750      | Blue   | 350           |
| RRC3-1/2A | 3-1/2             | 4.000  | 1.750      | Black  | 280           |
| RRC4A     | 4                 | 4.500  | 1.870      | Blue   | 208           |
| RRC5A     | 5                 | 5.630  | 2.150      | Blue   | 120           |
| RRC6A     | 6                 | 6.640  | 1.960      | Black  | 80            |
| RRC8A     | 8                 | 8.670  | 2.320      | Black  | 50            |
| RRC10A    | 10                | 10.680 | 2.410      | Black  | 25            |
| RRC12A    | 12                | 12.600 | 2.620      | Black  | 18            |
| RRC14E    | 14                | 14.000 | 3.000      | Black  | 15            |
| RRC16E    | 16                | 16.000 | 3.125      | Black  | 15            |
| RRC18E    | 18                | 18.000 | 3.375      | Black  | 10            |
| RRC20A    | 20                | 20.000 | 2.955      | Black  | 15            |
| RRC22A    | 22                | 22.000 | 2.985      | Black  | 10            |
| RRC24A    | 24                | 24.000 | 2.995      | Black  | 8             |
| RRC26A    | 26                | 26.000 | 4.500      | Black  | 8             |
| RRC28A    | 28                | 28.000 | 4.724      | Black  | 12            |
| RRC30A    | 30                | 30.000 | 4.625      | Black  | 3             |
| RRC32A    | 32                | 32.000 | 4.720      | Black  | 10            |
| RRC36A    | 36                | 36.000 | 3.040      | Black  | 20            |
| RRC42A    | 42                | 42.000 | 5.250      | Black  | 12            |
| RRC48A    | 48                | 48.000 | 5.250      | Black  | 12            |



## Vented Pipe Caps

The vent hole option prevents pressure build up inside the pipe that may otherwise force off the cap.

| Item No.  | Nominal Pipe Size | ID     | Height (h) | Color  | Bulk Pack Qty |
|-----------|-------------------|--------|------------|--------|---------------|
|           | in                | in     | in         |        |               |
| RRC2F     | 2                 | 2.378  | 1.080      | Orange | 1000          |
| RRC2-1/2D | 2-1/2             | 2.860  | 1.580      | Orange | 500           |
| RRC3F     | 3                 | 3.470  | 1.750      | Orange | 350           |
| RRC3-1/2E | 3-1/2             | 4.000  | 1.750      | Orange | 280           |
| RRC4E     | 4                 | 4.500  | 1.870      | Orange | 192           |
| RRC5F     | 5                 | 5.630  | 2.150      | Orange | 120           |
| RRC6I     | 6                 | 6.640  | 1.960      | Orange | 80            |
| RRC8B     | 8                 | 8.670  | 2.320      | Orange | 50            |
| RRC10D    | 10                | 10.580 | 2.410      | Orange | 25            |
| RRC12B    | 12                | 12.600 | 2.620      | Orange | 18            |

## FPC Series

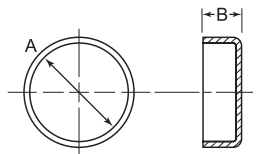
### Cracking & Splitting Resistant Pipe Caps

**Specifications:**

- Material: Flexible Polyethylene
- Color: Yellow

**Features:**

- Protects threaded or non-threaded pipe ends
- Resistant to cracking and splitting
- Ideal for withstanding temperatures of -40°F to 150°F (-40°C to 66°C) and will not crack or split under normal use
- Outstanding toughness and puncture resistance
- Good flexibility
- DIN sizes available, please consult Essentra if needed



| Item No.  | Nominal Pipe Size | A      | B     | Bulk Pack Qty |
|-----------|-------------------|--------|-------|---------------|
|           | in                | in     | in    |               |
| FPC34137A | 2                 | 2.374  | 2.362 | 300           |
| FPC34140A | 2-1/2             | 2.717  | 1.417 | 100           |
| FPC34151A | 3                 | 3.386  | 1.693 | 100           |
| FPC32709A | 3-1/2             | 4.000  | 3.937 | 100           |
| FPC34169A | 4                 | 4.500  | 1.969 | 200           |
| FPC34179A | 6                 | 6.626  | 1.969 | 100           |
| FPC31733A | 8                 | 8.625  | 2.165 | 80            |
| FPC31735A | 10                | 10.748 | 2.559 | 28            |
| FPC31694A | 12                | 12.748 | 2.953 | 32            |
| FPC31685A | 14                | 14.000 | 3.150 | 26            |
| FPC31664A | 16                | 16.000 | 3.346 | 18            |
| FPC34211A | 18                | 17.913 | 3.150 | 16            |
| FPC31689A | 20                | 20.000 | 4.134 | 12            |

| Item No.  | Nominal Pipe Size | A      | B     | Bulk Pack Qty |
|-----------|-------------------|--------|-------|---------------|
|           | in                | in     | in    |               |
| FPC31710A | 22                | 22.000 | 4.527 | 10            |
| FPC31739A | 24                | 24.000 | 4.921 | 10            |
| FPC31718A | 28                | 28.000 | 5.709 | 24            |
| FPC31696A | 30                | 30.000 | 6.102 | 22            |
| FPC31722A | 32                | 32.000 | 6.496 | 18            |
| FPC34240A | 34                | 34.000 | 6.693 | 20            |
| FPC31701A | 36                | 36.000 | 6.889 | 16            |
| FPC34244A | 38                | 38.000 | 7.087 | 16            |
| FPC31727A | 40                | 40.000 | 7.087 | 16            |
| FPC34248A | 44                | 44.000 | 7.283 | 5             |
| FPC39127A | 54                | 54.000 | 7.086 | 5             |
| FPC34252A | 56                | 56.000 | 8.465 | 5             |
| FPC34254A | 60                | 60.000 | 8.661 | 5             |
| FPC34256A | 64                | 64.000 | 9.056 | 5             |



**RRO Series**  
Pipe & Conduit Open-End Pipe Caps



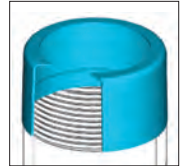
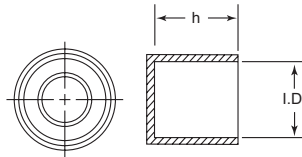
How to Measure a Pipe & Pick a Cap  
See Page 105

Specifications:

- Material: Polyethylene
- Color: See Table

Features:

- Protects external threads on pipe ends, rigid metal conduit ends (RMC) or intermediate metal conduit ends (IMC)
- Sized and designed for positive-gripping power over the threads on the pipe



Color Coded for Pipe, EMT or Rigid Metal Conduit (RMC)

| Item No.  | Nominal Pipe Size | ID     | Height (h) | Color | Bulk Pack Qty |
|-----------|-------------------|--------|------------|-------|---------------|
|           | in                | in     | in         |       |               |
| RRO1/2C   | 1/2               | 0.835  | 0.750      | Black | 5000          |
| RRO3/4A   | 3/4               | 1.048  | 0.747      | Red   | 8000          |
| RRO1A     | 1                 | 1.305  | 0.940      | Blue  | 4000          |
| RRO1-1/4A | 1-1/4             | 1.653  | 0.980      | Red   | 2500          |
| RRO1-1/2A | 1-1/2             | 1.890  | 1.030      | Black | 1600          |
| RRO2A     | 2                 | 2.375  | 1.157      | Blue  | 1000          |
| RRO2-1/2A | 2-1/2             | 2.891  | 1.580      | Black | 500           |
| RRO3A     | 3                 | 3.465  | 1.750      | Blue  | 350           |
| RRO3-1/2A | 3-1/2             | 4.010  | 1.750      | Black | 280           |
| RRO4A     | 4                 | 4.530  | 1.870      | Blue  | 208           |
| RRO5A     | 5                 | 5.531  | 1.870      | Blue  | 120           |
| RRO6A     | 6                 | 6.586  | 2.180      | Blue  | 80            |
| RRO8A     | 8                 | 8.625  | 2.210      | Black | 50            |
| RRO10A    | 10                | 10.850 | 2.410      | Black | 30            |

Color Coded for Intermediate Metal Conduit (IMC)

| Item No.  | Nominal Pipe Size | ID    | Height (h) | Color  | Bulk Pack Qty |
|-----------|-------------------|-------|------------|--------|---------------|
|           | in                | In    | In         |        |               |
| RRO1/2B   | 1/2               | 0.835 | 0.750      | Yellow | 5000          |
| RRO3/4C   | 3/4               | 1.048 | 0.747      | Green  | 8000          |
| RRO1D     | 1                 | 1.305 | 0.940      | Orange | 4000          |
| RRO1-1/4C | 1-1/4             | 1.653 | 0.980      | Green  | 2500          |
| RRO1-1/2B | 1-1/2             | 1.890 | 1.030      | Yellow | 1600          |
| RRO2E     | 2                 | 2.375 | 1.157      | Orange | 1000          |
| RRO2-1/2B | 2-1/2             | 2.891 | 1.580      | Yellow | 500           |
| RRO3C     | 3                 | 3.465 | 1.750      | Orange | 350           |
| RRO3-1/2B | 3-1/2             | 4.010 | 1.750      | Yellow | 280           |
| RRO4C     | 4                 | 4.530 | 1.870      | Orange | 208           |

**NPS Series**  
Heavy Duty Base Pipe Caps

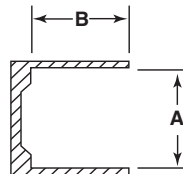


Specifications:

- Material: Polyethylene
- Color: Black

Features:

- Has a thicker heavy-duty base for added protection over the outside diameter of the pipe
- Protects threaded or non-threaded pipe ends
- Eliminates foreign materials from entering the pipe



| Item No.  | Nominal Pipe Size | A     | B     | Bulk Pack Qty |
|-----------|-------------------|-------|-------|---------------|
|           | in                | in    | in    |               |
| NPS1/4B   | 1/4               | 0.540 | 0.813 | 4000          |
| NPS3/8B   | 3/8               | 0.675 | 0.813 | 2500          |
| NPS1/2B   | 1/2               | 0.840 | 0.813 | 1800          |
| NPS3/4B   | 3/4               | 1.050 | 0.813 | 1200          |
| NPS1B     | 1                 | 1.315 | 0.813 | 1600          |
| NPS1-1/4B | 1-1/4             | 1.660 | 1.406 | 550           |

| Item No.  | Nominal Pipe Size | A     | B     | Bulk Pack Qty |
|-----------|-------------------|-------|-------|---------------|
|           | in                | in    | in    |               |
| NPS1-1/2B | 1-1/2             | 1.900 | 1.406 | 450           |
| NPS2B     | 2                 | 2.375 | 1.375 | 300           |
| NPS2-1/2B | 2-1/2             | 2.875 | 1.375 | 200           |
| NPS3B     | 3                 | 3.500 | 1.344 | 150           |
| NPS3-1/2B | 3-1/2             | 4.000 | 1.594 | 100           |
| NPS4B     | 4                 | 4.500 | 1.594 | 80            |

**CEX Series**  
Lightweight Pipe Caps

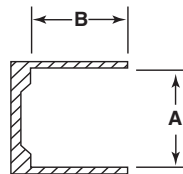


Specifications:

- Material: Polyethylene
- Color: See Table

Features:

- Lightweight range with internal rings for positive-gripping power
- Protects threaded or non-threaded pipe ends
- Eliminates foreign materials from entering the pipe



| Item No.  | Nominal Pipe Size | A     | B     | Color  | Bulk Pack Qty |
|-----------|-------------------|-------|-------|--------|---------------|
|           | in                | in    | in    |        |               |
| CEX1/4B   | 1/4               | 0.540 | 0.845 | Orange | 4000          |
| CEX3/8B   | 3/8               | 0.675 | 0.845 | Orange | 2500          |
| CEX1/2B   | 1/2               | 0.840 | 0.845 | Black  | 1800          |
| CEX3/4B   | 3/4               | 1.050 | 0.845 | Red    | 1300          |
| CEX1C     | 1                 | 1.315 | 0.845 | Blue   | 1600          |
| CEX1-1/4B | 1-1/4             | 1.660 | 1.465 | Red    | 650           |

| Item No.  | Nominal Pipe Size | A     | B     | Color | Bulk Pack Qty |
|-----------|-------------------|-------|-------|-------|---------------|
|           | in                | in    | in    |       |               |
| CEX1-1/2C | 1-1/2             | 1.900 | 1.465 | Black | 500           |
| CEX2B     | 2                 | 2.375 | 1.465 | Blue  | 300           |
| CEX2-1/2B | 2-1/2             | 2.875 | 1.465 | Black | 200           |
| CEX3B     | 3                 | 3.500 | 1.465 | Blue  | 150           |
| CEX3-1/2B | 3-1/2             | 4.000 | 1.695 | Black | 100           |
| CEX4B     | 4                 | 4.500 | 1.695 | Blue  | 80            |



**PIPE PLUGS**

How to Measure a Steel Pipe & Pick a Pipe Plug  
See Page 105

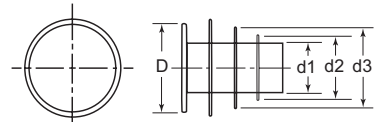
**RPP Series Ribbed Pipe Plug**

Specifications:

- Material: Polyethylene
- Color: See Table

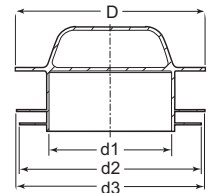
Features:

- Flexible ribs allow plug to fit multiple schedules of NPT pipe
- Straight wall on the plugs OD provides a secure and friction fit with the mating parts ID



Style 1

| Item No. | NPT   |                      | Style | Color | D      | d1     | d2     | d3     | Bulk Pack Qty |
|----------|-------|----------------------|-------|-------|--------|--------|--------|--------|---------------|
|          | in    | Schedule             |       |       |        |        |        |        |               |
| 1343438  | 1/4   | 40,80                | 1     | Blue  | 0.539  | 0.266  | 0.478  | 0.5    | 20000         |
| 1343439  | 3/8   | 40,80                | 1     | Blue  | 0.673  | 0.217  | 0.575  | 0.587  | 15000         |
| 1343440  | 1/2   | 40,80,160            | 1     | Blue  | 0.838  | 0.407  | 0.695  | 0.734  | 12000         |
| 1343441  | 3/4   | 40,80,160            | 1     | Blue  | 1.051  | 0.461  | 0.905  | 0.939  | 10000         |
| 1343442  | 1     | 40,80,160            | 1     | Blue  | 1.315  | 0.637  | 1.161  | 1.194  | 8000          |
| 1343443  | 1-1/4 | 40,80,160            | 1     | Blue  | 1.660  | 0.902  | 1.509  | 1.539  | 4000          |
| 1343444  | 1-1/2 | 40,80,160            | 1     | Blue  | 1.900  | 1.053  | 1.717  | 1.759  | 3000          |
| 1343445  | 2     | 40,80,160            | 1     | Blue  | 2.374  | 1.254  | 2.216  | 2.163  | 2000          |
| 1343446  | 2-1/2 | 40,80,160            | 1     | Blue  | 2.875  | 1.641  | 2.758  | 2.737  | 1300          |
| 1343447  | 3     | 40,80,160            | 1     | Blue  | 3.500  | 2.230  | 3.356  | 3.309  | 800           |
| 1343448  | 4     | 40,80,120,160        | 1     | Blue  | 4.500  | 3.137  | 4.292  | 4.281  | 450           |
| RPP4A    | 4     | 40,80,120,160        | 2     | Black | 4.450  | 2.250  | 4.249  | 4.409  | 50            |
| 1343449  | 5     | 40,80,120,160        | 1     | Blue  | 5.563  | 3.908  | 5.285  | 5.245  | 400           |
| RPP5A    | 5     | 40,80,120            | 2     | Blue  | 5.452  | 2.875  | 5.150  | 5.275  | 50            |
| 1343450  | 6     | 40,80,120            | 1     | Blue  | 6.625  | 4.852  | 6.472  | 6.364  | 270           |
| RPP6A    | 6     | 80,120               | 2     | Red   | 6.460  | 3.500  | 5.500  | 6.000  | 20            |
| 1343451  | 8     | 40,60,80,100,120,140 | 1     | Blue  | 8.625  | 6.625  | 8.396  | 8.268  | 115           |
| 1343452  | 10    | 20,30,40,60,80,100   | 1     | Blue  | 10.750 | 8.750  | 10.475 | 10.450 | 69            |
| 1343453  | 12    | 30,40,60,80,100      | 1     | Blue  | 12.750 | 10.687 | 12.366 | 12.410 | 42            |
| 1343454  | 14    | 20,30,60,80,100,120  | 1     | Blue  | 14.000 | 11.500 | 13.602 | 13.566 | 12            |
| 1343455  | 16    | 20,30,40,60,80       | 1     | Blue  | 16.000 | 13.750 | 15.655 | 15.547 | 15            |
| 1343456  | 18    | 20,30,40,60,80       | 1     | Blue  | 18.000 | 15.250 | 17.464 | 17.443 | 10            |
| 1343457  | 20    | 20,30,40,60,80       | 1     | Blue  | 20.000 | 17.000 | 19.593 | 19.522 | 10            |
| 1343458  | 24    | 20,30,40,60,80       | 1     | Blue  | 24.000 | 20.867 | 24.606 | 24.606 | 5             |



Style 2

**Schedule 40 & 80 Pipe Plugs**

Specifications:

- Material: Polyethylene
- Color: See Table

Features:

- Designed to plug schedule 40 and 80 steel or plastic pipe ends



See the Numbered Series on page 24 - 26 for more size and color options

**Steel Pipe**

| Nominal Pipe Size |          | Item No. | Color | Bulk Pack Qty |
|-------------------|----------|----------|-------|---------------|
| in                | Schedule |          |       |               |
| 1/8               | 40       | 004A     | Blue  | 5000          |
| 1/8               | 80       | 002A     | Blue  | 5000          |
| 1/4               | 40       | 008A     | Blue  | 5000          |
| 1/4               | 80       | 006A     | Blue  | 5000          |
| 3/8               | 40       | 012A     | Blue  | 5000          |
| 3/8               | 80       | 009A     | Blue  | 5000          |
| 1/2               | 40       | 017A     | Blue  | 7500          |
| 1/2               | 80       | 014A     | Blue  | 9000          |
| 3/4               | 40       | 027A     | Blue  | 7000          |
| 3/4               | 80       | 022A     | Blue  | 4000          |
| 1                 | 40       | 039A     | Red   | 2000          |
| 1                 | 80       | 030A     | Blue  | 4500          |
| 1-1/4             | 40       | 1055A    | Blue  | 2500          |
| 1-1/4             | 80       | 044A     | Blue  | 2500          |
| 1-1/2             | 40       | 055A     | Blue  | 1500          |
| 1-1/2             | 80       | 051A     | Blue  | 1500          |
| 2                 | 40       | 062A     | Blue  | 850           |
| 2                 | 80       | 1075A    | Blue  | 2500          |
| 2-1/2             | 40       | 073A     | Blue  | 600           |
| 2-21/2            | 80       | 064A     | Blue  | 1000          |
| 3                 | 40       | 083A     | Blue  | 750           |
| 3                 | 80       | 081A     | Blue  | 500           |
| 3-1/2             | 40       | 089A     | Blue  | 350           |
| 3-1/2             | 80       | 086A     | Blue  | 400           |
| 4                 | 40       | 092A     | Blue  | 250           |
| 4                 | 80       | 090A     | Blue  | 300           |
| 5                 | 40       | 1110A    | Blue  | 250           |
| 5                 | 80       | 096A     | Blue  | 250           |
| 6                 | 40       | FPL6A    | Black | 150           |
| 6                 | 80       | 102A     | Blue  | 250           |
| 8                 | 40       | FPL8A    | Black | 100           |
| 8                 | 80       | 112A     | Blue  | 100           |
| 10                | 40       | FPL10A   | Black | 50            |
| 12                | 40       | FPL12A   | Black | 30            |
| 12                | 80       | 132A     | Blue  | 40            |

**Plastic Pipe**

| Nominal Pipe Size |          | Item No. | Color | Bulk Pack Qty |
|-------------------|----------|----------|-------|---------------|
| in                | Schedule |          |       |               |
| 1/8               | 40       | 003A     | Blue  | 5000          |
| 1/8               | 80       | 1000A    | Blue  | 5000          |
| 1/4               | 40       | 007A     | Blue  | 5000          |
| 1/4               | 80       | 005A     | Blue  | 5000          |
| 3/8               | 40       | 013A     | Blue  | 5000          |
| 3/8               | 80       | 009A     | Blue  | 5000          |
| 1/2               | 40       | 016A     | Blue  | 7500          |
| 1/2               | 80       | 013A     | Blue  | 9000          |
| 3/4               | 40       | 026A     | Blue  | 4000          |
| 3/4               | 80       | 022A     | Blue  | 4000          |
| 1                 | 40       | 038A     | Blue  | 2500          |
| 1                 | 80       | 030A     | Blue  | 4500          |
| 1-1/4             | 40       | 047A     | Blue  | 2000          |
| 1-1/4             | 80       | 044A     | Blue  | 2500          |
| 1-1/2             | 40       | 054A     | Blue  | 1700          |
| 1-1/2             | 80       | 051A     | Blue  | 1500          |
| 2                 | 40       | 061A     | Blue  | 1000          |
| 2                 | 80       | 058A     | Blue  | 900           |
| 2-1/2             | 40       | 071A     | Blue  | 600           |
| 2-1/2             | 80       | 064A     | Blue  | 1000          |
| 3                 | 40       | 083A     | Blue  | 750           |
| 3                 | 80       | 081A     | Blue  | 500           |
| 3-1/2             | 40       | 088A     | Blue  | 300           |
| 3-1/2             | 80       | 086A     | Blue  | 400           |
| 4                 | 40       | 092A     | Blue  | 300           |
| 4                 | 80       | 090A     | Blue  | 300           |
| 5                 | 40       | 1100A    | Blue  | 250           |
| 5                 | 80       | 096A     | Blue  | 250           |
| 6                 | 40       | 104A     | Blue  | 90            |
| 6                 | 80       | 102A     | Blue  | 250           |
| 8                 | 40       | 116A     | Blue  | 100           |
| 8                 | 80       | 112A     | Blue  | 100           |
| 10                | 40       | 128A     | Blue  | 75            |
| 12                | 40       | 133A     | Blue  | 30            |
| 12                | 80       | 132A     | Blue  | 40            |



# SUCKER ROD PROTECTORS, STATOR CAPS & NPT PLUGS

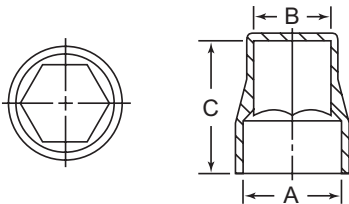
## SRH Series Sucker Rod Caps

**Specifications:**

- Material: Polyethylene
- Color: Black

**Features:**

- Protects sucker-rod pin ends
- The heavy-duty part design protects during shipping or in-house processing
- The hex head design promotes easy removal in the field with an open or closed-end wrench



| Item No.  | Coupling Size<br>in | A<br>in | B<br>in | C<br>in | Bulk Pack Qty |
|-----------|---------------------|---------|---------|---------|---------------|
| SRH5/8B   | 0.625               | 1.250   | 1.050   | 1.750   | 700           |
| SRH3/4A   | 0.750               | 1.500   | 1.130   | 2.063   | 500           |
| SRH7/8A   | 0.875               | 1.635   | 1.325   | 2.188   | 400           |
| SRH1A     | 1.000               | 2.000   | 1.565   | 2.460   | 250           |
| SRH1-1/8A | 1.125               | 2.250   | 1.560   | 2.625   | 200           |

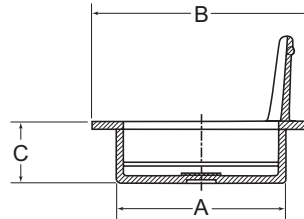
## SRPP Series Sucker Rod Plug with Pull

**Specifications:**

- Material: Polyethylene
- Color: Black

**Features:**

- Protect sucker-rod coupling ends
- Protects the coupling during shipping and storage



| Item No.   | Coupling Size<br>in | A<br>in | B<br>in | C<br>in | Bulk Pack Qty |
|------------|---------------------|---------|---------|---------|---------------|
| SRPP5/8A   | 0.625               | 0.982   | 1.187   | 0.400   | 700           |
| SRPP3/4A   | 0.750               | 1.110   | 1.437   | 0.400   | 500           |
| SRPP7/8A   | 0.875               | 1.240   | 1.562   | 0.400   | 400           |
| SRPP1A     | 1.000               | 1.430   | 1.937   | 0.400   | 250           |
| SRPP1-1/8A | 1.125               | 1.620   | 2.093   | 0.400   | 200           |

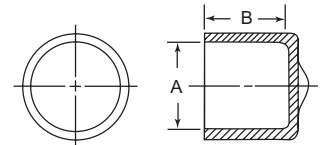
## SCDK Series Pump Stator/Rotor Cap

**Specifications:**

- Material: PVC
- Color: Black

**Features:**

- Provides maximum protection for stators/rotors on progressive cavity pumps
- Flexible material for easy installation



| Item No.  | ID A<br>in | Length B<br>in | Bulk Pack Qty |
|-----------|------------|----------------|---------------|
| SCDK0262A | 4.500      | 2.000          | 50            |
| SCDK0259A | 4.750      | 2.000          | 50            |
| SCDK0263A | 5.000      | 2.000          | 50            |
| SCDK0264A | 6.250      | 2.000          | 25            |

| Item No.  | ID A<br>in | Length B<br>in | Bulk Pack Qty |
|-----------|------------|----------------|---------------|
| SCDK0265A | 6.500      | 2.000          | 25            |
| SCDK0266A | 6.750      | 2.000          | 25            |
| SCDK0267A | 8.000      | 2.000          | 25            |
| DM9625-2A | 9.625      | 2.000          | 20            |

## NPT Series Plugs for NPT Threads

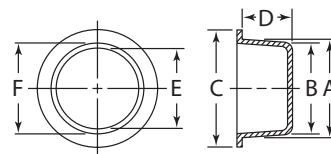


**Specifications:**

- Material: Low-Density Polyethylene
- Colors: See Table

**Features:**

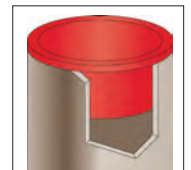
- Designed specifically to be used to plug NPT tapered threaded fittings
- The tapered design allows the part to plug multiple inner diameters



**To Assure Proper Fit:**



Plug dimension "A" should be approx. 1% larger than the inner diameter of the part. Minimum of .020"



| Item No.  | A     |        | B     |        | C     |        | D     |       | E     |        | F     |        | Color  | Bulk Pack Qty |
|-----------|-------|--------|-------|--------|-------|--------|-------|-------|-------|--------|-------|--------|--------|---------------|
|           | in    | mm     | in    | mm     | in    | mm     | in    | mm    | in    | mm     | in    | mm     |        |               |
| NPT3/8A   | 0.615 | 15.62  | 0.570 | 14.48  | 0.750 | 19.05  | 0.285 | 7.24  | 0.497 | 12.62  | 0.535 | 13.59  | Yellow | 5000          |
| NPT3/4A   | 0.955 | 24.26  | 0.922 | 23.42  | 1.125 | 28.58  | 0.363 | 9.22  | 0.849 | 21.56  | 0.872 | 22.15  | Red    | 5500          |
| NPT1-1/4A | 1.560 | 39.62  | 1.510 | 38.35  | 1.750 | 44.45  | 0.435 | 11.05 | 1.401 | 35.59  | 1.481 | 37.62  | Red    | 2000          |
| NPT2A     | 2.275 | 57.79  | 2.225 | 56.52  | 2.437 | 61.90  | 0.495 | 12.57 | 2.092 | 53.14  | 2.194 | 55.73  | Blue   | 2500          |
| NPT2-1/2A | 2.725 | 69.22  | 2.680 | 68.07  | 2.875 | 73.03  | 0.480 | 12.19 | 2.512 | 63.80  | 2.628 | 66.75  | Black  | 600           |
| NPT3A     | 3.325 | 84.46  | 3.285 | 83.44  | 3.500 | 88.90  | 0.470 | 11.94 | 3.154 | 80.11  | 3.220 | 81.79  | Blue   | 400           |
| NPT3-1/2A | 3.785 | 96.14  | 3.775 | 95.89  | 4.062 | 103.17 | 0.750 | 19.05 | 3.665 | 93.09  | 3.675 | 93.35  | Black  | 550           |
| NPT4A     | 4.315 | 109.61 | 4.295 | 109.09 | 4.687 | 119.05 | 0.790 | 20.07 | 4.077 | 103.56 | 4.115 | 104.52 | Blue   | 500           |
| NPT5A     | 5.360 | 136.14 | 5.350 | 135.89 | 5.750 | 146.05 | 0.850 | 21.59 | 5.205 | 132.21 | 5.215 | 132.46 | Blue   | 275           |
| NPT6A     | 6.425 | 163.20 | 6.390 | 162.31 | 6.750 | 171.45 | 0.895 | 22.73 | 6.252 | 158.80 | 6.272 | 159.31 | Blue   | 180           |



# PIPE CHOCKS & WELD FITTING CAPS AND PLUGS

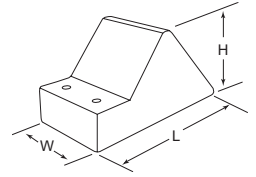
## PCK Series Pipe Chocks

**Specifications:**

- Material: Low-Density Polyethylene
- Color: Orange

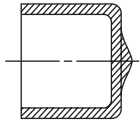
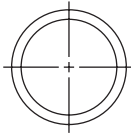
**Features:**

- Pipe chocks are used to help secure pipe during transit
- Nails are included

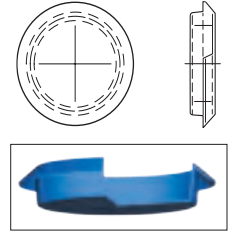


| Item No. | L     |        | W     |       | H     |       | Bulk Pack Qty |
|----------|-------|--------|-------|-------|-------|-------|---------------|
|          | in    | mm     | in    | mm    | in    | mm    |               |
| PCK0400B | 4.500 | 114.30 | 2.750 | 69.85 | 2.000 | 50.80 | 50            |
| PCK0800B | 8.000 | 203.20 | 3.500 | 88.90 | 3.000 | 76.20 | 20            |

## BW & DM Series Butt-Weld Caps & Plugs



Type: Cap



Type: Plug

**Specifications:**

- See Table

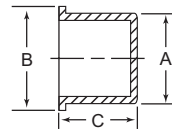
**Features:**

- Provides maximum protection for butt-weld ends on valves, pumps and heat exchangers
- Will not crack or chip and eliminates the need for plywood, masonite and fasteners
- Saves labor assembly costs
- BW Plug: The special reverse angle matches the butt-weld angle and completely covers or protects the end during shipping and storage

| Item No.    | Nominal Pipe Size |      |              | Material | Color | Bulk Pack Qty |
|-------------|-------------------|------|--------------|----------|-------|---------------|
|             | in                | Type |              |          |       |               |
| DM0843-1/2A | 1/2               | Cap  | PVC          | Black    | 5000  |               |
| DM1000-1/2A | 3/4               | Cap  | PVC          | Black    | 2500  |               |
| DM1312-1/2A | 1                 | Cap  | PVC          | Black    | 2000  |               |
| DM1625-1/2A | 1-1/4             | Cap  | PVC          | Black    | 500   |               |
| DM1875-1/2A | 1-1/2             | Cap  | PVC          | Black    | 700   |               |
| BW2A        | 2                 | Plug | Polyethylene | Blue     | 1000  |               |
| DM2375-1/2A | 2                 | Cap  | PVC          | Black    | 500   |               |
| BW2-1/2A    | 2-1/2             | Plug | Polyethylene | Blue     | 600   |               |

| Item No.    | Nominal Pipe Size |      |              | Material | Color | Bulk Pack Qty |
|-------------|-------------------|------|--------------|----------|-------|---------------|
|             | in                | Type |              |          |       |               |
| DM2875-1/2A | 2-1/2             | Cap  | PVC          | Black    | 500   |               |
| BW3A        | 3                 | Plug | Polyethylene | Blue     | 400   |               |
| DM3500-1/2A | 3                 | Cap  | PVC          | Black    | 200   |               |
| DM4000-1/2A | 3-1/2             | Cap  | PVC          | Black    | 200   |               |
| BW4A        | 4                 | Plug | Polyethylene | Blue     | 250   |               |
| DM4500-1/2A | 4                 | Cap  | PVC          | Black    | 200   |               |
| DM5500-1/2A | 5                 | Cap  | PVC          | Black    | 100   |               |
| DM6500-1/2A | 6                 | Cap  | PVC          | Black    | 100   |               |

## V Series Socket-Weld Fitting Plugs



**Specifications:**

- Material: Polyethylene
- Color: Blue

**Features:**

- Designed to provide maximum protection for close fit socket weld applications
- Straight wall on the plugs OD provides a secure and friction fit with the mating parts ID

| Item No. | Socket Weld Size |  | A     | B     | C     | Bulk Pack Qty |
|----------|------------------|--|-------|-------|-------|---------------|
|          | in               |  | in    | in    | in    |               |
| V23A     | 1/2              |  | 0.875 | 1.000 | 0.355 | 5000          |
| V31A     | 3/4              |  | 1.085 | 1.200 | 0.430 | 3000          |
| V42A     | 1                |  | 1.350 | 1.475 | 0.430 | 4000          |
| V53A     | 1-1/4            |  | 1.695 | 1.801 | 0.430 | 2500          |
| V57A     | 1-1/2            |  | 1.935 | 2.060 | 0.430 | 2000          |
| V68A     | 2                |  | 2.426 | 2.550 | 0.555 | 1000          |



# RAISED-FACE FLANGE PROTECTORS

## 150, 300, 600 & 900 Series Quick-Fit Raised-Face Protectors

**Specifications:**

- Material: Polyethylene
- Colors: See Table
- Meets ANSI B16.5 and API specifications
- Suitable for use on ASA and BS1560 flanges

**Features:**

- Quickly fits into flange bolt holes
- Weather and petroleum resistant
- Requires no fasteners



How to Measure a Flange & Pick a Protector  
See Page 105



| Nominal Pipe Size | Class Pressure Rating | Item No.  | Color | Bulk Pack Qty |
|-------------------|-----------------------|-----------|-------|---------------|
| 1/2               | 125                   | 1501/2A   | Blue  | 600           |
| 1/2               | 150                   | 1501/2A   | Blue  | 600           |
| 1/2               | 300                   | 3001/2A   | Black | 500           |
| 1/2               | 400                   | 3001/2A   | Black | 500           |
| 1/2               | 600                   | 3001/2A   | Black | 500           |
| 1/2               | 900                   | 9001/2A   | Black | 400           |
| 1/2               | 1500                  | 9001/2A   | Black | 400           |
| 3/4               | 125                   | 1503/4A   | Blue  | 550           |
| 3/4               | 150                   | 1503/4A   | Blue  | 550           |
| 3/4               | 300                   | 3003/4A   | Black | 325           |
| 3/4               | 400                   | 3003/4A   | Black | 325           |
| 3/4               | 600                   | 3003/4A   | Black | 325           |
| 3/4               | 900                   | 9003/4A   | Black | 300           |
| 3/4               | 1500                  | 9003/4A   | Black | 300           |
| 1                 | 125                   | 1501A     | Blue  | 400           |
| 1                 | 150                   | 1501A     | Blue  | 400           |
| 1                 | 300                   | 3001A     | Black | 280           |
| 1                 | 400                   | 3001A     | Black | 280           |
| 1                 | 600                   | 3001A     | Black | 280           |
| 1                 | 900                   | 9001A     | Black | 250           |
| 1                 | 1500                  | 9001A     | Black | 250           |
| 1-1/4             | 125                   | 1501-1/4A | Blue  | 350           |
| 1-1/4             | 150                   | 1501-1/4A | Blue  | 350           |
| 1-1/4             | 300                   | 3001-1/4A | Black | 200           |
| 1-1/4             | 400                   | 3001-1/4A | Black | 200           |
| 1-1/4             | 600                   | 3001-1/4A | Black | 200           |
| 1-1/4             | 900                   | 9001-1/4A | Black | 200           |
| 1-1/4             | 1500                  | 9001-1/4A | Black | 200           |
| 1-1/2A            | 125                   | 1501-1/2A | Blue  | 250           |
| 1-1/2A            | 150                   | 1501-1/2A | Blue  | 250           |
| 1-1/2A            | 300                   | 3001-1/2A | Black | 150           |
| 1-1/2A            | 400                   | 3001-1/2A | Black | 150           |
| 1-1/2A            | 600                   | 3001-1/2A | Black | 150           |
| 1-1/2A            | 900                   | 9001-1/2A | Black | 100           |
| 1-1/2A            | 1500                  | 9001-1/2A | Black | 100           |
| 2                 | 125                   | 1502A     | Blue  | 200           |
| 2                 | 150                   | 1502A     | Blue  | 200           |
| 2                 | 300                   | 3002A     | Black | 125           |
| 2                 | 400                   | 3002A     | Black | 125           |
| 2                 | 600                   | 3002A     | Black | 125           |
| 2                 | 900                   | 9002A     | Black | 100           |
| 2                 | 1500                  | 9002A     | Black | 100           |
| 2-1/2A            | 125                   | 1502-1/2A | Blue  | 150           |

| Nominal Pipe Size | Class Pressure Rating | Item No.  | Color | Bulk Pack Qty |
|-------------------|-----------------------|-----------|-------|---------------|
| 2-1/2A            | 150                   | 1502-1/2A | Blue  | 150           |
| 2-1/2A            | 300                   | 3002-1/2A | Black | 100           |
| 2-1/2A            | 400                   | 3002-1/2A | Black | 100           |
| 2-1/2A            | 600                   | 3002-1/2A | Black | 100           |
| 2-1/2A            | 900                   | 9002-1/2A | Black | 100           |
| 2-1/2A            | 1500                  | 9002-1/2A | Black | 100           |
| 3                 | 125                   | 1503A     | Blue  | 100           |
| 3                 | 150                   | 1503A     | Blue  | 100           |
| 3                 | 300                   | 3003A     | Black | 100           |
| 3                 | 400                   | 3003A     | Black | 100           |
| 3                 | 600                   | 3003A     | Black | 100           |
| 3                 | 900                   | 9003A     | Black | 50            |
| 3-1/2             | 125                   | 1503-1/2A | Blue  | 100           |
| 3-1/2             | 150                   | 1503-1/2A | Blue  | 100           |
| 3-1/2             | 300                   | 3003-1/2A | Black | 80            |
| 4                 | 125                   | 1504A     | Blue  | 100           |
| 4                 | 150                   | 1504A     | Blue  | 100           |
| 4                 | 300                   | 3004A     | Black | 80            |
| 4                 | 600                   | 6004A     | Black | 50            |
| 4                 | 900                   | 9004A     | Black | 50            |
| 5                 | 150                   | 900098    | Blue  | 50            |
| 5                 | 300                   | 900099    | Blue  | 50            |
| 6                 | 125                   | 1506A     | Blue  | 90            |
| 6                 | 150                   | 1506A     | Blue  | 90            |
| 6                 | 300                   | 3006A     | Black | 40            |
| 6                 | 600                   | 6006A     | Black | 30            |
| 6                 | 900                   | 9006A     | Black | 20            |
| 8                 | 125                   | 1508A     | Blue  | 70            |
| 8                 | 150                   | 1508A     | Blue  | 70            |
| 8                 | 300                   | 3008A     | Black | 45            |
| 8                 | 600                   | 6008A     | Black | 20            |
| 8                 | 900                   | 9008A     | Black | 20            |
| 10                | 125                   | 15010A    | Blue  | 35            |
| 10                | 150                   | 15010A    | Blue  | 35            |
| 10                | 300                   | 30010A    | Black | 35            |
| 10                | 600                   | 60010A    | Black | 10            |
| 10                | 900                   | 90010A    | Black | 10            |
| 12                | 125                   | 15012A    | Blue  | 30            |
| 12                | 150                   | 15012A    | Blue  | 30            |
| 12                | 300                   | 30012A    | Black | 25            |
| 12                | 600                   | 60012A    | Black | 10            |
| 12                | 900                   | 90012A    | Black | 10            |

## FPR Series Raised-Face Protector Plugs

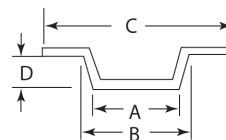


**Specifications:**

- Material: Polyethylene
- Color: Black
- Meets ANSI/ASME B16.5 Specifications

**Features:**

- Protects petroleum, gas and water type valve flanges
- Protects raised machine face and pipe interior from dirt and moisture during shot and sandblasting operations
- Bolt holes are not covered by flange plugs
- Tapered plug design fits snugly into the pipe's interior
- Requires no fasteners



| Item No.  | Nominal Pipe Size | A     | B     | C     | D     | Flange Thickness | Bulk Pack Qty |
|-----------|-------------------|-------|-------|-------|-------|------------------|---------------|
| FPR1A     | 1                 | 1.110 | 1.156 | 2.080 | 0.375 | 0.150            | 2000          |
| FPR2A     | 2                 | 2.050 | 2.075 | 3.805 | 0.440 | 0.140            | 400           |
| FPR2-1/2A | 2-1/2             | 2.490 | 2.510 | 4.315 | 0.480 | 0.130            | 400           |
| FPR3A     | 3                 | 3.030 | 3.110 | 5.195 | 0.730 | 0.132            | 450           |
| FPR4A     | 4                 | 3.995 | 4.095 | 6.550 | 0.925 | 0.130            | 250           |

| Item No. | Nominal Pipe Size | A      | B      | C      | D     | Flange Thickness | Bulk Pack Qty |
|----------|-------------------|--------|--------|--------|-------|------------------|---------------|
| FPR5A    | 5                 | 4.990  | 5.080  | 7.475  | 1.070 | 0.125            | 175           |
| FPR6A    | 6                 | 5.950  | 6.050  | 8.810  | 1.265 | 0.125            | 100           |
| FPR8A    | 8                 | 8.000  | 8.070  | 11.020 | 1.275 | 0.145            | 70            |
| FPR10A   | 10                | 9.995  | 10.150 | 12.925 | 1.330 | 0.170            | 50            |
| FPR12A   | 12                | 12.010 | 12.155 | 15.215 | 1.330 | 0.165            | 35            |

**RAISED-FACE FLANGE PROTECTORS****PGR Series  
Adhesive Peel & Stick Raised-Face Protectors**

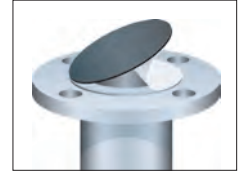
How to Measure a  
Flange & Pick a  
Protector  
See Page 105

## Specifications:

- Meets ANSI/ASME B16.5 specifications
- Material: Polyethylene
- Color: Black

## Features:

- Adhesive backed, peel and stick design
- Each size will protect the raised-face for 150, 300, 400, 600, 900, 1500 and 2500 pound flanges
- Special adhesive bonds tightly and leaves no residue under normal conditions
- Requires no fasteners



| Item No.  | Nominal Pipe Size |              | Bulk Pack Qty |
|-----------|-------------------|--------------|---------------|
|           | in                | Actual OD in |               |
| PGR1/2A   | 1/2               | 1.380        | 50            |
| PGR3/4A   | 3/4               | 1.690        | 50            |
| PGR1A     | 1                 | 2.000        | 50            |
| PGR1-1/4A | 1-1/4             | 2.500        | 50            |
| PGR1-1/2A | 1-1/2             | 2.880        | 50            |
| PGR2A     | 2                 | 3.620        | 50            |
| PGR2-1/2A | 2-1/2             | 4.120        | 25            |
| PGR3A     | 3                 | 5.000        | 50            |

| Item No.  | Nominal Pipe Size |              | Bulk Pack Qty |
|-----------|-------------------|--------------|---------------|
|           | in                | Actual OD in |               |
| PGR3-1/2A | 3-1/2             | 5.500        | 50            |
| PGR4B     | 4                 | 6.190        | 50            |
| PGR5A     | 5                 | 7.310        | 50            |
| PGR6A     | 6                 | 8.500        | 50            |
| PGR8A     | 8                 | 10.620       | 25            |
| PGR10A    | 10                | 12.750       | 25            |
| PGR12A    | 12                | 15.000       | 25            |

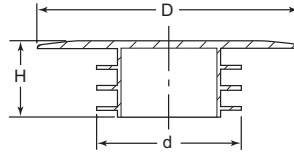
**PIR Series  
Push-In Raised Face Protectors**

## Specifications:

- Material: Polyethylene
- Color: Yellow
- Suitable for ANSI and DIN flanges

## Features:

- The flexible fins ensure a snug fit into the bore
- Protects raised face against dirt, moisture, paint and sand blasting
- Parts fit 150, 300, 600, 900, 1500 and 2500 pound flanges
- Requires no fasteners



| Item No.   | Nominal Pipe Size |  | DIN    | d      |    | D      |    | H     |  | Bulk Pack Qty |
|------------|-------------------|--|--------|--------|----|--------|----|-------|--|---------------|
|            | in                |  |        | in     | in | in     | in |       |  |               |
| PIR494283A | 1/2               |  | DN 15  | 0.748  |    | 1.772  |    | 0.650 |  | 500           |
| PIR494284A | 3/4               |  | DN 20  | 0.945  |    | 2.283  |    | 0.650 |  | 500           |
| PIR494285A | 1                 |  | DN 25  | 1.181  |    | 2.756  |    | 0.768 |  | 500           |
| PIR494286A | 1-1/4             |  | DN 32  | 1.535  |    | 3.071  |    | 1.161 |  | 500           |
| PIR494287A | 1-1/2             |  | DN 40  | 1.772  |    | 3.465  |    | 1.161 |  | 400           |
| PIR494288A | 2                 |  | DN 50  | 2.205  |    | 4.016  |    | 1.161 |  | 200           |
| PIR494289A | 2-1/2             |  | DN 65  | 2.835  |    | 4.803  |    | 1.358 |  | 200           |
| PIR494290A | 3                 |  | DN 80  | 3.346  |    | 5.433  |    | 1.358 |  | 150           |
| PIR494291A | 4                 |  | DN 100 | 4.685  |    | 6.417  |    | 1.437 |  | 100           |
| PIR494292A | 5                 |  | DN 125 | 5.630  |    | 7.480  |    | 1.437 |  | 100           |
| PIR494293A | 6                 |  | DN 150 | 6.693  |    | 8.465  |    | 1.437 |  | 50            |
| PIR494294A | 8                 |  | DN 200 | 8.701  |    | 10.630 |    | 1.634 |  | 30            |
| PIR494295A | 10                |  | DN 250 | 10.827 |    | 13.583 |    | 1.634 |  | 20            |
| PIR494296A | 12                |  | DN 300 | 12.795 |    | 16.063 |    | 1.634 |  | 10            |

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# FULL-FACE FLANGE PROTECTORS



**RFL/PCF/PRB Series  
Full-Face Flange Protectors**

▶ How to Measure a Flange & Pick a Protector, See Page 105



RFL Series



PCF Series



PRB Series



Cable Tie



Hole Plug



Pin/Washer



| Nominal Pipe Size<br>in | Class Pressure Rating | Actual OD<br>in | Bolt Circle Ø | Hole Size | Item No.     |             |                      | Bulk Pack Qty | Fasteners |               |           |           |
|-------------------------|-----------------------|-----------------|---------------|-----------|--------------|-------------|----------------------|---------------|-----------|---------------|-----------|-----------|
|                         |                       |                 |               |           | HDPE (Black) | PP (Black)  | Pressboard (Natural) |               | Cable Tie | Retainer Plug | PIN       | Washer    |
| 24                      | 300                   | 36.000          | 32.000        | 1.625     | RFL300-24A   | PCF300-24A  | PRB300-24A           | 10            | CT029B    | FLS045B       | —         | —         |
| 24                      | 400                   | 36.000          | 32.000        | 1.875     | RFL400-24A   | —           | —                    | 10            | CT029B    | FLS055B       | —         | —         |
| 24                      | 600                   | 37.000          | 33.000        | 2.000     | RFL600-24A   | PCF600-24A  | PRB600-24A           | 10            | CT076B    | FLS060B       | —         | —         |
| 24                      | 900                   | 41.000          | 35.500        | 2.625     | RFL900-24A   | PCF900-24A  | PRB900-24A           | 10            | CT076B    | FLS075B       | —         | —         |
| 24                      | 1500                  | 46.000          | 39.000        | 3.625     | RFL1500-24A  | PCF1500-24A | PRB1500-24A          | 10            | CT080B    | FLS080B       | —         | —         |
| 26                      | 150                   | 34.250          | 31.750        | 1.375     | RFL150-26A   | PCF150-26A  | PRB150-26A           | 10            | CT027B    | FLS035B       | PIN3-1/4B | WAS1-3/4A |
| 26                      | 300                   | 38.250          | 34.500        | 1.750     | RFL300-26A   | PCF300-26A  | PRB300-26A           | 10            | CT029B    | FLS050B       | —         | —         |
| 26                      | 400                   | 38.250          | 34.500        | 1.875     | RFL400-26A   | —           | —                    | 10            | CT029B    | FLS055B       | —         | —         |
| 26                      | 600                   | 40.000          | 36.000        | 2.000     | RFL600-26A   | PCF600-26A  | PRB600-26A           | 10            | CT076B    | FLS060B       | —         | —         |
| 26                      | 900                   | 42.750          | 37.500        | 2.875     | RFL900-26A   | PCF900-26A  | PRB900-26A           | 10            | CT076B    | —             | —         | —         |
| 28                      | 150                   | 36.500          | 34.000        | 1.375     | RFL150-28A   | PCF150-28A  | PRB150-28A           | 10            | CT027B    | FLS035B       | PIN3-1/4B | WAS1-3/4A |
| 28                      | 300                   | 40.750          | 37.000        | 1.750     | RFL300-28A   | PCF300-28A  | PRB300-28A           | 10            | CT029B    | FLS050B       | —         | —         |
| 28                      | 400                   | 40.750          | 37.000        | 2.000     | RFL400-28A   | —           | —                    | 10            | CT029B    | FLS060B       | —         | —         |
| 28                      | 600                   | 42.250          | 38.000        | 2.125     | RFL600-28A   | PCF600-28A  | PRB600-28A           | 10            | CT076B    | FLS065B       | —         | —         |
| 28                      | 900                   | 46.000          | 40.250        | 3.125     | RFL900-28A   | PCF900-28A  | PRB900-28A           | 10            | CT076B    | —             | —         | —         |
| 30                      | 150                   | 38.750          | 36.000        | 1.375     | RFL150-30A   | PCF150-30A  | PRB150-30A           | 10            | CT027B    | FLS035B       | PIN3-1/4B | WAS1-3/4A |
| 30                      | 300                   | 43.000          | 39.250        | 1.875     | RFL300-30A   | PCF300-30A  | PRB300-30A           | 10            | CT029B    | FLS055B       | —         | —         |
| 30                      | 400                   | 43.000          | 39.250        | 2.125     | RFL400-30A   | —           | —                    | 10            | CT076B    | FLS065B       | —         | —         |
| 30                      | 600                   | 44.500          | 40.250        | 2.125     | RFL600-30A   | PCF600-30A  | PRB600-30A           | 10            | CT076B    | FLS065B       | —         | —         |
| 30                      | 900                   | 48.500          | 42.750        | 3.125     | RFL900-30A   | —           | —                    | 1             | CT076B    | —             | —         | —         |
| 32                      | 150                   | 41.750          | 38.500        | 1.625     | RFL150-32A   | PCF150-32A  | PRB150-32A           | 10            | CT029B    | FLS045B       | —         | —         |
| 32                      | 300                   | 45.250          | 41.500        | 2.000     | RFL300-32A   | PCF300-32A  | PRB300-32A           | 10            | CT029B    | FLS060B       | —         | —         |
| 32                      | 400                   | 45.250          | 41.500        | 2.125     | RFL400-32A   | —           | —                    | 10            | CT076B    | FLS065B       | —         | —         |
| 32                      | 600                   | 47.000          | 42.500        | 2.375     | RFL600-32A   | PCF600-32A  | PRB600-32A           | 10            | CT076B    | FLS070B       | —         | —         |
| 32                      | 900                   | 51.750          | 45.500        | 3.375     | RFL900-32A   | —           | —                    | 10            | CT076B    | —             | —         | —         |
| 34                      | 150                   | 43.750          | 40.500        | 1.625     | RFL150-34A   | PCF150-34A  | PRB150-34A           | 10            | CT029B    | FLS045B       | —         | —         |
| 34                      | 300                   | 47.500          | 43.500        | 2.000     | RFL300-34A   | PCF300-34A  | PRB300-34A           | 10            | CT076B    | FLS060B       | —         | —         |
| 34                      | 400                   | 47.500          | 43.500        | 2.125     | RFL400-34A   | —           | —                    | 10            | CT076B    | FLS065B       | —         | —         |
| 34                      | 600                   | 49.000          | 44.500        | 2.375     | RFL600-34A   | —           | —                    | 10            | CT076B    | FLS070B       | —         | —         |
| 34                      | 900                   | 55.000          | 48.250        | 3.625     | RFL900-34A   | —           | —                    | 10            | CT076B    | FLS080B       | —         | —         |
| 36                      | 150                   | 46.000          | 42.750        | 1.625     | RFL150-36A   | PCF150-36A  | PRB150-36A           | 10            | CT029B    | FLS045B       | —         | —         |
| 36                      | 300                   | 50.000          | 46.000        | 2.125     | RFL300-36A   | PCF300-36A  | —                    | 10            | CT076B    | FLS065B       | —         | —         |
| 36                      | 400                   | 50.000          | 46.000        | 2.125     | RFL400-36A   | —           | —                    | 10            | CT076B    | FLS065B       | —         | —         |
| 36                      | 600                   | 51.750          | 47.000        | 2.625     | RFL600-36A   | —           | —                    | 10            | CT076B    | FLS075B       | —         | —         |
| 36                      | 900                   | 57.500          | 50.750        | 3.625     | RFL900-36A   | —           | —                    | 10            | CT076B    | FLS080B       | —         | —         |
| 38                      | 150                   | 48.750          | 45.250        | 1.625     | RFL150-38A   | —           | —                    | 10            | CT080B    | FLS045B       | —         | —         |
| 38                      | 300                   | 46.000          | 43.000        | 1.625     | RFL300-38A   | —           | —                    | 10            | CT080B    | FLS045B       | —         | —         |
| 38                      | 400                   | 47.500          | 44.000        | 1.875     | RFL400-38A   | —           | —                    | 10            | CT080B    | FLS055B       | —         | —         |
| 38                      | 600                   | 50.000          | 45.750        | 2.375     | RFL600-38A   | —           | —                    | 10            | CT080B    | FLS070B       | —         | —         |
| 38                      | 900                   | 57.500          | 50.750        | 3.625     | RFL900-38A   | —           | —                    | 10            | CT080B    | FLS080B       | —         | —         |
| 40                      | 150                   | 50.750          | 47.250        | 1.625     | RFL150-40A   | —           | —                    | 1             | CT080B    | FLS045B       | —         | —         |
| 40                      | 300                   | 48.750          | 45.500        | 1.750     | RFL300-40A   | —           | —                    | 1             | CT080B    | FLS050B       | —         | —         |
| 40                      | 400                   | 50.000          | 46.250        | 2.000     | RFL400-40A   | —           | —                    | 1             | CT080B    | FLS060B       | —         | —         |
| 40                      | 600                   | 52.000          | 47.750        | 2.375     | RFL600-40A   | —           | —                    | 1             | CT080B    | FLS070B       | —         | —         |
| 40                      | 900                   | 59.500          | 52.750        | 3.625     | RFL900-40A   | —           | —                    | 1             | CT080B    | FLS080B       | —         | —         |
| 42                      | 150                   | 53.000          | 49.500        | 1.625     | RFL150-42A   | —           | —                    | 1             | CT080B    | FLS045B       | —         | —         |
| 42                      | 300                   | 50.750          | 47.500        | 1.750     | RFL300-42A   | —           | —                    | 1             | CT080B    | FLS050B       | —         | —         |
| 42                      | 400                   | 52.000          | 48.250        | 2.000     | RFL400-42A   | —           | —                    | 1             | CT080B    | FLS060B       | —         | —         |
| 42                      | 600                   | 55.250          | 50.500        | 2.625     | RFL600-42A   | —           | —                    | 1             | CT080B    | FLS075B       | —         | —         |
| 44                      | 150                   | 55.250          | 51.750        | 1.625     | RFL150-44A   | —           | —                    | 1             | CT080B    | FLS045B       | —         | —         |
| 44                      | 300                   | 53.250          | 49.750        | 1.875     | RFL300-44A   | —           | —                    | 1             | CT080B    | FLS055B       | —         | —         |
| 44                      | 400                   | 54.500          | 50.500        | 2.125     | RFL400-44A   | —           | —                    | 1             | CT080B    | FLS065B       | —         | —         |
| 44                      | 600                   | 57.250          | 52.500        | 2.625     | RFL600-44A   | —           | —                    | 1             | CT080B    | FLS075B       | —         | —         |
| 46                      | 150                   | 57.250          | 53.750        | 1.625     | RFL150-46A   | —           | —                    | 1             | CT080B    | FLS045B       | —         | —         |
| 46                      | 300                   | 55.750          | 52.000        | 2.000     | RFL300-46A   | —           | —                    | 1             | CT080B    | FLS060B       | —         | —         |
| 46                      | 400                   | 56.750          | 52.750        | 2.125     | RFL400-46A   | —           | —                    | 1             | CT080B    | FLS065B       | —         | —         |
| 46                      | 600                   | 59.500          | 54.750        | 2.625     | RFL600-46A   | —           | —                    | 1             | CT080B    | FLS075B       | —         | —         |
| 48                      | 150                   | 59.500          | 56.000        | 1.625     | RFL150-48A   | —           | —                    | 1             | CT080B    | FLS045B       | —         | —         |
| 48                      | 300                   | 57.750          | 54.000        | 2.000     | RFL300-48A   | —           | —                    | 1             | CT080B    | FLS060B       | —         | —         |
| 48                      | 400                   | 59.500          | 55.250        | 2.375     | RFL400-48A   | —           | —                    | 1             | CT080B    | FLS070B       | —         | —         |



# FULL-FACE FLANGE PROTECTORS

## Flange Protection Discs



### Specifications:

- Material: PolyCor™ corrugated polypropylene
- Color: Black

### Features:

- Provides simple, cost-effective protection for flanges
- Covers full flange face - applied by strapping cable ties through bolt holes
- Wide range covers variety of DIN sizes and pressure ratings

### DIN - PN 6 Range

| Item No.   | Nominal Pipe Size | Outside Ø | Bolt Circle Ø | Bolt Hole Size | Std Pack Qty | Cable Tie Item No. |
|------------|-------------------|-----------|---------------|----------------|--------------|--------------------|
|            |                   | mm        | mm            | mm             |              |                    |
| PCL6DN10A  | DN 10             | 75        | 50            | 11             | 50           | CT022B             |
| PCL6DN15A  | DN 15             | 80        | 55            | 11             | 50           | CT022B             |
| PCL6DN20A  | DN 20             | 90        | 65            | 11             | 50           | CT022B             |
| PCL6DN25A  | DN 25             | 100       | 75            | 11             | 50           | CT022B             |
| PCL6DN32A  | DN 32             | 120       | 90            | 14             | 50           | CT022B             |
| PCL6DN40A  | DN 40             | 130       | 100           | 14             | 50           | CT022B             |
| PCL6DN50A  | DN 50             | 140       | 110           | 14             | 50           | CT022B             |
| PCL6DN65A  | DN 65             | 160       | 130           | 14             | 50           | CT022B             |
| PCL6DN80A  | DN 80             | 190       | 150           | 18             | 50           | CT022B             |
| PCL6DN100A | DN 100            | 210       | 170           | 18             | 50           | CT022B             |
| PCL6DN125A | DN 125            | 240       | 200           | 18             | 50           | CT022B             |
| PCL6DN150A | DN 150            | 265       | 225           | 18             | 25           | CT022B             |
| PCL6DN200A | DN 200            | 320       | 280           | 18             | 25           | CT022B             |
| PCL6DN250A | DN 250            | 375       | 335           | 18             | 25           | CT022B             |
| PCL6DN300A | DN 300            | 440       | 395           | 22             | 25           | CT022B             |
| PCL6DN350A | DN 350            | 490       | 445           | 22             | 25           | CT022B             |
| PCL6DN400A | DN 400            | 540       | 495           | 22             | 10           | CT022B             |
| PCL6DN500A | DN 500            | 645       | 600           | 22             | 10           | CT022B             |
| PCL6DN600A | DN 600            | 755       | 705           | 24             | 10           | CT022B             |

### DIN - PN 16 Range

| Item No.         | Nominal Pipe Size | Outside Ø | Bolt Circle Ø | Bolt Hole Size | Std Pack Qty | Cable Tie Item No. |
|------------------|-------------------|-----------|---------------|----------------|--------------|--------------------|
|                  |                   | mm        | mm            | mm             |              |                    |
| PCL10162540DN10A | DN 10             | 90        | 60            | 14             | 50           | CT022B             |
| PCL10162540DN15A | DN 15             | 95        | 65            | 14             | 50           | CT022B             |
| PCL10162540DN20A | DN 20             | 105       | 75            | 14             | 50           | CT022B             |
| PCL10162540DN25A | DN 25             | 115       | 85            | 14             | 50           | CT022B             |
| PCL10162540DN32A | DN 32             | 140       | 100           | 18             | 50           | CT022B             |
| PCL10162540DN40A | DN 40             | 150       | 110           | 18             | 50           | CT022B             |
| PCL10162540DN50A | DN 50             | 165       | 125           | 18             | 50           | CT022B             |
| PCL1016DN65A     | DN 65             | 185       | 145           | 18             | 50           | CT022B             |
| PCL1016DN80A     | DN 80             | 200       | 160           | 18             | 50           | CT022B             |
| PCL1016DN100A    | DN 100            | 220       | 180           | 18             | 50           | CT022B             |
| PCL1016DN125A    | DN 125            | 250       | 210           | 18             | 50           | CT022B             |
| PCL1016DN150A    | DN 150            | 285       | 240           | 22             | 25           | CT022B             |
| PCL16DN200A      | DN 200            | 340       | 295           | 22             | 25           | CT022B             |
| PCL16DN250A      | DN 250            | 405       | 355           | 26             | 25           | CT022B             |
| PCL16DN300A      | DN 300            | 460       | 410           | 26             | 25           | CT022B             |
| PCL16DN350A      | DN 350            | 520       | 470           | 26             | 10           | CT022B             |
| PCL16DN400A      | DN 400            | 580       | 525           | 30             | 10           | CT022B             |
| PCL16DN500A      | DN 500            | 715       | 650           | 33             | 10           | CT022B             |
| PCL16DN600A      | DN 600            | 840       | 770           | 33             | 10           | CT022B             |

### DIN - PN 40 Range

| Part Number      | Nominal Pipe Size | Outside Ø | Bolt Circle Ø | Bolt Hole Size | Std Pack Qty | Cable Tie Item No. |
|------------------|-------------------|-----------|---------------|----------------|--------------|--------------------|
|                  |                   | mm        | mm            | mm             |              |                    |
| PCL10162540DN10A | DN 10             | 90        | 60            | 14             | 50           | CT025B             |
| PCL10162540DN15A | DN 15             | 95        | 65            | 14             | 50           | CT025B             |
| PCL10162540DN20A | DN 20             | 105       | 75            | 14             | 50           | CT025B             |
| PCL10162540DN25A | DN 25             | 115       | 85            | 14             | 50           | CT025B             |
| PCL10162540DN32A | DN 32             | 140       | 100           | 18             | 50           | CT025B             |
| PCL10162540DN40A | DN 40             | 150       | 110           | 18             | 50           | CT025B             |
| PCL10162540DN50A | DN 50             | 165       | 125           | 18             | 50           | CT025B             |
| PCL2540DN65A     | DN 65             | 185       | 145           | 18             | 50           | CT025B             |
| PCL2540DN80A     | DN 80             | 200       | 160           | 18             | 50           | CT025B             |
| PCL2540DN100A    | DN 100            | 235       | 190           | 22             | 50           | CT025B             |
| PCL2540DN125A    | DN 125            | 270       | 220           | 26             | 25           | CT025B             |
| PCL2540DN150A    | DN 150            | 300       | 250           | 26             | 25           | CT025B             |
| PCL40DN200A      | DN 200            | 375       | 320           | 30             | 25           | CT025B             |
| PCL40DN250A      | DN 250            | 450       | 385           | 33             | 25           | CT025B             |
| PCL40DN300A      | DN 300            | 515       | 450           | 33             | 10           | CT025B             |
| PCL40DN350A      | DN 350            | 580       | 510           | 36             | 10           | CT025B             |
| PCL40DN400A      | DN 400            | 660       | 585           | 39             | 10           | CT025B             |
| PCL40DN500A      | DN 500            | 755       | 670           | 42             | 10           | CT025B             |

### DIN - PN 10 Range

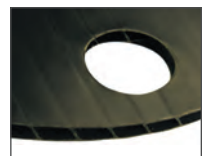
| Item No.         | Nominal Pipe Size | Outside Ø | Bolt Circle Ø | Bolt Hole Size | Std Pack Qty | Cable Tie Item No. |
|------------------|-------------------|-----------|---------------|----------------|--------------|--------------------|
|                  |                   | mm        | mm            | mm             |              |                    |
| PCL10162540DN10A | DN 10             | 90        | 60            | 14             | 50           | CT022B             |
| PCL10162540DN15A | DN 15             | 95        | 65            | 14             | 50           | CT022B             |
| PCL10162540DN20A | DN 20             | 105       | 75            | 14             | 50           | CT022B             |
| PCL10162540DN25A | DN 25             | 115       | 85            | 14             | 50           | CT022B             |
| PCL10162540DN32A | DN 32             | 140       | 100           | 18             | 50           | CT022B             |
| PCL10162540DN40A | DN 40             | 150       | 110           | 18             | 50           | CT022B             |
| PCL10162540DN50A | DN 50             | 165       | 125           | 18             | 50           | CT022B             |
| PCL1016DN65A     | DN 65             | 185       | 145           | 18             | 50           | CT022B             |
| PCL1016DN80A     | DN 80             | 200       | 160           | 18             | 50           | CT022B             |
| PCL1016DN100A    | DN 100            | 220       | 180           | 18             | 50           | CT022B             |
| PCL1016DN125A    | DN 125            | 250       | 210           | 18             | 50           | CT022B             |
| PCL1016DN150A    | DN 150            | 285       | 240           | 22             | 25           | CT022B             |
| PCL10DN200A      | DN 200            | 340       | 295           | 22             | 25           | CT022B             |
| PCL10DN250A      | DN 250            | 395       | 350           | 20             | 25           | CT022B             |
| PCL10DN300A      | DN 300            | 445       | 400           | 22             | 25           | CT022B             |
| PCL10DN350A      | DN 350            | 505       | 460           | 22             | 25           | CT022B             |
| PCL10DN400A      | DN 400            | 565       | 515           | 26             | 10           | CT022B             |
| PCL10DN500A      | DN 500            | 670       | 620           | 26             | 10           | CT022B             |
| PCL10DN600A      | DN 600            | 780       | 725           | 27             | 10           | CT022B             |

### DIN - PN 25 Range

| Item No.         | Nominal Pipe Size | Outside Ø | Bolt Circle Ø | Bolt Hole Size | Std Pack Qty | Cable Tie Item No. |
|------------------|-------------------|-----------|---------------|----------------|--------------|--------------------|
|                  |                   | mm        | mm            | mm             |              |                    |
| PCL10162540DN10A | DN 10             | 90        | 60            | 14             | 50           | CT025B             |
| PCL10162540DN15A | DN 15             | 95        | 65            | 14             | 50           | CT025B             |
| PCL10162540DN20A | DN 20             | 105       | 75            | 14             | 50           | CT025B             |
| PCL10162540DN25A | DN 25             | 115       | 85            | 14             | 50           | CT025B             |
| PCL10162540DN32A | DN 32             | 140       | 100           | 18             | 50           | CT025B             |
| PCL10162540DN40A | DN 40             | 150       | 110           | 18             | 50           | CT025B             |
| PCL10162540DN50A | DN 50             | 165       | 125           | 18             | 50           | CT025B             |
| PCL2540DN65A     | DN 65             | 185       | 145           | 18             | 50           | CT025B             |
| PCL2540DN80A     | DN 80             | 200       | 160           | 18             | 50           | CT025B             |
| PCL2540DN100A    | DN 100            | 235       | 190           | 22             | 50           | CT025B             |
| PCL2540DN125A    | DN 125            | 270       | 220           | 26             | 25           | CT025B             |
| PCL2540DN150A    | DN 150            | 300       | 250           | 26             | 25           | CT025B             |
| PCL25DN200A      | DN 200            | 375       | 320           | 30             | 25           | CT025B             |
| PCL25DN250A      | DN 250            | 450       | 385           | 33             | 25           | CT025B             |
| PCL25DN300A      | DN 300            | 515       | 450           | 33             | 10           | CT025B             |
| PCL25DN350A      | DN 350            | 580       | 510           | 36             | 10           | CT025B             |
| PCL25DN400A      | DN 400            | 660       | 585           | 39             | 10           | CT025B             |
| PCL25DN500A      | DN 500            | 755       | 670           | 42             | 10           | CT025B             |
| PCL25DN600A      | DN 600            | 845       | 770           | 36             | 10           | CT025B             |



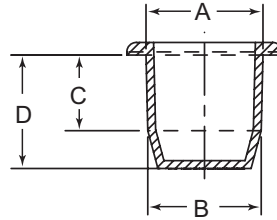
Cable ties fastened through bolt holes secure disc to flange



# FLANGE PROTECTOR FASTENERS



## FLS Series Flange Protector Retainer Plugs

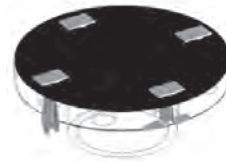


- Specifications:
- Material: PVC
  - Color: Black

- Features:
- Used to secure the RFL, PCF and PRB Series on pages 99 - 101

| Item No. | To Fit Bolt Hole in | A in  | B in  | C in  | D in  | Bulk Pack Qty |
|----------|---------------------|-------|-------|-------|-------|---------------|
| FLS005B  | 5/8                 | 0.640 | 0.625 | 0.750 | 1.130 | 3000          |
| FLS010B  | 3/4                 | 0.775 | 0.755 | 0.750 | 1.130 | 2000          |
| FLS015B  | 7/8                 | 0.900 | 0.880 | 0.820 | 1.200 | 2500          |
| FLS020B  | 1                   | 1.020 | 1.010 | 0.990 | 1.370 | 1500          |
| FLS025B  | 1-1/8               | 1.165 | 1.135 | 1.000 | 1.380 | 1000          |
| FLS030B  | 1-1/4               | 1.275 | 1.260 | 1.120 | 1.490 | 1000          |
| FLS035B  | 1-3/8               | 1.410 | 1.390 | 1.360 | 1.740 | 750           |
| FLS040B  | 1-1/2               | 1.545 | 1.510 | 1.370 | 1.730 | 750           |
| FLS045B  | 1-5/8               | 1.665 | 1.645 | 1.360 | 1.730 | 500           |
| FLS050B  | 1-3/4               | 1.770 | 1.750 | 1.360 | 1.700 | 400           |
| FLS055B  | 1-7/8               | 1.905 | 1.875 | 1.630 | 2.000 | 300           |
| FLS060B  | 2                   | 2.035 | 2.000 | 1.630 | 2.000 | 250           |
| FLS065B  | 2-1/8               | 2.160 | 2.125 | 1.630 | 2.000 | 200           |
| FLS070B  | 2-3/8               | 2.410 | 2.375 | 1.750 | 2.130 | 100           |
| FLS075B  | 2-5/8               | 2.660 | 2.625 | 1.750 | 2.130 | 50            |
| FLS080B  | 3-5/8               | 3.660 | 3.625 | 1.750 | 2.130 | 50            |

## PIN & WAS Series Pins & Washers



- Specifications:
- Material: See Table
  - Color: See Table

- Features:
- Pins and washers are used together to securely fasten the flange protectors to the flange
  - Used to secure the RFL, PCF and PRB Series on pages 99 - 101

### PIN Series

| Item No.  | Size in | Material & Color | Bulk Pack Qty |
|-----------|---------|------------------|---------------|
| PIN2-1/4B | 2.25    | Galvanized Steel | 1000          |
| PIN3-1/4B | 3.25    | Galvanized Steel | 1000          |

### WAS Series

| Item No.  | Size in | Material & Color | Bulk Pack Qty |
|-----------|---------|------------------|---------------|
| WAS1-3/8A | 1.375   | HDPE Black       | 800           |
| WAS1-3/4A | 1.75    | HDPE Black       | 800           |
| WAS1-3/4B | 1.75    | Galvanized Steel | 2000          |

3"  
to  
59"

# CABLE TIES

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In Stock  
Ready for  
Same Day  
Shipping

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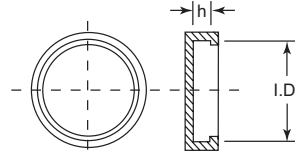


# FULL-FACE FLANGE PROTECTORS

## FF Series Flexible Protectors



How to Measure a Flange & Pick a Protector  
See Page 105



**Specifications:**

- Material: Flexible Polyethylene
- Color: Yellow
- Suitable for ANSI B16.5 Flanges

**Features:**

- Provides complete all-around flange protection including bolt holes
- Material is durable, yet flexible enough to provide an easy fit
- Requires no fasteners

| Nominal Pipe Size<br>in | Class Pressure Rating | Actual ID<br>in | Height<br>h | Item No.  | Bulk Pack Qty |
|-------------------------|-----------------------|-----------------|-------------|-----------|---------------|
| 1/2                     | 150                   | 3.500           | 0.441       | FF31836A  | 500           |
| 1/2                     | 300                   | 3.750           | 0.559       | FF31963A  | 500           |
| 1/2                     | 400                   | 3.750           | 0.559       | FF31963A  | 500           |
| 1/2                     | 600                   | 3.750           | 0.559       | FF31963A  | 500           |
| 3/4                     | 150                   | 3.940           | 0.480       | FF31837A  | 250           |
| 3/4                     | 300                   | 4.618           | 0.618       | FF31965A  | 100           |
| 3/4                     | 400                   | 4.618           | 0.618       | FF31965A  | 100           |
| 3/4                     | 600                   | 4.618           | 0.618       | FF31965A  | 100           |
| 1                       | 150                   | 4.250           | 0.559       | FF31887A  | 600           |
| 1                       | 300                   | 4.881           | 0.689       | FF31938A  | 400           |
| 1                       | 400                   | 4.881           | 0.689       | FF31938A  | 400           |
| 1                       | 600                   | 4.881           | 0.689       | FF31938A  | 400           |
| 1-1/4                   | 150                   | 4.618           | 0.618       | FF31965A  | 100           |
| 1-1/4                   | 300                   | 5.251           | 0.748       | FF34260A  | 40            |
| 1-1/2                   | 150                   | 5.000           | 0.689       | FF110321A | 300           |
| 1-1/2                   | 300                   | 6.118           | 0.811       | FF31886A  | 250           |
| 2                       | 150                   | 6.000           | 0.752       | FF31791A  | 200           |
| 2                       | 300                   | 6.515           | 0.885       | FF31783A  | 150           |
| 2-1/2                   | 150                   | 7.000           | 0.882       | FF32313A  | 100           |
| 2-1/2                   | 300                   | 7.500           | 1.000       | FF31888A  | 100           |
| 3                       | 150                   | 7.500           | 0.940       | FF31766A  | 125           |
| 3                       | 300                   | 8.250           | 1.118       | FF31867A  | 50            |
| 3-1/2                   | 150                   | 8.500           | 0.940       | FF34262A  | 75            |

| Nominal Pipe Size<br>in | Class Pressure Rating | Actual ID<br>in | Height<br>h | Item No. | Bulk Pack Qty |
|-------------------------|-----------------------|-----------------|-------------|----------|---------------|
| 3-1/2                   | 300                   | 9.000           | 1.189       | FF34263A | 50            |
| 4                       | 150                   | 9.000           | 0.940       | FF31763A | 75            |
| 4                       | 300                   | 10.000          | 1.250       | FF31868A | 30            |
| 5                       | 150                   | 10.000          | 0.941       | FF34265A | 30            |
| 5                       | 300                   | 11.000          | 1.378       | FF34266A | 35            |
| 6                       | 150                   | 11.000          | 1.000       | FF31760A | 50            |
| 6                       | 300                   | 12.500          | 1.437       | FF31869A | 25            |
| 8                       | 150                   | 13.500          | 1.118       | FF31870A | 30            |
| 8                       | 300                   | 15.000          | 1.618       | FF31871A | 10            |
| 10                      | 150                   | 16.000          | 1.189       | FF31872A | 35            |
| 10                      | 300                   | 17.500          | 1.878       | FF31873A | 24            |
| 12                      | 150                   | 19.090          | 1.181       | FF31874A | 25            |
| 12                      | 300                   | 20.500          | 2.000       | FF31875A | 10            |
| 14                      | 150                   | 21.000          | 1.382       | FF31876A | 10            |
| 14                      | 300                   | 23.000          | 2.118       | FF31847A | 10            |
| 16                      | 150                   | 23.500          | 1.441       | FF31877A | 10            |
| 16                      | 300                   | 25.500          | 2.248       | FF31878A | 6             |
| 18                      | 150                   | 25.000          | 1.559       | FF31879A | 8             |
| 18                      | 300                   | 28.000          | 2.378       | FF31880A | 10            |
| 20                      | 150                   | 27.500          | 1.689       | FF31881A | 50            |
| 20                      | 300                   | 30.500          | 2.500       | FF31882A | 10            |
| 24                      | 150                   | 32.000          | 1.882       | FF31943A | 8             |
| 24                      | 300                   | 36.000          | 2.748       | FF32088A | 5             |

## PG Series Adhesive Peel & Stick Full-Face Protectors



**Specifications:**

- Material: Polyethylene
- Color: Black
- Meets ANSI B16.5 and ASME B16.47 specification

**Features:**

- 150 lb. rating
- Adhesive backed, peel and stick design
- Full-face OD flange protection
- Special adhesive bonds tightly and leaves no residue under normal conditions
- Requires no fasteners



| Item No.     | Nominal Pipe Size<br>in | Actual OD<br>in | Bulk Pack Qty |
|--------------|-------------------------|-----------------|---------------|
| PG150-1/2A   | 1/2                     | 3.500           | 50            |
| PG150-3/4A   | 3/4                     | 3.875           | 25            |
| PG150-1A     | 1                       | 4.250           | 50            |
| PG150-1-1/4A | 1-1/4                   | 4.625           | 50            |
| PG150-1-1/2A | 1-1/2                   | 5.000           | 50            |
| PG150-2A     | 2                       | 6.000           | 50            |
| PG150-2-1/2A | 2-1/2                   | 7.000           | 50            |

| Item No.     | Nominal Pipe Size<br>in | Actual OD<br>in | Bulk Pack Qty |
|--------------|-------------------------|-----------------|---------------|
| PG150-3A     | 3                       | 7.500           | 50            |
| PG150-3-1/2A | 3-1/2                   | 8.500           | 25            |
| PG150-4A     | 4                       | 9.000           | 50            |
| PG150-5A     | 5                       | 10.000          | 50            |
| PG150-6A     | 6                       | 11.000          | 25            |
| PG150-8A     | 8                       | 13.500          | 25            |
| PG150-10A    | 10                      | 16.000          | 25            |
| PG150-12A    | 12                      | 19.000          | 25            |

| Item No.  | Nominal Pipe Size<br>in | Actual OD<br>in | Bulk Pack Qty |
|-----------|-------------------------|-----------------|---------------|
| PG150-14A | 14                      | 21.000          | 25            |
| PG150-16A | 16                      | 23.500          | 25            |
| PG150-18A | 18                      | 25.000          | 25            |
| PG150-20A | 20                      | 27.500          | 10            |
| PG150-24A | 24                      | 32.000          | 10            |
| PG150-30A | 30                      | 38.750          | 10            |
| PG150-36A | 36                      | 46.000          | 10            |



# FULL-FACE FLANGE PROTECTORS

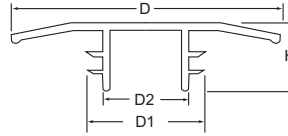
## PI Series Push-In Full-Face Protectors



How to Measure a Flange & Pick a Protector  
See Page 105

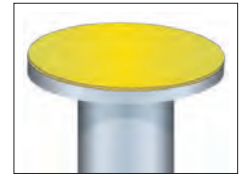
**Specifications:**

- Material: Polyethylene
- Color: Yellow
- Meets ANSI B16.5 Class 150 flanges, DN2627-2638 and BS5504 flanges



**Features:**

- The flexible fins ensure a snug fit into the bore every time
- Requires no fasteners



| Item No. | Nominal Pipe Size |        | D2     |        | D1     |        | D      |        | H     |       | Bulk Pack Qty |
|----------|-------------------|--------|--------|--------|--------|--------|--------|--------|-------|-------|---------------|
|          | in                | DIN    | in     | mm     | in     | mm     | in     | mm     | in    | mm    |               |
| PI10A    | 3/8               | DN 10  | 0.275  | 6.98   | 0.555  | 14.09  | 3.385  | 85.97  | 0.606 | 15.39 | 700           |
| PI15A    | 1/2               | DN 15  | 0.358  | 9.09   | 0.755  | 19.17  | 3.543  | 89.99  | 0.633 | 16.07 | 500           |
| PI20A    | 3/4               | DN 20  | 0.563  | 14.30  | 0.944  | 23.97  | 3.937  | 99.99  | 0.830 | 21.08 | 350           |
| PI25A    | 1                 | DN 25  | 0.724  | 18.38  | 1.177  | 29.89  | 4.330  | 109.98 | 0.826 | 20.98 | 600           |
| PI32A    | 1-1/4             | DN 32  | 0.885  | 22.47  | 1.539  | 39.09  | 5.354  | 135.99 | 0.787 | 19.98 | 500           |
| PI40A    | 1-1/2             | DN 40  | 1.181  | 29.99  | 1.771  | 44.98  | 5.748  | 145.99 | 0.826 | 20.98 | 200           |
| PI50A    | 2                 | DN 50  | 1.574  | 39.97  | 2.204  | 55.98  | 6.299  | 159.99 | 0.799 | 20.29 | 150           |
| PI65A    | 2-1/2             | DN 65  | 2.086  | 52.98  | 2.834  | 71.98  | 7.126  | 181.00 | 0.807 | 20.49 | 200           |
| PI80A    | 3                 | DN 80  | 2.637  | 66.97  | 3.346  | 84.98  | 7.677  | 194.99 | 0.972 | 24.68 | 150           |
| PI100A   | 4                 | DN 100 | 3.543  | 89.99  | 4.301  | 109.24 | 8.543  | 216.99 | 0.929 | 23.59 | 100           |
| PI125A   | 5                 | DN 125 | 4.370  | 110.99 | 5.275  | 133.98 | 9.685  | 245.99 | 1.027 | 26.08 | 70            |
| PI150A   | 6                 | DN 150 | 5.492  | 139.49 | 6.456  | 163.98 | 11.023 | 279.98 | 1.267 | 32.18 | 50            |
| PI200A   | 8                 | DN 200 | 7.362  | 186.94 | 8.212  | 208.58 | 13.228 | 335.99 | 1.318 | 33.47 | 25            |
| PI250A   | 10                | DN 250 | 9.606  | 243.99 | 10.472 | 265.98 | 15.866 | 403.50 | 1.401 | 35.58 | 15            |
| PI300A   | 12                | DN 300 | 11.181 | 283.99 | 12.559 | 318.99 | 17.716 | 449.98 | 1.909 | 48.48 | 5             |

## OFP Series Self-Locking Protectors



**Specifications:**

- Material: Polyethylene
- Color: Black
- Meets ANSI B16.5 and ASME B16.47 specification

**Features:**

- Fast, easy installation and removal
- Four Integral arrows push through the flange bolt holes to fasten the OFP firmly in place
- Requires no fasteners



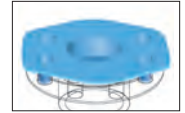
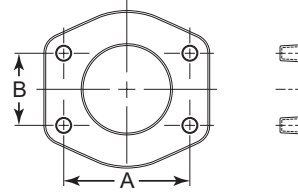
| Nominal Pipe Size | Class Pressure Rating | Actual OD |        | Item No.      | Bulk Pack Qty |
|-------------------|-----------------------|-----------|--------|---------------|---------------|
|                   |                       | in        | mm     |               |               |
| 1/2               | 150                   | 3.500     | 88.90  | OFP150-1/2A   | 50            |
| 1/2               | 300                   | 3.750     | 95.25  | OFP300-1/2A   | 500           |
| 1/2               | 400                   | 3.750     | 95.25  | OFP300-1/2A   | 500           |
| 1/2               | 600                   | 3.750     | 95.25  | OFP300-1/2A   | 500           |
| 3/4               | 150                   | 3.875     | 98.43  | OFP150-3/4A   | 500           |
| 3/4               | 300                   | 4.625     | 117.48 | OFP300-3/4A   | 300           |
| 3/4               | 400                   | 4.625     | 117.48 | OFP300-3/4A   | 300           |
| 3/4               | 600                   | 4.625     | 117.48 | OFP300-3/4A   | 300           |
| 1                 | 150                   | 4.250     | 108.00 | OFP150-1A     | 50            |
| 1                 | 300                   | 4.875     | 123.83 | OFP300-1A     | 300           |
| 1                 | 400                   | 4.875     | 123.83 | OFP300-1A     | 300           |
| 1                 | 600                   | 4.875     | 123.83 | OFP300-1A     | 300           |
| 1-1/4             | 300                   | 5.250     | 133.00 | OFP300-1-1/4A | 50            |
| 1-1/4             | 400                   | 5.250     | 133.00 | OFP300-1-1/4A | 50            |
| 1-1/4             | 600                   | 5.250     | 133.00 | OFP300-1-1/4A | 50            |
| 1-1/2             | 150                   | 5.000     | 127.00 | OFP150-1-1/2A | 200           |
| 1-1/2             | 300                   | 6.125     | 155.94 | OFP300-1-1/2A | 200           |
| 2                 | 150                   | 6.000     | 152.40 | OFP150-2A     | 50            |
| 2                 | 300                   | 6.500     | 165.10 | OFP300-2A     | 50            |
| 2-1/2             | 150                   | 7.000     | 177.80 | OFP150-2-1/2A | 50            |
| 2-1/2             | 300                   | 7.500     | 190.50 | OFP300-2-1/2A | 50            |
| 3                 | 150                   | 7.500     | 190.50 | OFP150-3A     | 50            |
| 3                 | 300                   | 8.250     | 209.55 | OFP300-3A     | 50            |
| 3-1/2             | 150                   | 8.500     | 215.90 | OFP150-3-1/2A | 200           |
| 3-1/2             | 300                   | 9.000     | 228.60 | OFP300-3-1/2A | 50            |

| Nominal Pipe Size | Class Pressure Rating | Actual OD |        | Item No.   | Bulk Pack Qty |
|-------------------|-----------------------|-----------|--------|------------|---------------|
|                   |                       | in        | mm     |            |               |
| 4                 | 150                   | 9.000     | 228.60 | OFP150-4A  | 50            |
| 4                 | 300                   | 10.000    | 254.00 | OFP300-4A  | 50            |
| 5                 | 150                   | 10.000    | 254.00 | OFP150-5A  | 50            |
| 5                 | 300                   | 11.000    | 279.40 | OFP300-5A  | 25            |
| 6                 | 150                   | 11.000    | 279.40 | OFP150-6A  | 25            |
| 6                 | 300                   | 12.500    | 317.50 | OFP300-6A  | 50            |
| 8                 | 150                   | 13.500    | 342.90 | OFP150-8A  | 50            |
| 8                 | 300                   | 15.000    | 381.00 | OFP300-8A  | 50            |
| 10                | 150                   | 16.000    | 406.40 | OFP150-10A | 50            |
| 10                | 300                   | 17.500    | 442.75 | OFP300-10A | 50            |
| 12                | 150                   | 19.000    | 481.50 | OFP150-12A | 50            |
| 12                | 300                   | 20.500    | 520.75 | OFP300-12A | 10            |
| 14                | 150                   | 21.000    | 533.40 | OFP150-14A | 10            |
| 14                | 300                   | 23.000    | 584.25 | OFP300-14A | 10            |
| 16                | 150                   | 23.500    | 596.50 | OFP150-16A | 10            |
| 16                | 300                   | 25.500    | 647.25 | OFP300-16A | 10            |
| 18                | 150                   | 25.000    | 635.00 | OFP150-18A | 10            |
| 18                | 300                   | 28.000    | 711.25 | OFP300-18A | 10            |
| 20                | 150                   | 27.500    | 701.75 | OFP150-20A | 10            |
| 20                | 300                   | 30.500    | 774.50 | OFP300-20A | 10            |
| 22                | 150                   | 29.500    | 750.25 | OFP150-22A | 10            |
| 24                | 150                   | 32.000    | 812.75 | OFP150-24A | 10            |
| 24                | 300                   | 36.000    | 914.25 | OFP300-24A | 10            |
| 30                | 150                   | 38.750    | 984.25 | OFP150-30A | 10            |



# CODE 61 & 62 FLANGE PROTECTORS

## BFP & XP Series SAE J518 Quick Fit Flange Protectors



**Specifications:**

- Material: Polyethylene
- Color: See Table

**Features:**

- The BFP series are used to protect SAE Code 61 3000 PSI flanges
- The XP series are used to protect SAE Code 62 6000 PSI flanges
- Provides full coverage with lugs firmly positioned into bolt holes
- Requires no fasteners

| Nominal Pipe Size | Class Pressure Rating | Item No.         | A     |       | B    |      | Bulk Pack Qty |
|-------------------|-----------------------|------------------|-------|-------|------|------|---------------|
|                   |                       |                  | in    | in    | in   | in   |               |
| 1/2               | 3000                  | <b>BFP1/2A</b>   | 1.500 | 0.688 | Blue | 2000 |               |
| 1/2               | 3000                  | <b>XP1/2A</b>    | 1.594 | 0.718 | Red  | 2000 |               |
| 3/4               | 3000                  | <b>BFP3/4A</b>   | 1.875 | 0.875 | Blue | 1000 |               |
| 3/4               | 6000                  | <b>XP3/4A</b>    | 2.000 | 0.937 | Red  | 1000 |               |
| 1                 | 3000                  | <b>BFP1A</b>     | 2.062 | 1.031 | Blue | 1000 |               |
| 1                 | 6000                  | <b>XP1A</b>      | 2.250 | 1.093 | Red  | 700  |               |
| 1-1/4             | 3000                  | <b>BFP1-1/4A</b> | 2.312 | 1.188 | Blue | 700  |               |
| 1-1/4             | 6000                  | <b>XP1-1/4A</b>  | 2.625 | 1.250 | Red  | 500  |               |
| 1-1/2             | 3000                  | <b>BFP1-1/2A</b> | 2.750 | 1.406 | Blue | 450  |               |

| Nominal Pipe Size | Class Pressure Rating | Item No.         | A     |       | B    |     | Bulk Pack Qty |
|-------------------|-----------------------|------------------|-------|-------|------|-----|---------------|
|                   |                       |                  | in    | in    | in   | in  |               |
| 1-1/2             | 6000                  | <b>XP1-1/2A</b>  | 3.125 | 1.437 | Red  | 400 |               |
| 2                 | 3000                  | <b>BFP2A</b>     | 3.062 | 1.688 | Blue | 400 |               |
| 2                 | 6000                  | <b>XP2A</b>      | 3.812 | 1.750 | Red  | 250 |               |
| 2-1/2             | 3000                  | <b>BFP2-1/2A</b> | 3.500 | 2.000 | Blue | 300 |               |
| 3                 | 3000                  | <b>BFP3A</b>     | 4.188 | 2.438 | Blue | 50  |               |
| 3-1/2             | 3000                  | <b>BFP3-1/2A</b> | 4.750 | 2.750 | Blue | 50  |               |
| 4                 | 3000                  | <b>BFP4A</b>     | 5.125 | 3.062 | Blue | 50  |               |
| 5                 | 3000                  | <b>BFP5A</b>     | 6.000 | 3.625 | Blue | 30  |               |

## Q & HP Series SAE J518 Split-Flange Covers

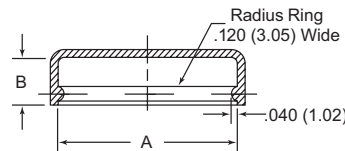


**Specifications:**

- Material: Polyethylene
- Color: Natural

**Features:**

- The Q Series are used on SAE Code 61 3000 PSI high pressure flanges
- The HP Series are used on SAE Code 62 6000 PSI high pressure flanges
- Protects machined surfaces on split flanged connections
- Manufactured in a natural translucent polyethylene so the O-Ring assembled on the flange remains visible through the cap
- The internal-locking bead design provides a secure fit
- Requires no fasteners



| Nominal Flange Size | Code | Class Pressure Rating | Item No.     | A     |       | Bulk Pack Qty |
|---------------------|------|-----------------------|--------------|-------|-------|---------------|
|                     |      |                       |              | in    | in    |               |
| 1/2                 | 61   | 3000                  | <b>Q1A</b>   | 1.190 | 0.390 | 2500          |
| 5/8                 | 61   | 3000                  | <b>Q2A</b>   | 1.330 | 0.415 | 4000          |
| 3/4                 | 61   | 3000                  | <b>Q3A</b>   | 1.510 | 0.435 | 3000          |
| 3/4                 | 62   | 6000                  | <b>HP12A</b> | 1.610 | 0.546 | 2200          |
| 1                   | 61   | 3000                  | <b>Q4A</b>   | 1.760 | 0.465 | 2000          |
| 1                   | 62   | 6000                  | <b>HP16A</b> | 1.860 | 0.578 | 1600          |
| 1-1/4               | 61   | 3000                  | <b>Q5A</b>   | 1.971 | 0.465 | 1700          |
| 1-1/4               | 62   | 6000                  | <b>HP20A</b> | 2.110 | 0.609 | 1200          |

| Nominal Flange Size | Code | Class Pressure Rating | Item No.     | A     |       | Bulk Pack Qty |
|---------------------|------|-----------------------|--------------|-------|-------|---------------|
|                     |      |                       |              | in    | in    |               |
| 1-1/2               | 61   | 3000                  | <b>Q6A</b>   | 2.385 | 0.465 | 1200          |
| 1-1/2               | 62   | 6000                  | <b>HP24A</b> | 2.485 | 0.690 | 750           |
| 2                   | 61   | 3000                  | <b>Q7A</b>   | 2.810 | 0.585 | 750           |
| 2                   | 62   | 6000                  | <b>HP32A</b> | 3.110 | 0.690 | 500           |
| 2-1/2               | 61   | 3000                  | <b>Q8A</b>   | 3.310 | 0.500 | 550           |
| 4                   | 61   | 3000                  | <b>Q9A</b>   | 4.000 | 0.500 | 500           |
| 4-1/2               | 61   | 3000                  | <b>Q11A</b>  | 4.500 | 0.570 | 250           |
| 5                   | 61   | 3000                  | <b>Q12A</b>  | 5.000 | 0.570 | 250           |

# DON'T FORGET YOUR FITTINGS!



**R Series**  
Square Head  
NPT Threads



**TSSP Series**  
Positive Sealing for  
Metric/BSP Threads



**PFP Series**  
NPT Threads  
(O-Ring Option)



**BL Nylon Series**  
Tough/Higher Temp  
For Standard Threads  
(O-Ring Option)



**G Series**  
UNF/JIC Threads for  
Flared/Flareless Fittings



**TF Series**  
Flat Faced O-Ring  
Hydraulic Fitting Threads



**BLM Series**  
Molded O-Ring Unified  
Standard Threads



**DC Series**  
UNJ/UNJS Threads



**EZF Series**  
Easy Pull for Unified  
Standard/Metric Threads



**UN Series**  
Quick Fit for Standard  
JIC/Metric/BSP Threads

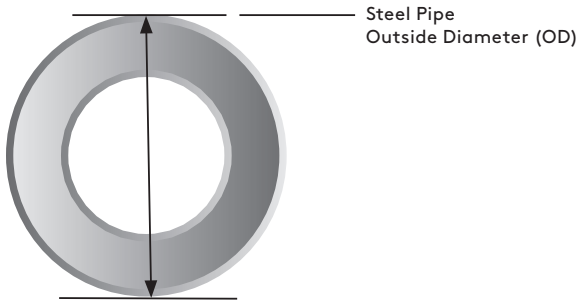
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# HOW TO MEASURE A PIPE OR FLANGE

## HOW TO MEASURE A STEEL PIPE & PICK A PIPE CAP



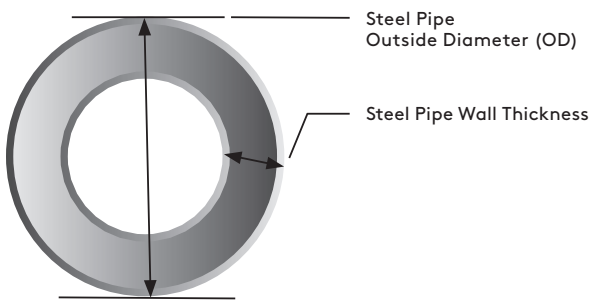
| Pipe O.D. (Measurement) | Nominal Pipe Size (In) |
|-------------------------|------------------------|
| 0.405 (10.3)            | 1/8                    |
| 0.540 (13.7)            | 1/4                    |
| 0.675 (17.1)            | 3/8                    |
| 0.840 (21.3)            | 1/2                    |
| 1.050 (26.7)            | 3/4                    |
| 1.315 (33.4)            | 1                      |
| 1.660 (42.2)            | 1-1/4                  |
| 1.900 (48.3)            | 1-1/2                  |
| 2.375 (60.3)            | 2                      |
| 2.875 (73.0)            | 2-1/2                  |
| 3.500 (88.9)            | 3                      |
| 4.000 (101.6)           | 3-1/2                  |
| 4.500 (114.3)           | 4                      |
| 5.563 (141.3)           | 5                      |
| 6.625 (168.3)           | 6                      |
| 8.625 (219.1)           | 8                      |
| 10.750 (273.0)          | 10                     |
| 12.750 (323.8)          | 12                     |

1. Measure the pipe OD as shown above.
2. Refer to the chart to the right and locate the pipe OD.
3. The 2<sup>nd</sup> column to is the Nominal Pipe Size of the pipe.
4. Refer to any pipe cap series on pages 92-95.
5. Find your nominal pipe size on the series table.

| Item No. | Nominal Pipe Size (In) | Actual ID In | Height (h) In | Color  | Pack Qty |
|----------|------------------------|--------------|---------------|--------|----------|
| RRC1/8A  | 1/8                    | 0.385        | 0.485         | Yellow | 1        |
| RRC1/4A  | 1/4                    | 0.516        | 0.490         | Yellow | 1        |
| RRC3/8A  | 3/8                    | 0.660        | 0.538         | Yellow | 1        |
| RRC1/2A  | 1/2                    | 0.840        | 0.717         | Yellow | 1        |
| RRC3/4A  |                        |              |               |        |          |

**EXAMPLE**

## HOW TO MEASURE A STEEL PIPE & PICK A PIPE PLUG



| Pipe O.D. (Measurement) | Nominal Pipe Size (In) | Wall Thickness (Measurement) | Schedule No. |
|-------------------------|------------------------|------------------------------|--------------|
| 0.405 (10.3)            | 1/8                    | .068 (1.73)                  | 40           |
|                         |                        | .095 (2.41)                  | 80           |
| 0.540 (13.7)            | 1/4                    | .088 (2.23)                  | 40           |
|                         |                        | .119 (3.02)                  | 80           |
| 0.675 (17.1)            | 3/8                    | .091 (2.31)                  | 40           |
|                         |                        | .126 (3.20)                  | 80           |
| 0.840 (21.3)            | 1/2                    | .109 (2.77)                  | 40           |
|                         |                        | .147 (3.73)                  | 80           |
| 1.050 (26.7)            | 3/4                    | .113 (2.87)                  | 40           |
|                         |                        | .154 (3.91)                  | 80           |
| 1.315 (33.4)            | 1                      | .133 (3.38)                  | 40           |
|                         |                        | .179 (4.55)                  | 80           |
| 1.660 (42.2)            | 1-1/4                  | .140 (3.56)                  | 40           |
|                         |                        | .191 (4.85)                  | 80           |
| 1.900 (48.3)            | 1-1/2                  | .145 (3.68)                  | 40           |
|                         |                        | .200 (5.08)                  | 80           |
| 2.375 (60.3)            | 2                      | .154 (3.91)                  | 40           |
|                         |                        | .218 (5.54)                  | 80           |
| 2.875 (73.0)            | 2-1/2                  | .203 (5.16)                  | 40           |
|                         |                        | .276 (7.01)                  | 80           |
| 3.500 (88.9)            | 3                      | .216 (5.49)                  | 40           |
|                         |                        | .300 (7.62)                  | 80           |
| 4.000 (101.6)           | 3-1/2                  | .226 (5.74)                  | 40           |
|                         |                        | .318 (8.08)                  | 80           |
| 4.500 (114.3)           | 4                      | .237 (6.02)                  | 40           |
|                         |                        | .337 (8.56)                  | 80           |
| 5.563 (141.3)           | 5                      | .258 (6.55)                  | 40           |
|                         |                        | .375 (9.52)                  | 80           |
| 6.625 (168.3)           | 6                      | .280 (7.11)                  | 40           |
|                         |                        | .432 (10.97)                 | 80           |
| 8.625 (219.10)          | 8                      | .322 (8.18)                  | 40           |
|                         |                        | .500 (12.70)                 | 80           |
| 10.750 (273.0)          | 10                     | .365 (9.27)                  | 40           |
|                         |                        | .594 (15.09)                 | 80           |
| 12.750 (323.8)          | 12                     | .406 (10.31)                 | 40           |
|                         |                        | .688 (17.48)                 | 80           |

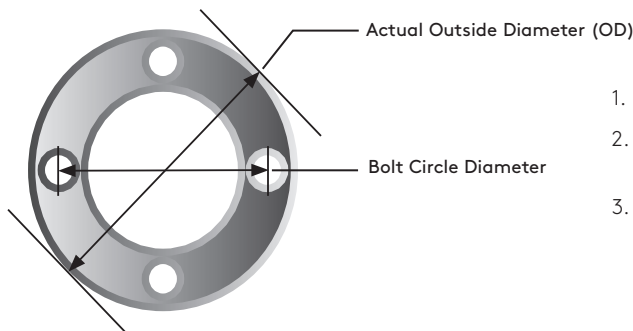
1. Measure the pipe OD and wall thickness as shown above.
2. Refer to the chart to the right and locate the pipe OD.
3. The 2<sup>nd</sup> column is the Nominal Pipe Size of the pipe.
4. Refer to any pipe plug series on pages 94 - 96.
5. Find your nominal pipe size on the series table.
6. That is the correct size plug for your pipe.

| Nominal Pipe Size (In) | Schedule | Item No. | Color | Pack Qty | Bu Pa |
|------------------------|----------|----------|-------|----------|-------|
| 1/8                    | 40       | 004A     | Blue  | 1        | 450   |
| 1/8                    | 80       | 002A     | Blue  | 1        | 450   |
| 1/4                    | 40       | 008A     | Blue  | 1        | 500   |
| 1/4                    | 80       | 003A     | Blue  | 1        | 500   |

**EXAMPLE**

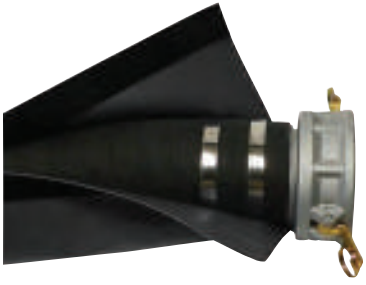
Plugs for other pipe schedules available. Contact Essentra for details.

## HOW TO MEASURE A FLANGE & PICK A PROTECTOR



1. Measure your flange's OD and its Bolt Circle Diameter as shown.
2. Refer to the RFL, PCF, and PRB on pages 99 - 101 and locate your Actual (OD) and Bolt Circle Diameter.
3. Any of the part numbers shown in the part number columns to the right of the Bolt Circle Diameter column will work on your flange.

# HOSE PROTECTION, BUNDLING & SECURING





|                                                                                   |                                    |           |
|-----------------------------------------------------------------------------------|------------------------------------|-----------|
|   | SPIRAL WRAP HOSE PROTECTION.....   | 108 - 109 |
|   | POINT OF CONTACT PROTECTORS .....  | 109       |
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# HOSE PROTECTION, BUNDLING & SECURING



# SPIRAL WRAP HOSE PROTECTION

## SGX Series

### TECTORGUARD® Heavy & Medium Duty Hose Guards



**Specifications:**

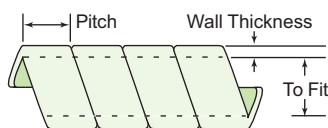
- Material: High-Density Polyethylene
- Color: Black

**Features:**

- TECTORGUARD® protects against cuts, abrasions, crushing and ultraviolet rays that regularly destroy expensive hoses
- Easy and safe to install either before or after the hose assembly is mounted
- The heavy-duty, double-beveled design on the inside and outside edge prevents snagging or cutting during installation
- Spiral goes up and to the left

**Heavy Duty - Heavy Abrasion**

| Item No. | To Fit |       | Wall Thickness |      | Pitch |        | Roll Length |       |
|----------|--------|-------|----------------|------|-------|--------|-------------|-------|
|          | in     | mm    | in             | mm   | in    | mm     | ft          | m     |
| SGX16HA  | 0.492  | 12.5  | 0.069          | 1.75 | 0.490 | 12.45  | 100         | 30.48 |
| SGX20HA  | 0.668  | 16.9  | 0.086          | 2.18 | 0.610 | 15.49  | 100         | 30.48 |
| SGX25HA  | 0.750  | 19.0  | 0.110          | 2.79 | 0.950 | 24.13  | 100         | 30.48 |
| SGX32HA  | 1.014  | 25.8  | 0.118          | 2.99 | 1.040 | 26.42  | 100         | 30.48 |
| SGX39HA  | 1.250  | 31.8  | 0.132          | 3.35 | 1.350 | 34.29  | 100         | 30.48 |
| SGX45HA  | 1.500  | 38.1  | 0.140          | 3.55 | 1.500 | 38.10  | 100         | 30.48 |
| SGX50HA  | 1.600  | 40.6  | 0.150          | 3.81 | 1.530 | 38.88  | 50          | 15.24 |
| SGX59HA  | 2.000  | 50.8  | 0.160          | 4.06 | 1.600 | 40.64  | 100         | 30.48 |
| SGX75HA  | 2.457  | 62.4  | 0.209          | 5.30 | 1.610 | 40.89  | 50          | 15.24 |
| SGX90HA  | 3.064  | 77.8  | 0.218          | 5.53 | 1.970 | 50.04  | 35          | 10.66 |
| SGX102HA | 3.500  | 89.1  | 0.250          | 6.35 | 1.950 | 49.53  | 25          | 7.62  |
| SGX114HA | 4.000  | 101.6 | 0.250          | 6.35 | 2.100 | 53.34  | 20          | 6.09  |
| SGX165HA | 6.000  | 152.4 | 0.250          | 6.35 | 4.000 | 101.60 | 15          | 4.57  |



**How to calculate quantity of Spiralguard® required**

$$\frac{\text{Outside diameter of hose}}{\text{Inside diameter of Spiralguard®}} \times \text{Length (ft) of hose to be covered}$$

Example OD of Hose: .93"

SGX75HA ID = .75"

Length to wrap = 25 Feet

$$.93" / .75" = 1.24 \times 25 = 31 \text{ Feet Required}$$

**Medium Duty - Flexible with Medium Abrasion**

| Item No. | To Fit |      | Wall Thickness |      | Pitch |       | Roll Length |       |
|----------|--------|------|----------------|------|-------|-------|-------------|-------|
|          | in     | mm   | in             | mm   | in    | mm    | ft          | m     |
| SGX16MA  | 0.492  | 12.5 | 0.045          | 1.14 | 0.490 | 12.45 | 100         | 30.48 |
| SGX20MA  | 0.668  | 16.9 | 0.052          | 1.32 | 0.610 | 15.49 | 100         | 30.48 |
| SGX25MA  | 0.750  | 19.0 | 0.062          | 1.57 | 0.800 | 20.32 | 100         | 30.48 |
| SGX32MA  | 1.014  | 25.8 | 0.071          | 1.80 | 1.040 | 26.42 | 100         | 30.48 |
| SGX39MA  | 1.250  | 31.8 | 0.080          | 2.03 | 1.350 | 34.29 | 100         | 30.48 |
| SGX50MA  | 1.600  | 40.6 | 0.090          | 2.28 | 1.530 | 38.86 | 50          | 15.24 |
| SGX75MA  | 2.457  | 62.4 | 0.125          | 3.17 | 1.610 | 40.89 | 50          | 15.24 |
| SGX90MA  | 3.064  | 77.8 | 0.131          | 3.32 | 1.970 | 50.04 | 35          | 10.66 |

**HeavyDuty - Heavy Abrasion**

**Specifications:**

- Material: High-Density Polyethylene
- Color: See Table

**Features:**

- Protects hydraulic or pneumatic hose against cuts, abrasion, crushing or UV damage that regularly destroys expensive hoses
- The double beveled design prevents snagging or cutting during installation
- Spiral goes up and to the right



| Item No.   | Hose OD Range | Spiral Wrap ID |               | Wall Thickness |       | Pitch |     | Roll Length |      |     |    |
|------------|---------------|----------------|---------------|----------------|-------|-------|-----|-------------|------|-----|----|
|            |               | in             | mm            | in             | mm    | in    | mm  | ft          | m    |     |    |
| 1437070    | 0.393 - 0.662 | 10.0           | 16.8          | 0.393          | 10.0  | 0.060 | 1.5 | 0.393       | 10.0 | 164 | 50 |
| 1437071    | 0.500 - 0.864 | 12.7           | 21.9          | 0.500          | 12.7  | 0.067 | 1.7 | 0.472       | 12.0 | 65  | 20 |
| SGX16B-50  | 0.500 - 0.864 | 12.7           | 21.9          | 0.500          | 12.7  | 0.067 | 1.7 | 0.472       | 12.0 | 164 | 50 |
| 1437072    | 0.629 - 1.060 | 16.0           | 26.9          | 0.629          | 16.0  | 0.078 | 2.0 | 0.629       | 16.0 | 65  | 20 |
| SGX20B-50  | 0.629 - 1.060 | 16.0           | 26.9          | 0.629          | 16.0  | 0.078 | 2.0 | 0.629       | 16.0 | 164 | 50 |
| 1437073    | 0.826 - 1.370 | 20.9           | 34.8          | 0.826          | 20.9  | 0.086 | 2.2 | 0.787       | 20.0 | 65  | 20 |
| SGX25B-50  | 0.826 - 1.370 | 20.9           | 34.8          | 0.826          | 20.9  | 0.086 | 2.2 | 0.787       | 20.0 | 164 | 50 |
| 1437074    | 1.062 - 1.694 | 27.0           | 43.0          | 1.062          | 27.0  | 0.098 | 2.5 | 0.866       | 22.0 | 65  | 20 |
| SGX32B-50  | 1.062 - 1.694 | 27.0           | 43.0          | 1.062          | 27.0  | 0.098 | 2.5 | 0.866       | 22.0 | 164 | 50 |
| 1437075    | 1.362 - 2.170 | 34.6           | 55.1          | 1.362          | 34.6  | 0.106 | 2.7 | 1.063       | 27.0 | 65  | 20 |
| SGX40B-50  | 1.362 - 2.170 | 34.6           | 55.1          | 1.362          | 34.6  | 0.106 | 2.7 | 1.063       | 27.0 | 164 | 50 |
| 1437076    | 1.732 - 2.520 | 43.9           | 64.0          | 1.732          | 44.0  | 0.118 | 3.0 | 1.181       | 30.0 | 65  | 20 |
| 1437077    | 2.180 - 2.950 | 55.3           | 74.9          | 2.180          | 55.3  | 0.149 | 3.8 | 1.457       | 37.0 | 65  | 20 |
| 1437078    | 2.637 - 3.800 | 67.0           | 96.5          | 2.637          | 67.0  | 0.157 | 4.0 | 1.654       | 42.0 | 65  | 20 |
| 1437079    | 3.150 - 4.300 | 80.0           | 109.2         | 3.150          | 80.0  | 0.196 | 5.0 | 1.771       | 45.0 | 65  | 20 |
| 1437080    | 3.897 - 4.900 | 99.0           | 124.5         | 3.897          | 99.0  | 0.216 | 5.5 | 1.968       | 50.0 | 39  | 12 |
| SGX125B-12 | SGX125Y-12    | 4.448 - 5.500  | 113.0 - 139.7 | 4.448          | 113.0 | 0.236 | 6.0 | 2.165       | 55.0 | 39  | 12 |
| SGX140B-09 | SGX140Y-09    | 5.039 - 6.000  | 128.0 - 152.4 | 5.039          | 128.0 | 0.236 | 6.0 | 2.165       | 55.0 | 29  | 9  |



# SPIRALGUARD® / POINT OF CONTACT PROTECTORS



## SGX FRAS Series SPIRALGUARD® Flame Retardant Antistatic Series

**Specifications:**

- Material: High-Density Polyethylene
- Color: Dark Gray

**Features:**

- Exceptional anti-crushing performance
- High abrasion resistance
- Good resistance to UV rays
- Reduces risk of industrial injury
- Suitable for wrapping single or multiple hoses
- Proven in arduous conditions
- Suitable for the protection of most types of hydraulic, pneumatic and industrial hose assemblies across a wide range of industries: mining, quarrying, drilling, tunnelling, forestry, welding, manufacturing, agricultural, automotive, marine sub-sea, offshore oil and gas construction



**SPIRALGUARD**  


**Approvals and Standards:**

- Tested and approved in accordance with the former British Coal specification 182:1986, satisfying the requirements of the non-metallics scheme for use underground
- Tested and approved by Mine Safety Laboratory, Department of Mineral Resources NSW to AS2660 FRAS Compliance - 1991 International Standard: ISO6805
- Patented product US6286557B1

| Item No.    | To Fit |       | Wall Thickness |      | Pitch |       | Roll Length |    |
|-------------|--------|-------|----------------|------|-------|-------|-------------|----|
|             | in     | mm    | in             | mm   | in    | mm    | ft          | m  |
| SGX16FRASA  | 0.472  | 12.00 | 0.089          | 2.25 | 0.510 | 12.95 | 65.62       | 20 |
| SGX20FRASA  | 0.591  | 15.00 | 0.098          | 2.50 | 0.610 | 15.49 | 65.62       | 20 |
| SGX25FRASA  | 0.748  | 19.00 | 0.108          | 2.75 | 0.750 | 19.05 | 65.62       | 20 |
| SGX32FRASA  | 0.906  | 23.00 | 0.138          | 3.50 | 0.900 | 22.86 | 65.62       | 20 |
| SGX40FRASA  | 1.201  | 30.50 | 0.167          | 4.25 | 1.140 | 28.96 | 65.62       | 20 |
| SGX50FRASA  | 1.496  | 38.00 | 0.167          | 4.25 | 1.420 | 36.07 | 65.62       | 20 |
| SGX63FRASA  | 1.850  | 47.00 | 0.217          | 5.50 | 1.550 | 39.37 | 65.62       | 20 |
| SGX75FRASA  | 2.402  | 61.00 | 0.236          | 6.00 | 1.730 | 43.94 | 65.62       | 20 |
| SGX90FRASA  | 2.776  | 70.50 | 0.276          | 7.00 | 2.000 | 50.80 | 65.62       | 20 |
| SGX110FRASA | 3.307  | 84.50 | 0.295          | 7.50 | 2.200 | 55.88 | 32.81       | 10 |

## THP Series Point of Contact Protectors

**Specifications:**

- Material: PVC
- Color: See Table

**Features:**

- Protects hose and wire abrasion caused by points of contact wear with frames or other abrasive surfaces
- Material is very durable and has a high wear factor
- Molded in grooves prevent the slipping and wear of cable ties
- Easy to assemble and remove
- Typically used on hydraulic hoses, fuel and oil lines, brake systems, wiring harnesses and battery cables
- The THPSD4B is to be used on 1/2" hoses and smaller since it is designed with a smaller radius



|         | Item No. |        |        | Length |
|---------|----------|--------|--------|--------|
|         | Black    | Orange | Yellow | in     |
| THPSD4B | —        | —      | —      | 4      |
| THP4B   | THP4A    | THP4C  | —      | 4      |
| THP6B   | THP6A    | THP6C  | —      | 6      |
| THP8B   | THP8A    | THP8C  | —      | 8      |
| THP10B  | THP10A   | THP10C | —      | 10     |
| THP12B  | THP12A   | THP12C | —      | 12     |

Each THP Series Requires 3 Ties

## CT Series Nylon Locking Cable Ties

**Specifications:**

- Material: UL Approved 94V-2 Nylon 6/6
- Color: See Table
- Temperature Range: -40°F to 185°F (-40°C to 85°C)

**Features:**

- Complies with MS-3367 and MIL-S-23190E
- RoHS Compliant

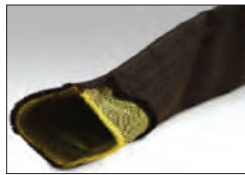


| Item No. |        |        |        |        |        |        |
|----------|--------|--------|--------|--------|--------|--------|
| Natural  | Black  | Green  | Red    | Yellow | Blue   | Silver |
| CT025A   | CT025B | CT025G | CT025K | CT025Y | CT025L | CT025S |

| Length | Width |       | Maximum Bundle Dia. |       | Minimum Tensile Strength |     | Classification | Bulk Pack Qty |     |
|--------|-------|-------|---------------------|-------|--------------------------|-----|----------------|---------------|-----|
|        | in    | mm    | in                  | mm    | lbs                      | kgs |                |               |     |
| 11-7/8 | 300   | 0.189 | 4.8                 | 3.350 | 85                       | 50  | 222            | Standard      | 100 |

# SLEEVE HOSE PROTECTION

## BG Series Burst Guard Double Nylon Sleeve



### Approvals and Standards:

- MSHA approved
- Meets ISO 6945 abrasion standard
- Meets SAE J343/ISO 3457 burst and leakage protection

### Specifications:

- Material: Nylon (Polyamide)
- Color: Black (Outer Layer), Yellow (Inner Layer)
- Thickness: 2.3mm
- Melting Point: 230°C
- Working Temperature: -40° to 125°C (The sleeve loses 10% of its resistance at 125°C)

### Features:

- Double layer sleeve which consists of nylon multifilament
- Two layer sleeve design will allow you to visually see wear damage; if you see that means the black outer layer has been worn through and you should look at replacing the sleeve soon
- Meets ISO 6945 abrasion standard
- Meets UV Solar Protection: BS EN 13758-1
- ROHS compliant
- Essentra's heaviest performance sleeve; specifically designed for high abrasion, weather resistance and controlling hose bursts to protect workers, equipment and the environment in line of sight operations
- Resistant to diesel, transmission fluid, engine oil and coolant

| Item No. | Round ID |      | Flat Width |       | Roll Length |    |
|----------|----------|------|------------|-------|-------------|----|
|          | in       | mm   | in         | mm    | ft          | m  |
| BG050    | 0.500    | 12.7 | 0.992      | 25.2  | 150         | 45 |
| BG078    | 0.787    | 20.0 | 1.496      | 38.0  | 164         | 50 |
| BG100    | 1.000    | 25.4 | 1.850      | 47.0  | 150         | 45 |
| BG106    | 1.062    | 27.0 | 1.929      | 49.0  | 164         | 50 |
| BG118    | 1.181    | 30.0 | 2.086      | 53.0  | 164         | 50 |
| BG126    | 1.260    | 32.0 | 2.204      | 56.0  | 100         | 30 |
| BG133    | 1.330    | 34.0 | 2.362      | 60.0  | 164         | 50 |
| BG141    | 1.147    | 36.0 | 2.480      | 63.0  | 100         | 30 |
| BG157    | 1.574    | 40.0 | 2.716      | 69.0  | 164         | 50 |
| BG162    | 1.620    | 42.0 | 2.834      | 72.0  | 100         | 30 |
| BG181    | 1.811    | 46.0 | 3.070      | 78.0  | 100         | 30 |
| BG216    | 2.165    | 55.0 | 3.661      | 93.0  | 100         | 30 |
| BG228    | 2.283    | 58.0 | 3.818      | 97.0  | 164         | 50 |
| BG244    | 2.440    | 62.0 | 4.094      | 104.0 | 164         | 50 |
| BG259    | 2.598    | 66.0 | 4.330      | 110.0 | 164         | 50 |
| BG275    | 2.755    | 70.0 | 4.606      | 117.0 | 164         | 50 |
| BG303    | 3.031    | 77.0 | 5.000      | 127.0 | 164         | 50 |
| BG314    | 3.149    | 80.0 | 5.196      | 132.0 | 164         | 50 |
| BG330    | 3.307    | 84.0 | 5.472      | 139.0 | 164         | 50 |
| BG354    | 3.543    | 90.0 | 5.826      | 148.0 | 164         | 50 |
| BG374    | 3.740    | 95.0 | 6.102      | 155.0 | 164         | 50 |

## Nylon Textile Sleeve



### Approvals and Standards:

- MSHA approved
- Meets ISO 6945 abrasion standard
- Meets FED-STD-191 test method 5309 for abrasion resistance
- Meets ASTM D6770 for abrasion resistance of textile sleeve

### Specifications:

- Material: Nylon 6
- Color: See Table

### Features:

- Working Temperature: -40°F (-40°C) to 257°F (125°C)
- Meets SAE J343/ISO 3457, Burst & Leakage Protection
- Meets EN982 ISO norm 833 EN 414
- UV Solar Protection: BS EN 13758-1
- ISO 8031 approved, conductivity requirement
- ROHS compliant
- Protects people, environment and machinery against hydraulic hose oil leakage or spills
- High degree of burst resistance with optimum UV and abrasion protection
- Excellent chemical compatibility with gasoline and oils
- Black color typically used on hydraulic hose assemblies and the red color used on wire and cable assemblies
- Pin hole test approved; very dense but not bulky

| Item No. | Round ID |     | Flattened Width |     | Color | Roll Length |       |
|----------|----------|-----|-----------------|-----|-------|-------------|-------|
|          | in       | mm  | in              | mm  |       | ft          | m     |
| 900500   | 0.67     | 17  | 1.18            | 30  | Black | 300         | 91.44 |
| 900502   | 0.79     | 20  | 1.38            | 35  | Black | 300         | 91.44 |
| 900503   | 0.79     | 20  | 1.38            | 35  | Red   | 300         | 91.44 |
| 900504   | 0.91     | 23  | 1.57            | 40  | Black | 300         | 91.44 |
| 900505   | 0.91     | 23  | 1.57            | 40  | Red   | 300         | 91.44 |
| 900506   | 0.98     | 25  | 1.69            | 43  | Black | 300         | 91.44 |
| 900508   | 1.06     | 27  | 1.81            | 46  | Black | 300         | 91.44 |
| 900510   | 1.22     | 31  | 2.05            | 52  | Black | 300         | 91.44 |
| 900510R  | 1.22     | 31  | 2.05            | 52  | Red   | 328         | 99.97 |
| 900511   | 1.30     | 33  | 2.20            | 56  | Black | 300         | 91.44 |
| 900512   | 1.42     | 36  | 2.36            | 60  | Black | 300         | 91.44 |
| 900514   | 1.57     | 40  | 2.64            | 67  | Black | 300         | 91.44 |
| 900516   | 1.73     | 44  | 2.87            | 73  | Black | 300         | 91.44 |
| 900518   | 1.85     | 47  | 3.07            | 78  | Black | 300         | 91.44 |
| 900519   | 2.09     | 53  | 3.43            | 87  | Black | 300         | 91.44 |
| 900520   | 2.17     | 55  | 3.54            | 90  | Black | 300         | 91.44 |
| 900520R  | 2.17     | 55  | 3.54            | 90  | Red   | 328         | 99.97 |
| 900522   | 2.36     | 60  | 3.86            | 98  | Black | 300         | 91.44 |
| 900524   | 2.60     | 66  | 4.21            | 107 | Black | 300         | 91.44 |
| 900526   | 2.87     | 73  | 4.65            | 118 | Black | 300         | 91.44 |
| 900526R  | 2.87     | 73  | 4.65            | 118 | Red   | 328         | 99.97 |
| 900527   | 3.07     | 78  | 4.96            | 126 | Black | 300         | 91.44 |
| 900534   | 3.35     | 85  | 5.39            | 137 | Black | 300         | 91.44 |
| 900528   | 3.66     | 93  | 5.91            | 150 | Black | 300         | 91.44 |
| 900530   | 4.41     | 112 | 7.09            | 180 | Black | 300         | 91.44 |

**SLEEVE HOSE PROTECTION**



**TQS Series  
Nylon Quick Assemble Hose Sleeve**

Specifications:

- Material: Nylon with a Urethane coating on one side
- Color: Black

Features:

- Excellent for use in the field or for applications where the winding of spiral-formed products is very difficult
- Resistant to heat, ozone and abrasion
- Hook-and-loop design closure promotes a quick and easy bundling of hose straps
- Close quarter operator protection from hose failures
- Easy assembly and removal
- Containment of hoses and tighter bundling
- Professional appearance; enhances the aesthetics of your equipment



| Item No.   | ID   |        | Flat Width |         | Roll Length |       |
|------------|------|--------|------------|---------|-------------|-------|
|            | in   | mm     | in         | m       | ft          | m     |
| • TQS1     | 1.0  | 25.40  | 3.980      | 101.09  | 150         | 45.72 |
| • TQS1-1/2 | 1.5  | 38.10  | 5.453      | 138.51  | 150         | 45.72 |
| • TQS2     | 2.0  | 50.80  | 7.760      | 197.10  | 150         | 45.72 |
| • TQS2-1/2 | 2.5  | 63.50  | 9.340      | 237.24  | 150         | 45.72 |
| • TQS3     | 3.0  | 76.20  | 10.930     | 277.62  | 150         | 45.72 |
| • TQS3-1/2 | 3.5  | 88.90  | 12.312     | 312.72  | 150         | 45.72 |
| • TQS4     | 4.0  | 101.60 | 14.125     | 358.78  | 150         | 45.72 |
| • TQS4-1/2 | 4.5  | 114.30 | 15.650     | 397.51  | 150         | 45.72 |
| • TQS5     | 5.0  | 127.00 | 17.187     | 436.55  | 150         | 45.72 |
| • TQS6     | 6.0  | 152.40 | 20.250     | 514.35  | 150         | 45.72 |
| • TQS7     | 7.0  | 177.80 | 23.420     | 594.87  | 150         | 45.72 |
| • TQS8     | 9.0  | 228.60 | 26.650     | 676.91  | 150         | 45.72 |
| • TQS9     | 9.0  | 228.60 | 29.750     | 755.65  | 75          | 22.86 |
| • TQS10    | 10.0 | 254.00 | 32.875     | 835.03  | 75          | 22.86 |
| • TQS11    | 11.0 | 279.40 | 36.000     | 914.40  | 75          | 22.86 |
| • TQS12    | 12.0 | 304.80 | 39.100     | 993.14  | 75          | 22.86 |
| • TQS13    | 13.0 | 330.20 | 42.250     | 1073.15 | 75          | 22.86 |
| • TQS14    | 14.0 | 355.60 | 45.380     | 1152.65 | 75          | 22.86 |
| • TQS15    | 15.0 | 381.00 | 48.650     | 1235.71 | 75          | 22.86 |
| • TQS16    | 16.0 | 406.40 | 51.720     | 1313.69 | 75          | 22.86 |

**Polyester Hose and Cable Protection Sleeve**

Specifications:

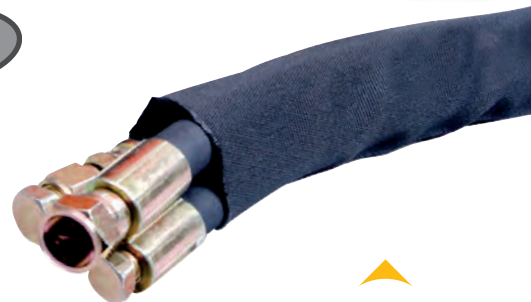
- Material: Polyester
- Color: Black

Features:

- Working Temperature: -40° to 125°C (the sleeve loses 10% of the resistance at 125°C)
- Melting Point: 230°C (446°F)
- Most economical MSHA approved sleeve protection option
- Lightweight but high strength and abrasion resistance
- Protects people, environment and machinery against hydraulic hose ruptures

Industries:

- Fluid Power Hose Manufacturers
- Construction & Agriculture
- Machinery & Equipment
- Industrial Trucks, Tractors, Trailers and Stackers
- Machine Shops
- Oil & Gas Field Services



**North America Standard**

| Item No. | Round ID |     | Flattened Width |     | Roll Length |      |
|----------|----------|-----|-----------------|-----|-------------|------|
|          | in       | mm  | in              | mm  | ft          | m    |
| 900359   | 0.472    | 12  | 0.787           | 20  | 100         | 30.5 |
| 900344   | 0.591    | 15  | 0.984           | 25  | 100         | 30.5 |
| 900345   | 0.748    | 19  | 1.181           | 30  | 100         | 30.5 |
| 900346   | 0.866    | 22  | 1.378           | 35  | 100         | 30.5 |
| 900347   | 0.984    | 25  | 1.575           | 40  | 100         | 30.5 |
| 900348   | 1.102    | 28  | 1.772           | 45  | 100         | 30.5 |
| 900349   | 1.220    | 31  | 1.969           | 50  | 100         | 30.5 |
| 900350   | 1.496    | 38  | 2.362           | 60  | 100         | 30.5 |
| 900351   | 1.732    | 44  | 2.756           | 70  | 100         | 30.5 |
| 900352   | 1.969    | 50  | 3.150           | 80  | 100         | 30.5 |
| 900353   | 2.244    | 57  | 3.543           | 90  | 100         | 30.5 |
| 900354   | 2.362    | 60  | 3.937           | 100 | 100         | 30.5 |
| 900355   | 2.756    | 70  | 4.528           | 115 | 50          | 15.2 |
| 900356   | 3.543    | 90  | 5.709           | 145 | 50          | 15.2 |
| 900357   | 4.331    | 110 | 6.929           | 176 | 50          | 15.2 |
| 900358   | 4.921    | 125 | 7.874           | 200 | 50          | 15.2 |

**European Standard**

| Item No. | Round ID |       | Flattened Width |       | Roll Length |     |
|----------|----------|-------|-----------------|-------|-------------|-----|
|          | mm       | in    | mm              | in    | m           | ft  |
| 900700   | 20.0     | 0.787 | 34.0            | 1.338 | 50          | 164 |
| 900702   | 25.0     | 0.984 | 42.0            | 1.653 | 50          | 164 |
| 900704   | 30.0     | 1.181 | 49.0            | 1.929 | 50          | 164 |
| 900706   | 35.0     | 1.378 | 59.0            | 2.322 | 50          | 164 |
| 900708   | 40.0     | 1.575 | 65.0            | 2.559 | 50          | 164 |
| 900710   | 45.0     | 1.772 | 72.0            | 2.834 | 50          | 164 |
| 900712   | 50.0     | 1.969 | 76.0            | 2.992 | 50          | 164 |
| 900714   | 55.0     | 2.165 | 89.0            | 3.503 | 50          | 164 |
| 900716   | 60.0     | 2.362 | 97.0            | 3.818 | 50          | 164 |
| 900718   | 65.0     | 2.559 | 106.0           | 4.173 | 50          | 164 |
| 900720   | 75.0     | 2.952 | 117.0           | 4.606 | 50          | 164 |
| 900722   | 85.0     | 3.346 | 136.0           | 5.354 | 50          | 164 |
| 900724   | 90.0     | 3.543 | 144.0           | 5.669 | 50          | 164 |
| 900726   | 95.0     | 3.740 | 149.0           | 5.866 | 50          | 164 |
| 900728   | 110.0    | 4.330 | 178.0           | 7.007 | 50          | 164 |

## SLEEVE HOSE PROTECTION

### Polyester Quick Assemble Hose or Cable Sleeve



**Specifications:**

- Material: Sleeve: Polyester, Hook and Loop: Polyamide
- Color: Black

**Features:**

- Lightweight but high strength and abrasion resistance
- Easy assembly and removal
- Breakouts are simple by bringing out through the hook and loop

| Item No. | ID    |    | Spread Width |     | Roll Length |    |
|----------|-------|----|--------------|-----|-------------|----|
|          | in    | mm | in           | m   | ft          | m  |
| 900328   | 0.787 | 20 | 3.149        | 80  | 82          | 25 |
| 900329   | 0.984 | 25 | 3.740        | 95  | 82          | 25 |
| 900330   | 1.181 | 30 | 4.527        | 115 | 82          | 25 |
| 900331   | 1.377 | 35 | 5.118        | 130 | 82          | 25 |
| 900332   | 1.574 | 40 | 5.748        | 146 | 82          | 25 |
| 900333   | 1.771 | 45 | 6.377        | 162 | 82          | 25 |
| 900334   | 1.968 | 50 | 7.007        | 178 | 82          | 25 |

### Textile Heatshrink Sleeve



**Specifications:**

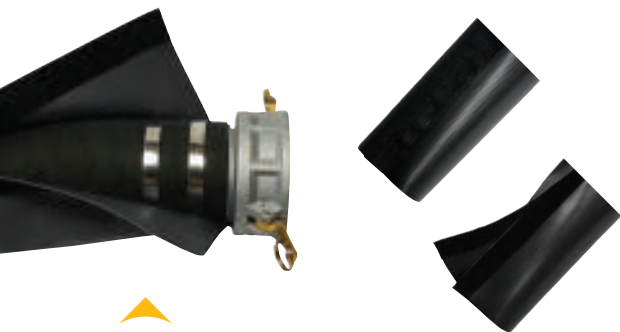
- Material: Polyester and Polyolefin
- Color: Black
- Shrink Ratio: 2:1
- Minimum shrink temperature: 176°F (80°C)
- Minimum full recovery temperature: 248°F (120°C)

**Features:**

- Provides excellent abrasion resistance and noise reduction
- Easily installed over connectors, fittings, splices, cables and hoses

| Item No. | Nominal Size |      | As Supplied ID |      | After Recovery ID |      | Roll Length |      |
|----------|--------------|------|----------------|------|-------------------|------|-------------|------|
|          | in           | mm   | in             | mm   | in                | mm   | ft          | m    |
| 900317   | 0.375        | 10.0 | 0.393          | 10.0 | 0.196             | 5.0  | 100         | 30.5 |
| 900318   | 0.500        | 12.0 | 0.472          | 12.0 | 0.236             | 6.0  | 100         | 30.5 |
| 900319   | 0.750        | 20.0 | 0.787          | 20.0 | 0.393             | 10.0 | 100         | 30.5 |
| 900320   | 1.000        | 25.0 | 0.984          | 25.0 | 0.492             | 12.5 | 100         | 30.5 |
| 900321   | 1.250        | 30.0 | 1.181          | 30.0 | 0.59              | 15.0 | 100         | 30.5 |
| 900322   | 1.338        | 34.0 | 1.338          | 34.0 | 0.669             | 17.0 | 100         | 30.5 |
| 900323   | 1.500        | 40.0 | 1.574          | 40.0 | 0.787             | 20.0 | 100         | 30.5 |
| 900324   | 2.000        | 50.0 | 1.968          | 50.0 | 0.984             | 25.0 | 100         | 30.5 |
| 900325   | 2.375        | 60.0 | 2.362          | 60.0 | 1.181             | 30.0 | 100         | 30.5 |
| 900326   | 2.750        | 70.0 | 2.755          | 70.0 | 1.377             | 35.0 | 100         | 30.5 |
| 900327   | 3.125        | 80.0 | 3.149          | 80.0 | 1.574             | 40.0 | 100         | 30.5 |

### Vinyl Quick Assemble Hose Sleeve



**Specifications:**

- Material: Woven Polyvinyl Chloride
- Color: Black

**Features:**

- Lightweight, tough and highly flexible; mildew and UV resistant
- Easy assembly and removal; easy to cut to length without fraying
- Sealing properties: Dielectric, thermal

**Mechanical Properties:**

- Grab Tensile: Meets ASTM D5034
- Strip Tensile: Meets ASTM D5035
- Tongue Tear: Meets ASTM D2261
- Temperature Range: 41°F to 180°F
- ROHS compliant

| Item No.  | Wrap ID |       | Flat Width |       | Roll Length |       |
|-----------|---------|-------|------------|-------|-------------|-------|
|           | in      | mm    | in         | m     | ft          | m     |
| TQSPOLY-2 | 2.000   | 50.8  | 7.750      | 196.0 | 150         | 45.72 |
| TQSPOLY-3 | 3.000   | 76.2  | 11.000     | 279.0 | 150         | 45.72 |
| TQSPOLY-4 | 4.000   | 101.6 | 14.000     | 355.0 | 150         | 45.72 |
| TQSPOLY-5 | 5.000   | 127.0 | 17.250     | 438.0 | 150         | 45.72 |
| TQSPOLY-6 | 6.000   | 152.4 | 20.380     | 517.0 | 150         | 45.72 |
| TQSPOLY-7 | 7.000   | 177.8 | 23.580     | 598.0 | 150         | 45.72 |
| TQSPOLY-8 | 8.000   | 203.2 | 26.620     | 676.0 | 150         | 45.72 |





# HEAT & FLAME HOSE PROTECTION



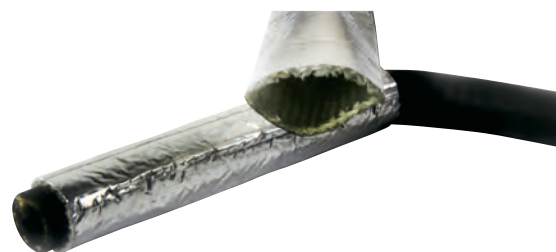
## Radiant Heat Reflective Sleeve

**Specifications:**

- Material: Outer Sleeve: Aluminum Foil
- Material: Inner Sleeve: Fiberglass
- Color: Silver

**Features:**

- Creates a thermal layer between wires, cables or hoses and the high temperature environments they are in
- Reflects more than 95% of the radiant energy that hits its surface



| Item No. | ID    |    | Max. Bundle Ø |    | Roll Length |      | Pack Qty |
|----------|-------|----|---------------|----|-------------|------|----------|
|          | in    | mm | in            | mm | ft          | m    |          |
| 900404   | 0.393 | 10 | 0.433         | 11 | 100         | 30.5 | 1        |
| 900405   | 0.629 | 16 | 0.669         | 17 | 100         | 30.5 | 1        |
| 900406   | 0.787 | 20 | 0.826         | 21 | 100         | 30.5 | 1        |
| 900407   | 0.984 | 25 | 1.023         | 26 | 100         | 30.5 | 1        |
| 900408   | 1.181 | 30 | 1.220         | 31 | 100         | 30.5 | 1        |

## FPS Series

### Fire Protection Sleeve

**Specifications:**

- Material: Outer Sleeve: Proprietary Iron Oxide Red Silicone Rubber
- Material: Inner Sleeve: Knitted High Bulk Glass Fiber

**Features:**

- Has excellent elasticity great for protecting or bundling hoses, tubes and cables in a variety of hostile environments
- The insulation properties provide close quartered personnel with effective protection against burns from hot hoses and reduce heat energy loss
- Withstands intense radiant heat and flame
  - Continuous exposure up to 500°F (260°C)
  - 15-20 minutes up to 2000°F (1090°C)
  - 15-30 seconds up to 3000°F (1650°C)
- Immediately sheds splash
  - Withstands repeated exposures to molten steel, molten aluminum and molten glass up to 3000°F (1650°C)



| Item No. | ID    |     | Roll Length |  |
|----------|-------|-----|-------------|--|
|          | in    | mm  | ft          |  |
| FPS0250  | 0.250 | 0.6 | 50          |  |
| FPS0313  | 0.313 | 0.8 | 50          |  |
| FPS0375  | 0.375 | 1.0 | 50          |  |
| FPS0500  | 0.500 | 1.3 | 50          |  |
| FPS0625  | 0.625 | 1.6 | 50          |  |
| FPS0750  | 0.750 | 1.9 | 50          |  |
| FPS0875  | 0.875 | 2.2 | 50          |  |
| FPS1000  | 1.000 | 2.5 | 50          |  |
| FPS1250  | 1.250 | 3.2 | 50          |  |
| FPS1375  | 1.375 | 3.5 | 50          |  |
| FPS1500  | 1.500 | 3.8 | 50          |  |
| FPS1625  | 1.625 | 4.1 | 50          |  |

| Item No. | ID    |      | Roll Length |  |
|----------|-------|------|-------------|--|
|          | in    | mm   | ft          |  |
| FPS1750  | 1.750 | 4.4  | 50          |  |
| FPS2000  | 2.000 | 5.1  | 50          |  |
| FPS2250  | 2.250 | 5.7  | 50          |  |
| FPS2375  | 2.375 | 6.0  | 50          |  |
| FPS2500  | 2.500 | 6.4  | 50          |  |
| FPS2750  | 2.750 | 7.0  | 50          |  |
| FPS3000  | 3.000 | 7.6  | 50          |  |
| FPS3250  | 3.250 | 8.3  | 50          |  |
| FPS3375  | 3.375 | 8.6  | 50          |  |
| FPS3500  | 3.500 | 8.9  | 50          |  |
| FPS3750  | 3.750 | 9.5  | 50          |  |
| FPS4000  | 4.000 | 10.2 | 50          |  |

## FPQS Series

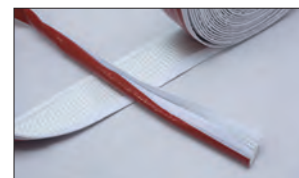
### Quick Assemble Fire Protection Sleeve

**Specifications:**

- Material: Outer Sleeve: Red Silicone
- Material: Inner Sleeve: White Fiberglass Fiber
- Material: Hook and Loop: White Nylon / Polyamid

**Features:**

- Excellent elasticity that is great for bundling hoses, tubes and cables in a variety of hostile environments
- The hook & loop design allows for easy installation and removal without having to disconnect the hose assembly in the field
- The insulation properties provide close quartered personnel with effective protection against burns from hot hoses and reduce heat energy loss
- Withstands intense radiant heat and flame - Continuous exposure up to 500°F (260°C); 15 - 20 minutes up to 2000°F (1090°C); 15 - 30 seconds up to 3000°F (1650°C)
- Immediately sheds splash; withstands repeated exposures to molten steel, molten aluminum and molten glass up to 3000°F (1650°C)



| Item No. | Round ID |       | Flat Width |    |
|----------|----------|-------|------------|----|
|          | in       | mm    | ft         | m  |
| FPQS0312 | 0.312    | 8.0   | 65         | 20 |
| FPQS0375 | 0.375    | 10.0  | 65         | 20 |
| FPQS0500 | 0.500    | 12.5  | 65         | 20 |
| FPQS0625 | 0.625    | 15.0  | 65         | 20 |
| FPQS0750 | 0.750    | 20.0  | 65         | 20 |
| FPQS1000 | 1.000    | 25.0  | 65         | 20 |
| FPQS1125 | 1.125    | 30.0  | 65         | 20 |
| FPQS1250 | 1.250    | 32.0  | 50         | 15 |
| FPQS1375 | 1.375    | 35.0  | 65         | 20 |
| FPQS1625 | 1.625    | 40.0  | 65         | 20 |
| FPQS1750 | 1.750    | 45.0  | 65         | 20 |
| FPQS2000 | 2.000    | 50.0  | 65         | 20 |
| FPQS2125 | 2.125    | 55.0  | 65         | 20 |
| FPQS2375 | 2.375    | 60.0  | 32         | 10 |
| FPQS2500 | 2.500    | 65.0  | 32         | 10 |
| FPQS2750 | 2.750    | 70.0  | 32         | 10 |
| FPQS3000 | 3.000    | 75.0  | 32         | 10 |
| FPQS3125 | 3.125    | 80.0  | 32         | 10 |
| FPQS3375 | 3.375    | 85.0  | 32         | 10 |
| FPQS3500 | 3.500    | 90.0  | 32         | 10 |
| FPQS4000 | 4.000    | 100.0 | 32         | 10 |

## HOSE STRAPS / BEND RESTRICTORS

### TCS and THCS Series Standard and Hanging Cinch Straps



TCS Series



THCS Series

Specifications:

- Material: Standard - Nylon 22 Plastic Buckles
- Material: Heavy-Duty: Woven Nylon Webbing, Steel Buckles

Features:

- Add, remove or adjust hose buckles in minutes
- Cuts normal installation time by 50%
- The hook and loop design holds hoses securely while allowing natural hose expansion and contraction movement without damage
- The grommet on the THCS strap can be attached to any convenient bulkhead or mounting surface
- Excellent UV and weather resistance



TCS Heavy



THCS Heavy

#### Cinch Straps

| Item No. |         | Bundle Diameter |        |
|----------|---------|-----------------|--------|
| Standard | Heavy   | in              | mm     |
| TCS4A    | TCS4HA  | 1.270           | 32.25  |
| TCS8A    | TCS8HA  | 2.540           | 64.51  |
| TCS12A   | TCS12HA | 3.820           | 97.02  |
| TCS16A   | TCS16HA | 5.100           | 129.54 |
| TCS20A   | TCS20HA | 6.370           | 161.79 |

#### Hanging Cinch Straps

| Item No. |          | Bundle Diameter |        |
|----------|----------|-----------------|--------|
| Standard | Heavy    | in              | mm     |
| THCS4A   | THCS4HA  | 1.270           | 32.25  |
| THCS8A   | THCS8HA  | 2.540           | 64.51  |
| THCS12A  | THCS12HA | 3.820           | 97.02  |
| THCS16A  | THCS16HA | 5.100           | 129.54 |
| THCS20A  | THCS20HA | 6.370           | 161.79 |

### TBS Series Bundling Straps



Specifications:

- Material: Polypropylene Textile Sleeve, Stainless Steel Buckle
- Color: Black

Features:

- Designed to bundle hydraulic/pneumatic hose assemblies or cables
- Easy assembly and removal
- Can be used multiple times

| Item No. | Length  |      | Width |      | Tensile Strength |     | Pack Qty |
|----------|---------|------|-------|------|------------------|-----|----------|
|          | in      | mm   | in    | mm   | lbs              | kgs |          |
| TBS600   | 23.622  | 600  | 1     | 25.4 | 550              | 250 | 10       |
| TBS800   | 31.496  | 800  | 1     | 25.4 | 550              | 250 | 10       |
| TBS1000  | 39.370  | 1000 | 1     | 25.4 | 550              | 250 | 10       |
| TBS2000  | 78.740  | 2000 | 1     | 25.4 | 550              | 250 | 10       |
| TBS5000  | 196.850 | 5000 | 1     | 25.4 | 550              | 250 | 10       |

### DMBR Series Vinyl Bend Restrictors



Specifications:

- Material: Vinyl PVC
- Color: Black
- Temperature Range: -40°F to 194°F (-40°C to 90°C)

Features:

- Reduces bending stress near the hose coupling junction
- Prevents damage and extends the life of the hose
- Can be used with hydraulic, pneumatic or pressure wash hoses

| Item No. | Hose OD |      | Coupling End OD |      |       |      | Length |       |
|----------|---------|------|-----------------|------|-------|------|--------|-------|
|          |         |      | Max             |      | Min   |      |        |       |
|          | in      | mm   | in              | mm   | in    | mm   | in     | mm    |
| DMBR0375 | 0.374   | 9.5  | 0.591           | 15.0 | 0.453 | 11.5 | 5.299  | 134.6 |
| DMBR0590 | 0.591   | 15.0 | 0.827           | 21.0 | 0.709 | 18.0 | 5.512  | 140.0 |
| DMBR0689 | 0.689   | 17.5 | 0.886           | 22.5 | 0.772 | 19.6 | 6.000  | 152.4 |
| DMBR0748 | 0.748   | 19.0 | 0.925           | 23.5 | 0.827 | 21.0 | 7.000  | 177.8 |
| DMBR0826 | 0.827   | 21.0 | 1.000           | 25.4 | 0.874 | 22.2 | 7.000  | 177.8 |
| DMBR0937 | 0.937   | 23.8 | 1.213           | 30.8 | 1.055 | 26.8 | 8.000  | 203.2 |

## PLUGS / PUNCHING TIES / HOSE CLAMPS

### HSP Series

#### Hose Service Plugs

## Specifications:

- Material: Rubber
- Color: Yellow
- Temperature Range: -13°F to 194°F (-25°C to 90°C)

## Features:

- Avoid costly spills of oils and chemicals during the maintenance and repair of hoses and rigid pipe
- No tools required; push in and twist
- Strong and reusable



| Item No.  | Size   | Plug Range    |               | Pack Qty          |
|-----------|--------|---------------|---------------|-------------------|
|           |        | in            | mm            |                   |
| HSPSMALL  | Small  | 0.040 - 0.400 | 1.01 - 10.16  | 20                |
| HSPMEDIUM | Medium | 0.160 - 0.910 | 4.06 - 23.11  | 10                |
| HSP LARGE | Large  | 0.470 - 1.700 | 11.93 - 43.18 | 4                 |
| HSP MIXED | Mixed  | 0.040 - 1.700 | 1.01 - 43.18  | 4 Sm, 4 Med, 2 Lg |



### Smooth ID Punching Ties

## Specifications:

- Material: 304 Stainless Steel

## Features:

- Smooth ID with a low profile which is excellent when used to fasten a fabric protective sleeve over a hydraulic hose assembly
- Can be applied by hand or pneumatic tool
- Pre-engaged for ease of installation



| Item No. | Straight Length |     | Width |     |
|----------|-----------------|-----|-------|-----|
|          | in              | mm  | in    | mm  |
| 900560   | 9               | 229 | 0.25  | 6.3 |
| 900562   | 11              | 285 | 0.25  | 6.3 |
| 900564   | 14              | 370 | 0.25  | 6.3 |
| 900566   | 16.5            | 419 | 0.25  | 6.3 |
| 900568   | 22.2            | 572 | 0.25  | 6.3 |



### MHC Series

#### Mini Worm Gear Hose Clamps

## Specifications:

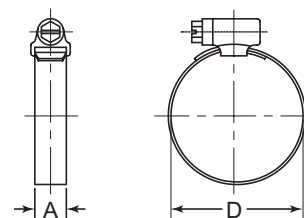
- Material: Band and Housing - Stainless Steel
- Screw: 1/4 Inch Hex-Head, Plated-Carbon Steel

## Features:

- Can be used on small hose applications
- Low profile housing and thin band make them easier to install or remove in confined areas



| Item No. | SAE Size | Ø Range D |          |       | Bulk Pack Qty |
|----------|----------|-----------|----------|-------|---------------|
|          |          | Min (in)  | Max (in) | A     |               |
| MHC04A   | 4        | 0.250     | 0.625    | 0.312 | 100           |
| MHC05A   | 5        | 0.250     | 0.687    | 0.312 | 100           |
| MHC06A   | 6        | 0.312     | 0.875    | 0.312 | 100           |
| MHC08A   | 8        | 0.375     | 1.000    | 0.312 | 100           |
| MHC10A   | 10       | 0.375     | 1.062    | 0.312 | 100           |
| MHC12A   | 12       | 0.500     | 1.250    | 0.312 | 50            |
| MHC16A   | 16       | 0.500     | 1.500    | 0.312 | 50            |
| MHC20A   | 20       | 0.750     | 1.750    | 0.312 | 50            |
| MHC24A   | 24       | 1.000     | 2.000    | 0.312 | 50            |
| MHC28A   | 28       | 1.250     | 2.250    | 0.312 | 20            |
| MHC30A   | 30       | 1.375     | 2.375    | 0.312 | 25            |
| MHC32A   | 32       | 1.500     | 2.500    | 0.312 | 25            |
| MHC36A   | 36       | 1.750     | 2.750    | 0.312 | 25            |
| MHC44A   | 44       | 2.250     | 3.250    | 0.312 | 20            |
| MHC48A   | 48       | 2.500     | 3.500    | 0.312 | 20            |



# HOSE CLAMPS

## WDHC Series

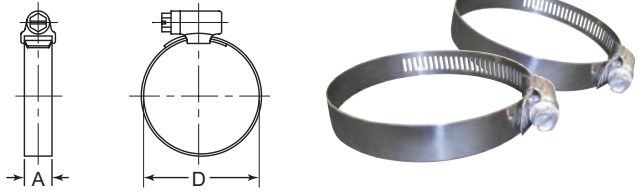
### Worm Drive or Worm Gear Hose Clamps

**Specifications:**

- Material: See Table

**Features:**

- Can be used with the TSL or TQS series sleeves
- Band detaches from the housing so you can install or remove them without disconnecting the hose or tube
- Screw is same material as the band



| Item No. | SAE # | Dia. Range D |        | A     | Bulk Pack Qty |
|----------|-------|--------------|--------|-------|---------------|
|          |       | Min in       | Max in |       |               |
| WDHC04A  | 4     | 0.250        | 0.625  | 0.320 | 100           |
| WDHC06A  | 6     | 0.438        | 0.750  | 0.320 | 100           |
| WDHC08A  | 8     | 0.500        | 0.875  | 0.320 | 100           |
| WDHC10A  | 10    | 0.500        | 1.063  | 0.500 | 50            |
| WDHC12A  | 12    | 0.500        | 1.250  | 0.500 | 50            |
| WDHC16A  | 16    | 1.063        | 1.500  | 0.500 | 50            |
| WDHC20A  | 20    | 0.750        | 1.750  | 0.500 | 50            |
| WDHC24A  | 24    | 1.000        | 2.000  | 0.500 | 25            |
| WDHC28A  | 28    | 1.250        | 2.250  | 0.500 | 25            |
| WDHC32A  | 32    | 1.500        | 2.500  | 0.500 | 25            |

| Item No. | SAE # | Dia. Range D |        | A     | Bulk Pack Qty |
|----------|-------|--------------|--------|-------|---------------|
|          |       | Min in       | Max in |       |               |
| WDHC36A  | 36    | 1.750        | 2.750  | 0.500 | 25            |
| WDHC44A  | 44    | 2.250        | 3.250  | 0.500 | 25            |
| WDHC48A  | 48    | 2.500        | 3.500  | 0.500 | 20            |
| WDHC52A  | 52    | 2.750        | 3.750  | 0.500 | 20            |
| WDHC56A  | 56    | 3.000        | 4.000  | 0.500 | 20            |
| WDHC60A  | 60    | 3.250        | 4.250  | 0.500 | 20            |
| WDHC64A  | 64    | 2.500        | 4.500  | 0.500 | 20            |
| WDHC72A  | 72    | 3.000        | 5.000  | 0.500 | 10            |
| WDHC80A  | 80    | 3.500        | 5.500  | 0.500 | 10            |
| WDHC88A  | 88    | 4.000        | 6.000  | 0.500 | 10            |
| WDHC96A  | 96    | 4.500        | 6.500  | 0.500 | 10            |

## TBC Series

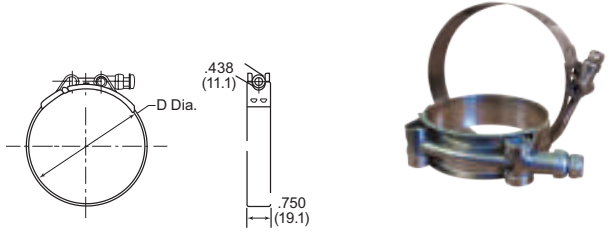
### T-Bolt Hose Clamps

**Specifications:**

- Material: All components 301 Stainless Steel
- Bolt: 1/4 - 28 inch
- Nut: 7/16 inch hex, nylon insert

**Features:**

- Designed to provide a dependable seal on large diameter applications where high vibration occurs



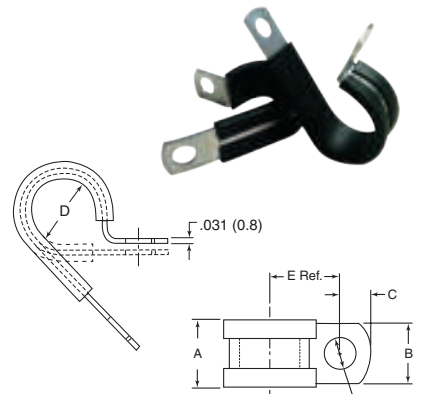
| Item No. | SAE Size | Dia. Range D |        | Bulk Pack Qty |
|----------|----------|--------------|--------|---------------|
|          |          | Min in       | Max in |               |
| TBC15A   | —        | 1.375        | 1.562  | 25            |
| TBC17A   | —        | 1.625        | 1.875  | 25            |
| TBC28A   | 28       | 1.750        | 1.937  | 25            |
| TBC32A   | 32       | 1.875        | 2.187  | 25            |
| TBC36A   | 36       | 2.125        | 2.312  | 25            |
| TBC40A   | 40       | 2.250        | 2.437  | 25            |
| TBC44A   | 44       | 2.375        | 2.562  | 25            |
| TBC48A   | 48       | 2.375        | 2.687  | 10            |
| TBC52A   | 52       | 2.500        | 2.812  | 10            |
| TBC56A   | 56       | 2.625        | 2.937  | 10            |
| TBC60A   | 60       | 2.750        | 3.062  | 10            |
| TBC64A   | 64       | 2.875        | 3.187  | 10            |
| TBC68A   | 68       | 3.000        | 3.312  | 10            |

| Item No. | SAE Size | Dia. Range D |        | Bulk Pack Qty |
|----------|----------|--------------|--------|---------------|
|          |          | Min in       | Max in |               |
| TBC76A   | 76       | 3.250        | 3.562  | 10            |
| TBC84A   | 84       | 3.500        | 3.812  | 10            |
| TBC92A   | 92       | 3.750        | 4.062  | 10            |
| TBC100A  | 100      | 4.000        | 4.312  | 5             |
| TBC108A  | 108      | 4.250        | 4.562  | 5             |
| TBC116A  | 116      | 4.500        | 4.812  | 5             |
| TBC124A  | 124      | 4.750        | 5.062  | 5             |
| TBC132A  | 132      | 5.000        | 5.312  | 5             |
| TBC140A  | 140      | 5.250        | 5.562  | 5             |
| TBC148A  | 148      | 5.500        | 5.812  | 5             |
| TBC156A  | 156      | 5.750        | 6.062  | 5             |
| TBC172A  | 172      | 6.250        | 6.562  | 5             |
| TBC188A  | 188      | 6.750        | 7.062  | 5             |
| TBC204A  | 204      | 7.250        | 7.562  | 2             |

## SPN / SPNW Series

### Steel Clamp with Rubber Cushion

| Item No. | D Holding Ø |      | B     | A    |       | Ø H  |       | E Ref. | C     |      | Bulk Pack Qty | Bulk Pack Qty |   |     |
|----------|-------------|------|-------|------|-------|------|-------|--------|-------|------|---------------|---------------|---|-----|
|          | in          | mm   |       | in   | mm    | in   | mm    |        | in    | mm   |               |               |   |     |
| SPN-3    | 0.188       | 4.8  | 0.500 | 12.7 | 0.650 | 16.5 | 0.266 | 6.7    | 0.500 | 12.7 | 0.260         | 6.6           | 1 | 500 |
| SPN-4    | 0.250       | 6.4  | 0.500 | 12.7 | 0.650 | 16.5 | 0.266 | 6.7    | 0.530 | 13.5 | 0.260         | 6.6           | 1 | 500 |
| SPNW-4   | 0.250       | 6.4  | 0.625 | 15.9 | 0.750 | 19.1 | 0.406 | 10.3   | 0.530 | 13.5 | 0.313         | 7.9           | 1 | 100 |
| SPN-5    | 0.313       | 7.9  | 0.500 | 12.7 | 0.650 | 16.5 | 0.266 | 6.7    | 0.560 | 14.2 | 0.260         | 6.6           | 1 | 500 |
| SPNW-5   | 0.313       | 7.9  | 0.625 | 15.9 | 0.750 | 19.1 | 0.406 | 10.3   | 0.560 | 14.2 | 0.313         | 7.9           | 1 | 100 |
| SPN-6    | 0.375       | 9.5  | 0.500 | 12.7 | 0.650 | 16.5 | 0.266 | 6.7    | 0.590 | 15   | 0.260         | 6.6           | 1 | 500 |
| SPNW-6   | 0.375       | 9.5  | 0.625 | 15.9 | 0.750 | 19.1 | 0.406 | 10.3   | 0.590 | 15   | 0.313         | 7.9           | 1 | 100 |
| SPN-7    | 0.438       | 11.1 | 0.500 | 12.7 | 0.650 | 16.5 | 0.266 | 6.7    | 0.620 | 15.7 | 0.260         | 6.6           | 1 | 500 |
| SPNW-7   | 0.438       | 11.1 | 0.625 | 15.9 | 0.750 | 19.1 | 0.406 | 10.3   | 0.620 | 15.7 | 0.313         | 7.9           | 1 | 100 |
| SPN-8    | 0.500       | 12.7 | 0.500 | 12.7 | 0.650 | 16.5 | 0.266 | 6.7    | 0.650 | 16.5 | 0.260         | 6.6           | 1 | 500 |
| SPNW-8   | 0.500       | 12.7 | 0.625 | 15.9 | 0.750 | 19.1 | 0.406 | 10.3   | 0.650 | 16.5 | 0.313         | 7.9           | 1 | 100 |
| SPN-9    | 0.563       | 14.3 | 0.500 | 12.7 | 0.650 | 16.5 | 0.266 | 6.7    | 0.750 | 19.1 | 0.260         | 6.6           | 1 | 500 |
| SPN-10   | 0.625       | 15.9 | 0.500 | 12.7 | 0.650 | 16.5 | 0.266 | 6.7    | 0.780 | 19.8 | 0.260         | 6.6           | 1 | 500 |
| SPNW-10  | 0.625       | 15.9 | 0.625 | 15.9 | 0.750 | 19.1 | 0.406 | 10.3   | 0.780 | 19.8 | 0.313         | 7.9           | 1 | 100 |
| SPN-11   | 0.688       | 17.5 | 0.500 | 12.7 | 0.650 | 16.5 | 0.266 | 6.7    | 0.810 | 20.6 | 0.260         | 6.6           | 1 | 500 |
| SPNW-11  | 0.688       | 17.5 | 0.625 | 15.9 | 0.750 | 19.1 | 0.406 | 10.3   | 0.810 | 20.6 | 0.313         | 7.9           | 1 | 100 |
| SPN-12   | 0.750       | 19.1 | 0.500 | 12.7 | 0.650 | 16.5 | 0.266 | 6.7    | 0.840 | 21.3 | 0.260         | 6.6           | 1 | 500 |
| SPN-14   | 0.875       | 22.2 | 0.500 | 12.7 | 0.650 | 16.5 | 0.266 | 6.7    | 0.900 | 22.9 | 0.260         | 6.6           | 1 | 100 |
| SPNW-14  | 0.875       | 22.2 | 0.625 | 15.9 | 0.750 | 19.1 | 0.406 | 10.3   | 0.900 | 22.9 | 0.313         | 7.9           | 1 | 100 |
| SPN-16   | 1.000       | 25.4 | 0.500 | 12.7 | 0.650 | 16.5 | 0.266 | 6.7    | 0.960 | 24.4 | 0.260         | 6.6           | 1 | 100 |
| SPNW-16  | 1.000       | 25.4 | 0.625 | 15.9 | 0.750 | 19.1 | 0.406 | 10.3   | 0.960 | 24.4 | 0.313         | 7.9           | 1 | 100 |
| SPN-18   | 1.125       | 28.6 | 0.500 | 12.7 | 0.650 | 16.5 | 0.266 | 6.7    | 1.050 | 26.7 | 0.260         | 6.6           | 1 | 100 |
| SPN-20   | 1.250       | 31.8 | 0.500 | 12.7 | 0.650 | 16.5 | 0.266 | 6.7    | 1.110 | 28.2 | 0.260         | 6.6           | 1 | 100 |
| SPNW-20  | 1.250       | 31.8 | 0.625 | 15.9 | 0.750 | 19.1 | 0.406 | 10.3   | 1.110 | 28.2 | 0.313         | 7.9           | 1 | 100 |



**Specifications:**

- Material: Cold Rolled Steel, Zinc Electroplated, Elastomer Cushion
- Color: Steel with Black Cushion

**Features:**

- Provides electrical insulation and vibration absorption
- Ideal for long-life applications

# SPIRALGUARD from Essentra



- HDPE - offering a thinner lightweight product while still maintaining industrial strength and quality
- Double beveled cut for a smooth finish and easy fitting



See Page 109

# FASTENERS





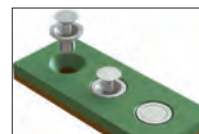
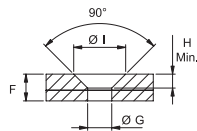
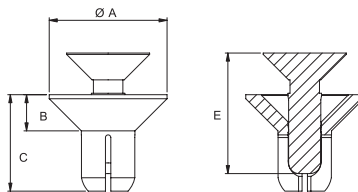
|                                                                                     |                                     |           |
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|  | PLASTIC NUTS .....                  | 188 - 194 |
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**SRCS Series  
Countersunk Snap Rivets**



**Specifications:**

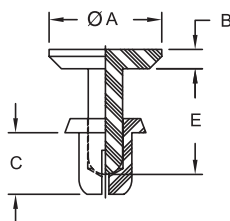
- Material: UL94 V-2 Nylon 6
- Color: See Table

**Features:**

- Countersunk design for flush surface
- Tamper resistant design
- Accommodates countersunk hole specification DIN ISO 7721

| Item No.   | Ø Hole     | Total Holding Thickness F |           | Ø A         |           | B    |     | C    |     | E    |      | H Min. |      | Ø I  |     | Bulk Pack Qty |      |      |
|------------|------------|---------------------------|-----------|-------------|-----------|------|-----|------|-----|------|------|--------|------|------|-----|---------------|------|------|
|            |            | in                        | mm        | in          | mm        | in   | mm  | in   | mm  | in   | mm   | in     | mm   | in   | mm  |               |      |      |
| SRCS-4060B | SRCS-4060W | 0.16 - 0.17               | 4.1 - 4.2 | 0.14 - 0.18 | 3.5 - 4.5 | 0.35 | 8.8 | 0.11 | 2.7 | 0.24 | 6.0  | 0.28   | 7.1  | 0.10 | 2.6 | 0.37          | 9.4  | 1000 |
| SRCS-4070B | SRCS-4070W | 0.16 - 0.17               | 4.1 - 4.2 | 0.18 - 0.22 | 4.5 - 5.5 | 0.35 | 8.8 | 0.11 | 2.7 | 0.28 | 7.2  | 0.35   | 9.0  | 0.10 | 2.6 | 0.37          | 9.4  | 1000 |
| SRCS-4080B | SRCS-4080W | 0.16 - 0.17               | 4.1 - 4.2 | 0.22 - 0.26 | 5.5 - 6.5 | 0.35 | 8.8 | 0.11 | 2.7 | 0.32 | 8.0  | 0.35   | 9.0  | 0.10 | 2.6 | 0.37          | 9.4  | 1000 |
| SRCS-4090B | SRCS-4090W | 0.16 - 0.17               | 4.1 - 4.2 | 0.26 - 0.30 | 6.5 - 7.5 | 0.35 | 8.8 | 0.11 | 2.7 | 0.35 | 9.0  | 0.43   | 11.0 | 0.10 | 2.6 | 0.37          | 9.4  | 1000 |
| SRCS-4100B | SRCS-4100W | 0.16 - 0.17               | 4.1 - 4.2 | 0.30 - 0.34 | 7.5 - 8.5 | 0.35 | 8.8 | 0.11 | 2.7 | 0.39 | 10.0 | 0.43   | 11.0 | 0.10 | 2.6 | 0.37          | 9.4  | 1000 |
| SRCS-5065B | SRCS-5065W | 0.20 - 0.21               | 5.1 - 5.2 | 0.14 - 0.18 | 3.5 - 4.5 | 0.35 | 8.8 | 0.11 | 2.7 | 0.26 | 6.5  | 0.35   | 8.5  | 0.10 | 2.6 | 0.41          | 10.4 | 1000 |

**SRH Series  
Snap Rivets, H-Type**



**Specifications:**

- Material: UL94 V-2 Nylon 6
- Color: Black

**Features:**

- Flat head design eases assembly and disassembly
- Installed easily by hand

| Item No. | Ø Hole        |           | Total Holding Thickness |           | Ø A   |     | B     |     | C    |      | E    |      | Bulk Pack Qty |
|----------|---------------|-----------|-------------------------|-----------|-------|-----|-------|-----|------|------|------|------|---------------|
|          | in            | mm        | in                      | mm        | in    | mm  | in    | mm  | in   | mm   | in   | mm   |               |
| SRH-3035 | 0.122 - 0.126 | 3.1 - 3.2 | 0.039 - 0.079           | 1.0 - 2.0 | 0.252 | 6.4 | 0.039 | 1.0 | 0.14 | 3.5  | 0.26 | 6.5  | 1000          |
| SRH-3045 | 0.122 - 0.126 | 3.1 - 3.2 | 0.079 - 0.118           | 2.0 - 3.0 | 0.252 | 6.4 | 0.039 | 1.0 | 0.18 | 4.5  | 0.26 | 6.5  | 1000          |
| SRH-3055 | 0.122 - 0.126 | 3.1 - 3.2 | 0.118 - 0.157           | 3.0 - 4.0 | 0.252 | 6.4 | 0.039 | 1.0 | 0.22 | 5.6  | 0.26 | 6.5  | 1000          |
| SRH-3065 | 0.122 - 0.126 | 3.1 - 3.2 | 0.157 - 0.197           | 4.0 - 5.0 | 0.236 | 6.0 | 0.039 | 1.0 | 0.26 | 6.5  | 0.39 | 10.0 | 1000          |
| SRH-3080 | 0.122 - 0.126 | 3.1 - 3.2 | 0.197 - 0.256           | 5.0 - 6.5 | 0.236 | 6.0 | 0.039 | 1.0 | 0.31 | 8.0  | 0.39 | 10.0 | 1000          |
| SRH-3090 | 0.122 - 0.126 | 3.1 - 3.2 | 0.256 - 0.295           | 6.5 - 7.5 | 0.252 | 6.4 | 0.039 | 1.0 | 0.35 | 9.0  | 0.47 | 12.0 | 1000          |
| SRH-3100 | 0.122 - 0.126 | 3.1 - 3.2 | 0.295 - 0.335           | 7.5 - 8.5 | 0.252 | 6.4 | 0.039 | 1.0 | 0.39 | 10.0 | 0.47 | 12.0 | 1000          |
| SRH-3535 | 0.142 - 0.146 | 3.6 - 3.7 | 0.047 - 0.083           | 1.2 - 2.1 | 0.252 | 6.4 | 0.039 | 1.0 | 0.14 | 3.5  | 0.26 | 6.5  | 1000          |
| SRH-3545 | 0.142 - 0.146 | 3.6 - 3.7 | 0.087 - 0.122           | 2.2 - 3.1 | 0.252 | 6.4 | 0.039 | 1.0 | 0.18 | 4.5  | 0.26 | 6.5  | 1000          |
| SRH-3555 | 0.142 - 0.146 | 3.6 - 3.7 | 0.118 - 0.157           | 3.0 - 4.0 | 0.236 | 6.0 | 0.039 | 1.0 | 0.22 | 5.5  | 0.39 | 10.0 | 1000          |
| SRH-3560 | 0.142 - 0.146 | 3.6 - 3.7 | 0.138 - 0.177           | 3.5 - 4.5 | 0.236 | 6.0 | 0.039 | 1.0 | 0.24 | 6.0  | 0.39 | 10.0 | 1000          |
| SRH-3570 | 0.142 - 0.146 | 3.6 - 3.7 | 0.177 - 0.217           | 4.5 - 5.5 | 0.236 | 6.0 | 0.039 | 1.0 | 0.28 | 7.0  | 0.39 | 10.0 | 1000          |
| SRH-3580 | 0.142 - 0.146 | 3.6 - 3.7 | 0.217 - 0.256           | 5.5 - 6.5 | 0.236 | 6.0 | 0.039 | 1.0 | 0.31 | 8.0  | 0.39 | 10.0 | 1000          |

**SRP Series  
High Temperature Snap Rivet**

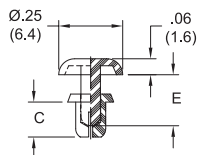


Fig. 1

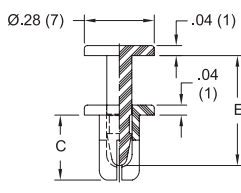


Fig. 2

**Specifications:**

- Material: UL94 V-1 Polysulfone
- Color: Black

**Features:**

- Withstands temperatures up to 311°F (155°C)

| Item No. | Ø Hole        |           | Total Holding Thickness |           | C    |     | E    |      | Bulk Pack Qty |      |
|----------|---------------|-----------|-------------------------|-----------|------|-----|------|------|---------------|------|
|          | in            | mm        | in                      | mm        | in   | mm  | in   | mm   |               |      |
| SRP-3045 | 0.122 - 0.126 | 3.1 - 3.2 | 0.059 - 0.098           | 1.5 - 2.5 | 0.18 | 4.5 | 0.24 | 6.1  | 1             | 1000 |
| SRP-3055 | 0.122 - 0.126 | 3.1 - 3.2 | 0.098 - 0.138           | 2.5 - 3.5 | 0.22 | 5.5 | 0.24 | 6.1  | 1             | 1000 |
| SRP-4065 | 0.157 - 0.165 | 4.0 - 4.2 | 0.138 - 0.177           | 3.5 - 4.5 | 0.26 | 6.5 | 0.43 | 11.0 | 2             | 1000 |



# SNAP RIVETS

## 1301 Series Snap In Rivets



**Specifications:**

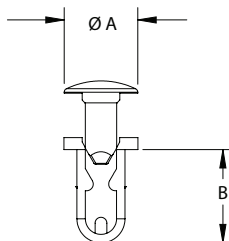
- Material: See Table
- Color: Black

**Features:**

- Quickly installed by hand
- Pin is predriven into the grommet
- Grommet expands as pin is inserted providing a tight fit
- Ideally suited for any application requiring a front-mount rivet

| Item No. | Fig | Ø Hole |      | Min Panel Thickness |     | Max Panel Thickness |     | Ø A  |      | Ø B  |      | C     |      | Material                            | Bulk Pack Qty |
|----------|-----|--------|------|---------------------|-----|---------------------|-----|------|------|------|------|-------|------|-------------------------------------|---------------|
|          |     | in     | mm   | in                  | mm  | in                  | mm  | in   | mm   | in   | mm   | in    | mm   |                                     |               |
| 1301297  | 1   | 0.24   | 6.2  | 0.079               | 2.0 | 0.177               | 4.5 | 0.55 | 14.0 | 0.39 | 9.9  | 0.724 | 18.4 | Acetal                              | 1000          |
| 1301298  | 2   | 0.28   | 7.0  | 0.098               | 2.5 | 0.197               | 5.0 | 0.78 | 19.9 | 0.58 | 14.8 | 0.831 | 21.1 | Grommet: Acetal, Pin: Polypropylene | 1000          |
| 1301299  | 3   | 0.31   | 8.0  | 0.177               | 4.5 | 0.189               | 4.8 | 0.63 | 16.1 | 0.51 | 13.0 | 0.783 | 19.9 | Acetal                              | 1000          |
| 1301300  | 3   | 0.39   | 10.0 | 0.217               | 5.5 | 0.276               | 7.0 | 0.79 | 20.0 | 0.55 | 14.0 | 1.030 | 26.1 | Grommet: Acetal, Pin: Polypropylene | 1000          |
| 1301301  | 4   | 0.35   | 9.0  | 0.15                | 3.8 | 0.189               | 4.8 | 0.71 | 18.0 | 0.55 | 13.9 | 1.547 | 39.3 | Grommet: Acetal, Pin: PBT           | 1000          |
| 1301302  | 5   | 0.28   | 7.2  | 0.118               | 3.0 | 0.157               | 4.0 | 0.71 | 18.1 | 0.48 | 12.2 | 0.689 | 17.5 | Acetal                              | 1000          |
| 1301303  | 2   | 0.31   | 8.0  | 0.098               | 2.5 | 0.197               | 5.0 | 0.79 | 20.0 | 0.58 | 14.8 | 0.780 | 19.8 | Grommet: Acetal, Pin: Polypropylene | 1000          |
| 1301304  | 6   | 0.27   | 6.8  | 0.039               | 1.0 | 0.157               | 4.0 | 0.79 | 20.0 | 0.51 | 13.0 | 0.736 | 18.7 | Acetal                              | 1000          |
| 1301305  | 7   | 0.28   | 7.0  | 0.059               | 1.5 | 0.098               | 2.5 | 0.79 | 20.0 | 0.55 | 14.0 | 0.740 | 18.8 | Grommet: Acetal, Pin: PBT           | 1000          |
| 1301306  | 3   | 0.39   | 10.0 | 0.276               | 7.0 | 0.315               | 8.0 | 0.79 | 20.0 | 0.53 | 13.6 | 1.201 | 30.5 | Acetal                              | 1000          |
| 1301307  | 5   | 0.24   | 6.0  | 0.161               | 4.1 | 0.197               | 5.0 | 0.55 | 14.0 | 0.29 | 7.3  | 0.650 | 16.5 | Acetal                              | 1000          |
| 1301308  | 7   | 0.31   | 8.0  | 0.118               | 3.0 | 0.197               | 5.0 | 0.79 | 20.0 | 0.47 | 11.8 | 0.843 | 21.4 | Acetal                              | 1000          |
| 1301309  | 6   | 0.31   | 7.8  | 0.118               | 3.0 | 0.236               | 6.0 | 0.79 | 20.0 | 0.51 | 13.0 | 0.874 | 22.2 | Acetal                              | 1000          |
| 1301310  | 8   | 0.28   | 7.0  | 0.118               | 3.0 | 0.138               | 3.5 | 0.58 | 14.8 | 0.22 | 5.6  | 0.819 | 20.8 | Acetal                              | 1000          |

## 27CINCH Series Cinch Rivets



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: See Table

**Features:**

- Easy installation; simply insert the "U" shaped body into the panel hole and tap the head of the "T" shaped pin with a hammer or other impact tool



| Item No.  | Ø Hole     |       | Total Holding Thickness |               | Ø A       |       | B    |       | Head Height |       | Bulk Pack Qty |      |
|-----------|------------|-------|-------------------------|---------------|-----------|-------|------|-------|-------------|-------|---------------|------|
|           | Natural    | Black | in                      | mm            | in        | mm    | in   | mm    | in          | mm    |               |      |
| 27CINCH01 | 27CINCH01B | 0.125 | 3.2                     | 0.020 - 0.109 | 0.5 - 2.8 | 0.250 | 6.4  | 0.357 | 9.1         | 0.080 | 2.0           | 1000 |
| 27CINCH02 | 27CINCH02B | 0.187 | 4.8                     | 0.020 - 0.174 | 0.5 - 4.4 | 0.375 | 9.5  | 0.450 | 11.1        | 0.120 | 3.4           | 1000 |
| 27CINCH03 | 27CINCH03B | 0.250 | 6.4                     | 0.020 - 0.109 | 0.5 - 2.8 | 0.375 | 9.5  | 0.475 | 12.1        | 0.115 | 2.9           | 500  |
| 27CINCH04 | 27CINCH04B | 0.250 | 6.4                     | 0.020 - 0.174 | 0.5 - 4.4 | 0.625 | 15.9 | 0.555 | 14.1        | 0.117 | 3.0           | 1000 |



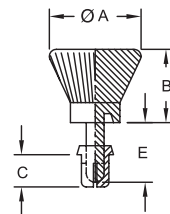
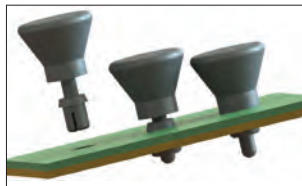
**SRT Series  
Removable Snap Rivet**

Specifications:

- Material: UL94 V-2 Nylon
- Color: Black

Features:

- Push/pull knob lets rivet snap in and out up to 25 times
- For applications requiring quick assembly and disassembly



| Item No.  | Ø Hole        |           | Total Holding Thickness |           | Ø A   |      | B     |     | C    |      | E    |      | Bulk Pack Qty |
|-----------|---------------|-----------|-------------------------|-----------|-------|------|-------|-----|------|------|------|------|---------------|
|           | in            | mm        | in                      | mm        | in    | mm   | in    | mm  | in   | mm   | in   | mm   |               |
| SRT-3035B | 0.122 - 0.126 | 3.1 - 3.2 | 0.039 - 0.079           | 1.0 - 2.0 | 0.394 | 10.0 | 0.315 | 8.0 | 0.14 | 3.5  | 0.26 | 6.5  | 1000          |
| SRT-3045B | 0.122 - 0.126 | 3.1 - 3.2 | 0.079 - 0.118           | 2.0 - 3.0 | 0.394 | 10.0 | 0.315 | 8.0 | 0.18 | 4.5  | 0.26 | 6.5  | 1000          |
| SRT-3055B | 0.122 - 0.126 | 3.1 - 3.2 | 0.118 - 0.157           | 3.0 - 4.0 | 0.394 | 10.0 | 0.315 | 8.0 | 0.22 | 5.6  | 0.26 | 6.5  | 1000          |
| SRT-3065B | 0.122 - 0.126 | 3.1 - 3.2 | 0.157 - 0.197           | 4.0 - 5.0 | 0.394 | 10.0 | 0.315 | 8.0 | 0.26 | 6.5  | 0.35 | 9.0  | 1000          |
| SRT-3075B | 0.122 - 0.126 | 3.1 - 3.2 | 0.197 - 0.236           | 5.0 - 6.0 | 0.394 | 10.0 | 0.315 | 8.0 | 0.30 | 7.5  | 0.35 | 9.0  | 1000          |
| SRT-3080B | 0.122 - 0.126 | 3.1 - 3.2 | 0.217 - 0.256           | 5.5 - 6.5 | 0.394 | 10.0 | 0.315 | 8.0 | 0.32 | 8.0  | 0.35 | 9.0  | 1000          |
| SRT-3535B | 0.142 - 0.146 | 3.6 - 3.7 | 0.039 - 0.079           | 1.0 - 2.0 | 0.394 | 10.0 | 0.315 | 8.0 | 0.14 | 3.5  | 0.26 | 6.6  | 1000          |
| SRT-3545B | 0.142 - 0.146 | 3.6 - 3.7 | 0.079 - 0.118           | 2.0 - 3.0 | 0.394 | 10.0 | 0.315 | 8.0 | 0.18 | 4.5  | 0.26 | 6.6  | 1000          |
| SRT-3555B | 0.142 - 0.146 | 3.6 - 3.7 | 0.118 - 0.146           | 3.0 - 3.7 | 0.394 | 10.0 | 0.315 | 8.0 | 0.22 | 5.5  | 0.26 | 6.6  | 1000          |
| SRT-3570B | 0.142 - 0.146 | 3.6 - 3.7 | 0.150 - 0.205           | 3.8 - 5.2 | 0.394 | 10.0 | 0.315 | 8.0 | 0.28 | 7.0  | 0.35 | 9.0  | 1000          |
| SRT-3580B | 0.142 - 0.146 | 3.6 - 3.7 | 0.209 - 0.256           | 5.3 - 6.5 | 0.394 | 10.0 | 0.315 | 8.0 | 0.32 | 8.0  | 0.35 | 9.0  | 1000          |
| SRT-4050B | 0.161 - 0.165 | 4.1 - 4.2 | 0.098 - 0.138           | 2.5 - 3.5 | 0.472 | 12.0 | 0.315 | 8.0 | 0.20 | 5.0  | 0.30 | 7.6  | 1000          |
| SRT-4060B | 0.161 - 0.165 | 4.1 - 4.2 | 0.138 - 0.177           | 3.5 - 4.5 | 0.472 | 12.0 | 0.315 | 8.0 | 0.24 | 6.0  | 0.30 | 7.6  | 1000          |
| SRT-4070B | 0.161 - 0.165 | 4.1 - 4.2 | 0.177 - 0.216           | 4.5 - 5.5 | 0.472 | 12.0 | 0.315 | 8.0 | 0.28 | 7.0  | 0.44 | 11.2 | 1000          |
| SRT-4080B | 0.161 - 0.165 | 4.1 - 4.2 | 0.216 - 0.256           | 5.5 - 6.5 | 0.472 | 12.0 | 0.315 | 8.0 | 0.32 | 8.0  | 0.44 | 11.2 | 1000          |
| SRT-4090B | 0.161 - 0.165 | 4.1 - 4.2 | 0.256 - 0.295           | 6.5 - 7.5 | 0.472 | 12.0 | 0.315 | 8.0 | 0.35 | 9.0  | 0.44 | 11.2 | 1000          |
| SRT-4100B | 0.161 - 0.165 | 4.1 - 4.2 | 0.295 - 0.335           | 7.5 - 8.5 | 0.472 | 12.0 | 0.315 | 8.0 | 0.39 | 10.0 | 0.44 | 11.2 | 1000          |

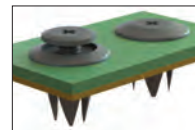
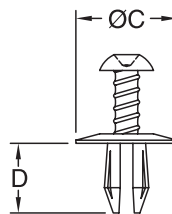
**TPSR/USR/113 Series  
Unscrewing Rivet**

Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: See Table

Features:

- As pin is screwed into body, the grommet expands locking it in place
- Removable by using a phillips head screwdriver
- Can be reused



| Item No.        | Ø Hole          |         | Total Holding Thickness |     | Ø C           |            | D     |      | Bulk Pack Qty |      |      |
|-----------------|-----------------|---------|-------------------------|-----|---------------|------------|-------|------|---------------|------|------|
|                 | Black           | Natural | in                      | mm  | in            | mm         | in    | mm   |               |      |      |
| USR-1131        | —               | —       | 0.197                   | 5.0 | 0.059 - 0.236 | 1.5 - 6.0  | 0.472 | 12.0 | 0.433         | 11.0 | 1000 |
| 113 000 169 902 | —               | —       | 0.197                   | 5.0 | 0.157 - 0.276 | 4.0 - 7.0  | 0.472 | 12.0 | 0.433         | 11.0 | 250  |
| 113 105 059 902 | 113 105 000 002 | —       | 0.197                   | 5.0 | 0.079 - 0.276 | 2.0 - 7.0  | 0.492 | 12.5 | 0.378         | 9.6  | 250  |
| USR-1132        | —               | —       | 0.236                   | 6.0 | 0.059 - 0.236 | 1.5 - 6.0  | 0.630 | 16.0 | 0.433         | 11.0 | 1000 |
| 113 106 059 902 | 113 106 000 002 | —       | 0.236                   | 6.0 | 0.079 - 0.315 | 2.0 - 8.0  | 0.591 | 15.0 | 0.421         | 10.7 | 250  |
| 113 000 269 902 | —               | —       | 0.236                   | 6.0 | 0.157 - 0.276 | 4.0 - 7.0  | 0.630 | 16.0 | 0.433         | 11.0 | 250  |
| —               | 401007          | —       | 0.250                   | 6.4 | 0.156         | 4.0        | 0.594 | 15.1 | 0.422         | 10.7 | 1000 |
| —               | 401008          | —       | 0.250                   | 6.4 | 0.140         | 3.6        | 0.703 | 17.9 | 0.438         | 11.1 | 1000 |
| 401022B         | 401022          | —       | 0.250                   | 6.4 | 0.156         | 4.0        | 0.594 | 15.1 | 0.422         | 10.7 | 1000 |
| 401023B         | 401023          | —       | 0.250                   | 6.4 | 0.156         | 4.0        | 0.594 | 15.1 | 0.422         | 10.7 | 1000 |
| USR-64125**     | —               | —       | 0.250                   | 6.4 | 0.126 - 0.172 | 3.2 - 4.4  | 0.594 | 15.1 | 0.500         | 12.7 | 500  |
| 113 107 059 902 | 113 107 000 002 | —       | 0.276                   | 7.0 | 0.118 - 0.354 | 3.0 - 9.0  | 0.689 | 17.5 | 0.476         | 12.1 | 250  |
| —               | 401009          | —       | 0.281                   | 7.0 | 0.093         | 2.4        | 0.689 | 17.5 | 0.476         | 12.1 | 500  |
| USR-1133        | —               | —       | 0.315                   | 8.0 | 0.118 - 0.394 | 3.0 - 1.0  | 0.787 | 20.0 | 0.551         | 14.0 | 1000 |
| USR-1*          | —               | —       | 0.315                   | 8.0 | 0.276 - 0.315 | 7.0 - 8.0  | 0.787 | 20.0 | 0.866         | 22.0 | 1000 |
| 113 108 059 902 | 113 108 000 002 | —       | 0.315                   | 8.0 | 0.118 - 0.394 | 3.0 - 10.0 | 0.787 | 20.0 | 0.531         | 13.5 | 250  |
| 113 000 369 902 | —               | —       | 0.315                   | 8.0 | 0.118 - 0.394 | 3.0 - 10.0 | 0.787 | 20.0 | 0.551         | 14.0 | 250  |

\* Screw Material: Acetal UL94 HB; Grommet Material: Nylon 6  
\*\* Nylon 6

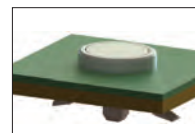
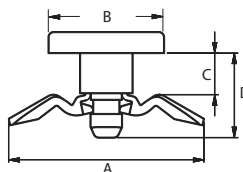
**RFL Series  
Folding Leg Rivet**

Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: See table

Features:

- Pushing the pin in the rivet body causes the legs to expand and grip the material
- Once installed, the rivet cannot be removed from the outside of the box
- Can be used with cardboard boxes or other porous materials



| Item No. | Ø Hole  |       | Total Holding Thickness |      | Ø B  | A    | D    | Bulk Pack Qty |
|----------|---------|-------|-------------------------|------|------|------|------|---------------|
|          | Natural | Black | in                      | mm   |      |      |      |               |
| RFL-1    | RFL-1BK | 0.22  | 0.11 - 0.15             | 0.43 | 0.73 | 0.29 | 1000 |               |
| RFL-2    | RFL-2BK | 0.22  | 0.14 - 0.18             | 0.43 | 0.73 | 0.32 | 1000 |               |



RIVETS

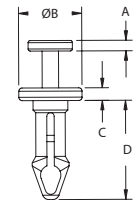
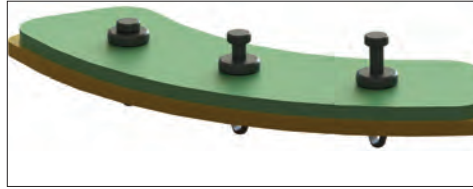
**TRM Series  
Mini Tough Snap Rivet**

Specifications:

- Material: UL94 V-0 Heat Stabilized Nylon 6/6
- Color: Black

Features:

- One-piece design easily installed by hand
- Removable by pulling pin out of grommet

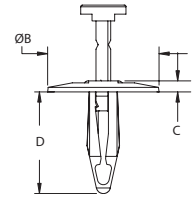


| Item No. | Ø Hole        |           | Total Holding Thickness |           | A     |     | Ø B   |     | C     |     | D     |      | Bulk Pack Qty |
|----------|---------------|-----------|-------------------------|-----------|-------|-----|-------|-----|-------|-----|-------|------|---------------|
|          | in            | mm        | in                      | mm        | in    | mm  | in    | mm  | in    | mm  | in    | mm   |               |
| TRM-1    | 0.097 - 0.103 | 2.5 - 2.6 | 0.160 - 0.180           | 4.1 - 4.6 | 0.040 | 1.0 | 0.190 | 4.8 | 0.060 | 1.5 | 0.345 | 8.8  | 1000          |
| TRM-2    | 0.106 - 0.112 | 2.7 - 2.8 | 0.080 - 0.105           | 2.0 - 2.7 | 0.050 | 1.3 | 0.218 | 5.5 | 0.060 | 1.5 | 0.300 | 7.6  | 1000          |
| TRM-3    | 0.122 - 0.128 | 3.1 - 3.3 | 0.105 - 0.130           | 2.7 - 3.3 | 0.050 | 1.3 | 0.218 | 5.5 | 0.060 | 1.5 | 0.320 | 8.1  | 1000          |
| TRM-4    | 0.122 - 0.128 | 3.1 - 3.3 | 0.130 - 0.155           | 3.3 - 3.9 | 0.050 | 1.3 | 0.218 | 5.5 | 0.060 | 1.5 | 0.345 | 7.6  | 1000          |
| TRM-5    | 0.122 - 0.128 | 3.1 - 3.3 | 0.155 - 0.180           | 3.9 - 4.6 | 0.050 | 1.3 | 0.218 | 5.5 | 0.060 | 1.5 | 0.370 | 9.4  | 1000          |
| TRM-6    | 0.122 - 0.128 | 3.1 - 3.3 | 0.240 - 0.265           | 6.1 - 6.7 | 0.050 | 1.3 | 0.218 | 5.5 | 0.060 | 1.5 | 0.455 | 11.6 | 1000          |
| TRM-7    | 0.144 - 0.154 | 3.7 - 3.9 | 0.265 - 0.290           | 6.7 - 7.4 | 0.050 | 1.3 | 0.300 | 7.6 | 0.060 | 1.5 | 0.470 | 11.9 | 1000          |

**TR Series  
Tough Snap Rivet**

Specifications:

- Material 1: UL94 HB Impact Modified Nylon 6/6
- Material 2: Nylon 6/6
- Color: Black



| Item No. | Ø Hole        |           | Total Holding Thickness |             | Ø B   |      | C     |     | D     |      | Material | Bulk Pack Qty |
|----------|---------------|-----------|-------------------------|-------------|-------|------|-------|-----|-------|------|----------|---------------|
|          | in            | mm        | in                      | mm          | in    | mm   | in    | mm  | in    | mm   |          |               |
| TR-1     | 0.193 - 0.205 | 4.9 - 5.2 | 0.059 - 0.181           | 1.5 - 4.6   | 0.283 | 7.2  | 0.045 | 1.1 | 0.445 | 11.3 | 1        | 1000          |
| 495201   | 0.197         | 5.0       | 0.059 - 0.181           | 1.5 - 4.6   | 0.283 | 7.2  | 0.060 | 1.0 | 0.449 | 11.4 | 2        | 1000          |
| TR-2     | 0.248 - 0.276 | 6.3 - 7.0 | 0.098 - 0.350           | 2.5 - 8.9   | 0.985 | 25.0 | 0.098 | 2.5 | 0.898 | 22.8 | 1        | 1000          |
| 495202   | 0.248         | 6.3       | 0.157 - 0.299           | 4.0 - 7.6   | 0.709 | 18.0 | 0.098 | 2.5 | 0.681 | 17.3 | 2        | 1000          |
| 495203   | 0.248         | 6.3       | 0.098 - 0.350           | 2.5 - 8.9   | 1.000 | 25.4 | 0.098 | 2.5 | 0.886 | 22.5 | 2        | 1000          |
| 495204   | 0.248         | 6.3       | 0.098 - 0.350           | 2.5 - 8.9   | 0.591 | 15.0 | 0.106 | 2.7 | 0.728 | 18.5 | 2        | 1000          |
| 495205   | 0.248         | 6.3       | 0.059 - 0.299           | 1.5 - 7.6   | 0.685 | 17.4 | 0.079 | 2.0 | 0.803 | 20.4 | 2        | 1000          |
| 495206   | 0.256         | 6.5       | 0.098 - 0.350           | 2.5 - 8.9   | 0.591 | 15.0 | 0.079 | 2.0 | 0.882 | 22.4 | 2        | 1000          |
| TR-3     | 0.250 - 0.276 | 6.4 - 7.0 | 0.098 - 0.315           | 2.5 - 8.0   | 0.585 | 14.9 | 0.079 | 2.0 | 0.897 | 22.8 | 1        | 1000          |
| 495207   | 0.276         | 7.0       | 0.472 - 0.591           | 12.0 - 15.0 | 1.000 | 25.4 | 0.098 | 2.5 | 1.063 | 27.0 | 2        | 1000          |
| 495208   | 0.276         | 7.0       | 0.354 - 0.512           | 9.0 - 13.0  | 0.709 | 18.0 | 0.098 | 2.5 | 0.906 | 23.0 | 2        | 1000          |
| 495209   | 0.315         | 8.0       | 0.118 - 0.315           | 3.0 - 8.0   | 0.787 | 20.0 | 0.106 | 2.7 | 0.827 | 21.0 | 2        | 1000          |
| 495210   | 0.315         | 8.0       | 0.118 - 0.315           | 3.0 - 8.0   | 0.591 | 15.0 | 0.102 | 2.6 | 0.866 | 22.0 | 2        | 1000          |
| 495211   | 0.315         | 8.0       | 0.157 - 0.315           | 4.0 - 8.0   | 0.709 | 18.0 | 0.114 | 2.9 | 0.906 | 23.0 | 2        | 1000          |
| 495212   | 0.315         | 8.0       | 0.472 - 0.630           | 12.0 - 16.0 | 0.590 | 15.0 | 0.118 | 3.0 | 1.142 | 29.0 | 2        | 1000          |
| TR-4     | 0.315 - 0.325 | 8.0 - 8.3 | 0.118 - 0.315           | 3.0 - 8.5   | 0.585 | 14.9 | 0.106 | 2.7 | 0.830 | 21.1 | 1        | 1000          |
| 495213   | 0.354         | 9.0       | 0.118 - 0.276           | 3.0 - 7.0   | 0.630 | 16.0 | 0.102 | 2.6 | 0.787 | 20.0 | 2        | 1000          |
| 495214   | 0.374         | 9.5       | 0.035 - 0.189           | 0.9 - 4.8   | 0.984 | 25.0 | 0.094 | 2.4 | 0.992 | 25.2 | 2        | 1000          |
| 495215   | 0.374         | 9.5       | 0.138 - 0.276           | 3.5 - 7.0   | 0.705 | 17.9 | 0.098 | 2.5 | 0.906 | 23.0 | 2        | 1000          |
| 495216   | 0.394         | 10.0      | 0.236 - 0.394           | 6.0 - 10.0  | 0.787 | 20.0 | 0.146 | 3.7 | 1.051 | 26.7 | 2        | 1000          |
| 495217   | 0.453         | 11.5      | 1.142 - 1.220           | 29.0 - 31.0 | 1.181 | 30.0 | 0.098 | 2.5 | 1.969 | 50.0 | 1        | 1000          |

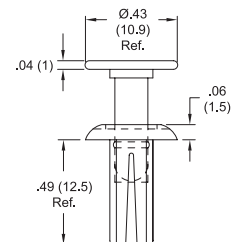
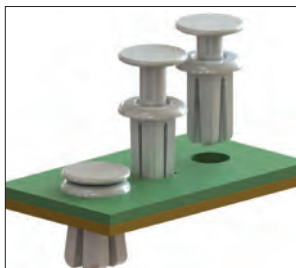
**PPR-10 Series  
Push Rivet**

Specifications:

- Material: UL94 V-2 Nylon 6
- Color: Natural

Features:

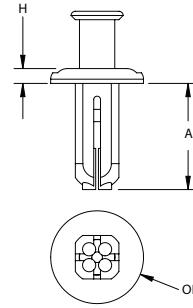
- Used in either a round or square hole
- Square hole mounting is for anti-rotation applications



| Item No. | Total Holding Thickness |           | Mounting Hole Options (Round Hole) |     | Mounting Hole Options (Square Hole) |     | Bulk Pack Qty |
|----------|-------------------------|-----------|------------------------------------|-----|-------------------------------------|-----|---------------|
|          | in                      | mm        | in                                 | mm  | in                                  | mm  |               |
| PPR-10   | 0.140 - 0.200           | 3.6 - 5.1 | 0.250                              | 6.4 | 0.220                               | 5.6 | 100           |



**61RR Series  
Push Rivet**



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: See Table

**Features:**

- Can be easily removed by retracting the pin, and then the body
- Used in either a round or rectangular hole

| Item No.   |             | OD    |      | H    |     | A     |      | Mounting Hole Options (Round Hole) |     | Mounting Hole Options Rectangular Hole |           | Total Holding Thickness |     | Bulk Pack Qty |
|------------|-------------|-------|------|------|-----|-------|------|------------------------------------|-----|----------------------------------------|-----------|-------------------------|-----|---------------|
| Natural    | Black       | in    | mm   | in   | mm  | in    | mm   | in                                 | mm  | in                                     | mm        | in                      | mm  |               |
| 61RR188062 | 61RR188062B | 0.375 | 9.5  | 0.07 | 1.8 | 0.500 | 12.7 | 0.188                              | 4.8 | —                                      | —         | 0.062                   | 1.6 | 1000          |
| 61RR188125 | 61RR188125B | 0.375 | 9.5  | 0.07 | 1.8 | 0.500 | 12.7 | 0.188                              | 4.8 | —                                      | —         | 0.125                   | 3.2 | 1000          |
| 61RR250500 | 61RR250500B | 0.437 | 11.1 | 0.07 | 1.8 | 0.500 | 12.7 | 0.250                              | 6.4 | 0.210 x 0.218                          | 5.3 x 5.5 | 0.062                   | 1.6 | 500           |
| 61RR250125 | 61RR250125B | 0.437 | 11.1 | 0.07 | 1.8 | 0.500 | 12.7 | 0.250                              | 6.4 | 0.210 x 0.218                          | 5.3 x 5.5 | 0.125                   | 3.2 | 1000          |
| 61RR250188 | 61RR250188B | 0.437 | 11.1 | 0.07 | 1.8 | 0.500 | 12.7 | 0.250                              | 6.4 | 0.210 x 0.218                          | 5.3 x 5.5 | 0.187                   | 4.8 | 500           |

**27TPF Series  
Two-Piece Rivet**

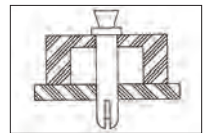
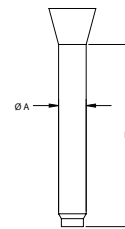
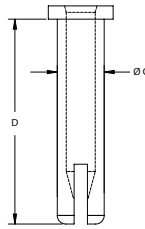


**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- For use with edge connector assembly
- Body item "A" is inserted through the connector and through the chassis. Pin item "B" is then pushed or tapped into the body to secure the connector to the chassis
- Pin can be removed to allow replacement of the connector
- Body and Pin sold separately



Piece A

Piece B

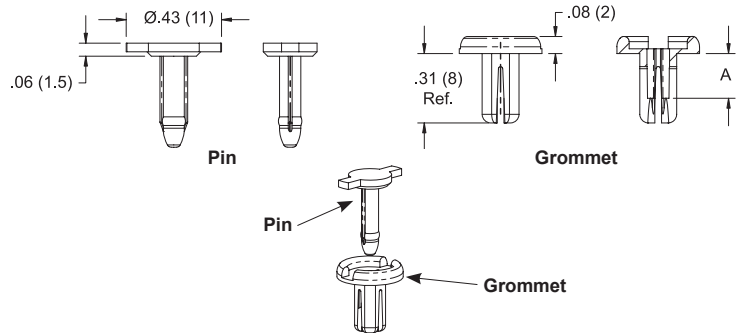
**Piece A - Body**

| Item No.   | C     |     | D     |      | Bulk Pack Qty |
|------------|-------|-----|-------|------|---------------|
|            | in    | mm  | in    | mm   |               |
| 27TPF0001A | 0.109 | 2.8 | 0.305 | 7.7  | 1000          |
| 27TPF0002A | 0.110 | 2.8 | 0.350 | 8.9  | 1000          |
| 27TPF0003A | 0.110 | 2.8 | 0.480 | 12.2 | 1000          |
| 27TPF0004A | 0.096 | 2.4 | 0.340 | 8.6  | 1000          |

**Piece B - Pin**

| Item No.   | B     |      | A     |     | Bulk Pack Qty |
|------------|-------|------|-------|-----|---------------|
|            | in    | mm   | in    | mm  |               |
| 27TPF0001B | 0.330 | 8.4  | 0.069 | 1.8 | 1000          |
| 27TPF0002B | 0.360 | 9.1  | 0.069 | 1.8 | 1000          |
| 27TPF0003B | 0.455 | 11.6 | 0.069 | 1.8 | 1000          |
| 27TPF0004B | 0.340 | 8.6  | 0.062 | 1.6 | 1000          |

**RRR Series  
Removable Rivet**



**Specifications:**

- Material: UL94 V-0 Nylon 66/6
- Color: Black

**Features:**

- Pin and grommet are supplied unassembled
- Pin is removable by pulling on the side tabs
- Can be used in a round or square hole

| Item No. | Mounting Hole Options (Round Hole) |           | Mounting Hole Options Square Hole |     | Total Holding Thickness |           | A Ref. |     | Bulk Pack Qty |
|----------|------------------------------------|-----------|-----------------------------------|-----|-------------------------|-----------|--------|-----|---------------|
|          | in                                 | mm        | in                                | mm  | in                      | mm        | in     | mm  |               |
| RRR-1    | 0.188 - 0.208                      | 4.8 - 5.3 | 0.177                             | 4.5 | 0.059 - 0.138           | 1.5 - 3.5 | 0.14   | 3.6 | 1000          |
| RRR-2    | 0.188 - 0.208                      | 4.8 - 5.3 | 0.177                             | 5.5 | 0.138 - 0.217           | 3.5 - 5.5 | 0.17   | 4.4 | 1000          |





# PUSH RIVETS / INSTALLATION TOOLS

## RP/PPR/61PR Series (continued) Push Rivet

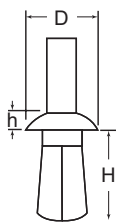
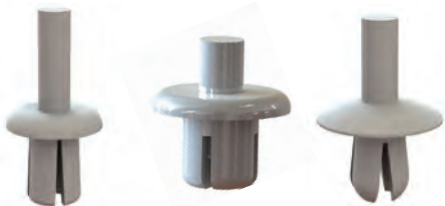


Fig. 1

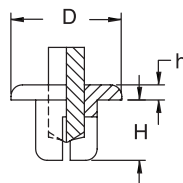
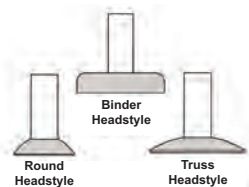


Fig. 2

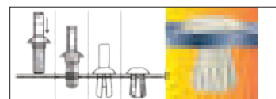


**Specifications:**

- Material: See Table
- Color: See Table

**Features:**

- Install by placing rivet into hole and pushing plunger into the rivet to expand legs to lock in place
- See installation tools on pages 127 - 128



| Item No.     |       | Ø Hole       |       | Total Holding Thickness |               | D          |       | h    |       | H   |       | Fig. | Head Style | Material | Bulk Pack Qty |      |
|--------------|-------|--------------|-------|-------------------------|---------------|------------|-------|------|-------|-----|-------|------|------------|----------|---------------|------|
| Black        | White | in           | mm    | in                      | mm            | in         | mm    | in   | mm    | in  | mm    |      |            |          |               |      |
| PPR-1B       | ---   | PPR-1        | 0.217 | 5.5                     | 0.098 - 0.157 | 2.5 - 4.0  | 0.370 | 9.4  | 0.079 | 2.0 | 0.449 | 11.4 | 1          | ---      | Nylon 6/6     | 1000 |
| ---          | ---   | 61PR100200   | 0.218 | 5.5                     | 0.094 - 0.312 | 2.4 - 7.9  | 0.437 | 11.1 | 0.100 | 2.5 | 0.464 | 11.8 | 1          | Binder   | Nylon 6/6     | 1000 |
| ---          | ---   | 61PR010000   | 0.218 | 5.5                     | 0.187 - 0.250 | 4.8 - 6.4  | 0.375 | 9.5  | 0.080 | 2.0 | 0.343 | 8.7  | 1          | Truss    | Nylon 6/6     | 1000 |
| ---          | ---   | 61PR010110   | 0.226 | 5.7                     | 0.125 - 0.312 | 3.2 - 7.9  | 0.375 | 9.5  | 0.080 | 2.0 | 0.468 | 11.4 | 1          | Round    | Nylon 6/6     | 1000 |
| ---          | ---   | 61PR100500   | 0.226 | 5.7                     | 0.125 - 0.312 | 3.2 - 7.9  | 0.376 | 9.5  | 0.080 | 2.0 | 0.467 | 11.8 | 1          | Truss    | Nylon 6/6     | 1000 |
| ---          | ---   | 61PR700300   | 0.226 | 5.7                     | 0.125 - 0.312 | 3.2 - 7.9  | 0.437 | 11.1 | 0.075 | 1.9 | 0.468 | 11.4 | 1          | Truss    | Nylon 6/6     | 500  |
| ---          | ---   | 61PR500500   | 0.227 | 5.8                     | 0.031 - 0.062 | 0.8 - 1.6  | 0.375 | 9.5  | 0.223 | 5.7 | 0.170 | 4.3  | 1          | Button   | Nylon 6/6     | 1000 |
| 093015059902 | ---   | 093015000002 | 0.236 | 6.0                     | 0.079 - 0.315 | 2.0 - 8.0  | 0.394 | 10.0 | 0.087 | 2.2 | 0.413 | 10.5 | 1          | ---      | Nylon 6/6     | 250  |
| PPR-6060B    | ---   | ---          | 0.236 | 6.0                     | 0.098 - 0.157 | 2.5 - 4.0  | 0.429 | 10.9 | 0.059 | 1.5 | 0.240 | 6.1  | 2          | ---      | LDPE/HDPE     | 1000 |
| 093002469902 | ---   | 093002400002 | 0.236 | 6.0                     | 0.118 - 0.276 | 3.0 - 7.0  | 0.433 | 11.0 | 0.079 | 2.0 | 0.394 | 10.0 | 1          | ---      | Nylon 6/6     | 250  |
| ---          | ---   | 61PR400700   | 0.245 | 6.2                     | 0.140 - 0.550 | 6.6 - 14.0 | 0.375 | 9.5  | 0.100 | 2.5 | 0.625 | 15.9 | 1          | Round    | Nylon 6/6     | 1000 |
| ---          | ---   | PPR-9        | 0.252 | 6.4                     | 0.059 - 0.252 | 1.5 - 6.4  | 0.437 | 11.1 | 0.185 | 4.7 | 0.366 | 9.3  | 1          | ---      | Nylon 6/6     | 1000 |
| ---          | ---   | 61PR700900   | 0.250 | 6.4                     | 0.062 - 0.125 | 1.6 - 3.2  | 0.370 | 9.4  | 0.080 | 2.0 | 0.218 | 5.5  | 1          | Round    | Nylon 6/6     | 1000 |
| ---          | ---   | 61PR400900   | 0.250 | 6.4                     | 0.078 - 0.275 | 2.0 - 7.0  | 0.494 | 12.6 | 0.305 | 7.8 | 0.375 | 9.5  | 1          | Button   | Nylon 6/6     | 1000 |
| ---          | ---   | 61PR800000   | 0.250 | 6.4                     | 0.093 - 0.312 | 2.4 - 7.9  | 0.468 | 11.9 | 0.080 | 2.0 | 0.500 | 12.7 | 1          | Truss    | Nylon 6/6     | 500  |
| ---          | ---   | 61PR400300   | 0.250 | 6.4                     | 0.093 - 0.312 | 2.4 - 7.9  | 0.468 | 11.9 | 0.080 | 2.0 | 0.500 | 12.7 | 1          | Binder   | Nylon 6/6     | 1000 |
| ---          | ---   | 61PR010300   | 0.250 | 6.4                     | 0.093 - 0.312 | 2.4 - 7.9  | 0.625 | 15.9 | 0.109 | 2.8 | 0.485 | 12.3 | 1          | Binder   | Nylon 6/6     | 500  |
| ---          | ---   | 61PR800300   | 0.250 | 6.4                     | 0.109 - 0.156 | 2.8 - 4.0  | 0.500 | 12.7 | 0.313 | 7.9 | 0.375 | 9.5  | 1          | Round    | Nylon 6/6     | 1000 |
| ---          | ---   | 61PR400800   | 0.250 | 6.4                     | 0.125 - 0.437 | 3.2 - 11.1 | 0.468 | 11.9 | 0.080 | 2.0 | 0.585 | 14.9 | 1          | Binder   | Nylon 6/6     | 500  |
| ---          | ---   | 61PR400200   | 0.250 | 6.4                     | 0.156 - 0.330 | 4.0 - 8.4  | 0.468 | 11.9 | 0.080 | 2.0 | 0.375 | 9.5  | 1          | Binder   | Nylon 6/6     | 1000 |
| 093002669902 | ---   | 093002600002 | 0.252 | 6.4                     | 0.157 - 0.374 | 4.0 - 9.5  | 0.433 | 11.0 | 0.079 | 2.0 | 0.472 | 12.0 | 1          | ---      | Nylon 6/6     | 250  |
| ---          | ---   | PPR-4        | 0.252 | 6.4                     | 0.280 - 0.500 | 7.1 - 12.7 | 0.569 | 11.9 | 0.079 | 2.0 | 0.622 | 15.8 | 1          | ---      | Nylon 6/6     | 1000 |
| ---          | ---   | 61PR800100   | 0.250 | 6.4                     | 0.281 - 0.500 | 7.1 - 12.7 | 0.468 | 11.9 | 0.080 | 2.0 | 0.620 | 15.8 | 1          | Truss    | Nylon 6/6     | 1000 |
| ---          | ---   | 61PR010400   | 0.250 | 6.4                     | 0.281 - 0.500 | 7.1 - 12.7 | 0.615 | 15.6 | 0.109 | 2.8 | 0.620 | 15.8 | 1          | Binder   | Nylon 6/6     | 1000 |
| ---          | ---   | 61PR400100   | 0.250 | 6.4                     | 0.350 - 0.500 | 8.9 - 12.7 | 0.370 | 9.4  | 0.080 | 2.0 | 0.620 | 15.8 | 1          | Round    | Nylon 6/6     | 1000 |
| ---          | ---   | 61PR400000   | 0.250 | 6.4                     | 0.350 - 0.500 | 8.9 - 12.7 | 0.468 | 11.9 | 0.080 | 2.0 | 0.620 | 15.8 | 1          | Binder   | Nylon 6/6     | 500  |
| ---          | ---   | 61PR300900   | 0.275 | 7.0                     | 0.062 - 0.600 | 1.6 - 15.2 | 0.370 | 9.4  | 0.080 | 2.0 | 0.640 | 16.3 | 1          | Round    | Nylon 6/6     | 500  |
| ---          | ---   | 61PR010100   | 0.275 | 7.0                     | 0.093 - 0.350 | 2.4 - 8.9  | 0.620 | 15.8 | 0.109 | 2.8 | 0.480 | 12.2 | 1          | Binder   | Nylon 6/6     | 500  |
| ---          | ---   | 61PR010200   | 0.280 | 7.1                     | 0.062 - 0.350 | 1.6 - 8.9  | 0.485 | 12.3 | 0.075 | 1.9 | 0.468 | 11.9 | 1          | Truss    | Nylon 6/6     | 500  |
| 093001869902 | ---   | 093001800002 | 0.280 | 7.1                     | 0.157 - 0.472 | 4.0 - 12.0 | 0.669 | 17.0 | 0.098 | 2.5 | 0.689 | 17.5 | 1          | ---      | Nylon 6/6     | 250  |
| ---          | ---   | 61PR010500   | 0.290 | 7.4                     | 0.093 - 0.187 | 2.4 - 4.8  | 0.620 | 15.8 | 0.109 | 2.8 | 0.300 | 7.6  | 1          | Binder   | Nylon 6/6     | 1000 |
| 093017059902 | ---   | 093017000002 | 0.315 | 8.0                     | 0.118 - 0.394 | 3.0 - 10.0 | 0.531 | 13.5 | 0.118 | 3.0 | 0.512 | 13.0 | 1          | ---      | Nylon 6/6     | 250  |

## 61PRT Push Rivet Installation Tool

**Specifications:**

- Material: ABS
- Color: Tools are color coded for identification

**Features:**

- Tough and lightweight
- Provides faster assembly and more accurate placement of push rivets
- Large plunger head and easy grip handle reduce operator fatigue
- Multiple sizes available to cover all standard drive rivets
- Rivets do not have to be predriven
- To install; the rivet is loaded in tool and inserted in prepared hole, pressure on the plunger frees the pin and expands the rivet in the assembly



| Item No.  | Pin OD |     | Color  |
|-----------|--------|-----|--------|
|           | in     | mm  |        |
| 61PRT0075 | 0.075  | 1.9 | Red    |
| 61PRT0093 | 0.093  | 2.4 | Black  |
| 61PRT0125 | 0.125  | 3.2 | Yellow |
| 61PRT0150 | 0.150  | 3.9 | Green  |



## PUSH IN FASTENERS

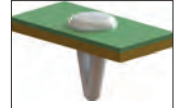
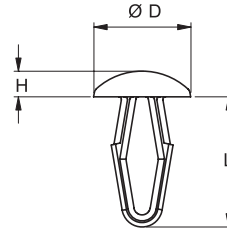
DF Series  
Drive Fastener

## Specifications:

- Material: See Table
- Color: Natural

## Features:

- Multi-purpose front loaded fastener
- Can be used as a decorative hole plug
- Inserts easily by hand
- Hollow body increases flexibility for ease of insertion and removal



| Item No.       |                    | Ø Hole |     | Total Holding Thickness |           | Ø D   |      | H     |     | L Ref. |      | Bulk Pack Qty |
|----------------|--------------------|--------|-----|-------------------------|-----------|-------|------|-------|-----|--------|------|---------------|
| UL94 HB Acetal | UL94 V-0 Nylon 6/6 | in     | mm  | in                      | mm        | in    | mm   | in    | mm  | in     | mm   |               |
| DF-137-010     | DFVO-137-010       | 0.126  | 3.2 | 0.039 - 0.177           | 1.0 - 4.5 | 0.315 | 8.0  | 0.059 | 1.5 | 0.512  | 13.0 | 1000          |
| DF-137-020     | DFVO-137-020       | 0.153  | 3.9 | 0.039 - 0.197           | 1.0 - 5.0 | 0.354 | 9.8  | 0.063 | 1.6 | 0.551  | 14.0 | 1000          |
| DF-137-030     | DFVO-137-030       | 0.185  | 4.7 | 0.039 - 0.216           | 1.0 - 5.5 | 0.394 | 10.0 | 0.067 | 1.7 | 0.590  | 15.0 | 1000          |
| DF-137-031     | DFVO-137-031       | 0.185  | 4.7 | 0.039 - 0.216           | 1.0 - 5.5 | 0.433 | 11.0 | 0.114 | 2.9 | 0.590  | 15.0 | 1000          |
| DF-137-040     | DFVO-137-040       | 0.252  | 6.4 | 0.059 - 0.256           | 1.5 - 6.5 | 0.472 | 12.0 | 0.079 | 2.0 | 0.669  | 17.0 | 1000          |
| DF-137-050     | DFVO-137-050       | 0.307  | 7.8 | 0.059 - 0.275           | 1.5 - 7.0 | 0.551 | 14.0 | 0.087 | 2.2 | 0.748  | 19.0 | 1000          |
| DF-137-060     | DFVO-137-060       | 0.216  | 5.5 | 0.236 - 0.354           | 6.0 - 9.0 | 0.472 | 12.0 | 0.079 | 2.0 | 0.689  | 17.5 | 1000          |

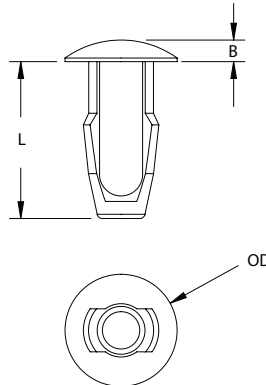
27SNC Series  
Snap Fastener

## Specifications:

- Material: Acetal
- Color: Natural

## Features:

- The combination of Celcon Acetal material and a resilient body design give these parts a positive "snap" and more definite grip when assembled

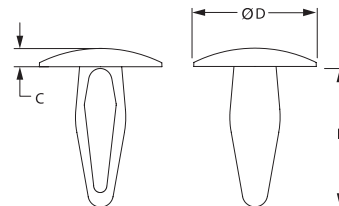


| Item No      | Ø Hole |     | Total Holding Thickness |     | Ø D   |      | B     |     | L     |      | Bulk Pack Qty |
|--------------|--------|-----|-------------------------|-----|-------|------|-------|-----|-------|------|---------------|
|              | in     | mm  | in                      | mm  | in    | mm   | in    | mm  | in    | mm   |               |
| 27SNC1250032 | 0.125  | 3.2 | 0.032                   | 0.8 | 0.250 | 6.4  | 0.060 | 1.5 | 0.250 | 6.4  | 1000          |
| 27SNC1250062 | 0.125  | 3.2 | 0.062                   | 1.6 | 0.250 | 6.4  | 0.060 | 1.5 | 0.281 | 7.1  | 1000          |
| 27SNC1250093 | 0.125  | 3.2 | 0.093                   | 2.4 | 0.250 | 6.4  | 0.060 | 1.5 | 0.313 | 7.9  | 1000          |
| 27SNC1250125 | 0.125  | 3.2 | 0.125                   | 3.2 | 0.250 | 6.4  | 0.060 | 1.5 | 0.344 | 8.7  | 1000          |
| 27SNC1560032 | 0.156  | 4.0 | 0.032                   | 0.8 | 0.313 | 7.9  | 0.060 | 1.5 | 0.281 | 7.1  | 1000          |
| 27SNC1560062 | 0.156  | 4.0 | 0.062                   | 1.6 | 0.313 | 7.9  | 0.060 | 1.5 | 0.313 | 7.9  | 1000          |
| 27SNC1560093 | 0.156  | 4.0 | 0.093                   | 2.4 | 0.313 | 7.9  | 0.060 | 1.5 | 0.344 | 8.7  | 1000          |
| 27SNC1560125 | 0.156  | 4.0 | 0.125                   | 3.2 | 0.313 | 7.9  | 0.060 | 1.5 | 0.390 | 9.9  | 1000          |
| 27SNC1560156 | 0.156  | 4.0 | 0.156                   | 4.0 | 0.313 | 7.9  | 0.060 | 1.5 | 0.406 | 10.3 | 1000          |
| 27SNC1870032 | 0.187  | 4.8 | 0.032                   | 0.8 | 0.313 | 7.9  | 0.060 | 1.5 | 0.313 | 7.9  | 1000          |
| 27SNC1870062 | 0.187  | 4.8 | 0.062                   | 1.6 | 0.313 | 7.9  | 0.060 | 1.5 | 0.344 | 8.7  | 1000          |
| 27SNC1870093 | 0.187  | 4.8 | 0.093                   | 2.4 | 0.313 | 7.9  | 0.060 | 1.5 | 0.375 | 9.5  | 1000          |
| 27SNC1870125 | 0.187  | 4.8 | 0.125                   | 3.2 | 0.313 | 7.9  | 0.060 | 1.5 | 0.406 | 10.3 | 1000          |
| 27SNC1870156 | 0.187  | 4.8 | 0.156                   | 4.0 | 0.313 | 7.9  | 0.060 | 1.5 | 0.438 | 11.1 | 1000          |
| 27SNC1870187 | 0.187  | 4.8 | 0.187                   | 4.8 | 0.313 | 7.9  | 0.060 | 1.5 | 0.469 | 11.9 | 1000          |
| 27SNC2190032 | 0.219  | 5.6 | 0.032                   | 0.8 | 0.344 | 8.7  | 0.060 | 1.5 | 0.391 | 9.9  | 1000          |
| 27SNC2190062 | 0.219  | 5.6 | 0.062                   | 1.6 | 0.344 | 8.7  | 0.060 | 1.5 | 0.422 | 10.7 | 1000          |
| 27SNC2190093 | 0.219  | 5.6 | 0.093                   | 2.4 | 0.344 | 8.7  | 0.060 | 1.5 | 0.453 | 11.5 | 1000          |
| 27SNC2190125 | 0.219  | 5.6 | 0.125                   | 3.2 | 0.344 | 8.7  | 0.060 | 1.5 | 0.484 | 12.3 | 1000          |
| 27SNC2190156 | 0.219  | 5.6 | 0.156                   | 4.0 | 0.344 | 8.7  | 0.060 | 1.5 | 0.516 | 13.1 | 1000          |
| 27SNC2190187 | 0.219  | 5.6 | 0.187                   | 4.8 | 0.344 | 8.7  | 0.060 | 1.5 | 0.547 | 13.9 | 1000          |
| 27SNC2500032 | 0.250  | 6.4 | 0.032                   | 0.8 | 0.500 | 12.7 | 0.060 | 1.5 | 0.406 | 10.3 | 1000          |
| 27SNC2500062 | 0.250  | 6.4 | 0.062                   | 1.6 | 0.500 | 12.7 | 0.060 | 1.5 | 0.422 | 10.7 | 1000          |
| 27SNC2500093 | 0.250  | 6.4 | 0.093                   | 2.4 | 0.500 | 12.7 | 0.060 | 1.5 | 0.453 | 11.5 | 1000          |
| 27SNC2500125 | 0.250  | 6.4 | 0.125                   | 3.2 | 0.500 | 12.7 | 0.060 | 1.5 | 0.484 | 12.3 | 1000          |
| 27SNC2500156 | 0.250  | 6.4 | 0.156                   | 4.0 | 0.500 | 12.7 | 0.060 | 1.5 | 0.516 | 13.1 | 1000          |
| 27SNC2500187 | 0.250  | 6.4 | 0.187                   | 4.8 | 0.500 | 12.7 | 0.060 | 1.5 | 0.546 | 13.9 | 1000          |





MMB/ARW/091/27AC Series  
Mounting Button



Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: See Table

| Item No.     |              | Ø Hole        |           | Total Holding Thickness |             | Ø D   |      | C     |     | E     |      | Bulk Pack Qty |
|--------------|--------------|---------------|-----------|-------------------------|-------------|-------|------|-------|-----|-------|------|---------------|
| Black        | Natural      | in            | mm        | in                      | mm          | in    | mm   | in    | mm  | in    | mm   |               |
| • 27AC0010B  | • 27AC0010   | 0.062 - 0.065 | 1.6 - 1.7 | 0.010 - 0.031           | 0.3 - 0.8   | 0.100 | 2.5  | 0.020 | 0.5 | 0.125 | 3.2  | 1000          |
| • 27AC0027B  | • 27AC0027   | 0.062 - 0.065 | 1.6 - 1.7 | 0.010 - 0.031           | 0.3 - 0.8   | 0.100 | 2.5  | 0.020 | 0.5 | 0.187 | 4.8  | 1000          |
| • 27AC0022B  | • 27AC0022   | 0.085 - 0.090 | 2.2 - 2.3 | 0.032 - 0.107           | 0.8 - 2.7   | 0.125 | 3.2  | 0.030 | 0.8 | 0.187 | 4.8  | 1000          |
| 091000059902 | 091000000002 | 0.110         | 2.8       | 0.031 - 0.142           | 0.8 - 3.6   | 0.307 | 7.8  | 0.047 | 1.2 | 0.471 | 12.0 | 500           |
| • 27AC0015B  | • 27AC0015   | 0.118 - 0.122 | 3.0 - 3.1 | 0.062 - 0.125           | 1.6 - 3.2   | 0.280 | 7.1  | 0.060 | 1.5 | 0.390 | 9.9  | 1000          |
| • 27AC0020B  | • 27AC0020   | 0.120 - 0.135 | 2.5 - 3.2 | 0.062 - 0.125           | 1.6 - 3.2   | 0.270 | 6.9  | 0.040 | 1.0 | 0.330 | 8.4  | 1000          |
| MMB-125-01BK | MMB-125-01   | 0.125         | 3.2       | 0.080 - 0.100           | 2.0 - 2.5   | 0.272 | 6.9  | 0.039 | 1.0 | 0.331 | 8.4  | 1000          |
| • 27AC0022B  | • 27AC0002   | 0.131 - 0.135 | 3.3 - 3.4 | 0.062 - 0.125           | 1.6 - 3.2   | 0.270 | 6.9  | 0.060 | 1.5 | 0.395 | 10.0 | 1000          |
| • 27AC0013B  | • 27AC0013   | 0.130 - 0.132 | 3.3 - 3.4 | 0.125 - 0.140           | 3.2 - 3.6   | 0.270 | 6.9  | 0.070 | 1.8 | 0.310 | 7.9  | 1000          |
| MMB-136-01BK | MMB-136-01   | 0.136         | 3.5       | 0.120 - 0.160           | 2.9 - 4.0   | 0.406 | 10.3 | 0.067 | 1.7 | 0.437 | 11.1 | 1000          |
| 091000259902 | 091000200002 | 0.138         | 3.5       | 0.034 - 0.157           | 0.9 - 4.0   | 0.406 | 10.3 | 0.097 | 2.5 | 0.433 | 11.0 | 500           |
| 091000359902 | 091000300002 | 0.138         | 3.5       | 0.034 - 0.157           | 0.9 - 4.0   | 0.406 | 10.3 | 0.189 | 4.8 | 0.433 | 11.0 | 500           |
| 091000159902 | 091000100002 | 0.138         | 3.5       | 0.094 - 0.228           | 2.4 - 5.8   | 0.299 | 7.6  | 0.043 | 1.1 | 0.512 | 13.0 | 500           |
| • 27AC0014B  | • 27AC0014   | 0.145 - 0.150 | 3.7       | 0.290 - 0.300           | 7.4 - 7.6   | 0.270 | 6.9  | 0.070 | 1.8 | 0.530 | 13.5 | 1000          |
| • 27AC0034B  | • 27AC0034   | 0.147         | 3.7       | 0.220 - 0.240           | 5.6 - 6.1   | 0.270 | 6.9  | 0.070 | 1.8 | 0.414 | 10.5 | 1000          |
| • 27AC0003B  | • 27AC0003   | 0.151 - 0.161 | 3.8 - 4.1 | 0.062 - 0.125           | 1.6 - 3.2   | 0.280 | 7.1  | 0.040 | 1.0 | 0.390 | 9.9  | 1000          |
| • 27AC0004B  | • 27AC0004   | 0.151 - 0.161 | 3.8 - 4.1 | 0.062 - 0.145           | 1.6 - 3.7   | 0.280 | 7.1  | 0.080 | 2.0 | 0.400 | 10.2 | 1000          |
| • 27AC0032B  | • 27AC0032   | 0.155 - 0.162 | 3.9 - 4.1 | 0.300 - 0.310           | 7.6 - 7.9   | 0.270 | 6.9  | 0.070 | 1.8 | 0.535 | 13.6 | 1000          |
| • 27AC0018B  | • 27AC0018   | 0.160 - 0.165 | 4.1 - 4.2 | 0.032 - 0.125           | 0.8 - 3.2   | 0.280 | 7.1  | 0.080 | 2.0 | 0.400 | 10.2 | 1000          |
| • 27AC0030B  | • 27AC0030   | 0.160 - 0.165 | 4.1 - 4.2 | 0.032 - 0.125           | 0.8 - 3.2   | 0.300 | 7.6  | 0.110 | 2.8 | 0.400 | 10.2 | 1000          |
| • 27AC0001B  | • 27AC0001   | 0.182 - 0.192 | 4.6 - 4.9 | 0.062 - 0.125           | 1.6 - 3.2   | 0.360 | 9.1  | 0.060 | 1.5 | 0.400 | 10.2 | 1000          |
| • 27AC0011B  | • 27AC0011   | 0.182 - 0.192 | 4.6 - 4.9 | 0.165 - 0.185           | 4.2 - 4.7   | 0.375 | 9.5  | 0.060 | 1.5 | 0.515 | 13.1 | 1000          |
| • 27AC0033B  | • 27AC0033   | 0.182 - 0.192 | 4.6 - 4.9 | 0.165 - 0.185           | 4.2 - 4.7   | 0.472 | 12.0 | 0.060 | 1.5 | 0.525 | 13.3 | 1000          |
| • 27AC0031B  | • 27AC0031   | 0.182 - 0.192 | 4.6 - 4.9 | 0.200 - 0.250           | 5.1 - 6.4   | 0.270 | 6.9  | 0.070 | 1.8 | 0.525 | 13.3 | 1000          |
| • 27AC0006B  | • 27AC0006   | 0.182 - 0.192 | 4.6 - 4.9 | 0.310 - 0.330           | 7.8 - 7.9   | 0.370 | 9.4  | 0.060 | 1.5 | 0.531 | 13.5 | 1000          |
| MMB-187-01BK | MMB-187-01   | 0.187         | 4.7       | 0.098 - 0.157           | 2.5 - 4.0   | 0.500 | 12.7 | 0.087 | 2.2 | 0.429 | 10.9 | 1000          |
| 091000659902 | 091000600002 | 0.189         | 4.8       | 0.035 - 0.157           | 0.9 - 4.0   | 0.374 | 9.5  | 0.059 | 1.5 | 0.433 | 11.0 | 500           |
| • 27AC0012B  | • 27AC0012   | 0.195 - 0.200 | 5.0 - 5.1 | 0.035 - 0.065           | 0.9 - 1.7   | 0.370 | 9.4  | 0.056 | 1.4 | 0.350 | 8.9  | 1000          |
| • 27AC0028B  | • 27AC0028   | 0.192 - 0.212 | 4.9 - 5.4 | 0.062 - 0.125           | 1.6 - 3.2   | 0.375 | 9.5  | 0.060 | 1.5 | 0.450 | 11.4 | 1000          |
| 091001069902 | 091001000002 | 0.197         | 5.0       | 0.020 - 0.118           | 0.5 - 3.0   | 0.531 | 13.5 | 0.102 | 2.6 | 0.567 | 14.4 | 250           |
| 091000459902 | 091000400002 | 0.197         | 5.0       | 0.059 - 0.138           | 1.5 - 3.5   | 0.374 | 9.5  | 0.063 | 1.6 | 0.433 | 11.0 | 500           |
| 091000769902 | 091000700002 | 0.197         | 5.0       | 0.118 - 0.236           | 3.0 - 6.0   | 0.543 | 13.8 | 0.087 | 2.2 | 0.567 | 14.4 | 250           |
| MMB-210-01BK | MMB-210-01   | 0.210         | 5.3       | 0.097 - 0.157           | 2.5 - 4.0   | 0.551 | 14.0 | 0.118 | 3.0 | 0.551 | 14.0 | 1000          |
| • 27AC0007B  | • 27AC0007   | 0.213 - 0.223 | 5.4 - 5.7 | 0.062 - 0.125           | 1.6 - 3.2   | 0.370 | 9.4  | 0.060 | 1.5 | 0.540 | 13.7 | 1000          |
| • 27AC0005B  | • 27AC0005   | 0.213 - 0.223 | 5.4 - 5.7 | 0.125 - 0.187           | 3.2 - 4.7   | 0.370 | 9.4  | 0.060 | 1.5 | 0.450 | 11.4 | 1000          |
| MMB-132-01BK | MMB-132-01   | 0.215         | 5.5       | 0.062 - 0.157           | 1.6 - 3.2   | 0.37  | 9.4  | 0.059 | 1.5 | 0.453 | 11.5 | 1000          |
| 091001259902 | 091001200002 | 0.228         | 5.8       | 0.236 - 0.335           | 6.0 - 8.5   | 0.591 | 15.0 | 0.118 | 3.0 | 0.709 | 18.0 | 250           |
| • 27AC0026B  | • 27AC0026   | 0.240 - 0.260 | 6.1 - 6.6 | 0.095 - 0.218           | 2.4 - 5.5   | 0.750 | 19.1 | 0.055 | 1.4 | 0.606 | 15.4 | 500           |
| • 27AC0021B  | • 27AC0021   | 0.250 - 0.260 | 6.4 - 6.6 | 0.125 - 0.250           | 3.2 - 6.4   | 0.500 | 12.7 | 0.050 | 1.3 | 0.630 | 16.0 | 500           |
| • 27AC0009B  | • 27AC0009   | 0.250 - 0.261 | 6.4 - 6.6 | 0.125 - 0.187           | 3.2 - 4.7   | 0.480 | 12.2 | 0.060 | 1.5 | 0.562 | 14.3 | 500           |
| • 27AC0016B  | • 27AC0016   | 0.250 - 0.262 | 6.4 - 6.7 | 0.360 - 0.380           | 9.1 - 9.7   | 0.620 | 15.7 | 0.065 | 1.7 | 0.767 | 19.5 | 500           |
| • 27AC0024B  | • 27AC0024   | 0.250 - 0.263 | 6.4 - 6.7 | 0.500 - 0.750           | 12.7 - 19.1 | 0.610 | 15.5 | 0.068 | 1.7 | 1.135 | 25.9 | 1000          |
| MMB-250-01BK | MMB-250-01   | 0.250         | 6.4       | 0.098 - 0.220           | 2.5 - 5.6   | 0.500 | 12.7 | 0.087 | 2.2 | 0.642 | 16.3 | 1000          |
| 091001159902 | 091001100002 | 0.256         | 6.5       | 0.118 - 0.276           | 3.0 - 7.0   | 0.551 | 14.0 | 0.098 | 2.5 | 0.748 | 19.0 | 250           |
| 091001359902 | 091001300002 | 0.260         | 6.6       | 0.031 - 0.197           | 0.8 - 5.0   | 0.500 | 12.7 | 0.067 | 1.7 | 0.571 | 14.5 | 250           |
| 091001559902 | 091001500002 | 0.283         | 7.2       | 0.079 - 0.217           | 2.0 - 5.5   | 0.563 | 14.3 | 0.079 | 2.0 | 0.669 | 17.0 | 250           |
| • 27AC0029B  | • 27AC0029   | 0.330 - 0.340 | 8.4 - 8.6 | 0.125 - 0.350           | 3.2 - 8.9   | 0.475 | 12.1 | 0.070 | 1.8 | 0.895 | 22.7 | 500           |
| • 27AC0019B  | • 27AC0019   | 0.330 - 0.340 | 8.4 - 8.6 | 0.125 - 0.350           | 3.2 - 8.9   | 0.685 | 17.5 | 0.070 | 1.8 | 0.895 | 22.7 | 1000          |
| • 27AC0023B  | • 27AC0023   | 0.335 - 0.345 | 8.5 - 8.8 | 0.062 - 0.140           | 1.6 - 3.6   | 0.866 | 22.0 | 0.050 | 1.3 | 0.450 | 11.4 | 500           |
| • 27AC0017B  | • 27AC0017   | 0.335 - 0.340 | 8.5 - 8.6 | 0.062 - 0.340           | 1.6 - 8.6   | 0.683 | 17.4 | 0.070 | 1.8 | 0.900 | 22.9 | 1000          |
| 091001659902 | 091001650002 | 0.370         | 9.4       | 0.118 - 0.354           | 3.0 - 9.0   | 0.787 | 20.0 | 0.102 | 2.6 | 0.945 | 24.0 | 250           |



# PUSH IN FASTENERS

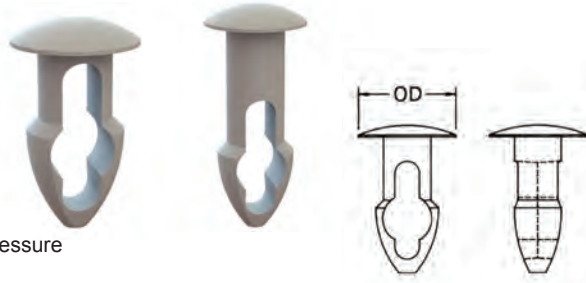
## 27KY Series Key Hole Clips

Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

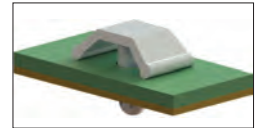
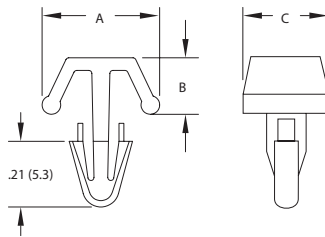
- Key-hole shaped interior allows the part to connect more completely for easy assembly with finger pressure
- Tapered, bullet style point slides into hole easily



| Item No.     | Ø Hole |       | Total Holding Thickness |       | OD    | Bulk Pack Qty |
|--------------|--------|-------|-------------------------|-------|-------|---------------|
|              | in     | mm    | in                      | mm    |       |               |
| 27KY1250093  | 0.125  | 3.175 | 0.093                   | 2.367 | 0.250 | 1000          |
| 27KY1250125  | 0.125  | 3.175 | 0.125                   | 3.175 | 0.250 | 1000          |
| 27KY1250156  | 0.125  | 3.175 | 0.156                   | 3.987 | 0.250 | 1000          |
| 27KY1250187  | 0.125  | 3.175 | 0.188                   | 4.778 | 0.250 | 1000          |
| 27KY1250219  | 0.125  | 3.175 | 0.219                   | 5.560 | 0.250 | 1000          |
| 27KY1250250  | 0.125  | 3.175 | 0.250                   | 6.350 | 0.250 | 1000          |
| 27KY1560062  | 0.156  | 3.987 | 0.062                   | 1.575 | 0.312 | 1000          |
| 27KY1560093  | 0.156  | 3.987 | 0.093                   | 2.367 | 0.312 | 1000          |
| 27KY1560125  | 0.156  | 3.987 | 0.125                   | 3.175 | 0.312 | 1000          |
| 27KY1560156  | 0.156  | 3.987 | 0.156                   | 3.987 | 0.312 | 1000          |
| 27KY1560187  | 0.156  | 3.987 | 0.187                   | 4.753 | 0.312 | 1000          |
| 27KY1560218  | 0.156  | 3.987 | 0.218                   | 5.534 | 0.312 | 1000          |
| 27KY1560250  | 0.156  | 3.987 | 0.250                   | 6.350 | 0.312 | 1000          |
| 27KY1560281  | 0.156  | 3.987 | 0.281                   | 7.141 | 0.312 | 1000          |
| 27KY1560312  | 0.156  | 3.987 | 0.312                   | 7.922 | 0.312 | 1000          |
| 27KY1560343  | 0.156  | 3.987 | 0.343                   | 8.713 | 0.312 | 1000          |
| 27KY1560375  | 0.156  | 3.987 | 0.375                   | 9.525 | 0.312 | 1000          |
| 27KY1870093  | 0.187  | 4.753 | 0.093                   | 2.367 | 0.312 | 1000          |
| 27KY1870125  | 0.187  | 4.753 | 0.125                   | 3.175 | 0.312 | 1000          |
| 27KY1870156  | 0.187  | 4.753 | 0.156                   | 3.987 | 0.312 | 1000          |
| 27KY1870187  | 0.187  | 4.753 | 0.187                   | 4.753 | 0.312 | 1000          |
| 27KY1870219  | 0.187  | 4.753 | 0.219                   | 5.560 | 0.312 | 1000          |
| 27KY1870250  | 0.187  | 4.753 | 0.250                   | 6.350 | 0.312 | 1000          |
| 27KY18702507 | 0.187  | 4.753 | 0.250                   | 6.350 | 0.469 | 1000          |
| 27KY1870281  | 0.187  | 4.753 | 0.281                   | 7.141 | 0.312 | 1000          |
| 27KY1870312  | 0.187  | 4.753 | 0.312                   | 7.922 | 0.312 | 1000          |
| 27KY1870343  | 0.187  | 4.753 | 0.344                   | 8.741 | 0.312 | 1000          |

| Item No.    | Ø Hole |       | Total Holding Thickness |        | OD    | Bulk Pack Qty |
|-------------|--------|-------|-------------------------|--------|-------|---------------|
|             | in     | mm    | in                      | mm     |       |               |
| 27KY1870375 | 0.187  | 4.753 | 0.375                   | 9.525  | 0.312 | 1000          |
| 27KY2190093 | 0.219  | 5.560 | 0.093                   | 2.367  | 0.343 | 1000          |
| 27KY2190125 | 0.219  | 5.560 | 0.125                   | 3.175  | 0.343 | 1000          |
| 27KY2190156 | 0.219  | 5.560 | 0.156                   | 3.987  | 0.343 | 1000          |
| 27KY2190187 | 0.219  | 5.560 | 0.187                   | 4.753  | 0.343 | 1000          |
| 27KY2190219 | 0.219  | 5.560 | 0.291                   | 7.391  | 0.343 | 1000          |
| 27KY2190250 | 0.219  | 5.560 | 0.250                   | 6.350  | 0.343 | 1000          |
| 27KY2190281 | 0.219  | 5.560 | 0.281                   | 7.141  | 0.343 | 1000          |
| 27KY2190312 | 0.219  | 5.560 | 0.312                   | 7.922  | 0.343 | 1000          |
| 27KY2190343 | 0.219  | 5.560 | 0.343                   | 8.713  | 0.344 | 1000          |
| 27KY2190375 | 0.219  | 5.560 | 0.375                   | 9.525  | 0.344 | 1000          |
| 27KY2500093 | 0.250  | 6.350 | 0.093                   | 2.367  | 0.500 | 1000          |
| 27KY2500125 | 0.250  | 6.350 | 0.125                   | 3.175  | 0.500 | 1000          |
| 27KY2500156 | 0.250  | 6.350 | 0.156                   | 3.987  | 0.500 | 1000          |
| 27KY2500187 | 0.250  | 6.350 | 0.187                   | 4.753  | 0.500 | 1000          |
| 27KY2500219 | 0.250  | 6.350 | 0.219                   | 5.560  | 0.500 | 500           |
| 27KY2500250 | 0.250  | 6.350 | 0.250                   | 6.350  | 0.500 | 1000          |
| 27KY2500281 | 0.250  | 6.350 | 0.281                   | 7.141  | 0.500 | 1000          |
| 27KY2500312 | 0.250  | 6.350 | 0.312                   | 7.922  | 0.500 | 1000          |
| 27KY2500343 | 0.250  | 6.350 | 0.343                   | 8.713  | 0.500 | 1000          |
| 27KY2500375 | 0.250  | 6.350 | 0.375                   | 9.525  | 0.500 | 500           |
| 27KY2500406 | 0.250  | 6.350 | 0.406                   | 10.317 | 0.500 | 1000          |
| 27KY2500437 | 0.250  | 6.350 | 0.437                   | 11.113 | 0.500 | 1000          |
| 27KY2500468 | 0.250  | 6.350 | 0.468                   | 11.904 | 0.500 | 1000          |
| 27KY2500500 | 0.250  | 6.350 | 0.500                   | 12.700 | 0.500 | 500           |
| 27KY2810406 | 0.281  | 7.141 | 0.406                   | 10.317 | 0.500 | 1000          |

## MB Series Mounting Button

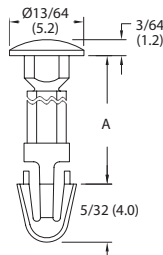


Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.  | Ø Hole |     | Total Holding Thickness |            | A Ref. |      | B Ref. |     | C    |     | Bulk Pack Qty |
|-----------|--------|-----|-------------------------|------------|--------|------|--------|-----|------|-----|---------------|
|           | in     | mm  | in                      | mm         | in     | mm   | in     | mm  | in   | mm  |               |
| MB-1-156  | 0.156  | 4.0 | 0.031 - 0.093           | 0.8 - 2.4  | 0.391  | 9.9  | 0.188  | 4.8 | 0.31 | 7.9 | 1000          |
| MB-3-156  | 0.156  | 4.0 | 0.093 - 0.156           | 2.4 - 4.0  | 0.391  | 9.9  | 0.188  | 4.8 | 0.31 | 7.9 | 1000          |
| MB-5-156  | 0.156  | 4.0 | 0.156 - 0.219           | 4.0 - 5.6  | 0.391  | 9.9  | 0.188  | 4.8 | 0.31 | 7.9 | 1000          |
| MB-7-156  | 0.156  | 4.0 | 0.219 - 0.281           | 5.6 - 7.1  | 0.391  | 9.9  | 0.188  | 4.8 | 0.31 | 7.9 | 1000          |
| MB-9-156  | 0.156  | 4.0 | 0.281 - 0.343           | 7.1 - 8.7  | 0.391  | 9.9  | 0.188  | 4.8 | 0.31 | 7.9 | 1000          |
| MB-11-156 | 0.156  | 4.0 | 0.343 - 0.406           | 8.7 - 10.3 | 0.391  | 9.9  | 0.188  | 4.8 | 0.31 | 7.9 | 1000          |
| MB-1-187  | 0.187  | 4.8 | 0.031 - 0.093           | 0.8 - 2.4  | 0.484  | 12.3 | 0.188  | 4.8 | 0.31 | 7.9 | 1000          |
| MB-3-187  | 0.187  | 4.8 | 0.093 - 0.156           | 2.4 - 4.0  | 0.484  | 12.3 | 0.188  | 4.8 | 0.31 | 7.9 | 1000          |
| MB-5-187  | 0.187  | 4.8 | 0.156 - 0.219           | 4.0 - 5.6  | 0.484  | 12.3 | 0.188  | 4.8 | 0.31 | 7.9 | 1000          |
| MB-7-187  | 0.187  | 4.8 | 0.219 - 0.281           | 5.6 - 7.1  | 0.484  | 12.3 | 0.188  | 4.8 | 0.31 | 7.9 | 1000          |
| MB-9-187  | 0.187  | 4.8 | 0.281 - 0.343           | 7.1 - 8.7  | 0.484  | 12.3 | 0.188  | 4.8 | 0.31 | 7.9 | 1000          |
| MB-11-187 | 0.187  | 4.8 | 0.343 - 0.406           | 8.7 - 10.3 | 0.484  | 12.3 | 0.188  | 4.8 | 0.31 | 7.9 | 1000          |

## SLPA Series Snap Lock Pin with Arrowhead



Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

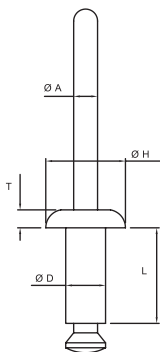
- Fixes connectors to PCB's
- Easily installed by hand

| Item No.       | Ø Hole |     | A     |      | Bulk Pack Qty |
|----------------|--------|-----|-------|------|---------------|
|                | in     | mm  | in    | mm   |               |
| SLPA125-187-01 | 0.125  | 3.2 | 0.187 | 4.7  | 1000          |
| SLPA125-250-01 | 0.125  | 3.2 | 0.250 | 6.4  | 1000          |
| SLPA125-312-01 | 0.125  | 3.2 | 0.312 | 7.9  | 1000          |
| SLPA125-375-01 | 0.125  | 3.2 | 0.375 | 9.5  | 1000          |
| SLPA125-500-01 | 0.125  | 3.2 | 0.500 | 12.7 | 1000          |
| SLPA125-625-01 | 0.125  | 3.2 | 0.625 | 15.9 | 1000          |
| SLPA125-750-01 | 0.125  | 3.2 | 0.750 | 19.1 | 1000          |



**CR**  
Expansion Blind Rivet

**PUSH IN FASTENERS / RIVETS**



**Specifications:**

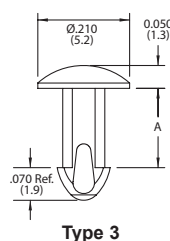
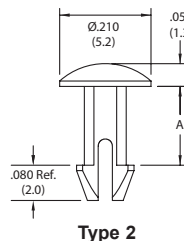
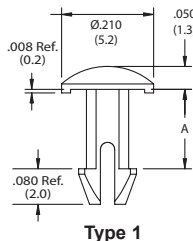
- Material: Rivet; Nylon 6/6, Mandrel; Polycarbonate
- Color: Black; Mandrel: Clear

**Features:**

- Set without the need for access to back of panel
- Set by pulling the mandrel head into the rivet body, expanding the rivet body and causing it to flare against the reverse side
- When sufficient force is applied, the mandrel will snap at its break point
- Installed with a pop rivet installation tool (not offered)

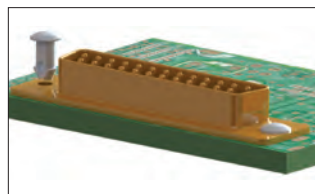
| Item No. | Hole Ø |     | Panel Thickness |            | Ø D   |     | L     |      | Ø H   |      | T     |     | Ø A   |     | Pack Qty |
|----------|--------|-----|-----------------|------------|-------|-----|-------|------|-------|------|-------|-----|-------|-----|----------|
|          | In     | mm  | In              | mm         | In    | mm  | In    | mm   | In    | mm   | In    | mm  | In    | mm  |          |
| CR32-1-1 | 0.130  | 3.3 | 0.040 - 0.160   | 1.0 - 4.0  | 0.130 | 3.2 | 0.250 | 6.4  | 0.250 | 6.4  | 0.060 | 1.4 | 0.080 | 2.1 | 1000     |
| CR32-2-1 | 0.130  | 3.3 | 0.160 - 0.280   | 4.1 - 7.0  | 0.130 | 3.2 | 0.380 | 9.6  | 0.250 | 6.4  | 0.060 | 1.4 | 0.080 | 2.1 | 1000     |
| CR32-3-1 | 0.130  | 3.3 | 0.280 - 0.390   | 7.0 - 10.0 | 0.130 | 3.2 | 0.500 | 12.7 | 0.250 | 6.4  | 0.060 | 1.4 | 0.080 | 2.1 | 1000     |
| CR40-1-1 | 0.160  | 4.1 | 0.040 - 0.160   | 1.0 - 4.0  | 0.160 | 4.0 | 0.250 | 6.4  | 0.310 | 8.0  | 0.070 | 1.8 | 0.090 | 2.4 | 1000     |
| CR40-2-1 | 0.160  | 4.1 | 0.160 - 0.280   | 4.1 - 7.0  | 0.160 | 4.0 | 0.380 | 9.6  | 0.310 | 8.0  | 0.070 | 1.8 | 0.090 | 2.4 | 1000     |
| CR40-3-1 | 0.160  | 4.1 | 0.280 - 0.390   | 7.0 - 10.0 | 0.160 | 4.0 | 0.500 | 12.7 | 0.310 | 8.0  | 0.070 | 1.8 | 0.090 | 2.4 | 1000     |
| CR48-1-1 | 0.190  | 4.9 | 0.060 - 0.200   | 1.5 - 5.0  | 0.190 | 4.8 | 0.310 | 8.0  | 0.380 | 9.6  | 0.080 | 2.0 | 0.110 | 2.8 | 500      |
| CR48-2-1 | 0.190  | 4.9 | 0.200 - 0.310   | 5.0 - 8.0  | 0.190 | 4.8 | 0.440 | 11.2 | 0.380 | 9.6  | 0.080 | 2.0 | 0.110 | 2.8 | 500      |
| CR48-3-1 | 0.190  | 4.9 | 0.310 - 0.430   | 8.0 - 11.0 | 0.190 | 4.8 | 0.570 | 14.4 | 0.380 | 9.6  | 0.080 | 2.0 | 0.110 | 2.8 | 500      |
| CR56-1-1 | 0.220  | 5.7 | 0.080 - 0.220   | 2.0 - 5.5  | 0.220 | 5.6 | 0.380 | 9.6  | 0.470 | 12.0 | 0.090 | 2.2 | 0.130 | 3.4 | 500      |
| CR56-2-1 | 0.220  | 5.7 | 0.220 - 0.330   | 5.5 - 8.5  | 0.220 | 5.6 | 0.500 | 12.7 | 0.470 | 12.0 | 0.090 | 2.2 | 0.130 | 3.4 | 500      |
| CR56-3-1 | 0.220  | 5.7 | 0.330 - 0.470   | 8.5 - 12.0 | 0.220 | 5.6 | 0.630 | 15.9 | 0.470 | 12.0 | 0.090 | 2.2 | 0.130 | 3.4 | 500      |

**SLP Series**  
Snap Lock Pin



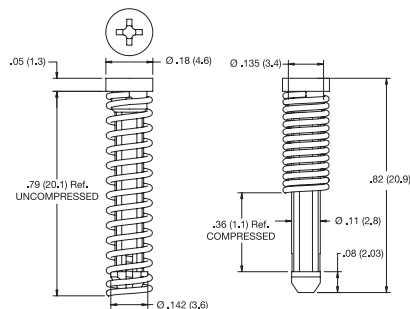
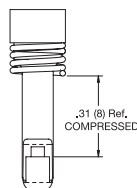
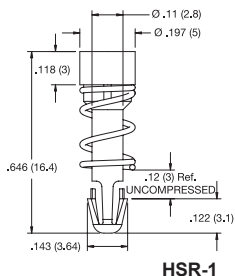
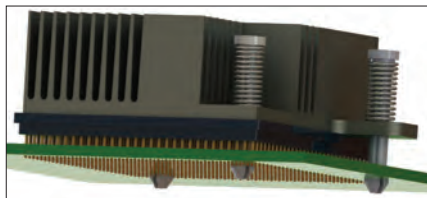
**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural



| Item No.      |               |              | Ø Hole | Panel Thickness A | Ø Head | Bulk Pack Qty |
|---------------|---------------|--------------|--------|-------------------|--------|---------------|
| Type 1        | Type 2        | Type 3       |        |                   |        |               |
| SLP100-177-01 | SLP-1-177-01  | SLP-2-177-01 | 0.098  | 0.177             | 0.210  | 1000          |
| SLP100-221-01 | SLP-1-221-01  | SLP-2-221-01 | 0.098  | 0.221             | 0.210  | 1000          |
| SLP100-236-01 | SLP-1-236-01  | SLP-2-236-01 | 0.098  | 0.236             | 0.210  | 1000          |
| SLP100-245-01 | SLP-1-245-01  | SLP-2-245-01 | 0.098  | 0.245             | 0.210  | 1000          |
| SLP100-307-01 | SLP-1-307-01  | SLP-2-307-01 | 0.098  | 0.307             | 0.210  | 1000          |
| SLP100-316-01 | SLP-1-316-01  | SLP-2-316-01 | 0.098  | 0.316             | 0.210  | 1000          |
| SLP100-330-01 | SLP-1-330-01  | SLP-2-330-01 | 0.098  | 0.33              | 0.210  | 1000          |
| SLP100-413-01 | SLP-1-413-01  | SLP-2-413-01 | 0.098  | 0.413             | 0.210  | 1000          |
| SLP100-638-01 | SLP-1-638-01  | SLP-2-638-01 | 0.098  | 0.638             | 0.210  | 1000          |
| —             | SLP125-187-01 | —            | 0.125  | 0.187             | 0.200  | 1000          |

**HSR Series**  
Heat Sink Spring Mount Rivet



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Fastens a heat sink to a processor chip on a PCB
- The spring provides continuous pressure to the heat sink until thermal adhesive cures
- HSR-2 can be installed by using a phillips head screwdriver

| Item No. | Heat Sink Ø Hole |           | PCB Ø Hole |      | Spring Material              | Bulk Pack Qty |
|----------|------------------|-----------|------------|------|------------------------------|---------------|
|          | In               | mm        | In         | mm   |                              |               |
| HSR-1    | 0.125 - 0.157    | 3.2 - 4.0 | 0.118      | 3.0  | Spring Steel, Chrome Plating | 1000          |
| HSR-2    | 0.120 - 0.140    | 3.1 - 3.5 | 0.122      | 13.1 | Stainless Steel              | 1000          |





# PUSH IN FASTENERS / SCREW ANCHORS

## 27PIF Series (continued) Push In Fasteners

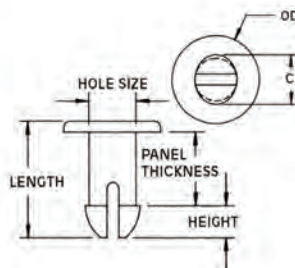


**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Provides an inexpensive, fast, convenient method to join plastic, light sheet metal, insulating materials, circuit boards, or any other thin, lightweight material
- Specially designed legs provide compression and expansion to lock fastener into pre-punched holes
- Vibration, abrasion and corrosion resistant
- Features large heads for easier assembly and can be reused



| Item No.  | Ø Hole |     | Panel Thickness |      | OD    |      | Height |     | C     |      | Length |      | Bulk Pack Qty |
|-----------|--------|-----|-----------------|------|-------|------|--------|-----|-------|------|--------|------|---------------|
|           | in     | mm  | in              | mm   | in    | mm   | in     | mm  | in    | mm   | in     | mm   |               |
| 27PIF0060 | 0.200  | 5.1 | 0.156           | 3.9  | 0.469 | 11.9 | 0.125  | 3.2 | 0.228 | 5.8  | 0.333  | 8.5  | 1000          |
| 27PIF0061 | 0.203  | 5.2 | 0.368           | 9.4  | 0.344 | 8.7  | 0.105  | 2.7 | 0.236 | 6.0  | 0.540  | 13.7 | 1000          |
| 27PIF0078 | 0.217  | 5.5 | 0.250           | 6.4  | 0.406 | 10.3 | 0.100  | 2.5 | 0.278 | 7.1  | 0.395  | 10.0 | 1000          |
| 27PIF0031 | 0.230  | 5.8 | 0.503           | 12.8 | 0.391 | 9.9  | 0.210  | 5.3 | 0.295 | 7.5  | 1.083  | 27.5 | 500           |
| 27PIF0062 | 0.230  | 5.8 | 1.730           | 43.9 | 0.391 | 9.9  | 0.222  | 5.6 | 0.295 | 7.5  | 2.010  | 51.1 | 1000          |
| 27PIF0088 | 0.239  | 6.1 | 0.219           | 5.6  | 0.500 | 12.7 | 0.175  | 4.4 | 0.277 | 7.0  | 0.445  | 11.3 | 1000          |
| 27PIF0063 | 0.240  | 6.1 | 0.276           | 7.0  | 0.453 | 11.5 | 0.142  | 3.6 | 0.295 | 7.5  | 0.460  | 11.7 | 500           |
| 27PIF0066 | 0.240  | 6.1 | 0.330           | 8.4  | 0.453 | 11.5 | 0.187  | 4.8 | 0.295 | 7.5  | 0.555  | 14.1 | 500           |
| 27PIF0090 | 0.240  | 6.1 | 0.281           | 7.1  | 0.500 | 12.7 | 0.176  | 4.5 | 0.280 | 7.1  | 0.513  | 13.0 | 1000          |
| 27PIF0092 | 0.240  | 6.1 | 0.345           | 8.8  | 0.500 | 12.7 | 0.177  | 4.5 | 0.281 | 7.1  | 0.578  | 14.7 | 1000          |
| 27PIF0098 | 0.240  | 6.1 | 0.438           | 11.1 | 0.500 | 12.7 | 0.176  | 4.5 | 0.281 | 7.1  | 0.672  | 17.1 | 1000          |
| 27PIF0096 | 0.240  | 6.1 | 0.466           | 11.8 | 0.500 | 12.7 | 0.183  | 4.6 | 0.280 | 7.1  | 0.701  | 17.8 | 500           |
| 27PIF0097 | 0.240  | 6.1 | 0.498           | 12.7 | 0.500 | 12.7 | 0.162  | 4.1 | 0.283 | 7.2  | 0.713  | 18.1 | 500           |
| 27PIF0085 | 0.241  | 6.1 | 0.127           | 3.2  | 0.500 | 12.7 | 0.185  | 4.7 | 0.281 | 7.1  | 0.361  | 9.2  | 1000          |
| 27PIF0087 | 0.241  | 6.1 | 0.189           | 4.8  | 0.500 | 12.7 | 0.156  | 4.0 | 0.278 | 7.1  | 0.395  | 10.0 | 1000          |
| 27PIF0089 | 0.241  | 6.1 | 0.250           | 6.4  | 0.500 | 12.7 | 0.175  | 4.4 | 0.283 | 7.2  | 0.487  | 12.4 | 1000          |
| 27PIF0091 | 0.241  | 6.1 | 0.314           | 8.0  | 0.500 | 12.7 | 0.152  | 3.9 | 0.281 | 7.1  | 0.520  | 13.2 | 500           |
| 27PIF0086 | 0.242  | 6.2 | 0.156           | 4.0  | 0.500 | 12.7 | 0.170  | 4.3 | 0.281 | 7.1  | 0.380  | 9.7  | 1000          |
| 27PIF0093 | 0.242  | 6.2 | 0.375           | 9.5  | 0.500 | 12.7 | 0.166  | 4.2 | 0.281 | 7.1  | 0.609  | 15.5 | 1000          |
| 27PIF0064 | 0.243  | 6.2 | 0.300           | 7.6  | 0.453 | 11.5 | 0.170  | 4.3 | 0.298 | 7.6  | 0.535  | 13.6 | 1000          |
| 27PIF0083 | 0.243  | 6.2 | 0.064           | 1.6  | 0.500 | 12.7 | 0.138  | 3.5 | 0.280 | 7.1  | 0.262  | 6.7  | 500           |
| 27PIF0022 | 0.243  | 6.2 | 0.064           | 1.6  | 0.500 | 12.7 | 0.185  | 4.7 | 0.280 | 7.1  | 0.370  | 9.4  | 500           |
| 27PIF0094 | 0.243  | 6.2 | 0.400           | 10.2 | 0.500 | 12.7 | 0.175  | 4.4 | 0.282 | 7.2  | 0.638  | 16.2 | 500           |
| 27PIF0084 | 0.245  | 6.2 | 0.099           | 2.5  | 0.500 | 12.7 | 0.168  | 4.3 | 0.280 | 7.1  | 0.324  | 8.2  | 1000          |
| 27PIF0118 | 0.245  | 6.2 | 0.250           | 6.4  | 0.500 | 12.7 | 0.187  | 4.8 | 0.290 | 7.4  | 0.497  | 12.6 | 1000          |
| 27PIF0071 | 0.245  | 6.2 | 0.250           | 6.4  | 0.594 | 15.1 | 0.187  | 4.8 | 0.290 | 7.4  | 0.497  | 12.6 | 500           |
| 27PIF0072 | 0.245  | 6.2 | 0.365           | 9.3  | 0.594 | 15.1 | 0.187  | 4.8 | 0.290 | 7.4  | 0.622  | 15.8 | 500           |
| 27PIF0024 | 0.245  | 6.2 | 0.365           | 9.3  | 0.594 | 15.1 | 0.187  | 4.8 | 0.295 | 7.5  | 0.685  | 17.4 | 500           |
| 27PIF0065 | 0.245  | 6.2 | 0.480           | 12.2 | 0.594 | 15.1 | 0.175  | 4.5 | 0.293 | 7.4  | 0.715  | 18.2 | 500           |
| 27PIF0100 | 0.250  | 6.4 | 1.543           | 39.2 | 0.375 | 9.5  | 0.205  | 5.2 | 0.295 | 7.5  | 1.875  | 47.6 | 500           |
| 27PIF0054 | 0.255  | 6.5 | 0.197           | 5.0  | 0.344 | 8.7  | 0.185  | 4.7 | 0.295 | 7.5  | 0.415  | 10.5 | 1000          |
| 27PIF0073 | 0.260  | 6.6 | 0.171           | 4.3  | 0.344 | 8.7  | 0.187  | 4.8 | 0.295 | 7.5  | 0.380  | 9.7  | 1000          |
| 27PIF0067 | 0.260  | 6.6 | 0.171           | 4.3  | 0.500 | 12.7 | 0.187  | 4.8 | 0.295 | 7.5  | 0.405  | 10.3 | 1000          |
| 27PIF0070 | 0.260  | 6.6 | 0.171           | 4.3  | 0.594 | 15.1 | 0.187  | 4.8 | 0.295 | 7.5  | 0.418  | 10.6 | 500           |
| 27PIF0105 | 0.270  | 6.9 | 1.065           | 27.1 | 0.625 | 15.9 | 0.360  | 9.1 | 0.360 | 9.1  | 1.500  | 38.1 | 1000          |
| 27PIF0074 | 0.275  | 7.0 | 0.405           | 10.3 | 0.594 | 15.1 | 0.160  | 4.1 | 0.315 | 8.0  | 0.620  | 15.8 | 500           |
| 27PIF0101 | 0.285  | 7.2 | 0.154           | 3.9  | 0.680 | 17.3 | 0.255  | 6.5 | 0.347 | 8.8  | 0.473  | 12.0 | 1000          |
| 27PIF0016 | 0.288  | 7.3 | 0.260           | 6.6  | 0.687 | 17.5 | 0.265  | 6.7 | 0.355 | 9.0  | 0.586  | 14.9 | 500           |
| 27PIF0068 | 0.290  | 7.4 | 0.140           | 3.6  | 0.687 | 17.5 | 0.243  | 6.2 | 0.360 | 9.1  | 0.468  | 11.9 | 1000          |
| 27PIF0082 | 0.290  | 7.4 | 0.250           | 6.4  | 0.687 | 17.5 | 0.258  | 6.6 | 0.360 | 9.1  | 0.585  | 14.9 | 500           |
| 27PIF0057 | 0.305  | 7.7 | 0.120           | 3.1  | 0.438 | 11.1 | 0.236  | 6.0 | 0.380 | 9.7  | 0.426  | 10.8 | 1000          |
| 27PIF0131 | 0.344  | 8.7 | 0.203           | 5.2  | 0.406 | 10.3 | 0.280  | 7.1 | 0.375 | 9.5  | 0.530  | 13.5 | 1000          |
| 27PIF0126 | 0.350  | 8.9 | 0.768           | 19.5 | 0.492 | 12.5 | 0.172  | 4.4 | 0.415 | 10.5 | 1.140  | 29.0 | 1000          |
| 27PIF0099 | 0.360  | 9.1 | 1.020           | 25.9 | 0.500 | 12.7 | 0.380  | 9.7 | 0.475 | 12.1 | 1.460  | 37.1 | 1000          |

## 61WA Screw Anchors

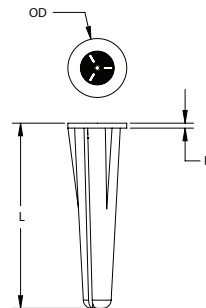


**Specifications:**

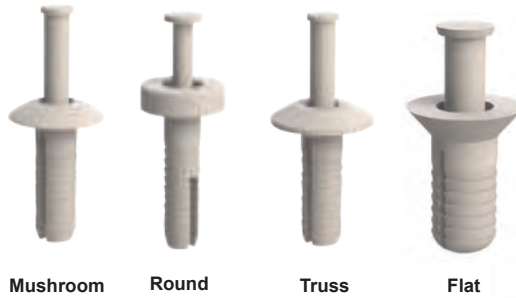
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- For use with metal, sheet metal, or wood screws (not included)
- Can be used in wood, masonry block, concrete, tile, brick or sheet metal
- Twist resisting flange for use in thin wall and hollow materials
- Can be color coded for size identification



| Item No.   | Screw Size | Hole Size |     | OD    |      | H     |     | L     |      | Bulk Pack Qty |
|------------|------------|-----------|-----|-------|------|-------|-----|-------|------|---------------|
|            |            | in        | mm  | in    | mm   | in    | mm  | in    | mm   |               |
| 61WA210875 | #6-8       | 0.188     | 4.8 | 0.313 | 7.9  | 0.037 | 0.9 | 0.875 | 22.2 | 1000          |
| 61WA281700 | #10-12     | 0.250     | 6.4 | 0.375 | 9.5  | 0.037 | 0.9 | 1.078 | 27.4 | 1000          |
| 61WA351385 | #14-16     | 0.313     | 7.9 | 0.438 | 11.1 | 0.037 | 0.9 | 1.375 | 31.9 | 1000          |

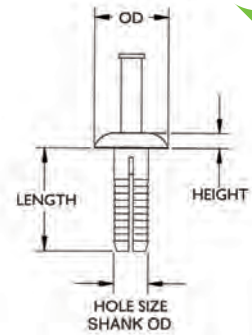
**ANCHOR RIVETS****61APF/APM/APR/APT****Anchor Rivets with Plastic Drive Pins**

## Specifications:

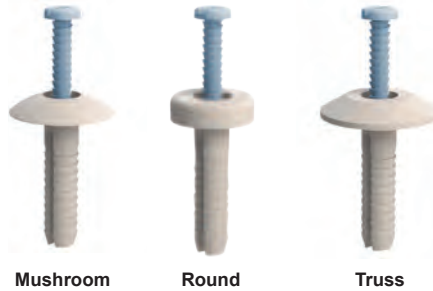
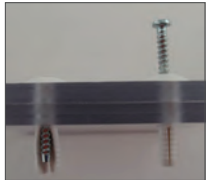
- Body Material: Impact Modified Nylon
- Pin Material: Acetal
- Color: White

## Features:

- Fast, easy installation
- High strength
- For solid or hollow materials including wood, concrete, plaster, metal, plastic, tile block or mortar



| Item No.   | Head Style | Shank Ø / Hole Size |     | Length |      | OD    |      | Height |     | Bulk Pack Qty |
|------------|------------|---------------------|-----|--------|------|-------|------|--------|-----|---------------|
|            |            | in                  | mm  | in     | mm   | in    | mm   | in     | mm  |               |
| 61APM18075 | Mushroom   | 0.188               | 4.8 | 0.750  | 19.1 | 0.563 | 14.3 | 0.110  | 2.8 | 1000          |
| 61APM25075 | Mushroom   | 0.250               | 6.4 | 0.750  | 19.1 | 0.563 | 14.3 | 0.110  | 2.8 | 1000          |
| 61APM25100 | Mushroom   | 0.250               | 6.4 | 1.000  | 25.4 | 0.563 | 14.3 | 0.110  | 2.8 | 1000          |
| 61APM25150 | Mushroom   | 0.250               | 6.4 | 1.500  | 38.1 | 0.563 | 14.3 | 0.110  | 2.8 | 1000          |
| 61APR18075 | Round      | 0.188               | 4.8 | 0.750  | 19.1 | 0.438 | 11.1 | 0.125  | 3.2 | 1000          |
| 61APR25075 | Round      | 0.250               | 6.4 | 0.750  | 19.1 | 0.438 | 11.1 | 0.125  | 3.2 | 1000          |
| 61APR25100 | Round      | 0.250               | 6.4 | 1.000  | 25.4 | 0.438 | 11.1 | 0.125  | 3.2 | 1000          |
| 61APR25150 | Round      | 0.250               | 6.4 | 1.500  | 38.1 | 0.438 | 11.1 | 0.125  | 3.2 | 1000          |
| 61APT18075 | Truss      | 0.188               | 4.8 | 0.750  | 19.1 | 0.625 | 15.9 | 0.110  | 2.8 | 1000          |
| 61APT25075 | Truss      | 0.250               | 6.4 | 0.750  | 19.1 | 0.625 | 15.9 | 0.110  | 2.8 | 1000          |
| 61APT25100 | Truss      | 0.250               | 6.4 | 1.000  | 25.4 | 0.625 | 15.9 | 0.110  | 2.8 | 1000          |
| 61APT25125 | Truss      | 0.250               | 6.4 | 1.250  | 31.8 | 0.625 | 15.9 | 0.110  | 2.8 | 1000          |
| 61APT25150 | Truss      | 0.250               | 6.4 | 1.500  | 38.1 | 0.625 | 15.9 | 0.110  | 2.8 | 1000          |
| 61APF25056 | Flat       | 0.250               | 6.4 | 0.563  | 14.3 | 0.438 | 11.1 | 0.108  | 2.7 | 1000          |
| 61APF25075 | Flat       | 0.250               | 6.4 | 0.750  | 19.1 | 0.438 | 11.1 | 0.108  | 2.7 | 1000          |

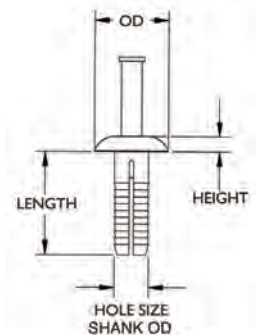
**61ASM/ASR/AST****Anchor Rivets with Steel Drive Pins**

## Specifications:

- Body Material: Impact Modified Nylon
- Drive Pin Material: Zinc Plated Steel
- Color: White

## Features:

- Fast, easy installation
- High strength
- Provides thermal and electrical insulation
- High pullout force

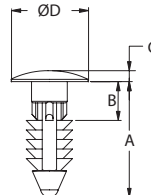
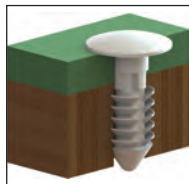


| Item No.   | Head Style | Shank Ø / Hole Size |     | Length |      | OD    |      | Height |     | Bulk Pack Qty |
|------------|------------|---------------------|-----|--------|------|-------|------|--------|-----|---------------|
|            |            | in                  | mm  | in     | mm   | in    | mm   | in     | mm  |               |
| 61ASM18075 | Mushroom   | 0.188               | 4.8 | 0.750  | 19.1 | 0.563 | 14.3 | 0.110  | 2.8 | 1000          |
| 61ASM18100 | Mushroom   | 0.188               | 4.8 | 1.000  | 25.4 | 0.563 | 14.3 | 0.110  | 2.8 | 1000          |
| 61ASM25075 | Mushroom   | 0.250               | 6.4 | 0.750  | 19.1 | 0.563 | 14.3 | 0.110  | 2.8 | 1000          |
| 61ASM25100 | Mushroom   | 0.250               | 6.4 | 1.000  | 25.4 | 0.563 | 14.3 | 0.110  | 2.8 | 1000          |
| 61ASM25150 | Mushroom   | 0.250               | 6.4 | 1.500  | 38.1 | 0.563 | 14.3 | 0.110  | 2.8 | 1000          |
| 61ASR18075 | Round      | 0.188               | 4.8 | 0.750  | 19.1 | 0.438 | 11.1 | 0.125  | 3.2 | 1000          |
| 61ASR18100 | Round      | 0.188               | 4.8 | 1.000  | 25.4 | 0.438 | 11.1 | 0.125  | 3.2 | 1000          |
| 61ASR25075 | Round      | 0.250               | 6.4 | 0.750  | 19.1 | 0.438 | 11.1 | 0.125  | 3.2 | 1000          |
| 61ASR25100 | Round      | 0.250               | 6.4 | 1.000  | 25.4 | 0.438 | 11.1 | 0.125  | 3.2 | 1000          |
| 61ASR25150 | Round      | 0.250               | 6.4 | 1.500  | 38.1 | 0.438 | 11.1 | 0.125  | 3.2 | 1000          |
| 61AST18075 | Truss      | 0.188               | 4.8 | 0.750  | 19.1 | 0.625 | 15.9 | 0.110  | 2.8 | 1000          |
| 61AST18100 | Truss      | 0.188               | 4.8 | 1.000  | 25.4 | 0.625 | 15.9 | 0.110  | 2.8 | 1000          |
| 61AST25075 | Truss      | 0.250               | 6.4 | 0.750  | 19.1 | 0.625 | 15.9 | 0.110  | 2.8 | 1000          |
| 61AST25100 | Truss      | 0.250               | 6.4 | 1.000  | 25.4 | 0.625 | 15.9 | 0.110  | 2.8 | 1000          |
| 61AST25150 | Truss      | 0.250               | 6.4 | 1.500  | 38.1 | 0.625 | 15.9 | 0.110  | 2.8 | 1000          |



# PAWL LOCKS / FIR TREE RIVETS

## PL Series Pawl Lock

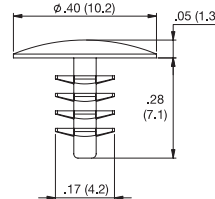
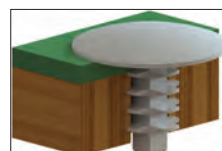
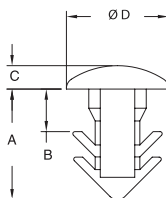


Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.     | Ø Hole |     | B     |     | Ø D   |      | A     |      | C     |     | Bulk Pack Qty |
|--------------|--------|-----|-------|-----|-------|------|-------|------|-------|-----|---------------|
|              | in     | mm  | in    | mm  | in    | mm   | in    | mm   | in    | mm  |               |
| PL-250-10-01 | 0.250  | 6.4 | 0.125 | 3.2 | 0.500 | 12.7 | 0.606 | 15.4 | 0.078 | 2.0 | 1000          |
| PL-250-12-01 | 0.250  | 6.4 | 0.264 | 6.7 | 0.500 | 12.7 | 0.751 | 19.1 | 0.070 | 1.8 | 1000          |
| PL-250-20-01 | 0.216  | 5.5 | 0.082 | 2.1 | 0.354 | 9.0  | 0.984 | 25.0 | 0.070 | 1.8 | 1000          |

## MPLE/PPF Series Mini Pawl Lock



Specifications:

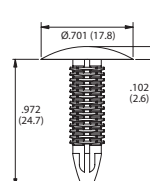
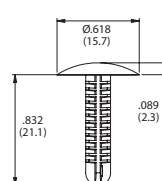
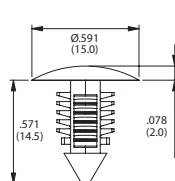
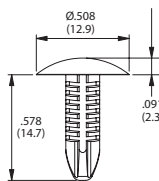
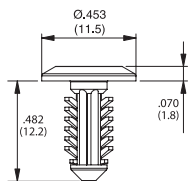
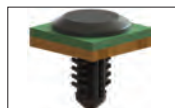
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

MPLE

PPF

| Item No.        | Ø Hole        |           | B    |     | Ø D  |      | A    |     | C    |     | Bulk Pack Qty |
|-----------------|---------------|-----------|------|-----|------|------|------|-----|------|-----|---------------|
|                 | in            | mm        | in   | mm  | in   | mm   | in   | mm  | in   | mm  |               |
| MPLE-3.2M-01    | 0.126         | 3.2       | 0.08 | 2.0 | 0.19 | 4.8  | 0.19 | 4.8 | 0.04 | 1.1 | 1000          |
| MPLE-32M/35M-01 | 0.126 - 0.138 | 3.2 - 3.5 | 0.08 | 2.0 | 0.19 | 4.8  | 0.20 | 5.2 | 0.04 | 1.1 | 1000          |
| PPF-7-01        | 0.139         | 3.5       | —    | —   | 0.40 | 10.2 | 0.28 | 7.1 | 0.05 | 1.3 | 1000          |

## BPF Series Barbed Push Fastener



Type 1

Type 2

Type 3

Type 4

Type 5

Specifications:

- Material: Nylon 6/6
- Color: Black

| Item No.  | Ø Hole |     | Panel Thickness |            | Ø Head |      | Lock Length |      | Head Thickness |     | Type | Flame Rating | Bulk Pack Qty |
|-----------|--------|-----|-----------------|------------|--------|------|-------------|------|----------------|-----|------|--------------|---------------|
|           | in     | mm  | in              | mm         | in     | mm   | in          | mm   | in             | mm  |      |              |               |
| BPF-A414  | 0.185  | 4.7 | 0.031 - 0.118   | 0.8 - 3.0  | 0.453  | 11.5 | 0.482       | 12.2 | 0.070          | 1.8 | 1    | UL94 V-0     | 1000          |
| BPF-F4410 | 0.197  | 5.0 | 0.059 - 0.295   | 1.5 - 7.5  | 0.508  | 12.9 | 0.578       | 14.7 | 0.091          | 2.3 | 2    | UL94 V-2     | 1000          |
| BPF-F3T31 | 0.197  | 5.0 | 0.079 - 0.394   | 2.0 - 10.0 | 0.618  | 15.7 | 0.832       | 21.1 | 0.089          | 2.3 | 4    | UL94 V-0     | 1000          |
| BPF-F2495 | 0.276  | 7.0 | 0.125 - 0.236   | 3.2 - 6.0  | 0.591  | 15.0 | 0.571       | 14.5 | 0.078          | 2.0 | 3    | UL94 V-0     | 1000          |
| BPF-F1G12 | 0.276  | 7.0 | 0.079 - 0.591   | 2.0 - 15.0 | 0.701  | 17.8 | 0.972       | 24.7 | 0.102          | 2.6 | 5    | UL94 V-0     | 1000          |

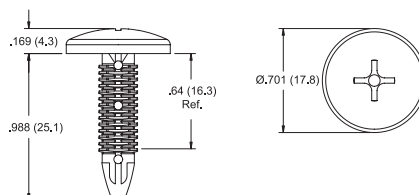
## BPFR Series Removable Fir-Tree Rivet

Specifications:

- Material: UL94 V-0 Nylon 6/6
- Color: Black

Features:

- Removable from threaded holes using a phillips head screwdriver



| Item No. | Threaded Hole | Non-Threaded Hole |     | Minimum Panel Thickness |     | Bulk Pack Qty |
|----------|---------------|-------------------|-----|-------------------------|-----|---------------|
|          |               | in                | mm  | in                      | mm  |               |
| BPFR-1   | 5/16 (M8)     | 0.276             | 7.0 | 0.236                   | 6.0 | 1000          |







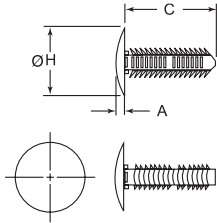
FIR TREE RIVETS



XT/RBF/27MXT/27XT Series (continued)  
Fir Tree Rivets

- Specifications:
- Material: UL94 V-2 Nylon 6/6
  - Color: Black

- Features:
- Ribbed design ensures fast and easy installation while securely holding onto various materials like wood, metal, foam, rubber and plastic
  - When pushed into a hole the flexible ribs deflect then spring back to lock securely in place

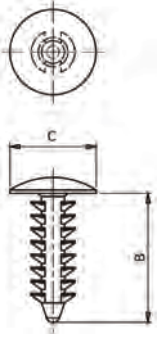


| Item No.      | Ø Hole |     | Panel Thickness |            | Ø H   |      | C     |      | A     |     | Bulk Pack Qty |
|---------------|--------|-----|-----------------|------------|-------|------|-------|------|-------|-----|---------------|
|               | in     | mm  | in              | mm         | in    | mm   | in    | mm   | in    | mm  |               |
| RBF-7.1-19-8  | 0.281  | 7.1 | 0.270 - 0.560   | 6.9 - 14.2 | 0.315 | 8.0  | 0.748 | 19.0 | 0.039 | 1.0 | 1000          |
| RBF-7.1-19-12 | 0.281  | 7.1 | 0.270 - 0.560   | 6.9 - 14.2 | 0.472 | 12.0 | 0.748 | 19.0 | 0.059 | 1.5 | 1000          |
| RBF-7.1-19-16 | 0.281  | 7.1 | 0.270 - 0.560   | 6.9 - 14.2 | 0.630 | 16.0 | 0.748 | 19.0 | 0.079 | 2.0 | 1000          |
| 27XT2810625   | 0.281  | 7.1 | 0.062 - 0.625   | 1.6 - 15.9 | 0.787 | 20.0 | 0.767 | 19.5 | 0.100 | 2.5 | 1000          |
| • 27XT2810750 | 0.281  | 7.1 | 0.062 - 0.750   | 1.6 - 19.1 | 0.787 | 20.0 | 0.894 | 22.7 | 0.100 | 2.5 | 1000          |
| • 27XT2810875 | 0.281  | 7.1 | 0.062 - 0.875   | 1.6 - 22.2 | 0.787 | 20.0 | 1.021 | 25.9 | 0.100 | 2.5 | 1000          |
| • 27XT2811000 | 0.281  | 7.1 | 0.062 - 1.000   | 1.6 - 25.4 | 0.787 | 20.0 | 1.147 | 29.1 | 0.100 | 2.5 | 1000          |
| • 27XT2811250 | 0.281  | 7.1 | 0.062 - 1.250   | 1.6 - 31.8 | 0.787 | 20.0 | 1.401 | 35.6 | 0.100 | 2.5 | 1000          |
| • 27XT2811500 | 0.281  | 7.1 | 0.062 - 1.500   | 1.6 - 38.1 | 0.787 | 20.0 | 1.651 | 41.9 | 0.100 | 2.5 | 1000          |
| • 27XT2811750 | 0.281  | 7.1 | 0.062 - 1.750   | 1.6 - 44.5 | 0.787 | 20.0 | 1.901 | 48.3 | 0.100 | 2.5 | 1000          |
| XT2812000A    | 0.281  | 7.1 | 0.062 - 2.000   | 1.6 - 50.8 | 0.787 | 20.0 | 2.153 | 54.7 | 0.100 | 2.5 | 1000          |
| • 27XT3120250 | 0.312  | 7.9 | 0.062 - 0.250   | 1.6 - 6.35 | 0.874 | 22.2 | 0.410 | 10.4 | 0.100 | 2.5 | 1000          |
| • 27XT3120375 | 0.312  | 7.9 | 0.062 - 0.375   | 1.6 - 9.53 | 0.874 | 22.2 | 0.529 | 13.4 | 0.100 | 2.5 | 1000          |
| • 27XT3120500 | 0.312  | 7.9 | 0.062 - 0.500   | 1.6 - 12.7 | 0.874 | 22.2 | 0.655 | 16.6 | 0.100 | 2.5 | 1000          |
| • 27XT3120625 | 0.312  | 7.9 | 0.062 - 0.625   | 1.6 - 15.9 | 0.874 | 22.2 | 0.783 | 19.9 | 0.100 | 2.5 | 1000          |
| • 27XT3120750 | 0.312  | 7.9 | 0.062 - 0.750   | 1.6 - 19.1 | 0.874 | 22.2 | 0.894 | 22.7 | 0.100 | 2.5 | 1000          |
| • 27XT3120875 | 0.312  | 7.9 | 0.062 - 0.875   | 1.6 - 22.2 | 0.874 | 22.2 | 1.036 | 26.3 | 0.100 | 2.5 | 1000          |
| • 27XT3121000 | 0.312  | 7.9 | 0.062 - 1.000   | 1.6 - 25.4 | 0.874 | 22.2 | 1.163 | 29.5 | 0.100 | 2.5 | 1000          |
| • 27XT3121250 | 0.312  | 7.9 | 0.062 - 1.250   | 1.6 - 31.8 | 0.874 | 22.2 | 1.416 | 36.0 | 0.100 | 2.5 | 1000          |
| • 27XT3121500 | 0.312  | 7.9 | 0.062 - 1.500   | 1.6 - 38.1 | 0.874 | 22.2 | 1.669 | 42.4 | 0.100 | 2.5 | 1000          |
| • 27XT3121750 | 0.312  | 7.9 | 0.062 - 1.750   | 1.6 - 44.5 | 0.874 | 22.2 | 1.930 | 49.0 | 0.100 | 2.5 | 1000          |
| • 27XT3150500 | 0.315  | 8.0 | 0.062 - 0.500   | 1.6 - 12.7 | 0.886 | 22.5 | 0.669 | 17.0 | 0.100 | 2.5 | 1000          |
| • 27XT3750250 | 0.375  | 9.5 | 0.062 - 0.250   | 1.6 - 6.35 | 1.000 | 25.4 | 0.445 | 11.3 | 0.100 | 2.5 | 1000          |
| • 27XT3750375 | 0.375  | 9.5 | 0.062 - 0.375   | 1.6 - 9.50 | 1.000 | 25.4 | 0.570 | 14.5 | 0.100 | 2.5 | 1000          |
| • 27XT3750500 | 0.375  | 9.5 | 0.062 - 0.500   | 1.6 - 9.53 | 1.000 | 25.4 | 0.689 | 17.5 | 0.100 | 2.5 | 1000          |
| XT3750625A    | 0.375  | 9.5 | 0.062 - 0.625   | 1.6 - 12.7 | 1.000 | 25.4 | 0.816 | 20.7 | 0.100 | 2.5 | 1000          |
| XT3750750A    | 0.375  | 9.5 | 0.062 - 0.750   | 1.6 - 19.1 | 1.000 | 25.4 | 0.943 | 24.0 | 0.100 | 2.5 | 1000          |
| • 27XT3750875 | 0.375  | 9.5 | 0.062 - 0.875   | 1.6 - 22.2 | 1.000 | 25.4 | 1.070 | 27.2 | 0.100 | 2.5 | 1000          |
| • 27XT3751000 | 0.375  | 9.5 | 0.062 - 1.000   | 1.6 - 25.4 | 1.000 | 25.4 | 1.196 | 30.4 | 0.100 | 2.5 | 1000          |
| XT3751250A    | 0.375  | 9.5 | 0.062 - 1.250   | 1.6 - 31.8 | 1.000 | 25.4 | 1.451 | 36.9 | 0.100 | 2.5 | 1000          |
| XT3751500A    | 0.375  | 9.5 | 0.062 - 1.500   | 1.6 - 38.1 | 1.000 | 25.4 | 1.705 | 43.3 | 0.100 | 2.5 | 1000          |
| XT3751750A    | 0.375  | 9.5 | 0.062 - 1.750   | 1.6 - 44.5 | 1.000 | 25.4 | 1.959 | 49.8 | 0.100 | 2.5 | 1000          |
| XT3752000A    | 0.375  | 9.5 | 0.062 - 2.000   | 1.6 - 50.8 | 1.000 | 25.4 | 2.213 | 56.2 | 0.100 | 2.5 | 1000          |

497 Series  
Fir Tree Rivets - Clear

- Specifications:
- Material: Polypropylene
  - Color: Clear

- Features:
- Ideal for threaded, non-threaded, drilled or punched holes
  - Designed to be non-removable
  - Good for Point of Purchase displays

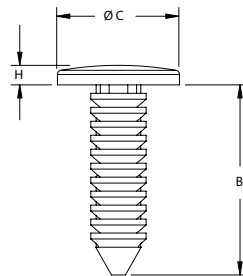


| Item No. | Ø Hole |     | Panel Thickness |             | B     |      | Ø C   |      | Head Height |     | Bulk Pack Qty |
|----------|--------|-----|-----------------|-------------|-------|------|-------|------|-------------|-----|---------------|
|          | in     | mm  | in              | mm          | in    | mm   | in    | mm   | in          | mm  |               |
| 497394   | 0.118  | 3.0 | 0.157 - 0.650   | 4.0 - 16.5  | 0.728 | 18.5 | 0.217 | 5.5  | 0.039       | 1.0 | 1000          |
| 495222   | 0.189  | 4.8 | 0.028 - 0.512   | 0.7 - 13.0  | 0.681 | 17.3 | 0.433 | 11.0 | 0.067       | 1.7 | 1000          |
| 495221   | 0.236  | 6.0 | 0.098 - 0.472   | 2.5 - 12.0  | 0.803 | 20.4 | 0.701 | 17.8 | 0.098       | 2.5 | 1000          |
| 497395   | 0.236  | 6.0 | 0.079 - 0.315   | 2.0 - 8.0   | 0.500 | 12.7 | 0.610 | 15.5 | 0.039       | 1.0 | 1000          |
| 497396   | 0.236  | 6.0 | 0.098 - 0.315   | 2.5 - 8.0   | 0.591 | 15.0 | 0.630 | 16.0 | 0.079       | 2.0 | 1000          |
| 495223   | 0.236  | 6.0 | 0.091 - 0.350   | 2.3 - 8.9   | 0.610 | 15.5 | 0.701 | 17.8 | 0.094       | 2.4 | 1000          |
| 495224   | 0.252  | 6.4 | 0.421 - 1.134   | 10.7 - 28.8 | 1.381 | 35.1 | 0.701 | 17.8 | 0.098       | 2.5 | 1000          |
| 495225   | 0.252  | 6.4 | 0.106 - 0.287   | 2.7 - 7.3   | 0.626 | 15.9 | 0.752 | 19.1 | 0.031       | 0.8 | 1000          |
| 495226   | 0.276  | 7.0 | 0.028 - 0.787   | 0.7 - 20.0  | 1.075 | 27.3 | 0.709 | 18.0 | 0.079       | 2.0 | 1000          |
| 495227   | 0.276  | 7.0 | 0.079 - 0.984   | 2.0 - 25.0  | 1.370 | 34.8 | 1.181 | 30.0 | 0.087       | 2.2 | 1000          |
| 497397   | 0.283  | 7.2 | 0.059 - 0.551   | 1.5 - 14.0  | 0.835 | 21.2 | 0.748 | 19.0 | 0.094       | 2.4 | 1000          |
| 497398   | 0.295  | 7.5 | 0.106 - 0.669   | 2.7 - 17.0  | 0.827 | 21.0 | 0.748 | 19.0 | 0.079       | 2.0 | 1000          |



# FIR TREE RIVETS

## 27RT Series Fir Tree Rivets



### Specifications:

- Material: Nylon 6/6
- \* Material: Polypropylene
- Color: See Table

### Features:

- Ideal for threaded, non-threaded, drilled or punched hole
- Designed to be non-removable

| Item No.         |              | Ø Hole |       | Panel Thickness |             | B     |      | Ø C   |      | H     |     | Bulk Pack Qty |
|------------------|--------------|--------|-------|-----------------|-------------|-------|------|-------|------|-------|-----|---------------|
| Black            | Natural      | in     | mm    | in              | mm          | in    | mm   | in    | mm   | in    | mm  |               |
| 468809           | 468833       | 0.118  | 3.0   | 0.157 - 0.650   | 4.0 - 16.5  | 0.728 | 18.5 | 0.217 | 5.5  | 0.039 | 1.0 | 1000          |
| 468811           | 468835       | 0.138  | 3.5   | 0.028 - 0.197   | 0.7 - 5.0   | 0.374 | 9.5  | 0.358 | 9.1  | 0.059 | 1.5 | 1000          |
| 167102069902     | —            | 0.138  | 3.5   | 0.028 - 0.197   | 0.7 - 5.0   | 0.374 | 9.5  | 0.358 | 9.1  | —     | —   | 100           |
| * 27RT1560432    | —            | 0.156  | 4.0   | 0.030 - 0.234   | 0.8 - 6.0   | 0.432 | 11.0 | 0.360 | 9.1  | 0.060 | 1.5 | 1000          |
| 167102569902     | 167102500002 | 0.157  | 4.0   | 0.028 - 0.236   | 0.7 - 6.0   | 0.433 | 11.0 | 0.358 | 9.1  | —     | —   | 100           |
| * 27RT160400     | —            | 0.160  | 4.1   | 0.040 - 0.250   | 1.0 - 6.4   | 0.426 | 10.8 | 0.359 | 9.1  | 0.060 | 1.5 | 1000          |
| * 27RT187310     | —            | 0.187  | 4.8   | 0.030 - 0.150   | 0.8 - 3.8   | 0.300 | 7.6  | 0.445 | 11.3 | 0.068 | 1.7 | 1000          |
| * 27RT187675     | —            | 0.187  | 4.8   | 0.030 - 0.512   | 0.8 - 13.0  | 0.680 | 17.3 | 0.437 | 11.1 | 0.070 | 1.8 | 1000          |
| * 27RT187680     | —            | 0.187  | 4.8   | 0.030 - 0.512   | 0.8 - 13.0  | 0.680 | 17.3 | 0.492 | 12.5 | 0.067 | 1.7 | 1000          |
| * 27RT187640     | —            | 0.187  | 4.8   | 0.125 - 0.365   | 3.2 - 9.3   | 0.640 | 16.3 | 0.437 | 11.1 | 0.070 | 1.8 | 1000          |
| * 27RT187500     | —            | 0.188  | 4.8   | 0.025 - 0.365   | 0.6 - 9.3   | 0.500 | 12.7 | 0.375 | 9.5  | 0.070 | 1.8 | 1000          |
| * 27RT187550     | —            | 0.188  | 4.8   | 0.030 - 0.330   | 0.8 - 8.4   | 0.560 | 14.2 | 0.435 | 11.0 | 0.068 | 1.7 | 1000          |
| * 27RT187700PPB* | —            | 0.188  | 4.8   | 0.125 - 0.450   | 3.2 - 11.4  | 0.700 | 17.8 | 0.300 | 7.6  | 0.065 | 1.7 | 1000          |
| 460436           | —            | 0.189  | 4.8   | 0.024 - 0.363   | 0.6 - 9.2   | 0.500 | 12.7 | 0.375 | 9.5  | 0.071 | 1.8 | 1000          |
| 167103569902     | 167103500002 | 0.189  | 4.8   | 0.028 - 0.315   | 0.7 - 8.0   | 0.480 | 12.2 | 0.433 | 11.0 | —     | —   | 100           |
| 167104069902     | 167104000002 | 0.189  | 4.8   | 0.028 - 0.315   | 0.7 - 8.0   | 0.480 | 12.2 | 0.748 | 19.0 | —     | —   | 100           |
| 167103069902     | 167103000002 | 0.189  | 4.8   | 0.028 - 0.512   | 0.7 - 13.0  | 0.681 | 17.3 | 0.433 | 11.0 | —     | —   | 100           |
| 468813           | 468837       | 0.189  | 4.8   | 0.028 - 0.512   | 0.7 - 13.0  | 0.681 | 17.3 | 0.433 | 11.0 | 0.067 | 1.7 | 1000          |
| 460437           | —            | 0.189  | 4.8   | 0.031 - 0.331   | 0.8 - 8.4   | 0.563 | 14.3 | 0.437 | 11.1 | 0.067 | 1.7 | 1000          |
| 463609           | —            | 0.193  | 4.9   | 0.094 - 0.291   | 2.4 - 7.4   | 0.492 | 12.5 | 0.441 | 11.2 | 0.043 | 1.1 | 100           |
| 468814           | 468838       | 0.197  | 5.0   | 0.047 - 0.236   | 1.2 - 6.0   | 0.433 | 11.0 | 0.630 | 16.0 | 0.079 | 2.0 | 1000          |
| 468815           | 468839       | 0.197  | 5.0   | 0.067 - 0.315   | 1.7 - 8.0   | 0.500 | 12.7 | 0.433 | 11.0 | 0.039 | 1.0 | 1000          |
| 167105069902     | 167105000002 | 0.217  | 5.5   | 0.059 - 0.559   | 1.5 - 14.2  | 0.776 | 19.7 | 0.512 | 13.0 | —     | —   | 100           |
| 167104569902     | 167104500002 | 0.217  | 5.5   | 0.059 - 0.559   | 1.5 - 14.2  | 0.776 | 19.7 | 0.650 | 16.5 | —     | —   | 100           |
| * 27RT218774     | —            | 0.218  | 5.5   | 0.060 - 0.560   | 1.5 - 14.2  | 0.774 | 19.7 | 0.650 | 16.5 | 0.090 | 2.3 | 1000          |
| 468816           | 468840       | 0.236  | 6.0   | 0.079 - 0.315   | 2.0 - 8.0   | 0.500 | 12.7 | 0.610 | 15.5 | 0.039 | 1.0 | 1000          |
| 167106069902     | 167106000002 | 0.236  | 6.0   | 0.091 - 0.744   | 2.3 - 18.9  | 0.610 | 15.5 | 0.701 | 17.8 | —     | —   | 100           |
| 468820           | 468844       | 0.236  | 6.0   | 0.091 - 0.350   | 2.3 - 8.9   | 0.610 | 15.5 | 0.701 | 17.8 | 0.094 | 2.4 | 1000          |
| 468817           | 468841       | 0.236  | 6.0   | 0.098 - 0.315   | 2.5 - 8.0   | 0.591 | 15.0 | 0.630 | 16.0 | 0.079 | 2.0 | 1000          |
| 167107069902     | 167107000002 | 0.236  | 6.0   | 0.098 - 0.472   | 2.5 - 12.0  | 0.803 | 20.4 | 0.701 | 17.8 | —     | —   | 100           |
| 468821           | 468845       | 0.236  | 6.0   | 0.098 - 0.472   | 2.5 - 12.0  | 0.803 | 20.4 | 0.701 | 17.8 | 0.098 | 2.5 | 1000          |
| 167107269902     | 167107200002 | 0.236  | 6.0   | 0.098 - 0.799   | 2.5 - 20.3  | 1.059 | 26.9 | 0.701 | 17.8 | —     | —   | 100           |
| 167106569902     | 167106500002 | 0.236  | 6.0   | 0.126 - 0.406   | 3.2 - 10.3  | 0.626 | 15.9 | 0.500 | 12.7 | —     | —   | 100           |
| 468819           | 468843       | 0.236  | 6.0   | 0.138 - 0.748   | 3.5 - 19.0  | 0.945 | 24.0 | 0.500 | 12.7 | 0.059 | 1.5 | 1000          |
| * 27RT250425     | —            | 0.250  | 6.4   | 0.020 - 0.218   | 0.50 - 5.53 | 0.425 | 10.8 | 0.720 | 18.3 | 0.098 | 2.5 | 1000          |
| * 27RT250425A    | —            | 0.250  | 6.4   | 0.020 - 0.218   | 0.50 - 5.53 | 0.425 | 10.8 | 0.433 | 11   | 0.039 | 1.0 | 1000          |
| * 27RT250900     | —            | 0.250  | 6.4   | 0.062 - 0.480   | 1.6 - 12.2  | 0.787 | 20.0 | 0.492 | 12.5 | 0.067 | 1.7 | 1000          |
| * 27RT250440     | —            | 0.250  | 6.4   | 0.105 - 0.300   | 2.7 - 7.6   | 0.470 | 11.9 | 0.700 | 17.8 | 0.100 | 2.5 | 1000          |
| 468824           | 468848       | 0.252  | 6.4   | 0.106 - 0.287   | 2.7 - 7.3   | 0.626 | 15.9 | 0.752 | 19.1 | 0.031 | 0.8 | 1000          |
| 460439           | —            | 0.250  | 6.4   | 0.106 - 0.299   | 2.7 - 7.6   | 0.437 | 11.1 | 0.701 | 17.8 | 0.098 | 2.5 | 1000          |
| * 27RT250625     | —            | 0.250  | 6.4   | 0.120 - 0.140   | 3.0 - 3.6   | 0.628 | 16.0 | 0.503 | 12.8 | 0.050 | 1.3 | 1000          |
| 460440           | —            | 0.250  | 6.4   | 0.150 - 0.531   | 3.8 - 13.5  | 0.744 | 18.9 | 0.701 | 17.8 | 0.106 | 2.7 | 1000          |
| * 27RT250800     | —            | 0.250  | 6.4   | 0.150 - 0.535   | 3.8 - 13.6  | 0.780 | 19.8 | 0.700 | 17.8 | 0.100 | 2.5 | 1000          |
| * 27RT250810     | —            | 0.250  | 6.4   | 0.150 - 0.535   | 3.8 - 13.6  | 0.783 | 19.9 | 0.495 | 12.6 | 0.074 | 1.9 | 1000          |
| 167107569902     | 167107500002 | 0.276  | 7.0   | 0.059 - 0.551   | 1.5 - 14.0  | 0.835 | 21.2 | 0.748 | 19.0 | —     | —   | 100           |
| 167108069902     | 167108000002 | 0.276  | 7.0   | 0.059 - 1.000   | 1.5 - 25.4  | 1.201 | 30.5 | 0.748 | 19.0 | —     | —   | 100           |
| 468826           | 468850       | 0.276  | 7.0   | 0.079 - 0.984   | 2.0 - 25.0  | 1.370 | 34.8 | 1.181 | 30.0 | 0.087 | 2.2 | 1000          |
| 468828           | 468852       | 0.276  | 7.0   | 0.276 - 0.283   | 7.0 - 7.2   | 0.744 | 18.9 | 0.626 | 15.9 | 0.039 | 1.0 | 1000          |
| * 27RT2811220    | —            | 0.281  | 7.13  | 0.078 - 1.000   | 2.0 - 25.4  | 1.220 | 31.0 | 0.490 | 12.4 | 0.093 | 2.4 | 1000          |
| * 27RT2811000    | —            | 0.281  | 7.13  | 0.084 - 0.500   | 2.1 - 12.7  | 0.890 | 22.6 | 0.625 | 15.9 | 0.110 | 2.8 | 1000          |
| * 27RT2811000    | —            | 0.281  | 7.13  | 0.093 - 0.500   | 2.4 - 12.7  | 0.890 | 22.6 | 0.625 | 15.9 | 0.110 | 2.8 | 1000          |
| * 27RT281975     | —            | 0.281  | 7.13  | 0.170 - 0.770   | 4.3 - 19.6  | 0.975 | 24.8 | 0.695 | 17.7 | 0.090 | 2.3 | 1000          |
| 495230           | 497397       | 0.283  | 7.2   | 0.059 - 0.551   | 1.5 - 14.0  | 0.835 | 21.2 | 0.748 | 19.0 | 0.094 | 2.4 | 1000          |
| 495231           | 495233       | 0.283  | 7.2   | 0.059 - 1.000   | 1.5 - 25.4  | 1.201 | 30.5 | 0.748 | 19.0 | 0.079 | 2.0 | 1000          |
| 468799           | —            | 0.295  | 7.5   | 0.106 - 0.669   | 2.7 - 17.0  | 0.827 | 21.0 | 0.748 | 19.0 | 0.079 | 2.0 | 1000          |
| 460441           | —            | 0.307  | 7.8   | 0.094 - 0.500   | 2.4 - 12.7  | 0.890 | 22.6 | 0.626 | 15.9 | 0.110 | 2.8 | 1000          |
| * 27RT3121516    | —            | 0.312  | 7.92  | 0.084 - 10.125  | 2.1 - 28.6  | 1.507 | 38.3 | 0.619 | 15.7 | 0.114 | 2.9 | 1000          |
| 167013069902     | 167013000002 | 0.315  | 8.0   | 0.130 - 0.500   | 3.3 - 12.7  | 0.661 | 16.8 | 0.500 | 12.7 | —     | —   | 100           |
| 468829           | 468853       | 0.315  | 8.0   | 0.130 - 0.500   | 3.3 - 12.7  | 0.661 | 16.8 | 0.500 | 12.7 | 0.059 | 1.5 | 1000          |
| 167108569902     | —            | 0.343  | 8.7   | 0.055 - 0.512   | 1.4 - 13.0  | 0.752 | 19.1 | 0.630 | 16.0 | —     | —   | 100           |
| 468830           | —            | 0.343  | 8.7   | 0.055 - 0.512   | 1.4 - 13.0  | 0.752 | 19.1 | 0.630 | 16.0 | 0.091 | 2.3 | 1000          |
| 167109569902     | 167109500002 | 0.394  | 10.0  | 0.059 - 0.787   | 1.5 - 20.0  | 1.110 | 28.2 | 0.858 | 21.8 | —     | —   | 100           |
| 167109069902     | 167109000002 | 0.394  | 10.0  | 0.114 - 0.567   | 2.9 - 14.4  | 0.819 | 20.8 | 1.000 | 25.4 | —     | —   | 100           |
| 468831           | 468855       | 0.394  | 10.0  | 0.059 - 0.787   | 1.5 - 20.0  | 1.110 | 28.2 | 0.858 | 21.8 | 0.138 | 3.5 | 1000          |
| * 27RT406820     | —            | 0.406  | 10.31 | 0.115 - 0.565   | 2.9 - 14.4  | 0.820 | 20.8 | 1.000 | 25.4 | 0.080 | 2.0 | 1000          |

FIR TREE RIVETS



**BHF Series**  
Fir Tree Clip Fastener

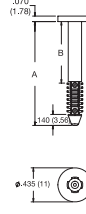


Fig. 1

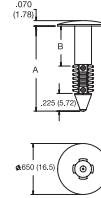


Fig. 2

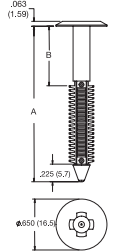


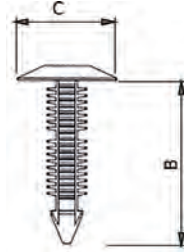
Fig. 3

Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Black

| Item No. | Fig. | Ø Hole |     | Panel Thickness |             | B    |      | A     |      | Bulk Pack Qty |
|----------|------|--------|-----|-----------------|-------------|------|------|-------|------|---------------|
|          |      | in     | mm  | in              | mm          | in   | mm   | in    | mm   |               |
| BHF-1    | 1    | 0.187  | 4.8 | 0.035 - 0.385   | 0.9 - 9.8   | 0.02 | .5   | 0.560 | 14.2 | 1000          |
| BHF-2    | 1    | 0.187  | 4.8 | 0.125 - 0.475   | 3.2 - 12.1  | 0.11 | 2.8  | 0.650 | 16.5 | 1000          |
| BHF-3    | 1    | 0.187  | 4.8 | 0.425 - 0.775   | 10.8 - 19.7 | 0.41 | 10.4 | 0.950 | 24.1 | 1000          |
| BHF-4    | 1    | 0.187  | 4.8 | 0.800 - 1.150   | 20.3 - 29.2 | 0.79 | 19.9 | 1.330 | 33.7 | 1000          |
| BHF-5    | 2    | 0.250  | 6.4 | 0.035 - 0.335   | 0.9 - 8.5   | 0.02 | .5   | 0.590 | 15.1 | 1000          |
| BHF-6    | 2    | 0.250  | 6.4 | 0.095 - 0.395   | 2.4 - 10.0  | 0.08 | 2.0  | 0.650 | 16.6 | 1000          |
| BHF-7    | 2    | 0.250  | 6.4 | 0.325 - 0.625   | 8.3 - 15.9  | 0.31 | 7.9  | 0.880 | 22.5 | 1000          |
| BHF-8    | 2    | 0.250  | 6.4 | 0.525 - 0.825   | 13.3 - 21.0 | 0.51 | 12.9 | 1.080 | 27.6 | 1000          |
| BHF-9    | 3    | 0.281  | 7.1 | 0.075 - 0.475   | 1.9 - 12.1  | 0.06 | 1.5  | 0.740 | 18.7 | 1000          |
| BHF-10   | 3    | 0.281  | 7.1 | 0.475 - 0.875   | 12.1 - 22.2 | 0.46 | 11.7 | 1.140 | 28.8 | 1000          |
| BHF-11   | 3    | 0.281  | 7.1 | 0.075 - 1.025   | 1.9 - 26.0  | 0.06 | 1.5  | 1.280 | 32.6 | 1000          |
| BHF-12   | 3    | 0.281  | 7.1 | 0.275 - 1.225   | 7.0 - 31.1  | 0.26 | 6.6  | 1.480 | 37.7 | 1000          |
| BHF-13   | 3    | 0.281  | 7.1 | 0.575 - 1.525   | 14.6 - 38.7 | 0.56 | 14.2 | 1.780 | 45.3 | 1000          |
| BHF-14   | 3    | 0.281  | 7.1 | 0.775 - 1.725   | 19.7 - 43.8 | 0.76 | 19.3 | 2.000 | 50.8 | 1000          |

**167 Series**  
Fir Tree Fasteners



Specifications:

- Material: Nylon 6/6
- Color: See Table

Features:

- Ideal for threaded, non-threaded, drilled or punched holes

| Item No.     | Ø Hole       | Panel Thickness | B   |               | Ø C         |       | Bulk Pack Qty |       |      |     |
|--------------|--------------|-----------------|-----|---------------|-------------|-------|---------------|-------|------|-----|
|              |              |                 | in  | mm            | in          | mm    |               |       |      |     |
| Black        | Natural      | in              | mm  | in            | mm          | in    | mm            |       |      |     |
| 167201069902 | 167201000002 | 0.106           | 2.7 | 0.059 - 0.157 | 1.5 - 4.0   | 0.276 | 7.0           | 0.236 | 6.0  | 100 |
| 167201569902 | 167201500002 | 0.106           | 2.7 | 0.059 - 0.315 | 1.5 - 8.0   | 0.433 | 11.0          | 0.236 | 6.0  | 100 |
| 167202069902 | 167202000002 | 0.106           | 2.7 | 0.059 - 0.591 | 1.5 - 15.0  | 0.709 | 18.0          | 0.236 | 6.0  | 100 |
| 167002069902 | 167002000002 | 0.118           | 3.0 | 0.138 - 0.248 | 3.5 - 6.3   | 0.307 | 7.8           | 0.236 | 6.0  | 100 |
| 167002569902 | 167002500002 | 0.118           | 3.0 | 0.157 - 0.472 | 4.0 - 12.0  | 0.571 | 14.5          | 0.217 | 5.5  | 100 |
| 167002769902 | 167002700002 | 0.118           | 3.0 | 0.157 - 0.650 | 4.0 - 16.5  | 0.728 | 18.5          | 0.213 | 5.4  | 100 |
| 167203069902 | 167203000002 | 0.130           | 3.3 | 0.059 - 0.177 | 1.5 - 4.5   | 0.315 | 8.0           | 0.394 | 10.0 | 100 |
| 167003069902 | 167003000002 | 0.157           | 4.0 | 0.035 - 0.315 | 0.9 - 8.0   | 0.531 | 13.5          | 0.374 | 9.5  | 100 |
| 167204069902 | 167204000002 | 0.161           | 4.1 | 0.039 - 0.098 | 1.0 - 2.5   | 0.236 | 6.0           | 0.472 | 12.0 | 100 |
| 167204569902 | 167204500002 | 0.161           | 4.1 | 0.059 - 0.217 | 1.5 - 5.5   | 0.394 | 10.0          | 0.472 | 12.0 | 100 |
| 167205069902 | 167205000002 | 0.161           | 4.1 | 0.079 - 0.394 | 2.0 - 10.0  | 0.591 | 15.0          | 0.472 | 12.0 | 100 |
| 167003569902 | 167003500002 | 0.187           | 4.8 | 0.035 - 0.209 | 0.9 - 5.3   | 0.437 | 11.1          | 0.433 | 11.0 | 100 |
| 167004069902 | 167004000002 | 0.189           | 4.8 | 0.098 - 0.598 | 2.5 - 15.2  | 0.701 | 17.8          | 0.469 | 11.9 | 100 |
| 167004569902 | 167004500002 | 0.189           | 4.8 | 0.079 - 0.394 | 2.0 - 10.0  | 0.642 | 16.3          | 0.433 | 11.0 | 100 |
| 167005069902 | 167005000002 | 0.197           | 5.0 | 0.047 - 0.236 | 1.2 - 6.0   | 0.433 | 11.0          | 0.630 | 16.0 | 100 |
| 468815       | 167005500002 | 0.197           | 5.0 | 0.067 - 0.315 | 1.7 - 8.0   | 0.500 | 12.7          | 0.433 | 11.0 | 100 |
| —            | 167006000002 | 0.197           | 5.0 | 0.059 - 0.480 | 1.5 - 12.2  | 0.701 | 17.8          | 0.748 | 19.0 | 50  |
| 167206069902 | 167206000002 | 0.220           | 5.6 | 0.079 - 0.276 | 2.0 - 7.0   | 0.472 | 12.0          | 0.512 | 13.0 | 100 |
| 167206569902 | 167206500002 | 0.220           | 5.6 | 0.059 - 0.591 | 1.5 - 15.0  | 0.787 | 20.0          | 0.512 | 13.0 | 100 |
| 167207069902 | 167207000002 | 0.220           | 5.6 | 0.039 - 1.060 | 1.0 - 27.0  | 1.260 | 32.0          | 0.512 | 13.0 | 100 |
| 167208069902 | 167208000002 | 0.232           | 5.9 | 0.079 - 0.217 | 2.0 - 5.5   | 0.433 | 11.0          | 0.669 | 17.0 | 100 |
| 167208569902 | 167208500002 | 0.232           | 5.9 | 0.039 - 0.394 | 1.0 - 10.0  | 0.591 | 15.0          | 0.669 | 17.0 | 100 |
| 167209069902 | 167209000002 | 0.232           | 5.9 | 0.079 - 0.748 | 2.0 - 19.0  | 0.945 | 24.0          | 0.669 | 17.0 | 100 |
| 167006569902 | 167006500002 | 0.236           | 6.0 | 0.079 - 0.315 | 2.0 - 8.0   | 0.500 | 12.7          | 0.610 | 15.5 | 100 |
| 167006769902 | —            | 0.236           | 6.0 | 0.094 - 0.319 | 2.4 - 8.1   | 0.500 | 12.7          | 0.748 | 19.0 | 100 |
| 167007069902 | —            | 0.236           | 6.0 | 0.098 - 0.394 | 2.5 - 10.0  | 0.709 | 18.0          | 0.512 | 13.0 | 100 |
| 167007569902 | 167007500002 | 0.236           | 6.0 | 0.138 - 0.748 | 3.5 - 19.0  | 0.945 | 24.0          | 0.500 | 12.7 | 100 |
| 167008569902 | 167008500002 | 0.236           | 6.0 | 0.067 - 1.025 | 1.7 - 31.8  | 1.441 | 36.6          | 1.000 | 25.4 | 100 |
| 167009069902 | 167009000002 | 0.252           | 6.4 | 0.035 - 1.004 | 0.9 - 26.5  | 1.500 | 38.1          | 0.496 | 12.6 | 100 |
| 167210069902 | 167210000002 | 0.269           | 6.8 | 0.059 - 0.354 | 1.5 - 9.0   | 0.531 | 14.0          | 0.512 | 13.0 | 100 |
| 167010069902 | 167010000002 | 0.276           | 7.0 | 0.051 - 0.441 | 1.3 - 11.2  | 0.705 | 17.9          | 0.937 | 23.8 | 100 |
| 167011069902 | 167011000002 | 0.276           | 7.0 | 0.094 - 0.469 | 2.4 - 11.9  | 0.744 | 18.9          | 0.626 | 15.9 | 100 |
| 167011569902 | 167011500002 | 0.276           | 7.0 | 0.098 - 0.866 | 2.5 - 22.0  | 1.311 | 33.3          | 0.598 | 15.2 | 100 |
| 167012069902 | 167012000002 | 0.276           | 7.0 | 0.051 - 0.902 | 1.3 - 22.9  | 1.260 | 32.0          | 0.760 | 19.3 | 100 |
| 167012569902 | 167012500002 | 0.276           | 7.0 | 0.531 - 0.921 | 13.5 - 23.4 | 1.189 | 30.2          | 1.252 | 31.8 | 100 |



27XTS Series  
Fir Tree Rivet

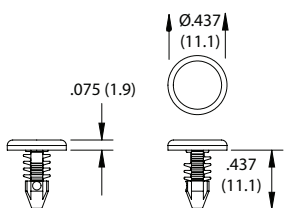


Fig. 1

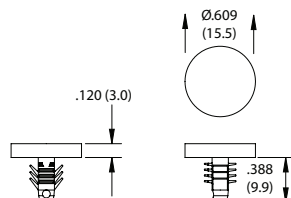


Fig. 2

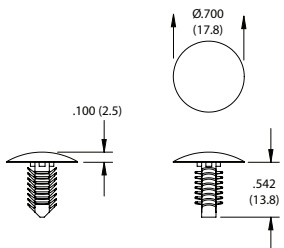


Fig. 3

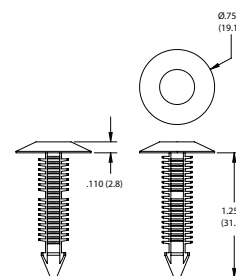


Fig. 4

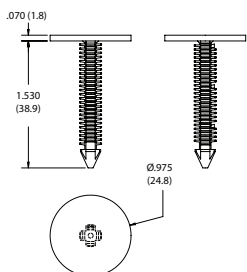


Fig. 5

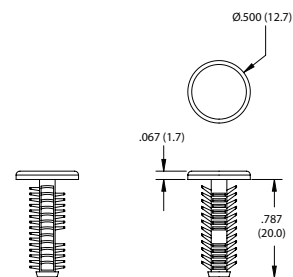


Fig. 6

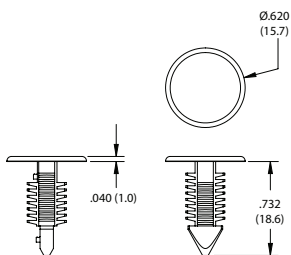


Fig. 7

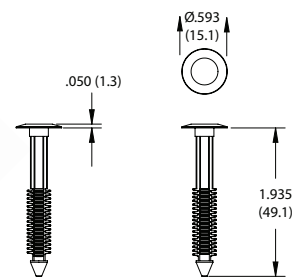


Fig. 8

Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Black

Features:

- Fast & easy installation while securely holding into various materials like wood, metal, foam, rubber and plastic
- Resistant to corrosion, oil, abrasion and most chemicals

| Item No.     | Figure | Hole Size     |           | Panel Thickness |             | Length |       | Bulk Pack Qty |
|--------------|--------|---------------|-----------|-----------------|-------------|--------|-------|---------------|
|              |        | in            | mm        | in              | mm          | in     | mm    |               |
| 27XTS1870442 | 1      | 0.182 - 0.192 | 4.6 - 4.9 | 0.035 - 0.210   | 0.9 - 5.3   | 0.437  | 11.1  | 1000          |
| 27XTS2500394 | 2      | 0.240 - 0.260 | 6.1 - 6.6 | 0.075 - 0.185   | 1.9 - 4.7   | 0.388  | 9.9   | 1000          |
| 27XTS2500561 | 3      | 0.245 - 0.255 | 6.2 - 6.8 | 0.070 - 0.400   | 1.8 - 10.2  | 0.542  | 13.8  | 500           |
| 27XTS2501250 | 4      | 0.250         | 6.4       | 0.070 - 0.875   | 1.3 - 22.2  | 1.250  | 31.8  | 1000          |
| 27XTS2501430 | 5      | 0.250         | 6.4       | 0.078 - 1.000   | 2.0 - 25.4  | 1.530  | 38.9  | 1000          |
| 27XTS2500787 | 6      | 0.250         | 6.4       | 0.125 - 0.687   | 3.2 - 17.5  | 0.787  | 20.0  | 500           |
| 27XTS2800710 | 7      | 0.250         | 6.4       | 0.200 - 0.500   | 5.1 - 12.7  | 0.732  | 18.6  | 1000          |
| 27XTS2812020 | 8      | 0.281         | 7.1       | 0.810 - 1.580   | 20.6 - 40.1 | 1.935  | 49.15 | 1000          |

FIR TREE / RATCHET RIVETS



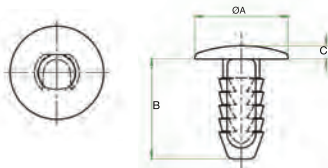
092 Series  
Fir Tree Rivet

Specifications:

- Material: Nylon 6/6
- Color: See Table

Features:

- Easily installed by hand



| Item No.     |              | Ø Hole |     | Panel Thickness |            | Ø A   |      | B     |      | C     |     | Bulk Pack Qty |
|--------------|--------------|--------|-----|-----------------|------------|-------|------|-------|------|-------|-----|---------------|
| Natural      | Black        | in     | mm  | in              | mm         | in    | mm   | in    | mm   | in    | mm  |               |
| 092000200002 | 092000259902 | 0.228  | 5.8 | 0.118 - 0.591   | 3.0 - 15.0 | 0.630 | 16.0 | 0.748 | 19.0 | 0.079 | 2.0 | 500           |
| 092000400002 | 092000459902 | 0.276  | 7.0 | 0.118 - 0.748   | 3.0 - 19.0 | 0.709 | 18.0 | 0.906 | 23.0 | 0.079 | 2.0 | 500           |

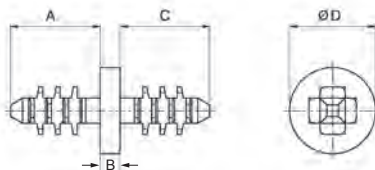
4952 Series  
Double Ended Fir Tree Rivet

Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Black

Features:

- Allows two panels to be connected from the center so that no fastener head is visible



| Item No. | Ø Hole |     | Panel Thickness A Side |           | Panel Thickness C Side |            | A     |      | C     |      | B     |     | Ø D   |      | Bulk Pack Qty |
|----------|--------|-----|------------------------|-----------|------------------------|------------|-------|------|-------|------|-------|-----|-------|------|---------------|
|          | in     | mm  | in                     | mm        | in                     | mm         | in    | mm   | in    | mm   | in    | mm  | in    | mm   |               |
| 495218   | 0.157  | 4.0 | 0.102 - 0.248          | 2.6 - 6.3 | 0.102 - 0.248          | 2.6 - 6.3  | 0.307 | 7.8  | 0.307 | 7.8  | 0.071 | 1.8 | 0.295 | 7.5  | 1000          |
| 495219   | 0.295  | 7.5 | 0.118 - 0.315          | 3.0 - 8.0 | 0.118 - 0.315          | 3.0 - 8.0  | 0.689 | 17.5 | 0.689 | 17.5 | 0.039 | 1.0 | 0.748 | 19.0 | 1000          |
| 495220   | 0.315  | 8.0 | 0.126 - 0.315          | 3.2 - 9.5 | 0.142 - 0.748          | 3.6 - 19.0 | 0.457 | 11.6 | 0.858 | 21.8 | 0.043 | 1.1 | 0.500 | 12.7 | 1000          |

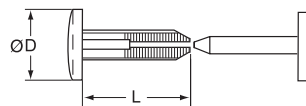
BR/27QB Series  
Ratchet Fasteners

Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: See Table

Features:

- Quick to install
- Interlocking teeth provide strong locking capability



| Item No.      |               | Ø D Ref. | L Ref. | Ø Hole | Panel Thickness | Bulk Pack Qty |
|---------------|---------------|----------|--------|--------|-----------------|---------------|
| Natural       | Black         |          |        |        |                 |               |
| • 27QB375750N | • 27QB375750B | 0.375    | 0.500  | 0.250  | 0.500 - 0.812   | 1000          |
| • 27QB371000N | • 27QB371000B | 0.375    | 0.750  | 0.250  | 0.780 - 1.375   | 1000          |
| • 27QB625750N | • 27QB625750B | 0.625    | 0.500  | 0.250  | 0.500 - 0.812   | 1000          |
| • 27QB621000N | • 27QB621000B | 0.625    | 0.750  | 0.250  | 0.780 - 1.375   | 1000          |
| • 27QB375250N | • 27QB375250B | 0.375    | 0.218  | 0.250  | 0.235 - 0.297   | 1000          |
| • 27QB375375N | • 27QB375375B | 0.375    | 0.343  | 0.250  | 0.346 - 0.500   | 1000          |
| • 27QB625250N | • 27QB625250B | 0.625    | 0.218  | 0.250  | 0.235 - 0.297   | 1000          |
| • 27QB625375N | • 27QB625375B | 0.625    | 0.343  | 0.250  | 0.346 - 0.500   | 1000          |
| BR2-226-01    | BR2-226-01BK  | 0.406    | 0.226  | 0.281  | 0.235 - 0.297   | 1000          |

| Item No.       |                | Ø D Ref. | L Ref. | Ø Hole | Panel Thickness | Bulk Pack Qty |
|----------------|----------------|----------|--------|--------|-----------------|---------------|
| Natural        | Black          |          |        |        |                 |               |
| BR2-344-01     | BR2-344-01BK   | 0.406    | 0.343  | 0.281  | 0.346 - 0.500   | 1000          |
| BR2-488-01     | BR2-488-01BK   | 0.406    | 0.500  | 0.281  | 0.500 - 0.812   | 1000          |
| BR2-768-01     | BR2-768-01BK   | 0.406    | 0.750  | 0.281  | 0.781 - 1.375   | 1000          |
| BR1-226-01     | BR1-226-01BK   | 0.750    | 0.226  | 0.281  | 0.235 - 0.297   | 1000          |
| BR1-344-01     | BR1-344-01BK   | 0.750    | 0.344  | 0.281  | 0.346 - 0.500   | 1000          |
| BR1-488-01     | BR1-488-01BK   | 0.750    | 0.488  | 0.281  | 0.500 - 0.812   | 1000          |
| BR1-768-01     | BR1-768-01BK   | 0.750    | 0.768  | 0.281  | 0.781 - 1.375   | 1000          |
| • 27QB700375AN | • 27QB700375AB | 1.000    | 0.343  | 0.281  | 0.347 - 0.500   | 1000          |
| • 27QB1300600N | • 27QB1300600B | 1.375    | 0.437  | 0.437  | 0.437 - 0.750   | 1000          |

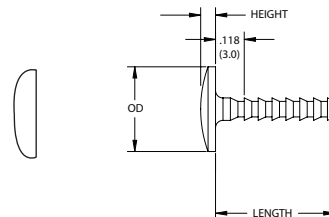
27MRF/27AMR Series  
Adjustable Mini Rivets

Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Two-Piece male/female rivet come in variable lengths to hold multiple thicknesses



Female Mini Rivet

Adjustable Mini Rivet

| Item No.     | Description       | OD    |      | Length |      | Height |     | Hole Ø |     | Panel Thickness |            | Mating Female Rivet | Bulk Pack Qty |
|--------------|-------------------|-------|------|--------|------|--------|-----|--------|-----|-----------------|------------|---------------------|---------------|
|              |                   | in    | mm   | in     | mm   | in     | mm  | in     | mm  | in              | mm         |                     |               |
| 27MRF09      | Female Mini Rivet | 0.375 | 9.5  | —      | —    | 0.075  | 1.9 | —      | —   | —               | —          | —                   | 1000          |
| 27MRF12      | Female Mini Rivet | 0.500 | 12.7 | —      | —    | 0.100  | 2.5 | —      | —   | —               | —          | —                   | 1000          |
| 27AMR0940375 | Male Mini Rivet   | 0.354 | 9.0  | 0.375  | 9.5  | 0.062  | 1.6 | 0.094  | 2.4 | 0.070 - 0.290   | 1.8 - 7.4  | 27MRF09             | 1000          |
| 27AMR0940500 | Male Mini Rivet   | 0.354 | 9.0  | 0.500  | 12.7 | 0.062  | 1.6 | 0.094  | 2.4 | 0.062 - 0.375   | 1.6 - 9.5  | 27MRF09             | 1000          |
| 27AMR1252187 | Male Mini Rivet   | 0.500 | 12.7 | 2.312  | 58.7 | 0.062  | 1.6 | 0.125  | 3.2 | 0.125 - 2.188   | 3.2 - 55.6 | 27MRF12             | 1000          |



# MALE / FEMALE RIVETS

## MBR/27MRM/27MRF Series Mini Barbed Rivets

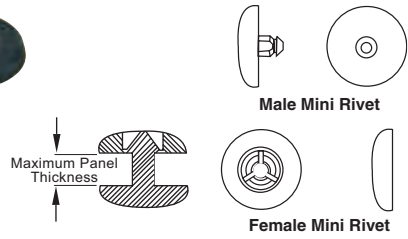
**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: See Table



**Features:**

- Quick to install by simply pressing together
- Male and female parts sold separately
- Ideal for outdoor environments
- Resistant to corrosion, oil, abrasion and most chemicals



| Item No.      | Ø Hole         | Max Panel Thickness |     | Head Ø |      | Head Thickness |      | Mating Part | Bulk Pack Qty |                         |      |
|---------------|----------------|---------------------|-----|--------|------|----------------|------|-------------|---------------|-------------------------|------|
|               |                | in                  | mm  | in     | mm   | in             | mm   |             |               |                         |      |
| <b>Male</b>   |                |                     |     |        |      |                |      |             |               |                         |      |
| • 27MRM060010 | • 27MRM060010B | 0.063               | 1.6 | 0.010  | 0.25 | 0.250          | 6.4  | 0.050       | 1.3           | • 27MRF06 or • 27MRF06B | 1000 |
| • 27MRM060020 | • 27MRM060020B | 0.063               | 1.6 | 0.020  | 0.51 | 0.250          | 6.4  | 0.050       | 1.3           | • 27MRF06 or • 27MRF06B | 1000 |
| • 27MRM060030 | • 27MRM060030B | 0.063               | 1.6 | 0.030  | 0.76 | 0.250          | 6.4  | 0.050       | 1.3           | • 27MRF06 or • 27MRF06B | 1000 |
| • 27MRM060045 | • 27MRM060045B | 0.063               | 1.6 | 0.045  | 1.14 | 0.250          | 6.4  | 0.050       | 1.3           | • 27MRF06 or • 27MRF06B | 1000 |
| • 27MRM060062 | • 27MRM060062B | 0.063               | 1.6 | 0.062  | 1.57 | 0.250          | 6.4  | 0.050       | 1.3           | • 27MRF06 or • 27MRF06B | 1000 |
| • 27MRM060075 | • 27MRM060075B | 0.063               | 1.6 | 0.075  | 1.91 | 0.250          | 6.4  | 0.050       | 1.3           | • 27MRF06 or • 27MRF06B | 1000 |
| <b>Female</b> |                |                     |     |        |      |                |      |             |               |                         |      |
| • 27MRF06     | • 27MRF06B     | —                   | —   | —      | —    | 0.250          | 6.4  | 0.050       | 1.3           | • 27MRM06XXXX           | 1000 |
| <b>Male</b>   |                |                     |     |        |      |                |      |             |               |                         |      |
| • 27MRM090020 | • 27MRM090020B | 0.094               | 2.4 | 0.020  | 0.5  | 0.375          | 9.5  | 0.075       | 1.9           | • 27MRF09 or • 27MRF09B | 1000 |
| • 27MRM090032 | • 27MRM090032B | 0.094               | 2.4 | 0.032  | 0.8  | 0.375          | 9.5  | 0.075       | 1.9           | • 27MRF09 or • 27MRF09B | 1000 |
| • 27MRM090045 | • 27MRM090045B | 0.094               | 2.4 | 0.045  | 1.1  | 0.375          | 9.5  | 0.075       | 1.9           | • 27MRF09 or • 27MRF09B | 1000 |
| • 27MRM090062 | • 27MRM090062B | 0.094               | 2.4 | 0.062  | 1.6  | 0.375          | 9.5  | 0.075       | 1.9           | • 27MRF09 or • 27MRF09B | 1000 |
| • 27MRM090075 | • 27MRM090075B | 0.094               | 2.4 | 0.075  | 1.9  | 0.375          | 9.5  | 0.075       | 1.9           | • 27MRF09 or • 27MRF09B | 1000 |
| • 27MRM090090 | • 27MRM090090B | 0.094               | 2.4 | 0.090  | 2.3  | 0.375          | 9.5  | 0.075       | 1.9           | • 27MRF09 or • 27MRF09B | 1000 |
| • 27MRM090112 | • 27MRM090112B | 0.094               | 2.4 | 0.125  | 3.2  | 0.375          | 9.5  | 0.075       | 1.9           | • 27MRF09 or • 27MRF09B | 1000 |
| • 27MRM090312 | • 27MRM090312B | 0.094               | 2.4 | 0.312  | 7.9  | 0.375          | 9.5  | 0.075       | 1.9           | • 27MRF09 or • 27MRF09B | 1000 |
| <b>Female</b> |                |                     |     |        |      |                |      |             |               |                         |      |
| • 27MRF09     | • 27MRF09B     | —                   | —   | —      | —    | 0.375          | 9.5  | 0.075       | 1.9           | • 27MRM09XXXX           | 1000 |
| <b>Male</b>   |                |                     |     |        |      |                |      |             |               |                         |      |
| • 27MRM125032 | • 27MRM125032B | 0.125               | 3.2 | 0.030  | 0.8  | 0.500          | 12.7 | 0.100       | 2.5           | • 27MRF12 or • 27MRF12B | 1000 |
| • 27MRM125045 | • 27MRM125045B | 0.125               | 3.2 | 0.045  | 1.1  | 0.500          | 12.7 | 0.100       | 2.5           | • 27MRF12 or • 27MRF12B | 1000 |
| • 27MRM125062 | • 27MRM125062B | 0.125               | 3.2 | 0.062  | 1.6  | 0.500          | 12.7 | 0.100       | 2.5           | • 27MRF12 or • 27MRF12B | 1000 |
| • 27MRM125075 | • 27MRM125075B | 0.125               | 3.2 | 0.075  | 1.6  | 0.500          | 12.7 | 0.100       | 2.5           | • 27MRF12 or • 27MRF12B | 1000 |
| MBRP1-100-01  | —              | 0.125               | 3.2 | 0.100  | 2.5  | 0.500          | 12.7 | 0.100       | 2.5           | MBRR1-01                | 1000 |
| • 27MRM125125 | • 27MRM125125B | 0.125               | 3.2 | 0.125  | 3.2  | 0.500          | 12.7 | 0.100       | 2.5           | • 27MRF12 or • 27MRF12B | 1000 |
| • 27MRM125143 | • 27MRM125143B | 0.125               | 3.2 | 0.143  | 3.6  | 0.500          | 12.7 | 0.100       | 2.5           | • 27MRF12 or • 27MRF12B | 1000 |
| • 27MRM125187 | • 27MRM125187B | 0.125               | 3.2 | 0.187  | 4.8  | 0.500          | 12.7 | 0.100       | 2.5           | • 27MRF12 or • 27MRF12B | 1000 |
| MBRP1-250-01  | —              | 0.125               | 3.2 | 0.250  | 6.4  | 0.500          | 12.7 | 0.09        | 2.3           | MBRR1-01                | 1000 |
| • 27MRM125325 | • 27MRM125325B | 0.125               | 3.2 | 0.325  | 8.3  | 0.500          | 12.7 | 0.100       | 2.5           | • 27MRF12 or • 27MRF12B | 1000 |
| <b>Female</b> |                |                     |     |        |      |                |      |             |               |                         |      |
| MBRR1-01      | —              | —                   | —   | —      | —    | 0.400          | 10.2 | 0.100       | 2.5           | MBRP1-XXX               | 1000 |
| • 27MRF12     | • 27MRF12B     | —                   | —   | —      | —    | 0.500          | 12.7 | 0.100       | 2.5           | • 27MRM125XXXX          | 1000 |

## 27STF/27STM Series Snap Tacks

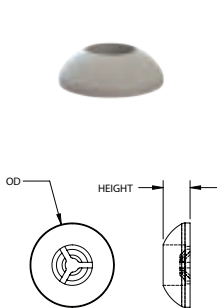


Fig. 1

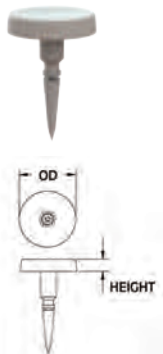


Fig. 2

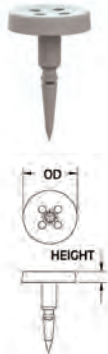
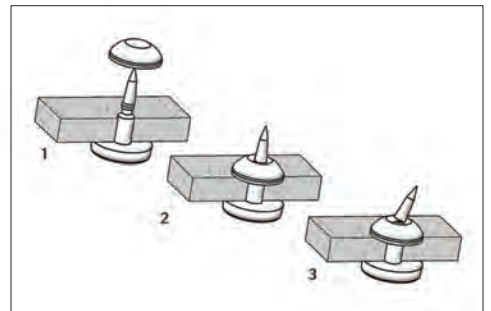


Fig. 3



**Specifications:**

- Material: Tack: Acetal, Button: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Sharp tack is inserted into the second detent of the retainer; once assembled, sharp end is broken off for final assembly
- Sharp point pierces soft material without the use of tools

| Item No.     | Fig. | Description      | OD    |      | Height |     | Ø Hole |     | Panel Thickness |     | Bulk Pack Qty |
|--------------|------|------------------|-------|------|--------|-----|--------|-----|-----------------|-----|---------------|
|              |      |                  | in    | mm   | in     | mm  | in     | mm  | in              | mm  |               |
| 27STF375     | 1    | Female Retainer  | 0.375 | 9.5  | 0.125  | 3.2 | 0.125  | 3.2 | —               | —   | 1000          |
| 27STM430062  | 2    | Male Tack        | 0.438 | 11.1 | 0.094  | 2.4 | 0.125  | 3.2 | 0.062           | 1.6 | 1000          |
| 27STM430125  | 2    | Male Tack        | 0.438 | 11.1 | 0.094  | 2.4 | 0.125  | 3.2 | 0.125           | 1.2 | 1000          |
| 27STM430188  | 2    | Male Tack        | 0.438 | 11.1 | 0.094  | 2.4 | 0.125  | 3.2 | 0.188           | 4.8 | 1000          |
| 27STMB430188 | 3    | Button Male Tack | 0.438 | 11.1 | 0.094  | 2.4 | 0.125  | 3.2 | 0.188           | 4.8 | 1000          |



MALE / FEMALE RIVETS

27MRF/27MRM Series  
Male / Female Rivet

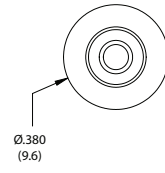
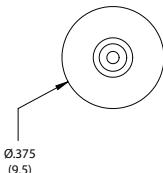
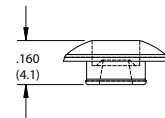
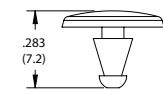


Fig. 1

Fig. 2



Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Two-Piece male/female rivet is difficult to remove without damaging

| Item No.    | Fig. | Description     | Ø Hole |     | Bulk Pack Qty |
|-------------|------|-----------------|--------|-----|---------------|
|             |      |                 | in     | mm  |               |
| 27MRF22     | 1    | Female Retainer | 0.213  | 5.4 | 1000          |
| 27MRM218125 | 2    | Male Rivet      | —      | —   | 1000          |

27DM/27TM Series  
Male / Female Snap Tacks

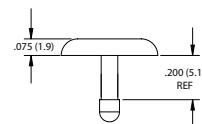
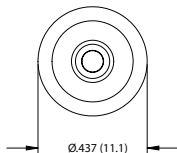
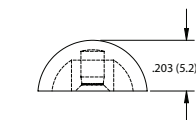


Fig. 1

Fig. 2



Specifications:

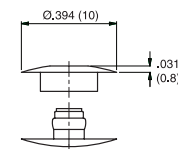
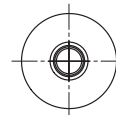
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Locking mechanism is totally enclosed to prevent tampering
- Can be used for a variety of thin panel fastening applications

| Item No.   | Fig. | Ø Hole |     | Panel Thickness |     | Bulk Pack Qty |
|------------|------|--------|-----|-----------------|-----|---------------|
|            |      | in     | mm  | in              | mm  |               |
| 27DM070    | 1    | 0.080  | 2.0 | 0.188           | 4.8 | 1000          |
| 27TM070188 | 2    | 0.080  | 2.0 | 0.188           | 4.8 | 1000          |

8201 Series  
Male / Female Push Clips



Specifications:

- Material: Nylon 6/6
- Color: See Table

Features:

- Low profile on both sides of the assembly
- Holds flat panels together
- Fast and easy clip in design
- Pack quantity includes 1000 each of male and female parts

| White        | Item No. | Black        | Ø Hole |     | Maximum Panel Thickness |     | Bulk Pack Qty |
|--------------|----------|--------------|--------|-----|-------------------------|-----|---------------|
|              |          |              | in     | mm  | in                      | mm  |               |
| 8201020008VR |          | 8201020001VR | 0.236  | 6.0 | 0.087                   | 2.2 | 1000          |
| 8201030008VR |          | 8201030001VR | 0.236  | 6.0 | 0.126                   | 3.2 | 1000          |
| 8201040008VR |          | 8201040001VR | 0.236  | 6.0 | 0.165                   | 4.2 | 1000          |
| 8201050008VR |          | 8201050001VR | 0.236  | 6.0 | 0.205                   | 5.2 | 1000          |



## MALE / FEMALE FASTENERS

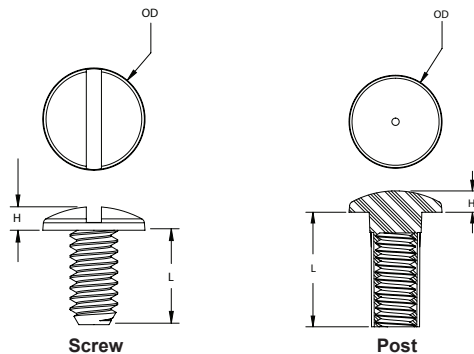
01POST/27POST  
Post and Screws

## Specifications:

- Material: Polycarbonate
- Color: Clear

## Features:

- Strong and durable for industrial applications
- Screw and post are used together; they are sold separately



## Screw

| Item No.        | Thread | OD    |      | H     |     | L     |     | Bulk Pack Qty |
|-----------------|--------|-------|------|-------|-----|-------|-----|---------------|
|                 |        | in    | mm   | in    | mm  | in    | mm  |               |
| 010832POST025PC | #8-32  | 0.355 | 9.0  | 0.093 | 2.4 | 0.250 | 6.4 | 1000          |
| 010832POST037PC | #8-32  | 0.406 | 10.3 | 0.093 | 2.4 | 0.375 | 9.5 | 1000          |

## Post

| Item No.      | Thread | Ø Post |     | L     |      | OD    |      | H     |     | Mating Screw    | Bulk Pack Qty |
|---------------|--------|--------|-----|-------|------|-------|------|-------|-----|-----------------|---------------|
|               |        | in     | mm  | in    | mm   | in    | mm   | in    | mm  |                 |               |
| 27POST8320250 | #8-32  | 0.218  | 5.5 | 0.250 | 6.4  | 0.350 | 8.9  | 0.093 | 2.4 | 010832POST025PC | 1000          |
| 27POST8320375 | #8-32  | 0.218  | 5.5 | 0.375 | 9.5  | 0.406 | 10.3 | 0.093 | 2.4 | 010832POST037PC | 1000          |
| 27POST8320500 | #8-32  | 0.218  | 5.5 | 0.500 | 12.7 | 0.406 | 10.3 | 0.093 | 2.4 | 010832POST037PC | 1000          |
| 27POST8320625 | #8-32  | 0.218  | 5.5 | 0.625 | 15.9 | 0.406 | 10.3 | 0.093 | 2.4 | 010832POST037PC | 1000          |
| 27POST8320750 | #8-32  | 0.218  | 5.5 | 0.750 | 19.1 | 0.406 | 10.3 | 0.093 | 2.4 | 010832POST037PC | 1000          |
| 27POST8320875 | #8-32  | 0.218  | 5.5 | 0.875 | 22.2 | 0.406 | 10.3 | 0.093 | 2.4 | 010832POST037PC | 1000          |
| 27POST8321000 | #8-32  | 0.218  | 5.5 | 1.000 | 25.4 | 0.406 | 10.3 | 0.093 | 2.4 | 010832POST037PC | 1000          |

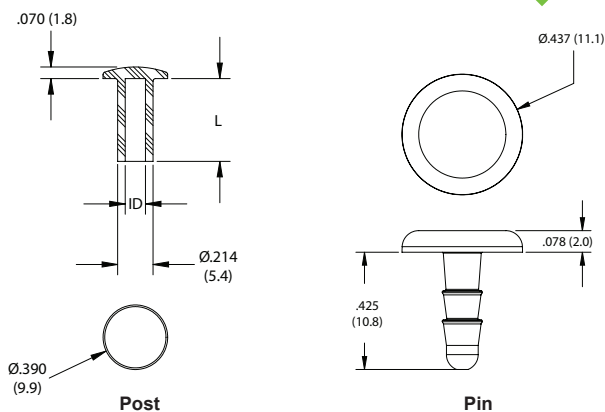
27POSTNT/27PP  
Post and Pin

## Specifications:

- Material: Post: Polyethylene
- Material: Pin: Polycarbonate
- Color: White

## Features:

- A cost effective way for binding applications
- One size pin fits all lengths of posts; sold separately



## Post

| Item No.     | ID    |     | L     |      | Bulk Pack Qty |
|--------------|-------|-----|-------|------|---------------|
|              | in    | mm  | in    | mm   |               |
| 27POSTNT0500 | 0.122 | 3.1 | 0.500 | 12.7 | 1000          |
| 27POSTNT0625 | 0.122 | 3.1 | 0.625 | 15.9 | 1000          |
| 27POSTNT0750 | 0.122 | 3.1 | 0.750 | 19.1 | 1000          |
| 27POSTNT1000 | 0.122 | 3.1 | 1.000 | 25.4 | 1000          |
| 27POSTNT1250 | 0.122 | 3.1 | 1.250 | 31.8 | 500           |

## Pin

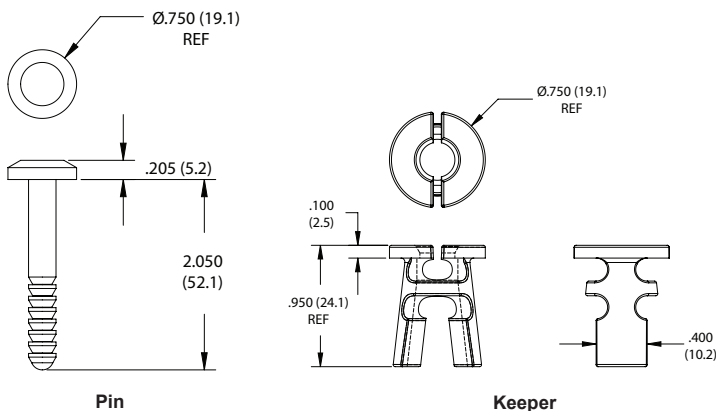
| Item No. | Bulk Pack Qty |
|----------|---------------|
| 27PP001  | 1000          |





MALE / FEMALE FASTENERS

27RSFP/27RSFK Series  
Sign Fastener System



Specifications:

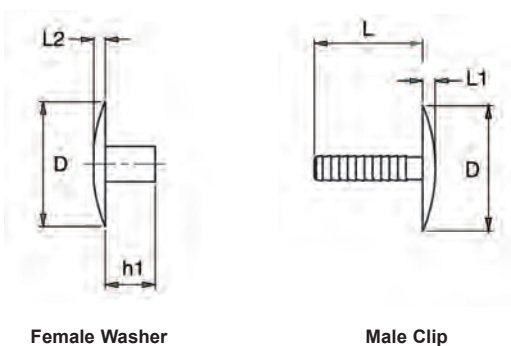
- Material: Impact Modified Nylon 6/6
- Color: White

Features:

- For rapid assembly and dis-assembly
- Squeeze the bottom of the keeper to slide the pin in

| Item No.  | Description | Ø Hole |     | Panel Thickness |             | Bulk Pack Qty |
|-----------|-------------|--------|-----|-----------------|-------------|---------------|
|           |             | in     | mm  | in              | mm          |               |
| 27RSFP001 | Pin         | 0.312  | 7.9 | 1.000 - 1.750   | 25.4 - 44.5 | 1000          |
| 27RSFK001 | Keeper      | 0.312  | 7.9 | 1.000 - 1.750   | 25.4 - 44.5 | 1000          |

8501 Series  
SR1990 Snap Fasteners



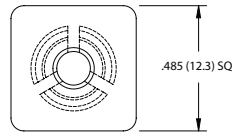
Specifications:

- Material:  
Female Washer: Low-Density Polyethylene  
Male Clip: Polypropylene
- Color: See Table

Features:

- Pack quantity includes 1000 each of male and female parts
- Ideal for fixing corrugated panel

| Black        | Item No.     |              | Ø Hole        |            | Panel Thickness |             | Ø D   | L     | L1    | L2    | h1    | Bulk Pack Qty |
|--------------|--------------|--------------|---------------|------------|-----------------|-------------|-------|-------|-------|-------|-------|---------------|
|              | White        | Clear        | in            | mm         | in              | mm          |       |       |       |       |       |               |
| 8502160901VR | 8502160908VR | 8502160900VR | 0.315 - 0.787 | 8.0 - 20.0 | 0.236 - 0.394   | 6.0 - 10.0  | 1.181 | 0.551 | 0.118 | 0.118 | 0.236 | 1000          |
| 8502260901VR | 8502260908VR | 8502260900VR | 0.315 - 0.787 | 8.0 - 20.0 | 0.236 - 0.394   | 6.0 - 22.0  | 1.181 | 1.102 | 0.118 | 0.118 | 0.236 | 1000          |
| 8502440901VR | 8502440908VR | 8502440900VR | 0.315 - 0.787 | 8.0 - 20.0 | 0.787 - 1.575   | 20.0 - 40.0 | 1.181 | 1.732 | 0.118 | 0.118 | 0.236 | 1000          |
| 8501160901VR | 8501160908VR | 8501160900VR | 0.315 - 0.787 | 8.0 - 20.0 | 0.472 - 0.709   | 12.0 - 18.0 | 1.181 | 0.551 | 0.118 | 0.118 | 0.472 | 1000          |
| 8501260901VR | 8501260908VR | 8501260900VR | 0.315 - 0.787 | 8.0 - 20.0 | 0.472 - 1.181   | 12.0 - 30.0 | 1.181 | 1.102 | 0.118 | 0.118 | 0.472 | 1000          |
| 8501440901VR | 8501440908VR | 8501440900VR | 0.315 - 0.787 | 8.0 - 20.0 | 0.472 - 1.811   | 12.0 - 46.0 | 1.181 | 1.732 | 0.118 | 0.118 | 0.472 | 1000          |
| 8501150901VR | 8501150908VR | 8501150900VR | 0.197 - 0.630 | 5.0 - 10.0 | 0.000 - 0.315   | 0.0 - 8.0   | 0.591 | 0.591 | 0.079 | 0.138 | 0.000 | 1000          |
| 8501220901VR | 8501220908VR | 8501220900VR | 0.197 - 0.630 | 5.0 - 10.0 | 0.000 - 0.630   | 0.0 - 16.0  | 0.591 | 0.866 | 0.079 | 0.138 | .0000 | 1000          |

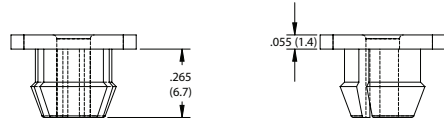
**GROMMET NUTS****60SGN Series  
Square Head Round Hole Grommet Nuts**

## Specifications:

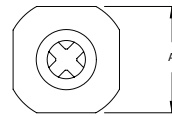
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

## Features:

- Provides a corrosion and vibration resistant connection
- Insulates areas of assembly from electrical and thermal transfer
- Eliminates the need for a nut; good for blind mounting
- Mounts with a self-tapping screw



| Item No.   | Ø Hole |     | Panel Thickness |           | Screw Size | Bulk Pack Qty |
|------------|--------|-----|-----------------|-----------|------------|---------------|
|            | in     | mm  | in              | mm        |            |               |
| 60SGN03300 | 0.300  | 7.6 | 0.031 - 0.135   | 0.8 - 3.4 | #6         | 1000          |

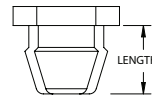
**60SGN Series  
Square Head Double Split Square Hole Grommet Nuts**

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

## Features:

- Provides a corrosion and vibration resistant connection
- Insulates areas of assembly from electrical and thermal transfer
- Mounts with a self-tapping screw



| Item No.   | Rect Hole Size |           | Panel Thickness |           | Screw Size | A x A |      | T     |     | Length |      | Bulk Pack Qty |
|------------|----------------|-----------|-----------------|-----------|------------|-------|------|-------|-----|--------|------|---------------|
|            | in             | mm        | in              | mm        |            | in    | mm   | in    | mm  | in     | mm   |               |
| 60SGN01015 | 0.228 x 0.233  | 5.8 x 5.9 | 0.250 - 0.271   | 6.4 - 6.9 | #8         | 0.375 | 9.5  | 0.031 | 0.8 | 0.406  | 10.3 | 1000          |
| 60SGN01025 | 0.250          | 6.4       | 0.093 - 0.275   | 0.9 - 7.0 | #8         | 0.375 | 9.5  | 0.047 | 1.2 | 0.420  | 10.7 | 500           |
| 60SGN01030 | 0.303          | 7.7       | 0.031 - 0.145   | 0.8 - 3.7 | #8-#10     | 0.435 | 11.1 | 0.062 | 1.6 | 0.270  | 6.9  | 1000          |
| 60SGN01019 | 0.305 x 0.310  | 7.8 x 7.9 | 0.125 - 0.135   | 3.2 - 3.4 | #8         | 0.437 | 11.1 | 0.062 | 1.6 | 0.281  | 7.1  | 500           |
| 60SGN01018 | 0.310 x 0.315  | 7.9 x 8.0 | 0.110 - 0.115   | 2.8 - 2.9 | #8         | 0.437 | 11.1 | 0.078 | 2.0 | 0.281  | 7.1  | 500           |
| 60SGN01128 | 0.330          | 8.4       | 0.031 - 0.125   | 0.8 - 3.5 | #8         | 0.505 | 12.8 | 0.032 | 0.8 | 0.275  | 7.0  | 500           |
| 60SGN01021 | 0.375 x 0.390  | 9.5 x 9.9 | 0.230           | 5.5       | 1/4        | 0.625 | 15.9 | 0.080 | 2.0 | 0.438  | 11.1 | 1000          |
| 60SGN01010 | 0.377 x 0.382  | 9.6 x 9.7 | 0.125 - 0.130   | 3.2 - 3.3 | #10        | 0.609 | 15.5 | 0.082 | 2.1 | 0.308  | 7.8  | 500           |
| 60SGN01181 | 0.410          | 10.4      | 0.031 - 0.062   | 0.8 - 1.6 | 1/4        | 0.630 | 16.0 | 0.140 | 3.6 | 0.280  | 7.1  | 500           |

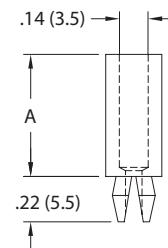
**MSNE  
Spacer Nut**

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

## Features:

- Square hole prevents rotation
- As screw is engaged, legs spread holding the spacer in place without use of a nut
- Mounts with a self-tapping screw



| Item No.    | Sq Hole Size |     | Panel Thickness |     | Screw Size | A     |      | Bulk Pack Qty |
|-------------|--------------|-----|-----------------|-----|------------|-------|------|---------------|
|             | in           | mm  | in              | mm  |            | in    | mm   |               |
| MSNE-2-01   | 0.169        | 4.3 | 0.063           | 1.6 | #4         | 0.125 | 3.2  | 1000          |
| MSNE-4M-01  | 0.169        | 4.3 | 0.063           | 1.6 | #4         | 0.157 | 4.0  | 1000          |
| MSNE-3-01   | 0.169        | 4.3 | 0.063           | 1.6 | #4         | 0.188 | 4.8  | 1000          |
| MSNE-6M-01  | 0.169        | 4.3 | 0.063           | 1.6 | #4         | 0.240 | 6.1  | 1000          |
| MSNE-4-01   | 0.169        | 4.3 | 0.063           | 1.6 | #4         | 0.250 | 6.4  | 1000          |
| MSNE-5-01   | 0.169        | 4.3 | 0.063           | 1.6 | #4         | 0.313 | 7.9  | 1000          |
| MSNE-8M-01  | 0.169        | 4.3 | 0.063           | 1.6 | #4         | 0.313 | 8.0  | 1000          |
| MSNE-6-01   | 0.169        | 4.3 | 0.063           | 1.6 | #4         | 0.375 | 9.5  | 1000          |
| MSNE-10M-01 | 0.169        | 4.3 | 0.063           | 1.6 | #4         | 0.390 | 9.9  | 1000          |
| MSNE-12M-01 | 0.169        | 4.3 | 0.063           | 1.6 | #4         | 0.470 | 11.9 | 1000          |
| MSNE-8-01   | 0.169        | 4.3 | 0.063           | 1.6 | #4         | 0.500 | 12.7 | 1000          |
| MSNE-10-01  | 0.169        | 4.3 | 0.063           | 1.6 | #4         | 0.625 | 15.9 | 1000          |
| MSNE-12-01  | 0.169        | 4.3 | 0.063           | 1.6 | #4         | 0.750 | 19.1 | 1000          |
| MSNE-16-01  | 0.169        | 4.3 | 0.063           | 1.6 | #4         | 1.000 | 25.4 | 1000          |



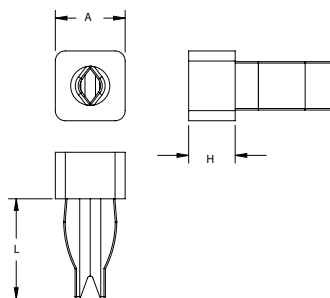
**60SGC Series**  
**Closed Screw Spacer**  
**Grommet Nuts**

Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Fully encapsulates metal screws, providing electrical insulation and protection
- Creates a low cost, positive connection of thin gauge materials while eliminating cross threading
- Mounts with a self-tapping screw



| Item No.   | Rect Hole Size |           | Panel Thickness |           | Screw Size | A Square |      | H     |     | L     |      | Bulk Pack Qty |
|------------|----------------|-----------|-----------------|-----------|------------|----------|------|-------|-----|-------|------|---------------|
|            | in             | mm        | in              | mm        |            | in       | mm   | in    | mm  | in    | mm   |               |
| 60SGC00001 | 0.270 x 0.290  | 6.9 x 7.4 | 0.020 - 0.140   | 0.5 - 3.6 | #8; #10    | 0.375    | 9.53 | 0.031 | 0.8 | 0.540 | 13.7 | 1000          |
| 60SGC00002 | 0.270 x 0.290  | 6.9 x 7.4 | 0.020 - 0.140   | 0.5 - 3.6 | #8; #10    | 0.375    | 9.53 | 0.062 | 1.6 | 0.540 | 13.7 | 1000          |
| 60SGC00003 | 0.270 x 0.290  | 6.9 x 7.4 | 0.020 - 0.140   | 0.5 - 3.6 | #8; #10    | 0.375    | 9.53 | 0.125 | 3.2 | 0.540 | 13.7 | 1000          |
| 60SGC00004 | 0.270 x 0.290  | 6.9 x 7.4 | 0.020 - 0.140   | 0.5 - 3.6 | #8; #10    | 0.375    | 9.53 | 0.250 | 6.4 | 0.540 | 13.7 | 500           |
| 60SGC00005 | 0.309 x 0.315  | 7.9 x 8.0 | 0.020 - 0.140   | 0.5 - 3.6 | #8; #10    | 0.437    | 11.1 | 0.031 | 0.8 | 0.540 | 13.7 | 1000          |
| 60SGC00006 | 0.309 x 0.315  | 7.9 x 8.0 | 0.020 - 0.140   | 0.5 - 3.6 | #8; #10    | 0.437    | 11.1 | 0.062 | 1.6 | 0.540 | 13.7 | 1000          |
| 60SGC00007 | 0.309 x 0.315  | 7.9 x 8.0 | 0.020 - 0.140   | 0.5 - 3.6 | #8; #10    | 0.437    | 11.1 | 0.125 | 3.2 | 0.540 | 13.7 | 500           |
| 60SGC00008 | 0.309 x 0.315  | 7.9 x 8.0 | 0.020 - 0.140   | 0.5 - 3.6 | #8; #10    | 0.437    | 11.1 | 0.250 | 6.4 | 0.540 | 13.7 | 1000          |

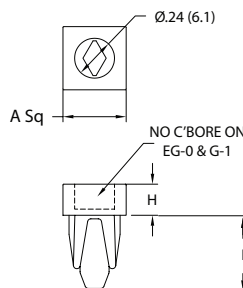
**EG**  
**Expansion Grommet**

Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Rectangular hole prevents rotation
- As screw is engaged, legs spread holding the spacer in place without use of a nut
- Fully encapsulates metal screws, providing electrical insulation and protection
- Mounts with a self-tapping screw



| Item No. | Rect Hole Size |           | Panel Thickness |           | Screw Size | A Square |     | H     |      | L    |      | Bulk Pack Qty |
|----------|----------------|-----------|-----------------|-----------|------------|----------|-----|-------|------|------|------|---------------|
|          | in             | mm        | in              | mm        |            | in       | mm  | in    | mm   | in   | mm   |               |
| EG-0-01  | 0.260 x 0.305  | 6.6 x 7.8 | 0.020 - 0.076   | 0.5 - 1.9 | #8; #10    | 0.38     | 9.6 | 0.031 | 0.8  | 0.44 | 11.1 | 1000          |
| EG-1-01  | 0.260 x 0.305  | 6.6 x 7.8 | 0.020 - 0.076   | 0.5 - 1.9 | #8; #10    | 0.38     | 9.6 | 0.063 | 1.6  | 0.44 | 11.1 | 1000          |
| EG-2-01  | 0.260 x 0.305  | 6.6 x 7.8 | 0.020 - 0.076   | 0.5 - 1.9 | #8; #10    | 0.38     | 9.6 | 0.125 | 3.2  | 0.44 | 11.1 | 1000          |
| EG-3-01  | 0.260 x 0.305  | 6.6 x 7.8 | 0.020 - 0.076   | 0.5 - 1.9 | #8; #10    | 0.38     | 9.6 | 0.188 | 4.8  | 0.44 | 11.1 | 1000          |
| EG-4-01  | 0.260 x 0.305  | 6.6 x 7.8 | 0.020 - 0.076   | 0.5 - 1.9 | #8; #10    | 0.38     | 9.6 | 0.250 | 6.4  | 0.44 | 11.1 | 1000          |
| EG-5-01  | 0.260 x 0.305  | 6.6 x 7.8 | 0.020 - 0.076   | 0.5 - 1.9 | #8; #10    | 0.38     | 9.6 | 0.313 | 7.9  | 0.44 | 11.1 | 1000          |
| EG-6-01  | 0.260 x 0.305  | 6.6 x 7.8 | 0.020 - 0.076   | 0.5 - 1.9 | #8; #10    | 0.38     | 9.6 | 0.375 | 9.5  | 0.44 | 11.1 | 1000          |
| EG-7-01  | 0.260 x 0.305  | 6.6 x 7.8 | 0.020 - 0.076   | 0.5 - 1.9 | #8; #10    | 0.38     | 9.6 | 0.438 | 11.1 | 0.44 | 11.1 | 1000          |
| EG-8-01  | 0.260 x 0.305  | 6.6 x 7.8 | 0.020 - 0.076   | 0.5 - 1.9 | #8; #10    | 0.38     | 9.6 | 0.500 | 12.7 | 0.44 | 11.1 | 1000          |

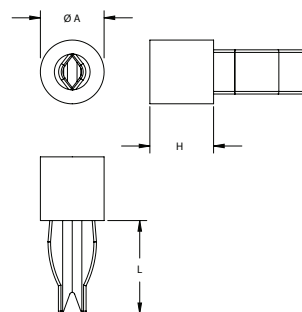
**60SPG/60SGC Series**  
**Closed Screw Spacer Grommet Nuts**

Specifications:

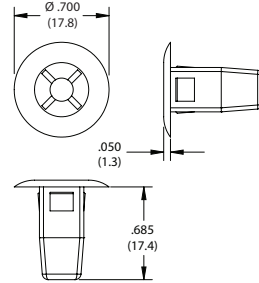
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Insulates areas of assembly from electrical and thermal transfer
- Creates a low cost, positive connection of thin gauge materials while eliminating cross threading
- Mounts with a self-tapping screw



| Item No.   | Rect Hole Size |           | Panel Thickness |           | Screw Size | Ø A   |     | H     |      | L     |      | Bulk Pack Qty |
|------------|----------------|-----------|-----------------|-----------|------------|-------|-----|-------|------|-------|------|---------------|
|            | in             | mm        | in              | mm        |            | in    | mm  | in    | mm   | in    | mm   |               |
| 60SGC00010 | 0.250 x 0.281  | 6.4 x 7.1 | 0.020 - 0.140   | 0.5 - 3.6 | #8; #10    | 0.375 | 9.5 | 0.125 | 3.2  | 0.438 | 11.1 | 500           |
| 60SPG00001 | 0.270 x 0.290  | 6.9 x 7.4 | 0.020 - 0.140   | 0.5 - 3.6 | #8; #10    | 0.375 | 9.5 | 0.125 | 3.2  | 0.548 | 13.9 | 1000          |
| 60SPG00002 | 0.270 x 0.290  | 6.9 x 7.4 | 0.020 - 0.140   | 0.5 - 3.6 | #8; #10    | 0.375 | 9.5 | 0.187 | 4.8  | 0.548 | 13.9 | 1000          |
| 60SPG00003 | 0.270 x 0.290  | 6.9 x 7.4 | 0.020 - 0.140   | 0.5 - 3.6 | #8; #10    | 0.375 | 9.5 | 0.250 | 6.4  | 0.548 | 13.9 | 500           |
| 60SPG00004 | 0.270 x 0.290  | 6.9 x 7.4 | 0.020 - 0.140   | 0.5 - 3.6 | #8; #10    | 0.375 | 9.5 | 0.312 | 7.9  | 0.548 | 13.9 | 1000          |
| 60SPG00005 | 0.270 x 0.290  | 6.9 x 7.4 | 0.020 - 0.140   | 0.5 - 3.6 | #8; #10    | 0.375 | 9.5 | 0.375 | 9.5  | 0.548 | 13.9 | 1000          |
| 60SPG00006 | 0.270 x 0.290  | 6.9 x 7.4 | 0.020 - 0.140   | 0.5 - 3.6 | #8; #10    | 0.375 | 9.5 | 0.500 | 12.7 | 0.548 | 13.9 | 1000          |

**GROMMET NUTS / ACETAL RIVETS****60SGN Series  
Closed Grommet Nuts**

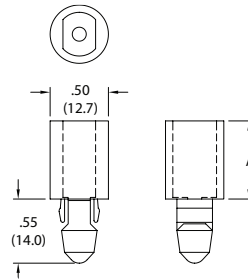
## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

## Features:

- Provides a corrosion and vibration resistant connection
- Insulates areas of assembly from electrical and thermal transfer
- Mounts with a self-tapping screw

| Item No.   | Sq Hole Size  |           | Panel Thickness |           | Screw Size | Bulk Pack Qty |
|------------|---------------|-----------|-----------------|-----------|------------|---------------|
|            | in            | mm        | in              | mm        |            |               |
| 60SGN01402 | 0.355 x 0.355 | 9.0 - 9.0 | 0.062 - 0.350   | 1.6 - 8.8 | #10        | 500           |

**SN Series  
Closed Spacer Nut**

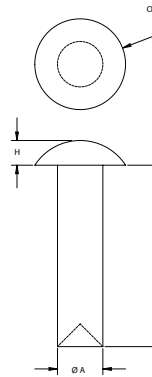
## Specifications:

- Material: UL94 HB Polycarbonate
- Color: Clear

## Features:

- Fully encapsulates the screw
- Mounts with a metal #8 self-tapping screw
- When the screw is fully engaged, the bottom tabs break free, allowing expansion of the bottom "wings" and locking it in place

| Item No. | Ø Hole |     | Panel Thickness |     | Screw Size | Ø Head |      | A     |      | Bulk Pack Qty |
|----------|--------|-----|-----------------|-----|------------|--------|------|-------|------|---------------|
|          | in     | mm  | in              | mm  |            | in     | mm   | in    | mm   |               |
| SN-125   | 0.312  | 7.9 | 0.063           | 1.6 | #8         | 0.50   | 12.7 | 0.125 | 3.2  | 1000          |
| SN-187   | 0.312  | 7.9 | 0.063           | 1.6 | #8         | 0.50   | 12.7 | 0.187 | 4.7  | 1000          |
| SN-250   | 0.312  | 7.9 | 0.063           | 1.6 | #8         | 0.50   | 12.7 | 0.250 | 6.4  | 1000          |
| SN-312   | 0.312  | 7.9 | 0.063           | 1.6 | #8         | 0.50   | 12.7 | 0.312 | 7.9  | 1000          |
| SN-375   | 0.312  | 7.9 | 0.063           | 1.6 | #8         | 0.50   | 12.7 | 0.375 | 9.5  | 1000          |
| SN-500   | 0.312  | 7.9 | 0.063           | 1.6 | #8         | 0.50   | 12.7 | 0.500 | 12.7 | 1000          |

**26RIV Series  
Molded Acetal Rivets**

## Specifications:

- Material: Acetal
- Color: Natural

## Features:

- Inserted into punched or predrilled holes and used in structural applications
- Joins different workpieces together
- Resists moisture, solvents, fuel and wear

| Item No. | Ø A   |     | OD    |     | H     |     | L     |      | Bulk Pack Qty |
|----------|-------|-----|-------|-----|-------|-----|-------|------|---------------|
|          | in    | mm  | in    | mm  | in    | mm  | in    | mm   |               |
| 26RIV001 | 0.085 | 2.2 | 0.143 | 3.6 | 0.058 | 1.5 | 0.125 | 3.2  | 1000          |
| 26RIV002 | 0.085 | 2.2 | 0.143 | 3.6 | 0.058 | 1.5 | 0.188 | 4.8  | 1000          |
| 26RIV003 | 0.085 | 2.2 | 0.143 | 3.6 | 0.058 | 1.5 | 0.250 | 6.4  | 1000          |
| 26RIV004 | 0.085 | 2.2 | 0.143 | 3.6 | 0.058 | 1.5 | 0.313 | 7.9  | 1000          |
| 26RIV005 | 0.085 | 2.2 | 0.143 | 3.6 | 0.058 | 1.5 | 0.375 | 9.5  | 1000          |
| 26RIV006 | 0.085 | 2.2 | 0.143 | 3.6 | 0.058 | 1.5 | 0.438 | 11.1 | 1000          |
| 26RIV007 | 0.085 | 2.2 | 0.143 | 3.6 | 0.058 | 1.5 | 0.500 | 12.7 | 1000          |
| 26RIV011 | 0.125 | 3.2 | 0.250 | 6.4 | 0.068 | 1.7 | 0.125 | 3.2  | 1000          |
| 26RIV012 | 0.125 | 3.2 | 0.250 | 6.4 | 0.068 | 1.7 | 0.188 | 4.8  | 1000          |
| 26RIV013 | 0.125 | 3.2 | 0.250 | 6.4 | 0.068 | 1.7 | 0.250 | 6.4  | 1000          |
| 26RIV014 | 0.125 | 3.2 | 0.250 | 6.4 | 0.068 | 1.7 | 0.313 | 7.9  | 1000          |
| 26RIV015 | 0.125 | 3.2 | 0.250 | 6.4 | 0.068 | 1.7 | 0.375 | 9.5  | 1000          |
| 26RIV016 | 0.125 | 3.2 | 0.250 | 6.4 | 0.068 | 1.7 | 0.438 | 11.1 | 1000          |
| 26RIV017 | 0.125 | 3.2 | 0.250 | 6.4 | 0.068 | 1.7 | 0.500 | 12.7 | 1000          |
| 26RIV018 | 0.125 | 3.2 | 0.250 | 6.4 | 0.068 | 1.7 | 0.563 | 14.3 | 1000          |
| 26RIV019 | 0.125 | 3.2 | 0.250 | 6.4 | 0.068 | 1.7 | 0.625 | 15.9 | 1000          |
| 26RIV020 | 0.125 | 3.2 | 0.250 | 6.4 | 0.068 | 1.7 | 0.688 | 17.5 | 1000          |
| 26RIV021 | 0.125 | 3.2 | 0.218 | 5.5 | 0.090 | 2.3 | 0.125 | 3.2  | 1000          |
| 26RIV022 | 0.125 | 3.2 | 0.218 | 5.5 | 0.090 | 2.3 | 0.188 | 4.8  | 1000          |
| 26RIV023 | 0.125 | 3.2 | 0.218 | 5.5 | 0.090 | 2.3 | 0.250 | 6.4  | 1000          |
| 26RIV024 | 0.125 | 3.2 | 0.218 | 5.5 | 0.090 | 2.3 | 0.313 | 7.9  | 1000          |
| 26RIV025 | 0.125 | 3.2 | 0.218 | 5.5 | 0.090 | 2.3 | 0.375 | 9.5  | 1000          |
| 26RIV026 | 0.125 | 3.2 | 0.218 | 5.5 | 0.090 | 2.3 | 0.500 | 12.7 | 1000          |
| 26RIV050 | 0.125 | 3.2 | 0.255 | 6.5 | 0.051 | 1.3 | 0.250 | 6.4  | 1000          |
| 26RIV055 | 0.125 | 3.2 | 0.255 | 6.5 | 0.051 | 1.3 | 0.375 | 9.5  | 1000          |



### HBG Series Ohio Nut and Bolt Caps

#### Specifications:

- Material: Elastomeric Polyethylene
- Color: Grey



#### Features:

- Low-cost alternative to adjustable swivel glides
- Used in conjunction with Ohio Nut and Bolt parts, capping the head of the bolt with a non-skid, non-marking elastomeric cap

| Item No. | Bolt Size    | Head Ø |      | Head Thickness |     | Bulk Pack Qty |
|----------|--------------|--------|------|----------------|-----|---------------|
|          |              | in     | mm   | in             | mm  |               |
| HBG1010A | 5/16-18 & M8 | 0.750  | 19.1 | 0.093          | 2.4 | 5000          |
| HBG1020A | 3/8-16 & M10 | 0.875  | 22.2 | 0.125          | 3.2 | 3800          |
| HBG1030A | 1/2-13       | 1.062  | 27.0 | 0.156          | 4.0 | 2200          |

### SCC/SCB Series Secure Bolt Cover Base & Caps

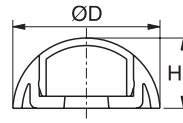
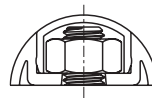
#### Specifications:

- Material: Polypropylene
- Color: See Table



#### Features:

- To cover bolt head or nut
- Cap design snaps securely into base (sold separately)
- Able to mix and match colors for the cap and base



| Item No. |         |         |         |         |         | Fits Bolt and Nut |        | Ø D   | H     | Bulk Pack Qty |
|----------|---------|---------|---------|---------|---------|-------------------|--------|-------|-------|---------------|
| White    |         | Black   |         | Red     |         | Std               | Metric | in    | in    |               |
| Cap      | Base    | Cap     | Base    | Cap     | Base    |                   |        |       |       |               |
| SCC003W  | SCB003W | SCC003B | SCB003B | SCC003R | SCB003R | —                 | M6     | 0.984 | 0.472 | 250           |
| SCC005W  | SCB005W | SCC005B | SCB005B | SCC005R | SCB005R | 5/16              | M8     | 1.260 | 0.551 | 250           |
| SCC010W  | SCB010W | SCC010B | SCB010B | SCC010R | SCB010R | 3/8               | M10    | 1.496 | 0.669 | 100           |
| SCC015W  | SCB015W | SCC015B | SCB015B | SCC015R | SCB015R | 7/16              | M12    | 1.693 | 0.807 | 100           |

| Item No. |          |         |         |         |         | Fits Bolt and Nut |        | Ø D   | H     | Bulk Pack Qty |
|----------|----------|---------|---------|---------|---------|-------------------|--------|-------|-------|---------------|
| Blue     |          | Green   |         | Yellow  |         | Std               | Metric | in    | in    |               |
| Cap      | Base     | Cap     | Base    | Cap     | Base    |                   |        |       |       |               |
| SCC003BL | SCB003BL | SCC003G | SCB003G | SCC003Y | SCB003Y | —                 | M6     | 0.984 | 0.472 | 250           |
| SCC005BL | SCB005BL | SCC005G | SCB005G | SCC005Y | SCB005Y | 5/16              | M8     | 1.260 | 0.551 | 250           |
| SCC010BL | SCB010BL | SCC010G | SCB010G | SCC010Y | SCB010Y | 3/8               | M10    | 1.496 | 0.669 | 100           |
| SCC015BL | SCB015BL | SCC015G | SCB015G | SCC015Y | SCB015Y | 7/16              | M12    | 1.693 | 0.807 | 100           |

### BNC Series Bolt and Nut Caps

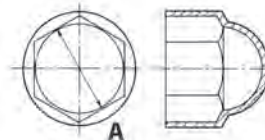
#### Specifications:

- Material: Low-Density Polyethylene with UV Stabilizer
- Color: See Table



#### Features:

- Protects against weathering and tampering
- Enhances finished appearance



| Item No. |          | Fits Bolt Size | Ø A   |      | Bulk Pack Qty |
|----------|----------|----------------|-------|------|---------------|
| Black    | White    |                | in    | mm   |               |
| BNC0189A | BNC0189B | #10            | 0.306 | 7.8  | 1000          |
| BNC0250A | BNC0250B | 1/4            | 0.425 | 10.8 | 5000          |
| BNC0312A | BNC0312B | 5/16           | 0.484 | 12.3 | 1000          |
| BNC0375A | BNC0375B | 3/8            | 0.550 | 14.0 | 1000          |
| BNC0437A | BNC0437B | 7/16           | 0.622 | 15.8 | 2500          |
| BNC0500A | BNC0500B | 1/2            | 0.740 | 18.8 | 2000          |
| BNC0625A | BNC0625B | 5/8            | 0.937 | 23.8 | 1000          |
| BNC05A   | BNC05B   | 5mm            | 0.311 | 7.9  | 5000          |

| Item No. |        | Fits Bolt Size | Ø A   |      | Bulk Pack Qty |
|----------|--------|----------------|-------|------|---------------|
| Black    | White  |                | in    | mm   |               |
| BNC06A   | BNC06B | 6mm            | 0.386 | 9.8  | 5000          |
| BNC08A   | BNC08B | 8mm            | 0.504 | 12.8 | 5000          |
| BNC10A   | BNC10B | 10mm           | 0.661 | 16.8 | 2500          |
| BNC14A   | BNC14B | 14mm           | 0.858 | 21.8 | 1200          |
| BNC18A   | BNC18B | 18mm           | 1.055 | 26.8 | 1500          |
| BNC20A   | BNC20B | 20mm           | 1.173 | 29.8 | 1200          |
| BNC22A   | BNC22B | 22mm           | 1.252 | 31.8 | 800           |
| BNC24A   | BNC24B | 24mm           | 1.406 | 35.7 | 500           |



## SCREW CAPS / LICENSE PLATE HOLDERS

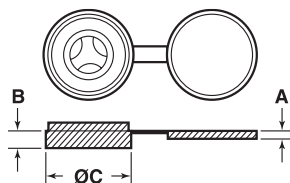
USC Series  
Screw Caps

Fig. 1

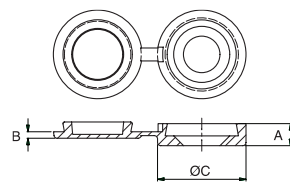


Fig. 2

## Specifications:

- Material: Polypropylene
- Color: See Table

## Features:

- Neatly hides screw heads from view
- Will suit most types of screw heads
- Cap is attached to the washer by a hinge, which folds neatly when cap is snapped together



| Item No. | Color | Fig | Fits Screw               | A     |     | B     |     | Ø C   |      | Bulk Pack Qty |
|----------|-------|-----|--------------------------|-------|-----|-------|-----|-------|------|---------------|
|          |       |     |                          | in    | mm  | in    | mm  | in    | mm   |               |
| USC6810A | White | 2   | #6 to #12 and M3.5 to M6 | 0.039 | 1.0 | 0.134 | 3.4 | 0.535 | 13.6 | 5000          |
| USC6810C | Black | 2   | #6 to #12 and M3.5 to M6 | 0.039 | 1.0 | 0.134 | 3.4 | 0.535 | 13.6 | 5000          |

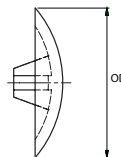
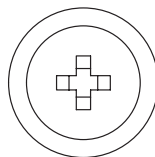
CH Series  
Cross Head Screw Caps

## Specifications:

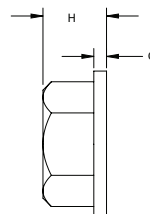
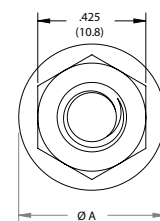
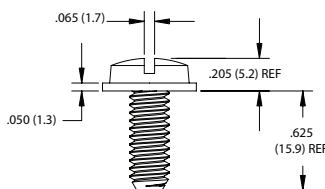
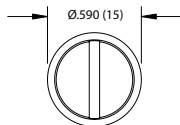
- Material: Low-Density Polyethylene
- Color: White

## Features:

- Provides excellent concealment and protection of cross-head screws



| Item No. | OD    |      | Fits Drive Size | Bulk Pack Qty |
|----------|-------|------|-----------------|---------------|
|          | in    | mm   |                 |               |
| CH2A     | 0.492 | 12.5 | #2              | 20000         |
| CH3A     | 0.551 | 14.0 | #3              | 20000         |
| CH4A     | 0.709 | 18.0 | #4              | 10000         |

012520LP/042502LPN  
License Plate Fasteners

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

## Features:

- Resistant to corrosion, vibration, oil and most chemicals
- Ideal for outdoor use

## Screw

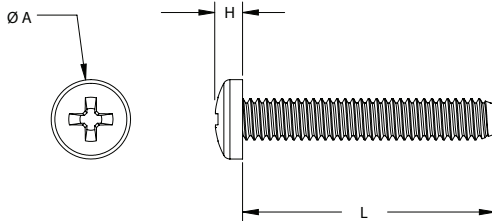
| Item No.    | Thread | Bulk Pack Qty |
|-------------|--------|---------------|
| 012520LP062 | 1/4-20 | 500           |

## Nut

| Item No.   | Thread | Ø A   |      | H     |     | C     |     | Bulk Pack Qty |
|------------|--------|-------|------|-------|-----|-------|-----|---------------|
|            |        | in    | mm   | in    | mm  | in    | mm  |               |
| 042502LPN  | 1/4-20 | 0.575 | 14.6 | 0.250 | 6.4 | 0.050 | 1.3 | 500           |
| 042502LPNS | 1/4-20 | 0.685 | 17.4 | 0.235 | 6.0 | 0.035 | 0.9 | 500           |



**NSP/01PW/01W Series  
Phillips Pan Head Screw**



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.    | Thread | Length<br>in | H<br>in | Ø A<br>in     | Bulk Pack Qty |
|-------------|--------|--------------|---------|---------------|---------------|
| 010080PW012 | #0-80  | 0.125        | 0.039   | 0.104 - 0.115 | 1000          |
| 010080PW018 | #0-80  | 0.188        | 0.039   | 0.104 - 0.115 | 1000          |
| 010080PW025 | #0-80  | 0.250        | 0.039   | 0.104 - 0.115 | 1000          |
| 010256PW009 | #2-56  | 0.094        | 0.055   | 0.155 - 0.166 | 1000          |
| 010632PW009 | #6-32  | 0.094        | 0.092   | 0.256 - 0.270 | 1000          |
| 010632PW012 | #6-32  | 0.125        | 0.092   | 0.256 - 0.270 | 1000          |
| 010632PW015 | #6-32  | 0.156        | 0.092   | 0.256 - 0.270 | 1000          |
| 010632PW018 | #6-32  | 0.188        | 0.092   | 0.256 - 0.270 | 1000          |
| 010632PW025 | #6-32  | 0.250        | 0.092   | 0.256 - 0.270 | 1000          |
| 010632PW031 | #6-32  | 0.313        | 0.092   | 0.256 - 0.270 | 1000          |
| 010632PW037 | #6-32  | 0.375        | 0.092   | 0.256 - 0.270 | 1000          |
| 010632PW043 | #6-32  | 0.438        | 0.092   | 0.256 - 0.270 | 1000          |
| 010632PW050 | #6-32  | 0.500        | 0.092   | 0.256 - 0.270 | 1000          |
| 010632PW056 | #6-32  | 0.563        | 0.092   | 0.256 - 0.270 | 1000          |
| 010632PW062 | #6-32  | 0.625        | 0.092   | 0.256 - 0.270 | 1000          |
| 010632PW068 | #6-32  | 0.688        | 0.092   | 0.256 - 0.270 | 1000          |
| 010632PW075 | #6-32  | 0.750        | 0.092   | 0.256 - 0.270 | 1000          |
| 010632PW087 | #6-32  | 0.875        | 0.092   | 0.256 - 0.270 | 1000          |
| 010632PW100 | #6-32  | 1.000        | 0.092   | 0.256 - 0.270 | 1000          |
| 010632PW112 | #6-32  | 1.125        | 0.092   | 0.256 - 0.270 | 1000          |
| 010632PW125 | #6-32  | 1.250        | 0.092   | 0.256 - 0.270 | 1000          |
| 010632PW150 | #6-32  | 1.500        | 0.092   | 0.256 - 0.270 | 1000          |
| 010632PW162 | #6-32  | 1.625        | 0.092   | 0.256 - 0.270 | 1000          |
| 010632PW175 | #6-32  | 1.750        | 0.092   | 0.256 - 0.270 | 1000          |
| 001632PW187 | #6-32  | 1.875        | 0.092   | 0.256 - 0.270 | 1000          |
| 010632PW200 | #6-32  | 2.000        | 0.092   | 0.256 - 0.270 | 1000          |
| 010632PW225 | #6-32  | 2.250        | 0.092   | 0.256 - 0.270 | 1000          |
| 010640PW025 | #6-40  | 0.250        | 0.092   | 0.256 - 0.270 | 1000          |
| 010640PW037 | #6-40  | 0.375        | 0.092   | 0.256 - 0.270 | 1000          |
| 010640PW075 | #6-40  | 0.750        | 0.092   | 0.256 - 0.270 | 1000          |
| 010640PW100 | #6-40  | 1.000        | 0.092   | 0.256 - 0.270 | 1000          |
| 010832PW012 | #8-32  | 0.125        | 0.110   | 0.306 - 0.322 | 1000          |
| 010832PW018 | #8-32  | 0.188        | 0.110   | 0.306 - 0.322 | 1000          |
| 010832PW025 | #8-32  | 0.250        | 0.110   | 0.306 - 0.322 | 1000          |
| 010832PW028 | #8-32  | 0.281        | 0.110   | 0.306 - 0.322 | 1000          |
| 010832PW031 | #8-32  | 0.313        | 0.110   | 0.306 - 0.322 | 1000          |
| 010832PW037 | #8-32  | 0.375        | 0.110   | 0.306 - 0.322 | 1000          |
| 010832PW043 | #8-32  | 0.438        | 0.110   | 0.306 - 0.322 | 1000          |
| 010832PW050 | #8-32  | 0.500        | 0.110   | 0.306 - 0.322 | 1000          |
| 010832PW062 | #8-32  | 0.625        | 0.110   | 0.306 - 0.322 | 1000          |
| 010832PW075 | #8-32  | 0.750        | 0.110   | 0.306 - 0.322 | 1000          |
| 010832PW087 | #8-32  | 0.875        | 0.110   | 0.306 - 0.322 | 1000          |
| 010832PW100 | #8-32  | 1.000        | 0.110   | 0.306 - 0.322 | 1000          |
| 010832PW112 | #8-32  | 1.125        | 0.110   | 0.306 - 0.322 | 1000          |
| 010832PW125 | #8-32  | 1.250        | 0.110   | 0.306 - 0.322 | 1000          |
| 010832PW137 | #8-32  | 1.375        | 0.110   | 0.306 - 0.322 | 500           |
| 010832PW150 | #8-32  | 1.500        | 0.110   | 0.306 - 0.322 | 500           |
| 010832PW165 | #8-32  | 1.656        | 0.110   | 0.306 - 0.322 | 500           |
| 010832PW175 | #8-32  | 1.750        | 0.110   | 0.306 - 0.322 | 500           |
| 010832PW187 | #8-32  | 1.875        | 0.110   | 0.306 - 0.322 | 500           |
| 010832PW200 | #8-32  | 2.000        | 0.110   | 0.306 - 0.322 | 500           |

| Item No.    | Thread | Length<br>in | H<br>in | Ø A<br>in     | Bulk Pack Qty |
|-------------|--------|--------------|---------|---------------|---------------|
| 010832PW229 | #8-32  | 2.297        | 0.110   | 0.306 - 0.322 | 500           |
| 011024PW012 | #10-24 | 0.125        | 0.150   | 0.357 - 0.373 | 1000          |
| 011024PW018 | #10-24 | 0.188        | 0.150   | 0.357 - 0.373 | 1000          |
| 011024PW025 | #10-24 | 0.250        | 0.150   | 0.357 - 0.373 | 1000          |
| 011024PW031 | #10-24 | 0.313        | 0.150   | 0.357 - 0.373 | 1000          |
| 011024PW037 | #10-24 | 0.375        | 0.150   | 0.357 - 0.373 | 1000          |
| 011024PW050 | #10-24 | 0.500        | 0.150   | 0.357 - 0.373 | 1000          |
| 011024PW062 | #10-24 | 0.625        | 0.150   | 0.357 - 0.373 | 1000          |
| 011024PW075 | #10-24 | 0.750        | 0.150   | 0.357 - 0.373 | 1000          |
| 011024PW100 | #10-24 | 1.000        | 0.150   | 0.357 - 0.373 | 500           |
| 011024PW125 | #10-24 | 1.250        | 0.150   | 0.357 - 0.373 | 500           |
| 011024PW150 | #10-24 | 1.500        | 0.150   | 0.357 - 0.373 | 500           |
| 011024PW225 | #10-24 | 2.250        | 0.150   | 0.357 - 0.373 | 500           |
| 011032PW012 | #10-32 | 0.125        | 0.150   | 0.357 - 0.373 | 1000          |
| 011032PW018 | #10-32 | 0.188        | 0.150   | 0.357 - 0.373 | 1000          |
| 011032PW025 | #10-32 | 0.250        | 0.150   | 0.357 - 0.373 | 1000          |
| 011032PW031 | #10-32 | 0.313        | 0.150   | 0.357 - 0.373 | 1000          |
| 011032PW037 | #10-32 | 0.375        | 0.150   | 0.357 - 0.373 | 1000          |
| 011032PW043 | #10-32 | 0.438        | 0.150   | 0.357 - 0.373 | 1000          |
| 011032PW050 | #10-32 | 0.500        | 0.150   | 0.357 - 0.373 | 1000          |
| 011032PW062 | #10-32 | 0.625        | 0.150   | 0.357 - 0.373 | 1000          |
| 011032PW075 | #10-32 | 0.750        | 0.150   | 0.357 - 0.373 | 500           |
| 011032PW081 | #10-32 | 1.188        | 0.150   | 0.357 - 0.373 | 500           |
| 011032PW087 | #10-32 | 0.875        | 0.150   | 0.357 - 0.373 | 500           |
| 011032PW100 | #10-32 | 1.000        | 0.150   | 0.357 - 0.373 | 500           |
| 011032PW106 | #10-32 | 1.063        | 0.150   | 0.357 - 0.373 | 500           |
| 011032PW125 | #10-32 | 1.250        | 0.150   | 0.357 - 0.373 | 1000          |
| 011032PW150 | #10-32 | 1.500        | 0.150   | 0.357 - 0.373 | 500           |
| 011032PW175 | #10-32 | 1.750        | 0.150   | 0.357 - 0.373 | 500           |
| 011032PW200 | #10-32 | 2.000        | 0.150   | 0.357 - 0.373 | 500           |
| 012520PW025 | 1/4-20 | 0.250        | 0.198   | 0.473 - 0.492 | 1000          |
| 012520PW031 | 1/4-20 | 0.313        | 0.198   | 0.473 - 0.492 | 1000          |
| 012520PW037 | 1/4-20 | 0.375        | 0.198   | 0.473 - 0.492 | 500           |
| 012520PW050 | 1/4-20 | 0.500        | 0.198   | 0.473 - 0.492 | 500           |
| 012520PW062 | 1/4-20 | 0.625        | 0.198   | 0.473 - 0.492 | 500           |
| 012520PW075 | 1/4-20 | 0.750        | 0.198   | 0.473 - 0.492 | 500           |
| 012520PW087 | 1/4-20 | 0.875        | 0.198   | 0.473 - 0.492 | 500           |
| 012520PW100 | 1/4-20 | 1.000        | 0.198   | 0.473 - 0.492 | 500           |
| 012520PW125 | 1/4-20 | 1.250        | 0.198   | 0.473 - 0.492 | 500           |
| 012520PW150 | 1/4-20 | 1.500        | 0.198   | 0.473 - 0.492 | 500           |
| 012520PW175 | 1/4-20 | 1.750        | 0.198   | 0.473 - 0.492 | 500           |
| 012520PW200 | 1/4-20 | 2.000        | 0.198   | 0.473 - 0.492 | 500           |
| 012520PW250 | 1/4-20 | 2.500        | 0.198   | 0.473 - 0.492 | 500           |
| 012528PW018 | 1/4-28 | 0.188        | 0.198   | 0.473 - 0.492 | 500           |
| 012528PW025 | 1/4-28 | 0.250        | 0.198   | 0.473 - 0.492 | 500           |
| 012528PW037 | 1/4-28 | 0.375        | 0.198   | 0.473 - 0.492 | 500           |
| 012528PW043 | 1/4-28 | 0.438        | 0.198   | 0.473 - 0.492 | 500           |
| 012528PW050 | 1/4-28 | 0.500        | 0.198   | 0.473 - 0.492 | 500           |
| 012528PW062 | 1/4-28 | 0.625        | 0.198   | 0.473 - 0.492 | 500           |
| 012528PW075 | 1/4-28 | 0.750        | 0.198   | 0.473 - 0.492 | 500           |
| 012528PW100 | 1/4-28 | 1.000        | 0.198   | 0.473 - 0.492 | 1000          |











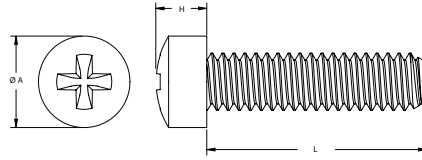


## PLASTIC SCREWS

50G Series  
Metric Phillips Fillister Head Screw

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural



| Item No.      | Thread     | L    |     | H   |      | ØA | Bulk Pack Qty |
|---------------|------------|------|-----|-----|------|----|---------------|
|               |            | mm   | mm  | mm  | mm   |    |               |
| 50M020040G004 | M2 x .4    | 4.0  | 1.6 | 3.8 | 1000 |    |               |
| 50M020040G005 | M2 x .4    | 5.0  | 1.6 | 3.8 | 1000 |    |               |
| 50M020040G006 | M2 x .4    | 6.0  | 1.6 | 3.8 | 1000 |    |               |
| 50M020040G008 | M2 x .4    | 8.0  | 1.6 | 3.8 | 1000 |    |               |
| 50M020040G010 | M2 x .4    | 10.0 | 1.6 | 3.8 | 1000 |    |               |
| 50M020040G012 | M2 x .4    | 12.0 | 1.6 | 3.8 | 1000 |    |               |
| 50M020040G016 | M2 x .4    | 16.0 | 1.6 | 3.8 | 1000 |    |               |
| 50M020040G020 | M2 x .4    | 20.0 | 1.6 | 3.8 | 1000 |    |               |
| 50M020040G025 | M2 x .4    | 25.0 | 1.6 | 3.8 | 1000 |    |               |
| 50M025045G004 | M2.5 x .45 | 4.0  | 1.6 | 3.8 | 1000 |    |               |
| 50M025045G005 | M2.5 x .45 | 5.0  | 2.0 | 5.0 | 1000 |    |               |
| 50M025045G006 | M2.5 x .45 | 6.0  | 2.0 | 5.0 | 1000 |    |               |
| 50M025045G008 | M2.5 x .45 | 8.0  | 2.0 | 5.0 | 1000 |    |               |
| 50M025045G010 | M2.5 x .45 | 10.0 | 2.0 | 5.0 | 1000 |    |               |
| 50M025045G012 | M2.5 x .45 | 12.0 | 2.0 | 5.0 | 1000 |    |               |
| 50M025045G016 | M2.5 x .45 | 16.0 | 2.0 | 5.0 | 1000 |    |               |
| 50M025045G020 | M2.5 x .45 | 20.0 | 2.0 | 5.0 | 1000 |    |               |
| 50M025045G025 | M2.5 x .45 | 25.0 | 2.0 | 5.0 | 1000 |    |               |
| 50M030050G004 | M3 x .5    | 4.0  | 2.4 | 6.0 | 1000 |    |               |
| 50M030050G005 | M3 x .5    | 5.0  | 2.4 | 6.0 | 1000 |    |               |
| 50M030050G006 | M3 x .5    | 6.0  | 2.4 | 6.0 | 1000 |    |               |
| 50M030050G008 | M3 x .5    | 8.0  | 2.4 | 6.0 | 1000 |    |               |
| 50M030050G010 | M3 x .5    | 10.0 | 2.4 | 6.0 | 1000 |    |               |
| 50M030050G012 | M3 x .5    | 12.0 | 2.4 | 6.0 | 1000 |    |               |
| 50M030050G016 | M3 x .5    | 16.0 | 2.4 | 6.0 | 1000 |    |               |
| 50M030050G020 | M3 x .5    | 20.0 | 2.4 | 6.0 | 1000 |    |               |
| 50M030050G025 | M3 x .5    | 25.0 | 2.4 | 6.0 | 1000 |    |               |
| 50M030050G030 | M3 x .5    | 30.0 | 2.4 | 6.0 | 1000 |    |               |
| 50M030050G035 | M3 x .5    | 35.0 | 2.4 | 6.0 | 1000 |    |               |
| 50M030050G042 | M3 x .5    | 42.0 | 2.4 | 6.0 | 1000 |    |               |
| 50M035060G005 | M3.5 x .6  | 5.0  | 2.7 | 7.0 | 1000 |    |               |
| 50M035060G006 | M3.5 x .6  | 6.0  | 2.7 | 7.0 | 1000 |    |               |
| 50M035060G007 | M3.5 x .6  | 7.0  | 2.7 | 7.0 | 1000 |    |               |
| 50M035060G008 | M3.5 x .6  | 8.0  | 2.7 | 7.0 | 1000 |    |               |
| 50M035060G010 | M3.5 x .6  | 10.0 | 2.7 | 7.0 | 1000 |    |               |
| 50M035060G012 | M3.5 x .6  | 12.0 | 2.7 | 7.0 | 1000 |    |               |
| 50M035060G016 | M3.5 x .6  | 16.0 | 2.7 | 7.0 | 1000 |    |               |
| 50M035060G020 | M3.5 x .6  | 20.0 | 2.7 | 7.0 | 1000 |    |               |
| 50M035060G025 | M3.5 x .6  | 25.0 | 2.7 | 7.0 | 1000 |    |               |
| 50M035060G035 | M3.5 x .6  | 35.0 | 2.7 | 7.0 | 1000 |    |               |
| 50M035060G042 | M3.5 x .6  | 42.0 | 2.7 | 7.0 | 1000 |    |               |
| 50M040070G003 | M4 x .7    | 3.0  | 3.1 | 8.0 | 1000 |    |               |
| 50M040070G006 | M4 x .7    | 6.0  | 3.1 | 8.0 | 1000 |    |               |
| 50M040070G008 | M4 x .7    | 8.0  | 3.1 | 8.0 | 1000 |    |               |
| 50M040070G010 | M4 x .7    | 10.0 | 3.1 | 8.0 | 1000 |    |               |
| 50M040070G012 | M4 x .7    | 12.0 | 3.1 | 8.0 | 1000 |    |               |
| 50M040070G016 | M4 x .7    | 16.0 | 3.1 | 8.0 | 1000 |    |               |
| 50M040070G020 | M4 x .7    | 20.0 | 3.1 | 8.0 | 1000 |    |               |

| Item No.      | Thread    | L    |     | H    |      | ØA | Bulk Pack Qty |
|---------------|-----------|------|-----|------|------|----|---------------|
|               |           | mm   | mm  | mm   | mm   |    |               |
| 50M040070G025 | M4 x .7   | 25.0 | 3.1 | 8.0  | 1000 |    |               |
| 50M040070G030 | M4 x .7   | 30.0 | 3.1 | 8.0  | 1000 |    |               |
| 50M040070G035 | M4 x .7   | 35.0 | 3.1 | 8.0  | 500  |    |               |
| 50M040070G040 | M4 x .7   | 40.0 | 3.1 | 8.0  | 500  |    |               |
| 50M050080G006 | M5 x .8   | 6.0  | 3.8 | 9.45 | 1000 |    |               |
| 50M050080G008 | M5 x .8   | 8.0  | 3.8 | 9.45 | 1000 |    |               |
| 50M050080G010 | M5 x .8   | 10.0 | 3.8 | 9.45 | 1000 |    |               |
| 50M050080G012 | M5 x .8   | 12.0 | 3.8 | 9.45 | 1000 |    |               |
| 50M050080G015 | M5 x .8   | 15.0 | 3.8 | 9.45 | 1000 |    |               |
| 50M050080G016 | M5 x .8   | 16.0 | 3.8 | 9.45 | 1000 |    |               |
| 50M050080G020 | M5 x .8   | 20.0 | 3.8 | 9.45 | 1000 |    |               |
| 50M050080G025 | M5 x .8   | 25.0 | 3.8 | 9.45 | 500  |    |               |
| 50M050080G030 | M5 x .8   | 30.0 | 3.8 | 9.45 | 500  |    |               |
| 50M050080G035 | M5 x .8   | 35.0 | 3.8 | 9.45 | 500  |    |               |
| 50M050080G040 | M5 x .8   | 40.0 | 3.8 | 9.45 | 500  |    |               |
| 50M060100G005 | M6 x 1.0  | 5.0  | 4.6 | 12.0 | 1000 |    |               |
| 50M060100G008 | M6 x 1.0  | 8.0  | 4.6 | 12.0 | 1000 |    |               |
| 50M060100G010 | M6 x 1.0  | 10.0 | 4.6 | 12.0 | 500  |    |               |
| 50M060100G012 | M6 x 1.0  | 12.0 | 4.6 | 12.0 | 500  |    |               |
| 50M060100G016 | M6 x 1.0  | 16.0 | 4.6 | 12.0 | 500  |    |               |
| 50M060100G020 | M6 x 1.0  | 20.0 | 4.6 | 12.0 | 500  |    |               |
| 50M060100G022 | M6 x 1.0  | 22.0 | 4.6 | 12.0 | 500  |    |               |
| 50M060100G025 | M6 x 1.0  | 25.0 | 4.6 | 12.0 | 500  |    |               |
| 50M060100G030 | M6 x 1.0  | 30.0 | 4.6 | 12.0 | 500  |    |               |
| 50M060100G035 | M6 x 1.0  | 35.0 | 4.6 | 12.0 | 500  |    |               |
| 50M060100G040 | M6 x 1.0  | 40.0 | 4.6 | 12.0 | 500  |    |               |
| 50M060100G045 | M6 x 1.0  | 45.0 | 4.6 | 12.0 | 500  |    |               |
| 50M060100G050 | M6 x 1.0  | 50.0 | 4.6 | 12.0 | 500  |    |               |
| 50M060100G060 | M6 x 1.0  | 60.0 | 4.6 | 12.0 | 500  |    |               |
| 50M060100G070 | M6 x 1.0  | 70.0 | 4.6 | 12.0 | 500  |    |               |
| 50M060100G075 | M6 x 1.0  | 75.0 | 4.6 | 12.0 | 500  |    |               |
| 50M080125G010 | M8 x 1.25 | 10.0 | 6.0 | 16.0 | 500  |    |               |
| 50M080125G016 | M8 x 1.25 | 16.0 | 6.0 | 16.0 | 500  |    |               |
| 50M080125G020 | M8 x 1.25 | 20.0 | 6.0 | 16.0 | 500  |    |               |
| 50M080125G025 | M8 x 1.25 | 25.0 | 6.0 | 16.0 | 500  |    |               |
| 50M080125G030 | M8 x 1.25 | 30.0 | 6.0 | 16.0 | 500  |    |               |
| 50M080125G035 | M8 x 1.25 | 35.0 | 6.0 | 16.0 | 500  |    |               |
| 50M080125G050 | M8 x 1.25 | 50.0 | 6.0 | 16.0 | 500  |    |               |
| 50M080125G070 | M8 x 1.25 | 70.0 | 6.0 | 16.0 | 500  |    |               |
| 50M100150G013 | M10 x 1.5 | 13.0 | 7.0 | 18.0 | 500  |    |               |
| 50M100150G016 | M10 x 1.5 | 16.0 | 7.0 | 18.0 | 500  |    |               |
| 50M100150G019 | M10 x 1.5 | 19.0 | 7.0 | 18.0 | 500  |    |               |
| 50M100150G020 | M10 x 1.5 | 20.0 | 7.0 | 18.0 | 500  |    |               |
| 50M100150G025 | M10 x 1.5 | 25.0 | 7.0 | 18.0 | 500  |    |               |
| 50M100150G030 | M10 x 1.5 | 30.0 | 7.0 | 18.0 | 500  |    |               |
| 50M100150G035 | M10 x 1.5 | 35.0 | 7.0 | 18.0 | 500  |    |               |
| 50M100150G050 | M10 x 1.5 | 50.0 | 7.0 | 18.0 | 500  |    |               |
| 50M100150G060 | M10 x 1.5 | 60.0 | 7.0 | 18.0 | 500  |    |               |

ESSENTIAL SOLUTIONS

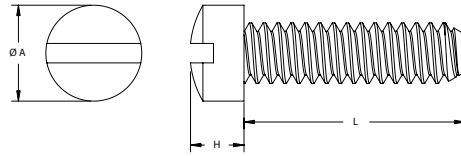
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## PLASTIC SCREWS

50F Series  
Metric Slotted Fillister Head Screw

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.      | Thread     | L mm | H mm | ØA mm | Bulk Pack Qty |
|---------------|------------|------|------|-------|---------------|
| 50M020040F004 | M2 x .4    | 4.0  | 1.6  | 3.8   | 1000          |
| 50M020040F005 | M2 x .4    | 5.0  | 1.6  | 3.8   | 1000          |
| 50M020040F006 | M2 x .4    | 6.0  | 1.6  | 3.8   | 1000          |
| 50M020040F008 | M2 x .4    | 8.0  | 1.6  | 3.8   | 1000          |
| 50M020040F010 | M2 x .4    | 10.0 | 1.6  | 3.8   | 1000          |
| 50M020040F012 | M2 x .4    | 12.0 | 1.6  | 3.8   | 1000          |
| 50M020040F016 | M2 x .4    | 16.0 | 1.6  | 3.8   | 1000          |
| 50M020040F020 | M2 x .4    | 20.0 | 1.6  | 3.8   | 1000          |
| 50M020040F025 | M2 x .4    | 25.0 | 1.6  | 3.8   | 1000          |
| 50M025045F004 | M2.5 x .45 | 4.0  | 2.0  | 5.0   | 1000          |
| 50M025045F005 | M2.5 x .45 | 5.0  | 2.0  | 5.0   | 1000          |
| 50M025045F006 | M2.5 x .45 | 6.0  | 2.0  | 5.0   | 1000          |
| 50M025045F008 | M2.5 x .45 | 8.0  | 2.0  | 5.0   | 1000          |
| 50M025045F010 | M2.5 x .45 | 10.0 | 2.0  | 5.0   | 1000          |
| 50M025045F012 | M2.5 x .45 | 12.0 | 2.0  | 5.0   | 1000          |
| 50M025045F016 | M2.5 x .45 | 16.0 | 2.0  | 5.0   | 1000          |
| 50M025045F020 | M2.5 x .45 | 20.0 | 2.0  | 5.0   | 1000          |
| 50M025045F025 | M2.5 x .45 | 25.0 | 2.0  | 5.0   | 1000          |
| 50M030050F004 | M3 x .5    | 4.0  | 2.4  | 6.0   | 1000          |
| 50M030050F005 | M3 x .5    | 5.0  | 2.4  | 6.0   | 1000          |
| 50M030050F006 | M3 x .5    | 6.0  | 2.4  | 6.0   | 1000          |
| 50M030050F008 | M3 x .5    | 8.0  | 2.4  | 6.0   | 1000          |
| 50M030050F010 | M3 x .5    | 10.0 | 2.4  | 6.0   | 1000          |
| 50M030050F012 | M3 x .5    | 12.0 | 2.4  | 6.0   | 1000          |
| 50M030050F016 | M3 x .5    | 16.0 | 2.4  | 6.0   | 1000          |
| 50M030050F020 | M3 x .5    | 20.0 | 2.4  | 6.0   | 1000          |
| 50M030050F025 | M3 x .5    | 25.0 | 2.4  | 6.0   | 1000          |
| 50M030050F030 | M3 x .5    | 30.0 | 2.4  | 6.0   | 1000          |
| 50M030050F035 | M3 x .5    | 35.0 | 2.4  | 6.0   | 1000          |
| 50M030050F042 | M3 x .5    | 42.0 | 2.4  | 6.0   | 1000          |
| 50M035060F005 | M3.5 x .6  | 5.0  | 2.7  | 7.0   | 1000          |
| 50M035060F006 | M3.5 x .6  | 6.0  | 2.7  | 7.0   | 1000          |
| 50M035060F007 | M3.5 x .6  | 7.0  | 2.7  | 7.0   | #N/A          |
| 50M035060F008 | M3.5 x .6  | 8.0  | 2.7  | 7.0   | 1000          |
| 50M035060F010 | M3.5 x .6  | 10.0 | 2.7  | 7.0   | 1000          |
| 50M035060F012 | M3.5 x .6  | 12.0 | 2.7  | 7.0   | 1000          |
| 50M035060F016 | M3.5 x .6  | 16.0 | 2.7  | 7.0   | 1000          |
| 50M035060F020 | M3.5 x .6  | 20.0 | 2.7  | 7.0   | 1000          |
| 50M035060F025 | M3.5 x .6  | 25.0 | 2.7  | 7.0   | 1000          |
| 50M035060F035 | M3.5 x .6  | 35.0 | 2.7  | 7.0   | 1000          |
| 50M035060F042 | M3.5 x .6  | 42.0 | 2.7  | 7.0   | 1000          |
| 50M040070F003 | M4 x .7    | 3.0  | 3.1  | 8.0   | 1000          |
| 50M040070F006 | M4 x .7    | 6.0  | 3.1  | 8.0   | 1000          |
| 50M040070F008 | M4 x .7    | 8.0  | 3.1  | 8.0   | 1000          |
| 50M040070F010 | M4 x .7    | 10.0 | 3.1  | 8.0   | 1000          |
| 50M040070F012 | M4 x .7    | 12.0 | 3.1  | 8.0   | 1000          |
| 50M040070F016 | M4 x .7    | 16.0 | 3.1  | 8.0   | 1000          |
| 50M040070F020 | M4 x .7    | 20.0 | 3.1  | 8.0   | 1000          |

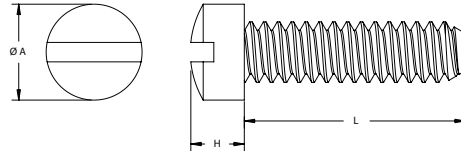
01FPC Series  
Transparent Slotted Fillister Head Screw

## Specifications:

- Material: UL94 V-2 Polycarbonate
- Color: Transparent

## Features:

- Exceptionally high impact strength
- Polycarbonate is unaffected by greases, oils and detergents



| Item No.     | Thread | L mm  | H mm          | ØA mm         | Bulk Pack Qty |
|--------------|--------|-------|---------------|---------------|---------------|
| 010440F025PC | #4-40  | 0.250 | 0.088 - 0.107 | 0.166 - 0.183 | 1000          |
| 010440F028PC | #4-40  | 0.281 | 0.088 - 0.107 | 0.166 - 0.183 | 1000          |
| 010440F037PC | #4-40  | 0.375 | 0.088 - 0.107 | 0.166 - 0.183 | 1000          |
| 010440F050PC | #4-40  | 0.500 | 0.088 - 0.107 | 0.166 - 0.183 | 1000          |
| 010632F025PC | #6-32  | 0.250 | 0.111 - 0.132 | 0.208 - 0.226 | 1000          |
| 010632F037PC | #6-32  | 0.375 | 0.111 - 0.132 | 0.208 - 0.226 | 1000          |
| 010632F050PC | #6-32  | 0.500 | 0.111 - 0.132 | 0.208 - 0.226 | 1000          |
| 010632F062PC | #6-32  | 0.625 | 0.111 - 0.132 | 0.208 - 0.226 | 1000          |
| 010632F075PC | #6-32  | 0.750 | 0.111 - 0.132 | 0.208 - 0.226 | 1000          |
| 010832F012PC | #8-32  | 0.125 | 0.133 - 0.156 | 0.250 - 0.270 | 1000          |
| 010832F025PC | #8-32  | 0.250 | 0.133 - 0.156 | 0.250 - 0.270 | 1000          |

| Item No.     | Thread | L mm  | H mm          | ØA mm         | Bulk Pack Qty |
|--------------|--------|-------|---------------|---------------|---------------|
| 010832F037PC | #8-32  | 0.375 | 0.133 - 0.156 | 0.250 - 0.270 | 1000          |
| 010832F050PC | #8-32  | 0.500 | 0.133 - 0.156 | 0.250 - 0.270 | 1000          |
| 010832F062PC | #8-32  | 0.625 | 0.133 - 0.156 | 0.250 - 0.270 | 1000          |
| 010832F075PC | #8-32  | 0.750 | 0.133 - 0.156 | 0.250 - 0.270 | 1000          |
| 011032F025PC | #10-32 | 0.250 | 0.156 - 0.180 | 0.292 - 0.313 | 1000          |
| 011032F037PC | #10-32 | 0.375 | 0.156 - 0.180 | 0.292 - 0.313 | 1000          |
| 011032F050PC | #10-32 | 0.500 | 0.156 - 0.180 | 0.292 - 0.313 | 1000          |
| 011032F062PC | #10-32 | 0.625 | 0.156 - 0.180 | 0.292 - 0.313 | 1000          |
| 011032F075PC | #10-32 | 0.750 | 0.156 - 0.180 | 0.292 - 0.313 | 500           |
| 011032F100PC | #10-32 | 1.000 | 0.156 - 0.180 | 0.292 - 0.313 | 500           |



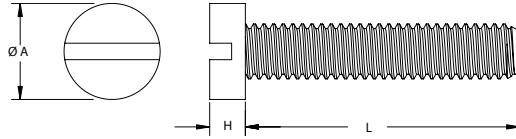








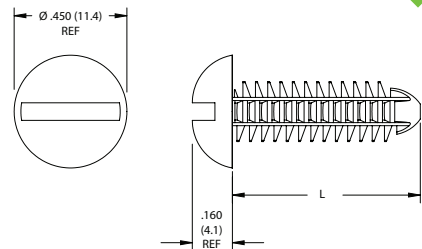
## PLASTIC SCREWS

50D Series  
Metric Cheese Head Slotted Screws

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.      | Thread     | L<br>mm | H<br>mm | ØA<br>mm | Bulk Pack Qty |
|---------------|------------|---------|---------|----------|---------------|
| 50M020040D004 | M2 x .4    | 4.0     | 1.3     | 3.8      | 1000          |
| 50M020040D005 | M2 x .4    | 5.0     | 1.3     | 3.8      | 1000          |
| 50M020040D006 | M2 x .4    | 6.0     | 1.3     | 3.8      | 1000          |
| 50M020040D008 | M2 x .4    | 8.0     | 1.3     | 3.8      | 1000          |
| 50M020040D010 | M2 x .4    | 10.0    | 1.3     | 3.8      | 1000          |
| 50M020040D012 | M2 x .4    | 12.0    | 1.3     | 3.8      | 1000          |
| 50M020040D016 | M2 x .4    | 16.0    | 1.3     | 3.8      | 1000          |
| 50M020040D020 | M2 x .4    | 20.0    | 1.3     | 3.8      | 1000          |
| 50M020040D025 | M2 x .4    | 25.0    | 1.3     | 3.8      | 1000          |
| 50M025045D004 | M2.5 x .45 | 4.0     | 1.6     | 4.5      | 1000          |
| 50M025045D005 | M2.5 x .45 | 5.0     | 1.6     | 4.5      | 1000          |
| 50M025045D006 | M2.5 x .45 | 6.0     | 1.6     | 4.5      | 1000          |
| 50M025045D008 | M2.5 x .45 | 8.0     | 1.6     | 4.5      | 1000          |
| 50M025045D010 | M2.5 x .45 | 10.0    | 1.6     | 4.5      | 1000          |
| 50M025045D012 | M2.5 x .45 | 12.0    | 1.6     | 4.5      | 1000          |
| 50M025045D016 | M2.5 x .45 | 16.0    | 1.6     | 4.5      | 1000          |
| 50M025045D020 | M2.5 x .45 | 20.0    | 1.6     | 4.5      | 1000          |
| 50M025045D025 | M2.5 x .45 | 25.0    | 1.6     | 4.5      | 1000          |
| 50M030050D004 | M3 x .5    | 4.0     | 2.0     | 5.5      | 1000          |
| 50M030050D005 | M3 x .5    | 5.0     | 2.0     | 5.5      | 1000          |
| 50M030050D006 | M3 x .5    | 6.0     | 2.0     | 5.5      | 1000          |
| 50M030050D008 | M3 x .5    | 8.0     | 2.0     | 5.5      | 1000          |
| 50M030050D010 | M3 x .5    | 10.0    | 2.0     | 5.5      | 1000          |
| 50M030050D012 | M3 x .5    | 12.0    | 2.0     | 5.5      | 1000          |
| 50M030050D014 | M3 x .5    | 14.0    | 2.0     | 5.5      | 1000          |
| 50M030050D016 | M3 x .5    | 16.0    | 2.0     | 5.5      | 1000          |
| 50M030050D020 | M3 x .5    | 20.0    | 2.0     | 5.5      | 1000          |
| 50M030050D025 | M3 x .5    | 25.0    | 2.0     | 5.5      | 1000          |
| 50M030050D030 | M3 x .5    | 30.0    | 2.0     | 5.5      | 1000          |
| 50M030050D035 | M3 x .5    | 35.0    | 2.0     | 5.5      | 1000          |
| 50M030050D042 | M3 x .5    | 42.0    | 2.0     | 5.5      | 1000          |
| 50M035060D005 | M3.5 x .6  | 5.0     | 2.4     | 6.0      | 1000          |
| 50M035060D006 | M3.5 x .6  | 6.0     | 2.4     | 6.0      | 1000          |
| 50M035060D008 | M3.5 x .6  | 8.0     | 2.4     | 6.0      | 1000          |
| 50M035060D010 | M3.5 x .6  | 10.0    | 2.4     | 6.0      | 1000          |
| 50M035060D012 | M3.5 x .6  | 12.0    | 2.4     | 6.0      | 1000          |
| 50M035060D016 | M3.5 x .6  | 16.0    | 2.4     | 6.0      | 1000          |
| 50M035060D020 | M3.5 x .6  | 20.0    | 2.4     | 6.0      | 1000          |
| 50M035060D025 | M3.5 x .6  | 25.0    | 2.4     | 6.0      | 1000          |
| 50M035060D035 | M3.5 x .6  | 35.0    | 2.4     | 6.0      | 1000          |
| 50M035060D042 | M3.5 x .6  | 42.0    | 2.4     | 6.0      | 1000          |
| 50M040070D004 | M4 x .7    | 4.0     | 2.6     | 7.0      | 1000          |
| 50M040070D006 | M4 x .7    | 6.0     | 2.6     | 7.0      | 1000          |
| 50M040070D008 | M4 x .7    | 8.0     | 2.6     | 7.0      | 1000          |
| 50M040070D010 | M4 x .7    | 10.0    | 2.6     | 7.0      | 1000          |
| 50M040070D012 | M4 x .7    | 12.0    | 2.6     | 7.0      | 1000          |
| 50M040070D016 | M4 x .7    | 16.0    | 2.6     | 7.0      | 1000          |

27SCR  
Slotted Round Spin Clips

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

## Features:

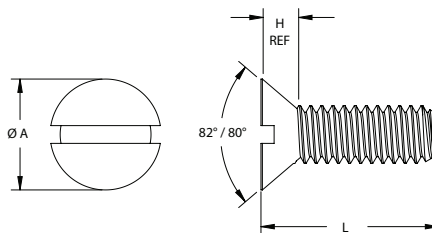
- Combines the advantages of a push-in type fastener with a screw
- Fast and easy assembly
- Resistant to corrosion, oil, abrasion and most chemicals
- Can also be used as a standard Fir Tree Rivet

| Item No.     | Screw Size | L     |       | Ø Hole | Bulk Pack Qty |
|--------------|------------|-------|-------|--------|---------------|
|              |            | in    | mm    | mm     |               |
| 27SC2520R037 | 1/4        | 0.375 | 0.203 | 5.2    | 1000          |
| 27SC2520R050 | 1/4        | 0.500 | 0.203 | 5.2    | 1000          |
| 27SC2520R062 | 1/4        | 0.625 | 0.203 | 5.2    | 1000          |
| 27SC2520R075 | 1/4        | 0.750 | 0.203 | 5.2    | 1000          |
| 27SC2520R100 | 1/4        | 1.000 | 0.203 | 5.2    | 1000          |

PLASTIC SCREWS



02A Series  
82° Slotted Flat Head Screw



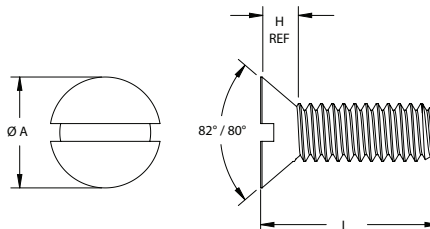
Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.   | Thread | L in  | H in  | ØA in         | Bulk Pack Qty |
|------------|--------|-------|-------|---------------|---------------|
| 020080A012 | #0-80  | 0.125 | 0.035 | 0.096 - 0.112 | 1000          |
| 020080A018 | #0-80  | 0.188 | 0.035 | 0.096 - 0.112 | 1000          |
| 020080A025 | #0-80  | 0.250 | 0.035 | 0.096 - 0.112 | 1000          |
| 020172A025 | #1-72  | 0.250 | 0.043 | 0.126 - 0.146 | 1000          |
| 020172A031 | #1-72  | 0.313 | 0.043 | 0.126 - 0.146 | 1000          |
| 020172A050 | #1-72  | 0.500 | 0.043 | 0.126 - 0.146 | 1000          |
| 020256A009 | #2-56  | 0.094 | 0.051 | 0.147 - 0.172 | 1000          |
| 020256A012 | #2-56  | 0.125 | 0.051 | 0.147 - 0.172 | 1000          |
| 020256A018 | #2-56  | 0.188 | 0.051 | 0.147 - 0.172 | 1000          |
| 020256A025 | #2-56  | 0.250 | 0.051 | 0.147 - 0.172 | 1000          |
| 020256A031 | #2-56  | 0.313 | 0.051 | 0.147 - 0.172 | 1000          |
| 020256A037 | #2-56  | 0.375 | 0.051 | 0.147 - 0.172 | 1000          |
| 020256A043 | #2-56  | 0.438 | 0.051 | 0.147 - 0.172 | 1000          |
| 020256A050 | #2-56  | 0.500 | 0.051 | 0.147 - 0.172 | 1000          |
| 020256A056 | #2-56  | 0.563 | 0.051 | 0.147 - 0.172 | 1000          |
| 020256A062 | #2-56  | 0.625 | 0.051 | 0.147 - 0.172 | 1000          |
| 020256A075 | #2-56  | 0.750 | 0.051 | 0.147 - 0.172 | 1000          |
| 020256A100 | #2-56  | 1.000 | 0.051 | 0.147 - 0.172 | 1000          |
| 020440A012 | #4-40  | 0.125 | 0.067 | 0.195 - 0.225 | 1000          |
| 020440A015 | #4-40  | 0.156 | 0.067 | 0.195 - 0.225 | 1000          |
| 020440A018 | #4-40  | 0.188 | 0.067 | 0.195 - 0.225 | 1000          |
| 020440A025 | #4-40  | 0.250 | 0.067 | 0.195 - 0.225 | 1000          |
| 020440A028 | #4-40  | 0.281 | 0.067 | 0.195 - 0.225 | 1000          |
| 020440A031 | #4-40  | 0.313 | 0.067 | 0.195 - 0.225 | 1000          |
| 020440A037 | #4-40  | 0.375 | 0.067 | 0.195 - 0.225 | 1000          |
| 020440A050 | #4-40  | 0.500 | 0.067 | 0.195 - 0.225 | 1000          |
| 020440A056 | #4-40  | 0.563 | 0.067 | 0.195 - 0.225 | 1000          |
| 020440A062 | #4-40  | 0.625 | 0.067 | 0.195 - 0.225 | 1000          |
| 020440A075 | #4-40  | 0.750 | 0.067 | 0.195 - 0.225 | 1000          |
| 020440A100 | #4-40  | 1.000 | 0.067 | 0.195 - 0.225 | 1000          |
| 020440A112 | #4-40  | 1.125 | 0.067 | 0.195 - 0.225 | 1000          |
| 020440A118 | #4-40  | 1.188 | 0.067 | 0.195 - 0.225 | 1000          |
| 020440A125 | #4-40  | 1.250 | 0.067 | 0.195 - 0.225 | 1000          |
| 020440A137 | #4-40  | 1.375 | 0.067 | 0.195 - 0.225 | 1000          |
| 020440A150 | #4-40  | 1.500 | 0.067 | 0.195 - 0.225 | 1000          |
| 020440A175 | #4-40  | 1.750 | 0.067 | 0.195 - 0.225 | 1000          |
| 020448A015 | #4-48  | 0.156 | 0.067 | 0.195 - 0.225 | 1000          |
| 020632A018 | #6-32  | 0.188 | 0.083 | 0.244 - 0.279 | 1000          |
| 020632A025 | #6-32  | 0.250 | 0.083 | 0.244 - 0.279 | 1000          |
| 020632A031 | #6-32  | 0.313 | 0.083 | 0.244 - 0.279 | 1000          |
| 020632A037 | #6-32  | 0.375 | 0.083 | 0.244 - 0.279 | 1000          |
| 020632A050 | #6-32  | 0.500 | 0.083 | 0.244 - 0.279 | 1000          |
| 020632A062 | #6-32  | 0.625 | 0.083 | 0.244 - 0.279 | 1000          |
| 020632A075 | #6-32  | 0.750 | 0.083 | 0.244 - 0.279 | 1000          |
| 020632A100 | #6-32  | 1.000 | 0.083 | 0.244 - 0.279 | 1000          |
| 020632A112 | #6-32  | 1.125 | 0.083 | 0.244 - 0.279 | 1000          |

| Item No.    | Thread  | L in  | H in  | ØA in         | Bulk Pack Qty |
|-------------|---------|-------|-------|---------------|---------------|
| 020632A125  | #6-32   | 1.250 | 0.083 | 0.244 - 0.279 | 1000          |
| 020632A175  | #6-32   | 1.750 | 0.083 | 0.244 - 0.279 | 1000          |
| 020632A200  | #6-32   | 2.000 | 0.083 | 0.244 - 0.279 | 1000          |
| 020832A025  | #8-32   | 0.250 | 0.100 | 0.292 - 0.332 | 1000          |
| 020832A031  | #8-32   | 0.313 | 0.100 | 0.292 - 0.332 | 1000          |
| 020832A037  | #8-32   | 0.375 | 0.100 | 0.292 - 0.332 | 1000          |
| 020832A043  | #8-32   | 0.438 | 0.100 | 0.292 - 0.332 | 1000          |
| 020832A050  | #8-32   | 0.500 | 0.100 | 0.292 - 0.332 | 1000          |
| 020832A056  | #8-32   | 0.563 | 0.100 | 0.292 - 0.332 | 1000          |
| 020832A062  | #8-32   | 0.625 | 0.100 | 0.292 - 0.332 | 1000          |
| 020832A075  | #8-32   | 0.750 | 0.100 | 0.292 - 0.332 | 500           |
| 020832A100  | #8-32   | 1.000 | 0.100 | 0.292 - 0.332 | 1000          |
| 020832A125  | #8-32   | 1.250 | 0.100 | 0.292 - 0.332 | 1000          |
| 020832A150  | #8-32   | 1.500 | 0.100 | 0.292 - 0.332 | 1000          |
| 021024A025  | #10-24  | 0.250 | 0.116 | 0.340 - 0.385 | 1000          |
| 021024A050  | #10-24  | 0.500 | 0.116 | 0.340 - 0.385 | 1000          |
| 021024A062  | #10-24  | 0.625 | 0.116 | 0.340 - 0.385 | 1000          |
| 021024A075  | #10-24  | 0.750 | 0.116 | 0.340 - 0.385 | 1000          |
| 021024A100  | #10-24  | 1.000 | 0.116 | 0.340 - 0.385 | 500           |
| 021024A150  | #10-24  | 1.500 | 0.116 | 0.340 - 0.385 | 500           |
| 021032A025  | #10-32  | 0.250 | 0.116 | 0.340 - 0.385 | 1000          |
| 021032A031  | #10-32  | 0.313 | 0.116 | 0.340 - 0.385 | 1000          |
| 021032A037  | #10-32  | 0.375 | 0.116 | 0.340 - 0.385 | 1000          |
| 021032A050  | #10-32  | 0.500 | 0.116 | 0.340 - 0.385 | 1000          |
| 021032A062  | #10-32  | 0.625 | 0.116 | 0.340 - 0.385 | 500           |
| 021032A075  | #10-32  | 0.750 | 0.116 | 0.340 - 0.385 | 500           |
| 021032A087  | #10-32  | 0.875 | 0.116 | 0.340 - 0.385 | 500           |
| 021032A100  | #10-32  | 1.000 | 0.116 | 0.340 - 0.385 | 500           |
| 021032A125  | #10-32  | 1.250 | 0.116 | 0.340 - 0.385 | 500           |
| 021032A150  | #10-32  | 1.500 | 0.116 | 0.340 - 0.385 | 500           |
| 021032A200  | #10-32  | 2.000 | 0.116 | 0.340 - 0.385 | 500           |
| 022520A025  | 1/4-20  | 0.250 | 0.153 | 0.452 - 0.507 | 1000          |
| 022520A050  | 1/4-20  | 0.500 | 0.153 | 0.452 - 0.507 | 500           |
| 022520A062  | 1/4-20  | 0.625 | 0.153 | 0.452 - 0.507 | 500           |
| 022520A075  | 1/4-20  | 0.750 | 0.153 | 0.452 - 0.507 | 500           |
| 022520A087  | 1/4-20  | 0.875 | 0.153 | 0.452 - 0.507 | 500           |
| 022520A100  | 1/4-20  | 1.000 | 0.153 | 0.452 - 0.507 | 500           |
| 022520A125  | 1/4-20  | 1.250 | 0.153 | 0.452 - 0.507 | 500           |
| 022520A150  | 1/4-20  | 1.500 | 0.153 | 0.452 - 0.507 | 1000          |
| 022520A175  | 1/4-20  | 1.750 | 0.153 | 0.452 - 0.507 | 1000          |
| 022520A200  | 1/4-20  | 2.000 | 0.153 | 0.452 - 0.507 | 1000          |
| 022520A250  | 1/4-20  | 2.500 | 0.153 | 0.452 - 0.507 | 500           |
| 0231218A100 | 5/16-18 | 1.000 | 0.191 | 0.568 - 0.635 | 1000          |
| 0237516A175 | 3/8-16  | 1.750 | 0.230 | 0.685 - 0.762 | 500           |
| 0237516A200 | 3/8-16  | 2.000 | 0.230 | 0.685 - 0.762 | 500           |

02APC Series  
Transparent 82° Slotted Flat Head Screw



Specifications:

- Material: UL94 V-2 Polycarbonate
- Color: Transparent

Features:

- Exceptionally high impact strength
- Polycarbonate is unaffected by greases, oils & detergents

| Item No.     | Thread | L in  | H Ref in | ØA in         | Bulk Pack Qty |
|--------------|--------|-------|----------|---------------|---------------|
| 020256A012PC | #2-56  | 0.125 | 0.051    | 0.147 - 0.172 | 1000          |
| 020256A018PC | #2-56  | 0.188 | 0.051    | 0.147 - 0.172 | 1000          |
| 020256A025PC | #2-56  | 0.250 | 0.051    | 0.147 - 0.172 | 1000          |
| 020256A037PC | #2-56  | 0.375 | 0.051    | 0.147 - 0.172 | 1000          |

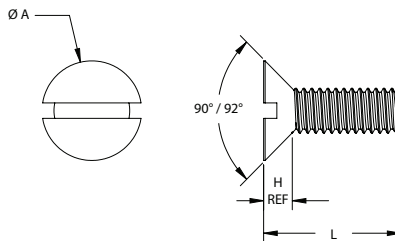
| Item No.     | Thread | L in  | H Ref in | ØA in         | Bulk Pack Qty |
|--------------|--------|-------|----------|---------------|---------------|
| 020256A050PC | #2-56  | 0.500 | 0.051    | 0.147 - 0.172 | 1000          |
| 020440A018PC | #4-40  | 0.188 | 0.067    | 0.195 - 0.225 | 1000          |
| 020632A025PC | #6-32  | 0.250 | 0.083    | 0.244 - 0.279 | 1000          |
| 021032A062PC | #10-32 | 0.625 | 0.116    | 0.340 - 0.385 | 500           |





# PLASTIC SCREWS / COUNTERSUNK SNAP RIVETS

## 50H Series Metric Slotted Flat Head Screw



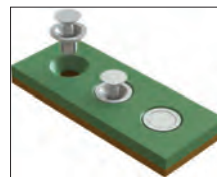
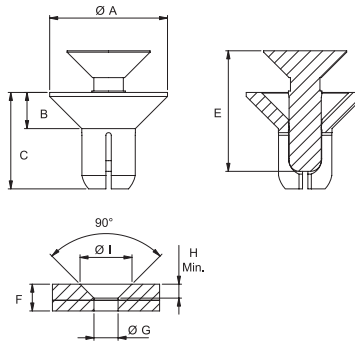
Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.      | Thread     | L mm | H Ref mm | ØA mm     | Bulk Pack Qty |
|---------------|------------|------|----------|-----------|---------------|
| 50M020040H004 | M2 x .4    | 4.0  | 1.2      | 3.5 - 4.4 | 1000          |
| 50M020040H005 | M2 x .4    | 5.0  | 1.2      | 3.5 - 4.4 | 1000          |
| 50M020040H006 | M2 x .4    | 6.0  | 1.2      | 3.5 - 4.4 | 1000          |
| 50M020040H008 | M2 x .4    | 8.0  | 1.2      | 3.5 - 4.4 | 1000          |
| 50M020040H010 | M2 x .4    | 10.0 | 1.2      | 3.5 - 4.4 | 1000          |
| 50M020040H011 | M2 x .4    | 11.0 | 1.2      | 3.5 - 4.4 | 1000          |
| 50M020040H012 | M2 x .4    | 12.0 | 1.2      | 3.5 - 4.4 | 1000          |
| 50M020040H016 | M2 x .4    | 16.0 | 1.2      | 3.5 - 4.4 | 1000          |
| 50M020040H025 | M2 x .4    | 25.0 | 1.2      | 3.5 - 4.4 | 1000          |
| 50M025045H004 | M2.5 x .45 | 4.0  | 1.5      | 4.4 - 5.5 | 1000          |
| 50M025045H005 | M2.5 x .45 | 5.0  | 1.5      | 4.4 - 5.5 | 1000          |
| 50M025045H006 | M2.5 x .45 | 6.0  | 1.5      | 4.4 - 5.5 | 1000          |
| 50M025045H008 | M2.5 x .45 | 8.0  | 1.5      | 4.4 - 5.5 | 1000          |
| 50M025045H010 | M2.5 x .45 | 10.0 | 1.5      | 4.4 - 5.5 | 1000          |
| 50M025045H012 | M2.5 x .45 | 12.0 | 1.5      | 4.4 - 5.5 | 1000          |
| 50M025045H016 | M2.5 x .45 | 16.0 | 1.5      | 4.4 - 5.5 | 1000          |
| 50M025045H020 | M2.5 x .45 | 20.0 | 1.5      | 4.4 - 5.5 | 1000          |
| 50M025045H025 | M2.5 x .45 | 25.0 | 1.5      | 4.4 - 5.5 | 1000          |
| 50M030050H005 | M3 x .5    | 5.0  | 1.7      | 5.2 - 6.3 | 1000          |
| 50M030050H006 | M3 x .5    | 6.0  | 1.7      | 5.2 - 6.3 | 1000          |
| 50M030050H008 | M3 x .5    | 8.0  | 1.7      | 5.2 - 6.3 | 1000          |
| 50M030050H010 | M3 x .5    | 10.0 | 1.7      | 5.2 - 6.3 | 1000          |
| 50M030050H012 | M3 x .5    | 12.0 | 1.7      | 5.2 - 6.3 | 1000          |
| 50M030050H015 | M3 x .5    | 15.0 | 1.7      | 5.2 - 6.3 | 1000          |
| 50M030050H016 | M3 x .5    | 16.0 | 1.7      | 5.2 - 6.3 | 1000          |
| 50M030050H020 | M3 x .5    | 20.0 | 1.7      | 5.2 - 6.3 | 1000          |
| 50M030050H025 | M3 x .5    | 25.0 | 1.7      | 5.2 - 6.3 | 1000          |
| 50M030050H030 | M3 x .5    | 30.0 | 1.7      | 5.2 - 6.3 | 1000          |
| 50M030050H042 | M3 x .5    | 42.0 | 1.7      | 5.2 - 6.3 | 1000          |
| 50M035060H005 | M3.5 x .6  | 5.0  | 2.3      | 6.9 - 8.2 | 1000          |
| 50M035060H006 | M3.5 x .6  | 6.0  | 2.3      | 6.9 - 8.2 | 1000          |
| 50M035060H008 | M3.5 x .6  | 8.0  | 2.3      | 6.9 - 8.2 | 1000          |
| 50M035060H010 | M3.5 x .6  | 10.0 | 2.3      | 6.9 - 8.2 | 1000          |
| 50M035060H016 | M3.5 x .6  | 16.0 | 2.3      | 6.9 - 8.2 | 1000          |
| 50M035060H025 | M3.5 x .6  | 25.0 | 2.3      | 6.9 - 8.2 | 1000          |
| 50M035060H035 | M3.5 x .6  | 35.0 | 2.3      | 6.9 - 8.2 | 500           |
| 50M040070H006 | M4 x .7    | 6.0  | 2.7      | 8.0 - 9.4 | 1000          |
| 50M040070H008 | M4 x .7    | 8.0  | 2.7      | 8.0 - 9.4 | 1000          |

| Item No.      | Thread    | L mm | H Ref mm | ØA mm       | Bulk Pack Qty |
|---------------|-----------|------|----------|-------------|---------------|
| 50M040070H010 | M4 x .7   | 10.0 | 2.7      | 8.0 - 9.4   | 1000          |
| 50M040070H012 | M4 x .7   | 12.0 | 2.7      | 8.0 - 9.4   | 1000          |
| 50M040070H015 | M4 x .7   | 15.0 | 2.7      | 8.0 - 9.4   | 1000          |
| 50M040070H016 | M4 x .7   | 16.0 | 2.7      | 8.0 - 9.4   | 1000          |
| 50M040070H020 | M4 x .7   | 20.0 | 2.7      | 8.0 - 9.4   | 1000          |
| 50M040070H025 | M4 x .7   | 25.0 | 2.7      | 8.0 - 9.4   | 1000          |
| 50M040070H030 | M4 x .7   | 30.0 | 2.7      | 8.0 - 9.4   | 1000          |
| 50M040070H035 | M4 x .7   | 35.0 | 2.7      | 8.0 - 9.4   | 500           |
| 50M050080H006 | M5 x .8   | 6.0  | 2.7      | 8.9 - 10.4  | 1000          |
| 50M050080H008 | M5 x .8   | 8.0  | 2.7      | 8.9 - 10.4  | 1000          |
| 50M050080H010 | M5 x .8   | 10.0 | 2.7      | 8.9 - 10.4  | 1000          |
| 50M050080H012 | M5 x .8   | 12.0 | 2.7      | 8.9 - 10.4  | 1000          |
| 50M050080H015 | M5 x .8   | 15.0 | 2.7      | 8.9 - 10.4  | 1000          |
| 50M050080H016 | M5 x .8   | 16.0 | 2.7      | 8.9 - 10.4  | 1000          |
| 50M050080H020 | M5 x .8   | 20.0 | 2.7      | 8.9 - 10.4  | 1000          |
| 50M050080H025 | M5 x .8   | 25.0 | 2.7      | 8.9 - 10.4  | 1000          |
| 50M050080H030 | M5 x .8   | 30.0 | 2.7      | 8.9 - 10.4  | 500           |
| 50M050080H040 | M5 x .8   | 40.0 | 2.7      | 8.9 - 10.4  | 500           |
| 50M060100H008 | M6 x 1.0  | 8.0  | 3.3      | 10.9 - 12.6 | 1000          |
| 50M060100H010 | M6 x 1.0  | 10.0 | 3.3      | 10.9 - 12.6 | 1000          |
| 50M060100H012 | M6 x 1.0  | 12.0 | 3.3      | 10.9 - 12.6 | 500           |
| 50M060100H016 | M6 x 1.0  | 16.0 | 3.3      | 10.9 - 12.6 | 500           |
| 50M060100H020 | M6 x 1.0  | 20.0 | 3.3      | 10.9 - 12.6 | 500           |
| 50M060100H025 | M6 x 1.0  | 25.0 | 3.3      | 10.9 - 12.6 | 500           |
| 50M060100H035 | M6 x 1.0  | 35.0 | 3.3      | 10.9 - 12.6 | 500           |
| 50M060100H040 | M6 x 1.0  | 40.0 | 3.3      | 10.9 - 12.6 | 500           |
| 50M060100H045 | M6 x 1.0  | 45.0 | 3.3      | 10.9 - 12.6 | 1000          |
| 50M060100H050 | M6 x 1.0  | 50.0 | 3.3      | 10.9 - 12.6 | 500           |
| 50M080125H016 | M8 x 1.25 | 16.0 | 4.6      | 15.4 - 17.3 | 500           |
| 50M080125H020 | M8 x 1.25 | 20.0 | 4.6      | 15.4 - 17.3 | 1000          |
| 50M080125H025 | M8 x 1.25 | 25.0 | 4.6      | 15.4 - 17.3 | 500           |
| 50M080125H030 | M8 x 1.25 | 30.0 | 4.6      | 15.4 - 17.3 | 1000          |
| 50M080125H050 | M8 x 1.25 | 50.0 | 4.6      | 15.4 - 17.3 | 500           |
| 50M100150H020 | M10 x 1.5 | 20.0 | 5.0      | 17.8 - 20.0 | 500           |
| 50M100150H025 | M10 x 1.5 | 25.0 | 5.0      | 17.8 - 20.0 | 500           |
| 50M100150H030 | M10 x 1.5 | 30.0 | 5.0      | 17.8 - 20.0 | 500           |
| 50M100150H035 | M10 x 1.5 | 35.0 | 5.0      | 17.8 - 20.0 | 500           |
| 50M100150H060 | M10 x 1.5 | 60.0 | 5.0      | 17.8 - 20.0 | 500           |

## SRCS Series Countersunk Snap Rivets



Specifications:

- Material: UL94 V-2 Nylon 6
- Color: See Table

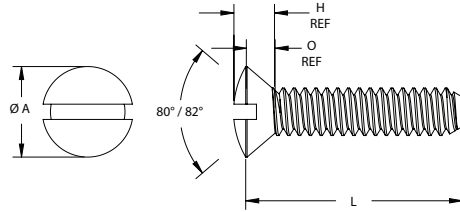
Features:

- Countersunk design for flush surface
- Tamper resistant design
- Accommodates countersunk hole specification DIN ISO 7721

| Item No.   | Ø Hole     | Total Holding Thickness F |           | Ø A         |           | B    |     | C    |     | E    |      | H Min. |      | Ø I  |     | Bulk Pack Qty |      |      |
|------------|------------|---------------------------|-----------|-------------|-----------|------|-----|------|-----|------|------|--------|------|------|-----|---------------|------|------|
| Black      | White      | in                        | mm        | in          | mm        | in   | mm  | in   | mm  | in   | mm   | in     | mm   | in   | mm  |               |      |      |
| SRCS-4060B | SRCS-4060W | 0.16 - 0.17               | 4.1 - 4.2 | 0.14 - 0.18 | 3.5 - 4.5 | 0.35 | 8.8 | 0.11 | 2.7 | 0.24 | 6.0  | 0.28   | 7.1  | 0.10 | 2.6 | 0.37          | 9.4  | 1000 |
| SRCS-4070B | SRCS-4070W | 0.16 - 0.17               | 4.1 - 4.2 | 0.18 - 0.22 | 4.5 - 5.5 | 0.35 | 8.8 | 0.11 | 2.7 | 0.28 | 7.2  | 0.35   | 9.0  | 0.10 | 2.6 | 0.37          | 9.4  | 1000 |
| SRCS-4080B | SRCS-4080W | 0.16 - 0.17               | 4.1 - 4.2 | 0.22 - 0.26 | 5.5 - 6.5 | 0.35 | 8.8 | 0.11 | 2.7 | 0.32 | 8.0  | 0.35   | 9.0  | 0.10 | 2.6 | 0.37          | 9.4  | 1000 |
| SRCS-4090B | SRCS-4090W | 0.16 - 0.17               | 4.1 - 4.2 | 0.26 - 0.30 | 6.5 - 7.5 | 0.35 | 8.8 | 0.11 | 2.7 | 0.35 | 9.0  | 0.43   | 11.0 | 0.10 | 2.6 | 0.37          | 9.4  | 1000 |
| SRCS-4100B | SRCS-4100W | 0.16 - 0.17               | 4.1 - 4.2 | 0.30 - 0.34 | 7.5 - 8.5 | 0.35 | 8.8 | 0.11 | 2.7 | 0.39 | 10.0 | 0.43   | 11.0 | 0.10 | 2.6 | 0.37          | 9.4  | 1000 |
| SRCS-5065B | SRCS-5065W | 0.20 - 0.21               | 5.1 - 5.2 | 0.14 - 0.18 | 3.5 - 4.5 | 0.35 | 8.8 | 0.11 | 2.7 | 0.26 | 6.5  | 0.35   | 8.5  | 0.10 | 2.6 | 0.41          | 10.4 | 1000 |



## PLASTIC SCREWS

33A Series  
82° Slotted Oval Head Screw

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.   | Thread | L<br>in | H Ref<br>in | O Ref<br>in   | ØA<br>in      | Bulk Pack Qty |
|------------|--------|---------|-------------|---------------|---------------|---------------|
| 330256A018 | #2-56  | 0.188   | 0.051       | 0.063 - 0.080 | 0.147 - 0.172 | 1000          |
| 330256A025 | #2-56  | 0.250   | 0.051       | 0.063 - 0.080 | 0.147 - 0.172 | 1000          |
| 330256A031 | #2-56  | 0.313   | 0.051       | 0.063 - 0.080 | 0.147 - 0.172 | 1000          |
| 330256A037 | #2-56  | 0.375   | 0.051       | 0.063 - 0.080 | 0.147 - 0.172 | 1000          |
| 330256A043 | #2-56  | 0.438   | 0.051       | 0.063 - 0.080 | 0.147 - 0.172 | 1000          |
| 330256A050 | #2-56  | 0.500   | 0.051       | 0.063 - 0.080 | 0.147 - 0.172 | 1000          |
| 330256A056 | #2-56  | 0.563   | 0.051       | 0.063 - 0.080 | 0.147 - 0.172 | 1000          |
| 330256A062 | #2-56  | 0.625   | 0.051       | 0.063 - 0.080 | 0.147 - 0.172 | 1000          |
| 330256A075 | #2-56  | 0.750   | 0.051       | 0.063 - 0.080 | 0.147 - 0.172 | 1000          |
| 330440A012 | #4-40  | 0.125   | 0.067       | 0.084 - 0.104 | 0.195 - 0.225 | 1000          |
| 330440A015 | #4-40  | 0.156   | 0.067       | 0.084 - 0.104 | 0.195 - 0.225 | 1000          |
| 330440A018 | #4-40  | 0.188   | 0.067       | 0.084 - 0.104 | 0.195 - 0.225 | 1000          |
| 330440A025 | #4-40  | 0.250   | 0.067       | 0.084 - 0.104 | 0.195 - 0.225 | 1000          |
| 330440A028 | #4-40  | 0.281   | 0.067       | 0.084 - 0.104 | 0.195 - 0.225 | 1000          |
| 330440A031 | #4-40  | 0.313   | 0.067       | 0.084 - 0.104 | 0.195 - 0.225 | 1000          |
| 330440A037 | #4-40  | 0.375   | 0.067       | 0.084 - 0.104 | 0.195 - 0.225 | 1000          |
| 330440A050 | #4-40  | 0.500   | 0.067       | 0.084 - 0.104 | 0.195 - 0.225 | 1000          |
| 330440A056 | #4-40  | 0.563   | 0.067       | 0.084 - 0.104 | 0.195 - 0.225 | 1000          |
| 330440A062 | #4-40  | 0.625   | 0.067       | 0.084 - 0.104 | 0.195 - 0.225 | 1000          |
| 330440A075 | #4-40  | 0.750   | 0.067       | 0.084 - 0.104 | 0.195 - 0.225 | 1000          |
| 330440A100 | #4-40  | 1.000   | 0.067       | 0.084 - 0.104 | 0.195 - 0.225 | 1000          |
| 330440A112 | #4-40  | 1.125   | 0.067       | 0.084 - 0.104 | 0.195 - 0.225 | 1000          |
| 330440A118 | #4-40  | 1.188   | 0.067       | 0.084 - 0.104 | 0.195 - 0.225 | 1000          |
| 330440A125 | #4-40  | 1.250   | 0.067       | 0.084 - 0.104 | 0.195 - 0.225 | 1000          |
| 330440A137 | #4-40  | 1.375   | 0.067       | 0.084 - 0.104 | 0.195 - 0.225 | 1000          |
| 330440A150 | #4-40  | 1.500   | 0.067       | 0.084 - 0.104 | 0.195 - 0.225 | 1000          |
| 330440A175 | #4-40  | 1.750   | 0.067       | 0.084 - 0.104 | 0.195 - 0.225 | 1000          |
| 330448A015 | #4-48  | 0.156   | 0.067       | 0.084 - 0.104 | 0.195 - 0.225 | 1000          |
| 330448A025 | #4-48  | 0.250   | 0.067       | 0.084 - 0.104 | 0.195 - 0.225 | 1000          |
| 330632A025 | #6-32  | 0.250   | 0.083       | 0.105 - 0.128 | 0.244 - 0.279 | 1000          |
| 330632A031 | #6-32  | 0.313   | 0.083       | 0.105 - 0.128 | 0.244 - 0.279 | 1000          |
| 330632A037 | #6-32  | 0.375   | 0.083       | 0.105 - 0.128 | 0.244 - 0.279 | 1000          |
| 330632A050 | #6-32  | 0.500   | 0.083       | 0.105 - 0.128 | 0.244 - 0.279 | 1000          |
| 330632A062 | #6-32  | 0.625   | 0.083       | 0.105 - 0.128 | 0.244 - 0.279 | 1000          |
| 330632A075 | #6-32  | 0.750   | 0.083       | 0.105 - 0.128 | 0.244 - 0.279 | 1000          |
| 330632A100 | #6-32  | 1.000   | 0.083       | 0.105 - 0.128 | 0.244 - 0.279 | 1000          |
| 330632A112 | #6-32  | 1.125   | 0.083       | 0.105 - 0.128 | 0.244 - 0.279 | 1000          |
| 330632A125 | #6-32  | 1.250   | 0.083       | 0.105 - 0.128 | 0.244 - 0.279 | 1000          |
| 330632A175 | #6-32  | 1.750   | 0.083       | 0.105 - 0.128 | 0.244 - 0.279 | 1000          |
| 330632A200 | #6-32  | 2.000   | 0.083       | 0.105 - 0.128 | 0.244 - 0.279 | 1000          |
| 330832A025 | #8-32  | 0.250   | 0.100       | 0.126 - 0.152 | 0.292 - 0.332 | 1000          |
| 330832A031 | #8-32  | 0.313   | 0.100       | 0.126 - 0.152 | 0.292 - 0.332 | 1000          |
| 330832A037 | #8-32  | 0.375   | 0.100       | 0.126 - 0.152 | 0.292 - 0.332 | 1000          |
| 330832A043 | #8-32  | 0.438   | 0.100       | 0.126 - 0.152 | 0.292 - 0.332 | 1000          |
| 330832A050 | #8-32  | 0.500   | 0.100       | 0.126 - 0.152 | 0.292 - 0.332 | 1000          |
| 330832A056 | #8-32  | 0.563   | 0.100       | 0.126 - 0.152 | 0.292 - 0.332 | 1000          |
| 330832A062 | #8-32  | 0.625   | 0.100       | 0.126 - 0.152 | 0.292 - 0.332 | 1000          |
| 330832A075 | #8-32  | 0.750   | 0.100       | 0.126 - 0.152 | 0.292 - 0.332 | 1000          |
| 330832A100 | #8-32  | 1.000   | 0.100       | 0.126 - 0.152 | 0.292 - 0.332 | 1000          |
| 330832A125 | #8-32  | 1.250   | 0.100       | 0.126 - 0.152 | 0.292 - 0.332 | 1000          |
| 331024A050 | #10-24 | 0.500   | 0.116       | 0.148 - 0.176 | 0.340 - 0.385 | 1000          |
| 331024A075 | #10-24 | 0.750   | 0.116       | 0.148 - 0.176 | 0.340 - 0.385 | 1000          |
| 331024A100 | #10-24 | 1.000   | 0.116       | 0.148 - 0.176 | 0.340 - 0.385 | 500           |
| 331024A125 | #10-24 | 1.250   | 0.116       | 0.148 - 0.176 | 0.340 - 0.385 | 500           |
| 331032A025 | #10-32 | 0.250   | 0.116       | 0.148 - 0.176 | 0.340 - 0.385 | 1000          |
| 331032A031 | #10-32 | 0.313   | 0.116       | 0.148 - 0.176 | 0.340 - 0.385 | 1000          |
| 331032A037 | #10-32 | 0.375   | 0.116       | 0.148 - 0.176 | 0.340 - 0.385 | 1000          |
| 331032A050 | #10-32 | 0.500   | 0.116       | 0.148 - 0.176 | 0.340 - 0.385 | 1000          |
| 331032A075 | #10-32 | 0.750   | 0.116       | 0.148 - 0.176 | 0.340 - 0.385 | 500           |
| 331032A087 | #10-32 | 0.875   | 0.116       | 0.148 - 0.176 | 0.340 - 0.385 | 500           |
| 331032A100 | #10-32 | 1.000   | 0.116       | 0.148 - 0.176 | 0.340 - 0.385 | 500           |
| 331032A125 | #10-32 | 1.250   | 0.116       | 0.148 - 0.176 | 0.340 - 0.385 | 500           |
| 331032A150 | #10-32 | 1.500   | 0.116       | 0.148 - 0.176 | 0.340 - 0.385 | 500           |
| 332520A025 | 1/4-20 | 0.250   | 0.153       | 0.197 - 0.232 | 0.452 - 0.507 | 1000          |
| 332520A050 | 1/4-20 | 0.500   | 0.153       | 0.197 - 0.232 | 0.452 - 0.507 | 500           |
| 332520A062 | 1/4-20 | 0.625   | 0.153       | 0.197 - 0.232 | 0.452 - 0.507 | 500           |
| 332520A075 | 1/4-20 | 0.750   | 0.153       | 0.197 - 0.232 | 0.452 - 0.507 | 500           |
| 332520A087 | 1/4-20 | 0.875   | 0.153       | 0.197 - 0.232 | 0.452 - 0.507 | 500           |
| 332520A100 | 1/4-20 | 1.000   | 0.153       | 0.197 - 0.232 | 0.452 - 0.507 | 500           |
| 332520A125 | 1/4-20 | 1.250   | 0.153       | 0.197 - 0.232 | 0.452 - 0.507 | 500           |
| 332520A150 | 1/4-20 | 1.500   | 0.153       | 0.197 - 0.232 | 0.452 - 0.507 | 500           |
| 332520A175 | 1/4-20 | 1.750   | 0.153       | 0.197 - 0.232 | 0.452 - 0.507 | 500           |
| 332520A200 | 1/4-20 | 2.000   | 0.153       | 0.197 - 0.232 | 0.452 - 0.507 | 500           |
| 332520A250 | 1/4-20 | 2.500   | 0.153       | 0.197 - 0.232 | 0.452 - 0.507 | 500           |





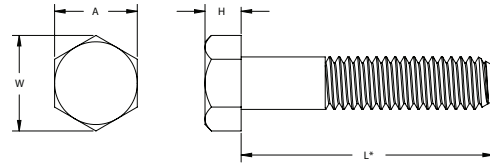
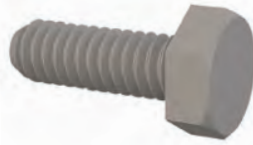








**03XM225 Series**  
**Unslotted Hex Cap Screw - GF Polyurethane**



**Specifications:**

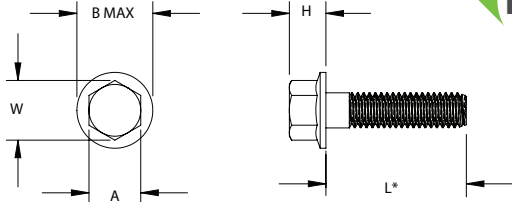
- Material: 40% Glass-Filled Polyurethane
- Color: Natural

| Item No.        | Thread  | L     |  | H     |         | A     |         | W     |         | Bulk Pack Qty |
|-----------------|---------|-------|--|-------|---------|-------|---------|-------|---------|---------------|
|                 |         | in    |  | in    |         | in    |         | in    |         |               |
| 0325020037XM225 | 1/4-20  | 0.375 |  | 0.150 | - 0.188 | 0.425 | - 0.438 | 0.484 | - 0.505 | 500           |
| 0325020050XM225 | 1/4-20  | 0.500 |  | 0.150 | - 0.188 | 0.425 | - 0.438 | 0.484 | - 0.505 | 500           |
| 0325020062XM225 | 1/4-20  | 0.625 |  | 0.150 | - 0.188 | 0.425 | - 0.438 | 0.484 | - 0.505 | 500           |
| 0325020075XM225 | 1/4-20  | 0.750 |  | 0.150 | - 0.188 | 0.425 | - 0.438 | 0.484 | - 0.505 | 500           |
| 0325020087XM225 | 1/4-20  | 0.875 |  | 0.150 | - 0.188 | 0.425 | - 0.438 | 0.484 | - 0.505 | 500           |
| 0325020100XM225 | 1/4-20  | 1.000 |  | 0.150 | - 0.188 | 0.425 | - 0.438 | 0.484 | - 0.505 | 500           |
| 0325020125XM225 | 1/4-20  | 1.250 |  | 0.150 | - 0.188 | 0.425 | - 0.438 | 0.484 | - 0.505 | 1000          |
| 0325020137XM225 | 1/4-20  | 1.375 |  | 0.150 | - 0.188 | 0.425 | - 0.438 | 0.484 | - 0.505 | 1000          |
| 0325020150XM225 | 1/4-20  | 1.500 |  | 0.150 | - 0.188 | 0.425 | - 0.438 | 0.484 | - 0.505 | 500           |
| 0331218100XM225 | 5/16-18 | 1.000 |  | 0.195 | - 0.235 | 0.484 | - 0.500 | 0.552 | - 0.577 | 1000          |
| 0331218150XM225 | 5/16-18 | 1.500 |  | 0.195 | - 0.235 | 0.425 | - 0.438 | 0.484 | - 0.505 | 500           |
| 0331218200XM225 | 5/16-18 | 2.000 |  | 0.195 | - 0.235 | 0.484 | - 0.500 | 0.552 | - 0.577 | 500           |
| 0337516050XM225 | 3/8-16  | 0.500 |  | 0.226 | - 0.268 | 0.544 | - 0.562 | 0.620 | - 0.650 | 500           |
| 0337516062XM225 | 3/8-16  | 0.625 |  | 0.226 | - 0.268 | 0.544 | - 0.562 | 0.620 | - 0.650 | 500           |
| 0337516075XM225 | 3/8-16  | 0.750 |  | 0.226 | - 0.268 | 0.544 | - 0.562 | 0.620 | - 0.650 | 500           |
| 0337516087XM225 | 3/8-16  | 0.875 |  | 0.226 | - 0.268 | 0.544 | - 0.562 | 0.620 | - 0.650 | 500           |
| 0337516100XM225 | 3/8-16  | 1.000 |  | 0.226 | - 0.268 | 0.544 | - 0.562 | 0.620 | - 0.650 | 500           |
| 0337516125XM225 | 3/8-16  | 1.250 |  | 0.226 | - 0.268 | 0.544 | - 0.562 | 0.620 | - 0.650 | 500           |
| 0337516150XM225 | 3/8-16  | 1.500 |  | 0.226 | - 0.268 | 0.544 | - 0.562 | 0.620 | - 0.650 | 500           |
| 0337516162XM225 | 3/8-16  | 1.625 |  | 0.226 | - 0.268 | 0.544 | - 0.562 | 0.620 | - 0.650 | 500           |
| 0337516175XM225 | 3/8-16  | 1.750 |  | 0.226 | - 0.268 | 0.544 | - 0.562 | 0.620 | - 0.650 | 250           |
| 0337516200XM225 | 3/8-16  | 2.000 |  | 0.226 | - 0.268 | 0.544 | - 0.562 | 0.620 | - 0.650 | 500           |
| 0337516225XM225 | 3/8-16  | 2.250 |  | 0.226 | - 0.268 | 0.544 | - 0.562 | 0.620 | - 0.650 | 500           |
| 0337516250XM225 | 3/8-16  | 2.500 |  | 0.226 | - 0.268 | 0.544 | - 0.562 | 0.620 | - 0.650 | 500           |
| 0337516300XM225 | 3/8-16  | 3.000 |  | 0.226 | - 0.268 | 0.544 | - 0.562 | 0.620 | - 0.650 | 500           |
| 0337516325XM225 | 3/8-16  | 3.250 |  | 0.226 | - 0.268 | 0.544 | - 0.562 | 0.620 | - 0.650 | 500           |
| 0337516350XM225 | 3/8-16  | 3.500 |  | 0.226 | - 0.268 | 0.544 | - 0.562 | 0.620 | - 0.650 | 1000          |
| 0337516375XM225 | 3/8-16  | 3.750 |  | 0.226 | - 0.268 | 0.544 | - 0.562 | 0.620 | - 0.650 | 1000          |
| 0337516400XM225 | 3/8-16  | 4.000 |  | 0.226 | - 0.268 | 0.544 | - 0.562 | 0.620 | - 0.650 | 500           |
| 0337516425XM225 | 3/8-16  | 4.250 |  | 0.226 | - 0.268 | 0.544 | - 0.562 | 0.620 | - 0.650 | 500           |
| 0337516450XM225 | 3/8-16  | 4.500 |  | 0.226 | - 0.268 | 0.544 | - 0.562 | 0.620 | - 0.650 | 500           |
| 0350013075XM225 | 1/2-13  | 0.750 |  | 0.302 | - 0.364 | 0.725 | - 0.750 | 0.826 | - 0.866 | 250           |
| 0350013087XM225 | 1/2-13  | 0.875 |  | 0.302 | - 0.364 | 0.725 | - 0.750 | 0.826 | - 0.866 | 250           |
| 0350013100XM225 | 1/2-13  | 1.000 |  | 0.302 | - 0.364 | 0.725 | - 0.750 | 0.826 | - 0.866 | 250           |
| 0350013125XM225 | 1/2-13  | 1.250 |  | 0.302 | - 0.364 | 0.725 | - 0.750 | 0.826 | - 0.866 | 250           |
| 0350013137XM225 | 1/2-13  | 1.375 |  | 0.302 | - 0.364 | 0.725 | - 0.750 | 0.826 | - 0.866 | 250           |
| 0350013150XM225 | 1/2-13  | 1.500 |  | 0.302 | - 0.364 | 0.725 | - 0.750 | 0.826 | - 0.866 | 250           |
| 0350013162XM225 | 1/2-13  | 1.625 |  | 0.302 | - 0.364 | 0.725 | - 0.750 | 0.826 | - 0.866 | 250           |
| 0350013175XM225 | 1/2-13  | 1.750 |  | 0.302 | - 0.364 | 0.725 | - 0.750 | 0.826 | - 0.866 | 250           |
| 0350013187XM225 | 1/2-13  | 1.875 |  | 0.302 | - 0.364 | 0.725 | - 0.750 | 0.826 | - 0.866 | 250           |
| 0350013200XM225 | 1/2-13  | 2.000 |  | 0.302 | - 0.364 | 0.725 | - 0.750 | 0.826 | - 0.866 | 250           |
| 0350013225XM225 | 1/2-13  | 2.250 |  | 0.302 | - 0.364 | 0.725 | - 0.750 | 0.826 | - 0.866 | 1000          |
| 0350013237XM225 | 1/2-13  | 2.375 |  | 0.302 | - 0.364 | 0.725 | - 0.750 | 0.826 | - 0.866 | 250           |
| 0350013250XM225 | 1/2-13  | 2.500 |  | 0.302 | - 0.364 | 0.725 | - 0.750 | 0.826 | - 0.866 | 250           |
| 0350013262XM225 | 1/2-13  | 2.625 |  | 0.302 | - 0.364 | 0.725 | - 0.750 | 0.826 | - 0.866 | 1000          |
| 0350013275XM225 | 1/2-13  | 2.750 |  | 0.302 | - 0.364 | 0.725 | - 0.750 | 0.826 | - 0.866 | 1000          |
| 0350013300XM225 | 1/2-13  | 3.000 |  | 0.302 | - 0.364 | 0.725 | - 0.750 | 0.826 | - 0.866 | 500           |
| 0350013325XM225 | 1/2-13  | 3.250 |  | 0.302 | - 0.364 | 0.725 | - 0.750 | 0.826 | - 0.866 | 500           |
| 0350013337XM225 | 1/2-13  | 3.375 |  | 0.302 | - 0.364 | 0.725 | - 0.750 | 0.826 | - 0.866 | 500           |
| 0350013350XM225 | 1/2-13  | 3.500 |  | 0.302 | - 0.364 | 0.725 | - 0.750 | 0.826 | - 0.866 | 500           |
| 0350013375XM225 | 1/2-13  | 3.750 |  | 0.302 | - 0.364 | 0.725 | - 0.750 | 0.826 | - 0.866 | 250           |
| 0350013400XM225 | 1/2-13  | 4.000 |  | 0.302 | - 0.364 | 0.725 | - 0.750 | 0.826 | - 0.866 | 500           |
| 0350013450XM225 | 1/2-13  | 4.500 |  | 0.302 | - 0.364 | 0.725 | - 0.750 | 0.826 | - 0.866 | 250           |
| 0350013500XM225 | 1/2-13  | 5.000 |  | 0.302 | - 0.364 | 0.725 | - 0.750 | 0.826 | - 0.866 | 250           |
| 0350013550XM225 | 1/2-13  | 5.500 |  | 0.302 | - 0.364 | 0.725 | - 0.750 | 0.826 | - 0.866 | 250           |
| 0350013600XM225 | 1/2-13  | 6.000 |  | 0.302 | - 0.364 | 0.725 | - 0.750 | 0.826 | - 0.866 | 250           |
| 0362511150XM225 | 5/8-11  | 1.500 |  | 0.378 | - 0.444 | 0.906 | - 0.938 | 1.033 | - 1.083 | 250           |
| 0362511200XM225 | 5/8-11  | 2.000 |  | 0.378 | - 0.444 | 0.906 | - 0.938 | 1.033 | - 1.083 | 250           |
| 0362511250XM225 | 5/8-11  | 2.500 |  | 0.378 | - 0.444 | 0.906 | - 0.938 | 1.033 | - 1.083 | 250           |
| 0362511300XM225 | 5/8-11  | 3.000 |  | 0.378 | - 0.444 | 0.906 | - 0.938 | 1.033 | - 1.083 | 250           |
| 0362511350XM225 | 5/8-11  | 3.500 |  | 0.378 | - 0.444 | 0.906 | - 0.938 | 1.033 | - 1.083 | 250           |
| 0362511400XM225 | 5/8-11  | 4.000 |  | 0.378 | - 0.444 | 0.906 | - 0.938 | 1.033 | - 1.083 | 500           |
| 0362511500XM225 | 5/8-11  | 5.000 |  | 0.378 | - 0.444 | 0.906 | - 0.938 | 1.033 | - 1.083 | 500           |
| 0362511550XM225 | 5/8-11  | 5.500 |  | 0.378 | - 0.444 | 0.906 | - 0.938 | 1.033 | - 1.083 | 500           |
| 0362511600XM225 | 5/8-11  | 6.000 |  | 0.378 | - 0.444 | 0.906 | - 0.938 | 1.033 | - 1.083 | 500           |
| 0375010150XM225 | 3/4-10  | 1.500 |  | 0.455 | - 0.524 | 1.088 | - 1.125 | 1.240 | - 1.299 | 500           |
| 0375010200XM225 | 3/4-10  | 2.000 |  | 0.455 | - 0.524 | 1.088 | - 1.125 | 1.240 | - 1.299 | 500           |
| 0375010250XM225 | 3/4-10  | 2.500 |  | 0.455 | - 0.524 | 1.088 | - 1.125 | 1.240 | - 1.299 | 500           |
| 0375010300XM225 | 3/4-10  | 3.000 |  | 0.455 | - 0.524 | 1.088 | - 1.125 | 1.240 | - 1.299 | 250           |
| 0375010350XM225 | 3/4-10  | 3.500 |  | 0.455 | - 0.524 | 1.088 | - 1.125 | 1.240 | - 1.299 | 250           |
| 0375010400XM225 | 3/4-10  | 4.000 |  | 0.455 | - 0.524 | 1.088 | - 1.125 | 1.240 | - 1.299 | 250           |
| 0375010500XM225 | 3/4-10  | 5.000 |  | 0.455 | - 0.524 | 1.088 | - 1.125 | 1.240 | - 1.299 | 250           |
| 0375010550XM225 | 3/4-10  | 5.500 |  | 0.455 | - 0.524 | 1.088 | - 1.125 | 1.240 | - 1.299 | 250           |
| 0375010600XM225 | 3/4-10  | 6.000 |  | 0.455 | - 0.524 | 1.088 | - 1.125 | 1.240 | - 1.299 | 250           |

\* All parts 1" and shorter or have a suffix of "FT" are fully threaded



## PLASTIC SCREWS

03FXM225 Series  
Unslotted Hex Cap Screw - GF Polyurethane

## Specifications:

- Material: 40% Glass-Filled Polyurethane
- Color: Natural

| Item No.         | Thread  | L<br>in | H Max<br>in | A<br>in       | B Max<br>in | W<br>in       | Bulk Pack Qty |
|------------------|---------|---------|-------------|---------------|-------------|---------------|---------------|
| 0325020037FXM225 | 1/4-20  | 0.375   | 0.280       | 0.367 - 0.375 | 0.560       | 0.409 - 0.433 | 500           |
| 0325020050FXM225 | 1/4-20  | 0.500   | 0.280       | 0.367 - 0.375 | 0.560       | 0.409 - 0.433 | 500           |
| 0325020062FXM225 | 1/4-20  | 0.625   | 0.280       | 0.367 - 0.375 | 0.560       | 0.409 - 0.433 | 500           |
| 0325020075FXM225 | 1/4-20  | 0.750   | 0.280       | 0.367 - 0.375 | 0.560       | 0.409 - 0.433 | 500           |
| 0325020087FXM225 | 1/4-20  | 0.875   | 0.280       | 0.367 - 0.375 | 0.560       | 0.409 - 0.433 | 500           |
| 0325020100FXM225 | 1/4-20  | 1.000   | 0.280       | 0.367 - 0.375 | 0.560       | 0.409 - 0.433 | 500           |
| 0325020125FXM225 | 1/4-20  | 1.250   | 0.280       | 0.367 - 0.375 | 0.560       | 0.409 - 0.433 | 1000          |
| 0325020137FXM225 | 1/4-20  | 1.375   | 0.280       | 0.367 - 0.375 | 0.560       | 0.409 - 0.433 | 1000          |
| 0325020150FXM225 | 1/4-20  | 1.500   | 0.280       | 0.367 - 0.375 | 0.560       | 0.409 - 0.433 | 500           |
| 0331218100FXM225 | 5/16-18 | 1.000   | 0.320       | 0.489 - 0.500 | 0.680       | 0.548 - 0.577 | 1000          |
| 0331218150FXM225 | 5/16-18 | 1.500   | 0.320       | 0.489 - 0.500 | 0.680       | 0.548 - 0.577 | 500           |
| 0331218200FXM225 | 5/16-18 | 2.000   | 0.320       | 0.489 - 0.500 | 0.680       | 0.548 - 0.577 | 500           |
| 0337516050FXM225 | 3/8-16  | 0.500   | 0.390       | 0.544 - 0.562 | 0.810       | 0.620 - 0.650 | 500           |
| 0337516062FXM225 | 3/8-16  | 0.625   | 0.390       | 0.544 - 0.562 | 0.810       | 0.620 - 0.650 | 500           |
| 0337516075FXM225 | 3/8-16  | 0.750   | 0.390       | 0.544 - 0.562 | 0.810       | 0.620 - 0.650 | 500           |
| 0337516087FXM225 | 3/8-16  | 0.875   | 0.390       | 0.544 - 0.562 | 0.810       | 0.620 - 0.650 | 500           |
| 0337516100FXM225 | 3/8-16  | 1.000   | 0.390       | 0.544 - 0.562 | 0.810       | 0.620 - 0.650 | 500           |
| 0337516125FXM225 | 3/8-16  | 1.250   | 0.390       | 0.544 - 0.562 | 0.810       | 0.620 - 0.650 | 500           |
| 0337516150FXM225 | 3/8-16  | 1.500   | 0.390       | 0.544 - 0.562 | 0.810       | 0.620 - 0.650 | 500           |
| 0337516162FXM225 | 3/8-16  | 1.625   | 0.390       | 0.544 - 0.562 | 0.810       | 0.620 - 0.650 | 500           |
| 0337516175FXM225 | 3/8-16  | 1.750   | 0.390       | 0.544 - 0.562 | 0.810       | 0.620 - 0.650 | 250           |
| 0337516200FXM225 | 3/8-16  | 2.000   | 0.390       | 0.544 - 0.562 | 0.810       | 0.620 - 0.650 | 500           |
| 0337516225FXM225 | 3/8-16  | 2.250   | 0.390       | 0.544 - 0.562 | 0.810       | 0.620 - 0.650 | 500           |
| 0337516250FXM225 | 3/8-16  | 2.500   | 0.390       | 0.544 - 0.562 | 0.810       | 0.620 - 0.650 | 500           |
| 0337516300FXM225 | 3/8-16  | 3.000   | 0.390       | 0.544 - 0.562 | 0.810       | 0.620 - 0.650 | 500           |
| 0337516325FXM225 | 3/8-16  | 3.250   | 0.390       | 0.544 - 0.562 | 0.810       | 0.620 - 0.650 | 500           |
| 0337516350FXM225 | 3/8-16  | 3.500   | 0.390       | 0.544 - 0.562 | 0.810       | 0.620 - 0.650 | 1000          |
| 0337516375FXM225 | 3/8-16  | 3.750   | 0.390       | 0.544 - 0.562 | 0.810       | 0.620 - 0.650 | 1000          |
| 0337516400FXM225 | 3/8-16  | 4.000   | 0.390       | 0.544 - 0.562 | 0.810       | 0.620 - 0.650 | 500           |
| 0337516425FXM225 | 3/8-16  | 4.250   | 0.390       | 0.544 - 0.562 | 0.810       | 0.620 - 0.650 | 500           |
| 0337516450FXM225 | 3/8-16  | 4.500   | 0.390       | 0.544 - 0.562 | 0.810       | 0.620 - 0.650 | 500           |
| 0350013075FXM225 | 1/2-13  | 0.750   | 0.510       | 0.725 - 0.750 | 1.070       | 0.826 - 0.866 | 250           |
| 0350013087FXM225 | 1/2-13  | 0.875   | 0.510       | 0.725 - 0.750 | 1.070       | 0.826 - 0.866 | 250           |
| 0350013100FXM225 | 1/2-13  | 1.000   | 0.510       | 0.725 - 0.750 | 1.070       | 0.826 - 0.866 | 250           |
| 0350013125FXM225 | 1/2-13  | 1.250   | 0.510       | 0.725 - 0.750 | 1.070       | 0.826 - 0.866 | 250           |
| 0350013137FXM225 | 1/2-13  | 1.375   | 0.510       | 0.725 - 0.750 | 1.070       | 0.826 - 0.866 | 250           |
| 0350013150FXM225 | 1/2-13  | 1.500   | 0.510       | 0.725 - 0.750 | 1.070       | 0.826 - 0.866 | 250           |
| 0350013162FXM225 | 1/2-13  | 1.625   | 0.510       | 0.725 - 0.750 | 1.070       | 0.826 - 0.866 | 250           |
| 0350013175FXM225 | 1/2-13  | 1.750   | 0.510       | 0.725 - 0.750 | 1.070       | 0.826 - 0.866 | 250           |
| 0350013187FXM225 | 1/2-13  | 1.875   | 0.510       | 0.725 - 0.750 | 1.070       | 0.826 - 0.866 | 250           |
| 0350013200FXM225 | 1/2-13  | 2.000   | 0.510       | 0.725 - 0.750 | 1.070       | 0.826 - 0.866 | 250           |
| 0350013225FXM225 | 1/2-13  | 2.250   | 0.510       | 0.725 - 0.750 | 1.070       | 0.826 - 0.866 | 1000          |
| 0350013237FXM225 | 1/2-13  | 2.375   | 0.510       | 0.725 - 0.750 | 1.070       | 0.826 - 0.866 | 250           |
| 0350013250FXM225 | 1/2-13  | 2.500   | 0.510       | 0.725 - 0.750 | 1.070       | 0.826 - 0.866 | 250           |
| 0350013262FXM225 | 1/2-13  | 2.625   | 0.510       | 0.725 - 0.750 | 1.070       | 0.826 - 0.866 | 1000          |
| 0350013275FXM225 | 1/2-13  | 2.750   | 0.510       | 0.725 - 0.750 | 1.070       | 0.826 - 0.866 | 1000          |
| 0350013300FXM225 | 1/2-13  | 3.000   | 0.510       | 0.725 - 0.750 | 1.070       | 0.826 - 0.866 | 500           |
| 0350013325FXM225 | 1/2-13  | 3.250   | 0.510       | 0.725 - 0.750 | 1.070       | 0.826 - 0.866 | 500           |
| 0350013337FXM225 | 1/2-13  | 3.375   | 0.510       | 0.725 - 0.750 | 1.070       | 0.826 - 0.866 | 500           |
| 0350013350FXM225 | 1/2-13  | 3.500   | 0.510       | 0.725 - 0.750 | 1.070       | 0.826 - 0.866 | 500           |
| 0350013375FXM225 | 1/2-13  | 3.750   | 0.510       | 0.725 - 0.750 | 1.070       | 0.826 - 0.866 | 250           |
| 0350013400FXM225 | 1/2-13  | 4.000   | 0.510       | 0.725 - 0.750 | 1.070       | 0.826 - 0.866 | 500           |
| 0350013450FXM225 | 1/2-13  | 4.500   | 0.510       | 0.725 - 0.750 | 1.070       | 0.826 - 0.866 | 250           |
| 0350013500FXM225 | 1/2-13  | 5.000   | 0.510       | 0.725 - 0.750 | 1.070       | 0.826 - 0.866 | 250           |
| 0350013550FXM225 | 1/2-13  | 5.500   | 0.510       | 0.725 - 0.750 | 1.070       | 0.826 - 0.866 | 250           |
| 0350013600FXM225 | 1/2-13  | 6.000   | 0.510       | 0.725 - 0.750 | 1.070       | 0.826 - 0.866 | 250           |
| 0362511150FXM225 | 5/8-11  | 1.500   | 0.620       | 0.906 - 0.938 | 1.330       | 1.033 - 1.083 | 250           |
| 0362511200FXM225 | 5/8-11  | 2.000   | 0.620       | 0.906 - 0.938 | 1.330       | 1.033 - 1.083 | 250           |
| 0362511250FXM225 | 5/8-11  | 2.500   | 0.620       | 0.906 - 0.938 | 1.330       | 1.033 - 1.083 | 250           |
| 0362511300FXM225 | 5/8-11  | 3.000   | 0.620       | 0.906 - 0.938 | 1.330       | 1.033 - 1.083 | 250           |
| 0362511350FXM225 | 5/8-11  | 3.500   | 0.620       | 0.906 - 0.938 | 1.330       | 1.033 - 1.083 | 250           |
| 0362511400FXM225 | 5/8-11  | 4.000   | 0.620       | 0.906 - 0.938 | 1.330       | 1.033 - 1.083 | 500           |
| 0362511500FXM225 | 5/8-11  | 5.000   | 0.620       | 0.906 - 0.938 | 1.330       | 1.033 - 1.083 | 500           |
| 0362511550FXM225 | 5/8-11  | 5.500   | 0.620       | 0.906 - 0.938 | 1.330       | 1.033 - 1.083 | 500           |
| 0362511600FXM225 | 5/8-11  | 6.000   | 0.620       | 0.906 - 0.938 | 1.330       | 1.033 - 1.083 | 500           |
| 0375010150FXM225 | 3/4-10  | 1.500   | 0.730       | 1.088 - 1.125 | 1.590       | 1.240 - 1.299 | 500           |
| 0375010200FXM225 | 3/4-10  | 2.000   | 0.730       | 1.088 - 1.125 | 1.590       | 1.240 - 1.299 | 500           |
| 0375010250FXM225 | 3/4-10  | 2.500   | 0.730       | 1.088 - 1.125 | 1.590       | 1.240 - 1.299 | 500           |
| 0375010300FXM225 | 3/4-10  | 3.000   | 0.730       | 1.088 - 1.125 | 1.590       | 1.240 - 1.299 | 250           |
| 0375010350FXM225 | 3/4-10  | 3.500   | 0.730       | 1.088 - 1.125 | 1.590       | 1.240 - 1.299 | 250           |
| 0375010400FXM225 | 3/4-10  | 4.000   | 0.730       | 1.088 - 1.125 | 1.590       | 1.240 - 1.299 | 250           |
| 0375010500FXM225 | 3/4-10  | 5.000   | 0.730       | 1.088 - 1.125 | 1.590       | 1.240 - 1.299 | 250           |
| 0375010550FXM225 | 3/4-10  | 5.500   | 0.730       | 1.088 - 1.125 | 1.590       | 1.240 - 1.299 | 250           |
| 0375010600FXM225 | 3/4-10  | 6.000   | 0.730       | 1.088 - 1.125 | 1.590       | 1.240 - 1.299 | 250           |

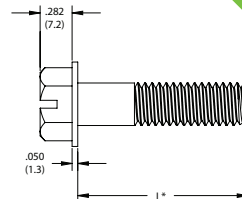
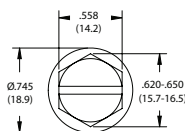
\* All parts 1" and shorter or have a suffix of "FT" are fully threaded





# PLASTIC SCREWS

## 32W Series Slotted Hex Washer Cap Screw



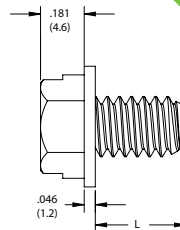
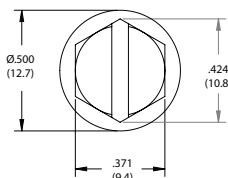
Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.    | Thread | L     |      | Bulk Pack Qty |
|-------------|--------|-------|------|---------------|
|             |        | in    | mm   |               |
| 32W37516050 | 3/8-16 | 0.500 | 12.7 | 500           |
| 32W37516075 | 3/8-16 | 0.750 | 19.0 | 500           |
| 32W37516100 | 3/8-16 | 1.000 | 25.4 | 500           |
| 32W37516125 | 3/8-16 | 1.250 | 31.8 | 500           |
| 32W37516150 | 3/8-16 | 1.500 | 38.1 | 500           |
| 32W37516200 | 3/8-16 | 2.000 | 50.8 | 250           |
| 32W37516250 | 3/8-16 | 2.500 | 63.5 | 250           |
| 32W37516300 | 3/8-16 | 3.000 | 76.2 | 250           |

\* All parts 1" and shorter are fully threaded

## 401 Series Slotted Hex Washer Cap Screw

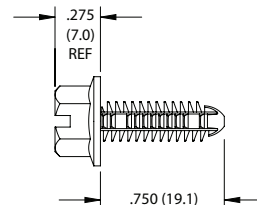
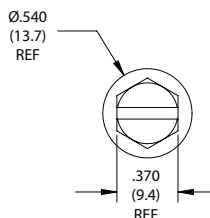


Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No. | Thread | L     |      | Bulk Pack Qty |
|----------|--------|-------|------|---------------|
|          |        | in    | mm   |               |
| 401017   | 1/4-20 | 0.375 | 9.5  | 250           |
| 401016   | 1/4-20 | 0.625 | 15.9 | 250           |

## 27SCHW Slotted Hex Flange Spin Clip



Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

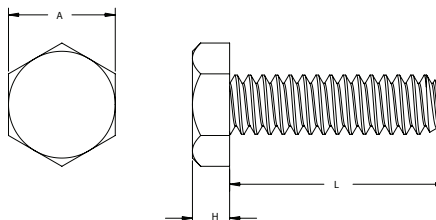
- Combines the advantages of a push-in type fastener with a screw
- Fast and easy assembly
- Resistant to corrosion, oil, abrasion and most chemicals
- Can also be used as a standard fir tree rivet

| Item No.      | Screw Size | Ø Hole |     | Bulk Pack Qty |
|---------------|------------|--------|-----|---------------|
|               |            | in     | mm  |               |
| 27SC2520HW075 | 1/4        | 0.203  | 5.2 | 1000          |





50J Series  
Metric Hex Unslotted Screw



Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.      | Thread     | L<br>mm | H<br>mm   | A<br>mm   | Bulk Pack Qty |
|---------------|------------|---------|-----------|-----------|---------------|
| 50M020040J004 | M2 x .4    | 4.0     | 1.3 - 1.6 | 3.0 - 3.2 | 1000          |
| 50M020040J005 | M2 x .4    | 5.0     | 1.3 - 1.6 | 3.0 - 3.2 | 1000          |
| 50M020040J006 | M2 x .4    | 6.0     | 1.3 - 1.6 | 3.0 - 3.2 | 1000          |
| 50M020040J008 | M2 x .4    | 8.0     | 1.3 - 1.6 | 3.0 - 3.2 | 1000          |
| 50M020040J010 | M2 x .4    | 10.0    | 1.3 - 1.6 | 3.0 - 3.2 | 1000          |
| 50M020040J012 | M2 x .4    | 12.0    | 1.3 - 1.6 | 3.0 - 3.2 | 1000          |
| 50M020040J016 | M2 x .4    | 16.0    | 1.3 - 1.6 | 3.0 - 3.2 | 1000          |
| 50M020040J020 | M2 x .4    | 20.0    | 1.3 - 1.6 | 3.0 - 3.2 | 1000          |
| 50M020040J025 | M2 x .4    | 25.0    | 1.3 - 1.6 | 3.0 - 3.2 | 1000          |
| 50M025045J004 | M2.5 x .45 | 4.0     | 1.8 - 2.1 | 3.8 - 4.0 | 1000          |
| 50M025045J005 | M2.5 x .45 | 5.0     | 1.8 - 2.1 | 3.8 - 4.0 | 1000          |
| 50M025045J006 | M2.5 x .45 | 6.0     | 1.8 - 2.1 | 3.8 - 4.0 | 1000          |
| 50M025045J008 | M2.5 x .45 | 8.0     | 1.8 - 2.1 | 3.8 - 4.0 | 1000          |
| 50M025045J010 | M2.5 x .45 | 10.0    | 1.8 - 2.1 | 3.8 - 4.0 | 1000          |
| 50M025045J012 | M2.5 x .45 | 12.0    | 1.8 - 2.1 | 3.8 - 4.0 | 1000          |
| 50M025045J016 | M2.5 x .45 | 16.0    | 1.8 - 2.1 | 3.8 - 4.0 | 1000          |
| 50M025045J020 | M2.5 x .45 | 20.0    | 1.8 - 2.1 | 3.8 - 4.0 | 1000          |
| 50M025045J025 | M2.5 x .45 | 25.0    | 1.8 - 2.1 | 3.8 - 4.0 | 1000          |
| 50M030050J004 | M3 x .5    | 4.0     | 2.0 - 2.3 | 4.8 - 5.0 | 1000          |
| 50M030050J005 | M3 x .5    | 5.0     | 2.0 - 2.3 | 4.8 - 5.0 | 1000          |
| 50M030050J006 | M3 x .5    | 6.0     | 2.0 - 2.3 | 4.8 - 5.0 | 1000          |
| 50M030050J008 | M3 x .5    | 8.0     | 2.0 - 2.3 | 4.8 - 5.0 | 1000          |
| 50M030050J010 | M3 x .5    | 10.0    | 2.0 - 2.3 | 4.8 - 5.0 | 1000          |
| 50M030050J012 | M3 x .5    | 12.0    | 2.0 - 2.3 | 4.8 - 5.0 | 1000          |
| 50M030050J016 | M3 x .5    | 16.0    | 2.0 - 2.3 | 4.8 - 5.0 | 1000          |
| 50M030050J020 | M3 x .5    | 20.0    | 2.0 - 2.3 | 4.8 - 5.0 | 1000          |
| 50M030050J025 | M3 x .5    | 25.0    | 2.0 - 2.3 | 4.8 - 5.0 | 1000          |
| 50M030050J030 | M3 x .5    | 30.0    | 2.0 - 2.3 | 4.8 - 5.0 | 1000          |
| 50M030050J035 | M3 x .5    | 35.0    | 2.0 - 2.3 | 4.8 - 5.0 | 1000          |
| 50M030050J042 | M3 x .5    | 42.0    | 2.0 - 2.3 | 4.8 - 5.0 | 1000          |
| 50M035060J005 | M3.5 x .6  | 5.0     | 2.3 - 2.6 | 5.3 - 5.5 | 1000          |
| 50M035060J006 | M3.5 x .6  | 6.0     | 2.3 - 2.6 | 5.3 - 5.5 | 1000          |
| 50M035060J007 | M3.5 x .6  | 7.0     | 2.3 - 2.6 | 5.3 - 5.5 | 1000          |
| 50M035060J008 | M3.5 x .6  | 8.0     | 2.3 - 2.6 | 5.3 - 5.5 | 1000          |
| 50M035060J010 | M3.5 x .6  | 10.0    | 2.3 - 2.6 | 5.3 - 5.5 | 1000          |
| 50M035060J012 | M3.5 x .6  | 12.0    | 2.3 - 2.6 | 5.3 - 5.5 | 1000          |
| 50M035060J016 | M3.5 x .6  | 16.0    | 2.3 - 2.6 | 5.3 - 5.5 | 1000          |
| 50M035060J020 | M3.5 x .6  | 20.0    | 2.3 - 2.6 | 5.3 - 5.5 | 1000          |
| 50M035060J025 | M3.5 x .6  | 25.0    | 2.3 - 2.6 | 5.3 - 5.5 | 1000          |
| 50M035060J035 | M3.5 x .6  | 35.0    | 2.3 - 2.6 | 5.3 - 5.5 | 1000          |
| 50M035060J042 | M3.5 x .6  | 42.0    | 2.3 - 2.6 | 5.3 - 5.5 | 1000          |
| 50M040070J006 | M4 x .7    | 6.0     | 2.6 - 3.0 | 6.8 - 7.0 | 1000          |
| 50M040070J008 | M4 x .7    | 8.0     | 2.6 - 3.0 | 6.8 - 7.0 | 1000          |
| 50M040070J010 | M4 x .7    | 10.0    | 2.6 - 3.0 | 6.8 - 7.0 | 1000          |
| 50M040070J012 | M4 x .7    | 12.0    | 2.6 - 3.0 | 6.8 - 7.0 | 1000          |
| 50M040070J016 | M4 x .7    | 16.0    | 2.6 - 3.0 | 6.8 - 7.0 | 1000          |
| 50M040070J020 | M4 x .7    | 20.0    | 2.6 - 3.0 | 6.8 - 7.0 | 1000          |
| 50M040070J025 | M4 x .7    | 25.0    | 2.6 - 3.0 | 6.8 - 7.0 | 1000          |
| 50M040070J030 | M4 x .7    | 30.0    | 2.6 - 3.0 | 6.8 - 7.0 | 1000          |
| 50M040070J035 | M4 x .7    | 35.0    | 2.6 - 3.0 | 6.8 - 7.0 | 500           |
| 50M040070J040 | M4 x .7    | 40.0    | 2.6 - 3.0 | 6.8 - 7.0 | 500           |
| 50M050080J006 | M5 x .8    | 6.0     | 3.3 - 3.8 | 7.8 - 8.0 | 1000          |
| 50M050080J008 | M5 x .8    | 8.0     | 3.3 - 3.8 | 7.8 - 8.0 | 1000          |

| Item No.      | Thread     | L<br>mm | H<br>mm   | A<br>mm     | Bulk Pack Qty |
|---------------|------------|---------|-----------|-------------|---------------|
| 50M050080J010 | M5 x .8    | 10.0    | 3.3 - 3.8 | 7.8 - 8.0   | 1000          |
| 50M050080J012 | M5 x .8    | 12.0    | 3.3 - 3.8 | 7.8 - 8.0   | 1000          |
| 50M050080J014 | M5 x .8    | 14.0    | 3.3 - 3.8 | 7.8 - 8.0   | 1000          |
| 50M050080J016 | M5 x .8    | 16.0    | 3.3 - 3.8 | 7.8 - 8.0   | 1000          |
| 50M050080J020 | M5 x .8    | 20.0    | 3.3 - 3.8 | 7.8 - 8.0   | 1000          |
| 50M050080J025 | M5 x .8    | 25.0    | 3.3 - 3.8 | 7.8 - 8.0   | 500           |
| 50M050080J030 | M5 x .8    | 30.0    | 3.3 - 3.8 | 7.8 - 8.0   | 500           |
| 50M050080J035 | M5 x .8    | 35.0    | 3.3 - 3.8 | 7.8 - 8.0   | 500           |
| 50M050080J040 | M5 x .8    | 40.0    | 3.3 - 3.8 | 7.8 - 8.0   | 500           |
| 50M050080J070 | M5 x .8    | 70.0    | 3.3 - 3.8 | 7.8 - 8.0   | 500           |
| 50M060100J005 | M6 x 1.0   | 5.0     | 4.1 - 4.7 | 9.8 - 10.0  | 500           |
| 50M060100J008 | M6 x 1.0   | 8.0     | 4.1 - 4.7 | 9.8 - 10.0  | 500           |
| 50M060100J010 | M6 x 1.0   | 10.0    | 4.1 - 4.7 | 9.8 - 10.0  | 500           |
| 50M060100J012 | M6 x 1.0   | 12.0    | 4.1 - 4.7 | 9.8 - 10.0  | 500           |
| 50M060100J016 | M6 x 1.0   | 16.0    | 4.1 - 4.7 | 9.8 - 10.0  | 500           |
| 50M060100J020 | M6 x 1.0   | 20.0    | 4.1 - 4.7 | 9.8 - 10.0  | 500           |
| 50M060100J025 | M6 x 1.0   | 25.0    | 4.1 - 4.7 | 9.8 - 10.0  | 500           |
| 50M060100J030 | M6 x 1.0   | 30.0    | 4.1 - 4.7 | 9.8 - 10.0  | 500           |
| 50M060100J035 | M6 x 1.0   | 35.0    | 4.1 - 4.7 | 9.8 - 10.0  | 500           |
| 50M060100J040 | M6 x 1.0   | 40.0    | 4.1 - 4.7 | 9.8 - 10.0  | 1000          |
| 50M060100J045 | M6 x 1.0   | 45.0    | 4.1 - 4.7 | 9.8 - 10.0  | 500           |
| 50M060100J050 | M6 x 1.0   | 50.0    | 4.1 - 4.7 | 9.8 - 10.0  | 1000          |
| 50M060100J060 | M6 x 1.0   | 60.0    | 4.1 - 4.7 | 9.8 - 10.0  | 500           |
| 50M060100J070 | M6 x 1.0   | 70.0    | 4.1 - 4.7 | 9.8 - 10.0  | 500           |
| 50M060100J075 | M6 x 1.0   | 75.0    | 4.1 - 4.7 | 9.8 - 10.0  | 500           |
| 50M080125J006 | M8 x 1.25  | 6.0     | 4.1 - 4.7 | 9.8 - 10.0  | 500           |
| 50M080125J010 | M8 x 1.25  | 10.0    | 5.2 - 6.0 | 12.7 - 13.0 | 500           |
| 50M080125J016 | M8 x 1.25  | 16.0    | 5.2 - 6.0 | 12.7 - 13.0 | 500           |
| 50M080125J020 | M8 x 1.25  | 20.0    | 5.2 - 6.0 | 12.7 - 13.0 | 1000          |
| 50M080125J025 | M8 x 1.25  | 25.0    | 5.2 - 6.0 | 12.7 - 13.0 | 1000          |
| 50M080125J030 | M8 x 1.25  | 30.0    | 5.2 - 6.0 | 12.7 - 13.0 | 1000          |
| 50M080125J035 | M8 x 1.25  | 35.0    | 5.2 - 6.0 | 12.7 - 13.0 | 500           |
| 50M080125J040 | M8 x 1.25  | 40.0    | 5.2 - 6.0 | 12.7 - 13.0 | 500           |
| 50M080125J050 | M8 x 1.25  | 50.0    | 5.2 - 6.0 | 12.7 - 13.0 | 1000          |
| 50M080125J070 | M8 x 1.25  | 70.0    | 5.2 - 6.0 | 12.7 - 13.0 | 500           |
| 50M080125J080 | M8 x 1.25  | 80.0    | 5.2 - 6.0 | 12.7 - 13.0 | 250           |
| 50M100150J016 | M10 x 1.5  | 16.0    | 5.2 - 6.0 | 12.7 - 13.0 | 500           |
| 50M100150J020 | M10 x 1.5  | 20.0    | 6.5 - 7.5 | 15.7 - 16.0 | 500           |
| 50M100150J025 | M10 x 1.5  | 25.0    | 6.5 - 7.5 | 15.7 - 16.0 | 500           |
| 50M100150J030 | M10 x 1.5  | 30.0    | 6.5 - 7.5 | 15.7 - 16.0 | 500           |
| 50M100150J035 | M10 x 1.5  | 35.0    | 6.5 - 7.5 | 15.7 - 16.0 | 500           |
| 50M100150J050 | M10 x 1.5  | 50.0    | 6.5 - 7.5 | 15.7 - 16.0 | 250           |
| 50M100150J060 | M10 x 1.5  | 60.0    | 6.5 - 7.5 | 15.7 - 16.0 | 500           |
| 50M120125J012 | M12 x 1.75 | 12.0    | 6.5 - 7.5 | 15.7 - 16.0 | 250           |
| 50M120175J020 | M12 x 1.75 | 20.0    | 7.8 - 9.0 | 17.7 - 18.0 | 500           |
| 50M120175J025 | M12 x 1.75 | 25.0    | 7.8 - 9.0 | 17.7 - 18.0 | 250           |
| 50M120175J030 | M12 x 1.75 | 30.0    | 7.8 - 9.0 | 17.7 - 18.0 | 250           |
| 50M120175J035 | M12 x 1.75 | 35.0    | 7.8 - 9.0 | 17.7 - 18.0 | 250           |
| 50M120175J040 | M12 x 1.75 | 40.0    | 7.8 - 9.0 | 17.7 - 18.0 | 250           |
| 50M120175J050 | M12 x 1.75 | 50.0    | 7.8 - 9.0 | 17.7 - 18.0 | 250           |
| 50M120175J060 | M12 x 1.75 | 60.0    | 7.8 - 9.0 | 17.7 - 18.0 | 250           |



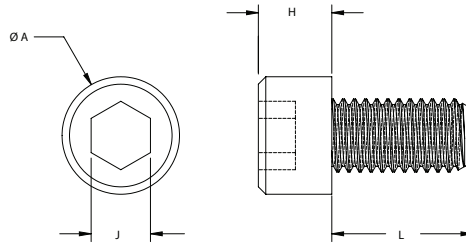




## PLASTIC SCREWS

## 50S Series

## Metric Hex Socket Head Cap Screw



## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.      | Thread    | L mm | H mm       | ØA mm       | Drive Size J | Bulk Pack Qty |
|---------------|-----------|------|------------|-------------|--------------|---------------|
| 50M100150S013 | M10 x 1.5 | 13.0 | 9.8 - 10.0 | 15.7 - 16.0 | 8mm          | 500           |
| 50M100150S016 | M10 x 1.5 | 16.0 | 9.8 - 10.0 | 15.7 - 16.0 | 8mm          | 500           |
| 50M100150S019 | M10 x 1.5 | 19.0 | 9.8 - 10.0 | 15.7 - 16.0 | 8mm          | 500           |
| 50M100150S020 | M10 x 1.5 | 20.0 | 9.8 - 10.0 | 15.7 - 16.0 | 8mm          | 500           |
| 50M100150S025 | M10 x 1.5 | 25.0 | 9.8 - 10.0 | 15.7 - 16.0 | 8mm          | 500           |

| Item No.      | Thread    | L mm | H mm       | ØA mm       | Drive Size J | Bulk Pack Qty |
|---------------|-----------|------|------------|-------------|--------------|---------------|
| 50M100150S030 | M10 x 1.5 | 30.0 | 9.8 - 10.0 | 15.7 - 16.0 | 8mm          | 500           |
| 50M100150S035 | M10 x 1.5 | 35.0 | 9.8 - 10.0 | 15.7 - 16.0 | 8mm          | 500           |
| 50M100150S050 | M10 x 1.5 | 50.0 | 9.8 - 10.0 | 15.7 - 16.0 | 8mm          | 500           |
| 50M100150S060 | M10 x 1.5 | 60.0 | 9.8 - 10.0 | 15.7 - 16.0 | 8mm          | 500           |

## 183 Series

## PEEK® Metric Socket Head Cap Screw

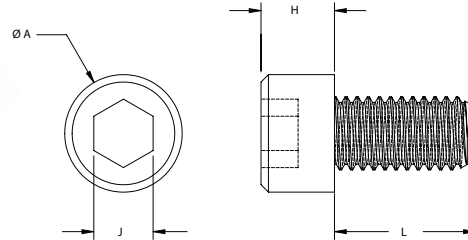


## Specifications:

- Material: UL94 V-0 PEEK®
- Color: Light Brown

## Features:

- Heat Resistant up to 350°F
- Excellent mechanical and chemical resistance properties
- High abrasion resistance
- Resistant to water

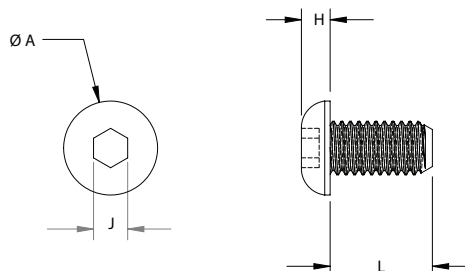


| Item No.     | Thread  | L mm | H mm | ØA mm | Drive Size J | Bulk Pack Qty |
|--------------|---------|------|------|-------|--------------|---------------|
| 183030870409 | M3 x .5 | 8.0  | 3.0  | 5.5   | 2.5mm        | 25            |
| 183031070409 | M3 x .5 | 10.0 | 3.0  | 5.5   | 2.5mm        | 25            |
| 183031270409 | M3 x .5 | 12.0 | 3.0  | 5.5   | 2.5mm        | 25            |
| 183031570409 | M3 x .5 | 15.0 | 3.0  | 5.5   | 2.5mm        | 25            |
| 183032070409 | M3 x .5 | 20.0 | 3.0  | 5.5   | 2.5mm        | 10            |
| 183032570409 | M3 x .5 | 25.0 | 3.0  | 5.5   | 2.5mm        | 10            |
| 183040870409 | M4 x .7 | 8.0  | 4.0  | 7.0   | 3mm          | 10            |
| 183041070409 | M4 x .7 | 10.0 | 4.0  | 7.0   | 3mm          | 10            |
| 183041270409 | M4 x .7 | 12.0 | 4.0  | 7.0   | 3mm          | 10            |
| 183041570409 | M4 x .7 | 15.0 | 4.0  | 7.0   | 3mm          | 10            |
| 183042070409 | M4 x .7 | 20.0 | 4.0  | 7.0   | 3mm          | 10            |
| 183042570409 | M4 x .7 | 25.0 | 4.0  | 7.0   | 3mm          | 10            |
| 183043070409 | M4 x .7 | 30.0 | 4.0  | 7.0   | 3mm          | 10            |
| 183050870409 | M5 x .8 | 8.0  | 5.0  | 8.5   | 4mm          | 10            |
| 183051070409 | M5 x .8 | 10.0 | 5.0  | 8.5   | 4mm          | 10            |
| 183051270409 | M5 x .8 | 12.0 | 5.0  | 8.5   | 4mm          | 10            |
| 183051570409 | M5 x .8 | 15.0 | 5.0  | 8.5   | 4mm          | 10            |

| Item No.     | Thread    | L mm | H mm | ØA mm | Drive Size J | Bulk Pack Qty |
|--------------|-----------|------|------|-------|--------------|---------------|
| 183052070409 | M5 x .8   | 20.0 | 5.0  | 8.5   | 4mm          | 10            |
| 183052570409 | M5 x .8   | 25.0 | 5.0  | 8.5   | 4mm          | 10            |
| 183053070409 | M5 x .8   | 30.0 | 5.0  | 8.5   | 4mm          | 10            |
| 183061070409 | M6 x 1.0  | 10.0 | 6.0  | 10.0  | 5mm          | 10            |
| 183061270409 | M6 x 1.0  | 12.0 | 6.0  | 10.0  | 5mm          | 10            |
| 183061570409 | M6 x 1.0  | 15.0 | 6.0  | 10.0  | 5mm          | 10            |
| 183062070409 | M6 x 1.0  | 20.0 | 6.0  | 10.0  | 5mm          | 10            |
| 183062570409 | M6 x 1.0  | 25.0 | 6.0  | 10.0  | 5mm          | 10            |
| 183063070409 | M6 x 1.0  | 30.0 | 6.0  | 10.0  | 5mm          | 10            |
| 183063570409 | M6 x 1.0  | 35.0 | 6.0  | 10.0  | 5mm          | 10            |
| 183081070409 | M8 x 1.25 | 10.0 | 8.0  | 13.0  | 6mm          | 1             |
| 183081270409 | M8 x 1.25 | 12.0 | 8.0  | 13.0  | 6mm          | 1             |
| 183081570409 | M8 x 1.25 | 15.0 | 8.0  | 13.0  | 6mm          | 1             |
| 183082070409 | M8 x 1.25 | 20.0 | 8.0  | 13.0  | 6mm          | 1             |
| 183082570409 | M8 x 1.25 | 25.0 | 8.0  | 13.0  | 6mm          | 1             |
| 183083070409 | M8 x 1.25 | 30.0 | 8.0  | 13.0  | 6mm          | 1             |
| 183083570409 | M8 x 1.25 | 35.0 | 8.0  | 13.0  | 6mm          | 1             |

## 50BH Series

## Metric Button Head Socket Cap Screw



## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.       | Thread    | L mm | H mm      | ØA mm       | Drive Size J | Bulk Pack Qty |
|----------------|-----------|------|-----------|-------------|--------------|---------------|
| 50M080125BH015 | M8 x 1.25 | 15.0 | 4.1 - 4.4 | 13.6 - 14.0 | 5mm          | 500           |





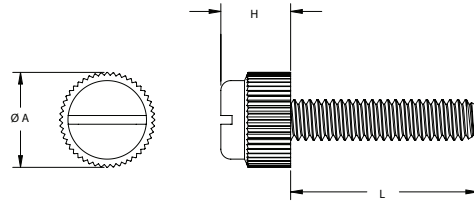
# THUMB SCREWS

## 09TEG Series Economy Grade Thumb Screw



Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

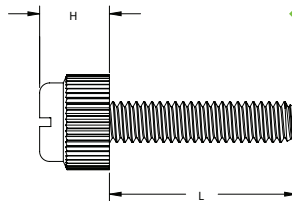
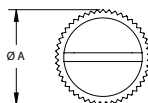


| Item No.     | Thread | L<br>in | H<br>in | ØA<br>in | Bulk Pack Qty |
|--------------|--------|---------|---------|----------|---------------|
| 09044009TEG  | #4-40  | 0.094   | 0.216   | 0.317    | 1000          |
| 090440012TEG | #4-40  | 0.125   | 0.216   | 0.317    | 1000          |
| 090440014TEG | #4-40  | 0.141   | 0.216   | 0.317    | 1000          |
| 090440018TEG | #4-40  | 0.188   | 0.216   | 0.317    | 1000          |
| 090440025TEG | #4-40  | 0.250   | 0.216   | 0.317    | 1000          |
| 090440028TEG | #4-40  | 0.281   | 0.216   | 0.317    | 1000          |
| 090440031TEG | #4-40  | 0.313   | 0.216   | 0.317    | 1000          |
| 090440037TEG | #4-40  | 0.375   | 0.216   | 0.317    | 1000          |
| 090440043TEG | #4-40  | 0.438   | 0.216   | 0.317    | 1000          |
| 090440050TEG | #4-40  | 0.500   | 0.216   | 0.317    | 1000          |
| 090440056TEG | #4-40  | 0.563   | 0.216   | 0.317    | 1000          |
| 090440062TEG | #4-40  | 0.625   | 0.216   | 0.317    | 1000          |
| 090440068TEG | #4-40  | 0.688   | 0.216   | 0.317    | 1000          |
| 090440075TEG | #4-40  | 0.750   | 0.216   | 0.317    | 1000          |
| 090440087TEG | #4-40  | 0.875   | 0.216   | 0.317    | 1000          |
| 090440100TEG | #4-40  | 1.000   | 0.216   | 0.317    | 1000          |
| 090440112TEG | #4-40  | 1.125   | 0.216   | 0.317    | 1000          |
| 090440118TEG | #4-40  | 1.188   | 0.216   | 0.317    | 1000          |
| 090440125TEG | #4-40  | 1.250   | 0.216   | 0.317    | 1000          |
| 090440137TEG | #4-40  | 1.375   | 0.216   | 0.317    | 1000          |
| 090440150TEG | #4-40  | 1.500   | 0.216   | 0.317    | 1000          |
| 090440175TEG | #4-40  | 1.750   | 0.216   | 0.317    | 1000          |
| 090448025TEG | #4-48  | 0.250   | 0.216   | 0.317    | 1000          |
| 090632009TEG | #6-32  | 0.094   | 0.243   | 0.336    | 1000          |
| 090632012TEG | #6-32  | 0.125   | 0.243   | 0.336    | 1000          |
| 090632015TEG | #6-32  | 0.156   | 0.243   | 0.336    | 1000          |
| 090632018TEG | #6-32  | 0.188   | 0.243   | 0.336    | 1000          |
| 090632025TEG | #6-32  | 0.250   | 0.243   | 0.336    | 1000          |
| 090632031TEG | #6-32  | 0.313   | 0.243   | 0.336    | 1000          |
| 090632037TEG | #6-32  | 0.375   | 0.243   | 0.336    | 1000          |
| 090632043TEG | #6-32  | 0.438   | 0.243   | 0.336    | 1000          |
| 090632050TEG | #6-32  | 0.500   | 0.243   | 0.336    | 1000          |
| 090632056TEG | #6-32  | 0.563   | 0.243   | 0.336    | 1000          |
| 090632062TEG | #6-32  | 0.625   | 0.243   | 0.336    | 1000          |
| 090632068TEG | #6-32  | 0.688   | 0.243   | 0.336    | 1000          |
| 090632075TEG | #6-32  | 0.750   | 0.243   | 0.336    | 500           |
| 090632087TEG | #6-32  | 0.875   | 0.243   | 0.336    | 1000          |
| 090632100TEG | #6-32  | 1.000   | 0.243   | 0.336    | 1000          |
| 090632112TEG | #6-32  | 1.125   | 0.243   | 0.336    | 1000          |
| 090632125TEG | #6-32  | 1.250   | 0.243   | 0.336    | 1000          |
| 090632150TEG | #6-32  | 1.500   | 0.243   | 0.336    | 1000          |
| 090632162TEG | #6-32  | 1.625   | 0.243   | 0.336    | 1000          |
| 090632175TEG | #6-32  | 1.750   | 0.243   | 0.336    | 1000          |
| 090632187TEG | #6-32  | 1.875   | 0.243   | 0.336    | 1000          |
| 090632225TEG | #6-32  | 2.250   | 0.243   | 0.336    | 1000          |
| 090640025TEG | #6-40  | 0.250   | 0.243   | 0.336    | 1000          |
| 090640037TEG | #6-40  | 0.375   | 0.243   | 0.336    | 1000          |
| 090640075TEG | #6-40  | 0.750   | 0.243   | 0.336    | 1000          |
| 090640100TEG | #6-40  | 1.000   | 0.243   | 0.336    | 1000          |
| 090832012TEG | #8-32  | 0.125   | 0.280   | 0.381    | 1000          |
| 090832018TEG | #8-32  | 0.188   | 0.280   | 0.381    | 1000          |
| 090832025TEG | #8-32  | 0.250   | 0.280   | 0.381    | 1000          |
| 090832028TEG | #8-32  | 0.281   | 0.280   | 0.381    | 1000          |
| 090832031TEG | #8-32  | 0.313   | 0.280   | 0.381    | 1000          |
| 090832037TEG | #8-32  | 0.375   | 0.280   | 0.381    | 1000          |
| 090832043TEG | #8-32  | 0.438   | 0.280   | 0.381    | 1000          |
| 090832050TEG | #8-32  | 0.500   | 0.280   | 0.381    | 1000          |

| Item No.     | Thread | L<br>in | H<br>in | ØA<br>in | Bulk Pack Qty |
|--------------|--------|---------|---------|----------|---------------|
| 090832062TEG | #8-32  | 0.625   | 0.280   | 0.381    | 1000          |
| 090832075TEG | #8-32  | 0.750   | 0.280   | 0.381    | 1000          |
| 090832087TEG | #8-32  | 0.875   | 0.280   | 0.381    | 1000          |
| 090832100TEG | #8-32  | 1.000   | 0.280   | 0.381    | 1000          |
| 090832112TEG | #8-32  | 1.125   | 0.280   | 0.381    | 1000          |
| 090832125TEG | #8-32  | 1.250   | 0.280   | 0.381    | 1000          |
| 090832137TEG | #8-32  | 1.375   | 0.280   | 0.381    | 500           |
| 090832150TEG | #8-32  | 1.500   | 0.280   | 0.381    | 500           |
| 090832175TEG | #8-32  | 1.750   | 0.280   | 0.381    | 500           |
| 090832187TEG | #8-32  | 1.875   | 0.280   | 0.381    | 500           |
| 090832200TEG | #8-32  | 2.000   | 0.280   | 0.381    | 500           |
| 091024012TEG | #10-24 | 0.125   | 0.305   | 0.395    | 1000          |
| 091024018TEG | #10-24 | 0.188   | 0.305   | 0.395    | 1000          |
| 091024025TEG | #10-24 | 0.250   | 0.305   | 0.395    | 1000          |
| 091024031TEG | #10-24 | 0.313   | 0.305   | 0.395    | 1000          |
| 091024037TEG | #10-24 | 0.375   | 0.305   | 0.395    | 1000          |
| 091024050TEG | #10-24 | 0.500   | 0.305   | 0.395    | 1000          |
| 091024062TEG | #10-24 | 0.625   | 0.305   | 0.395    | 1000          |
| 091024075TEG | #10-24 | 0.750   | 0.305   | 0.395    | 500           |
| 091024100TEG | #10-24 | 1.000   | 0.305   | 0.395    | 500           |
| 091024125TEG | #10-24 | 1.250   | 0.305   | 0.395    | 500           |
| 091024150TEG | #10-24 | 1.500   | 0.305   | 0.395    | 500           |
| 091032012TEG | #10-32 | 0.125   | 0.305   | 0.395    | 1000          |
| 091032018TEG | #10-32 | 0.188   | 0.305   | 0.395    | 1000          |
| 091032025TEG | #10-32 | 0.250   | 0.305   | 0.395    | 1000          |
| 091032031TEG | #10-32 | 0.313   | 0.305   | 0.395    | 1000          |
| 091032037TEG | #10-32 | 0.375   | 0.305   | 0.395    | 1000          |
| 091032043TEG | #10-32 | 0.438   | 0.305   | 0.395    | 1000          |
| 091032050TEG | #10-32 | 0.500   | 0.305   | 0.395    | 500           |
| 091032062TEG | #10-32 | 0.625   | 0.305   | 0.395    | 1000          |
| 091032075TEG | #10-32 | 0.750   | 0.305   | 0.395    | 500           |
| 091032081TEG | #10-32 | 0.813   | 0.305   | 0.395    | 500           |
| 091032087TEG | #10-32 | 0.875   | 0.305   | 0.395    | 500           |
| 091032100TEG | #10-32 | 1.000   | 0.305   | 0.395    | 500           |
| 091032125TEG | #10-32 | 1.250   | 0.305   | 0.395    | 500           |
| 091032150TEG | #10-32 | 1.500   | 0.305   | 0.395    | 500           |
| 091032175TEG | #10-32 | 1.750   | 0.305   | 0.395    | 500           |
| 091032200TEG | #10-32 | 2.000   | 0.305   | 0.395    | 1000          |
| 092520025TEG | 1/4-20 | 0.250   | 0.305   | 0.480    | 1000          |
| 092520031TEG | 1/4-20 | 0.313   | 0.305   | 0.480    | 1000          |
| 092520037TEG | 1/4-20 | 0.375   | 0.305   | 0.480    | 1000          |
| 092520050TEG | 1/4-20 | 0.500   | 0.305   | 0.480    | 500           |
| 092520062TEG | 1/4-20 | 0.625   | 0.305   | 0.480    | 500           |
| 092520075TEG | 1/4-20 | 0.750   | 0.305   | 0.480    | 500           |
| 092520087TEG | 1/4-20 | 0.875   | 0.305   | 0.480    | 500           |
| 092520100TEG | 1/4-20 | 1.000   | 0.305   | 0.480    | 1000          |
| 092520125TEG | 1/4-20 | 1.250   | 0.305   | 0.480    | 1000          |
| 092520150TEG | 1/4-20 | 1.500   | 0.305   | 0.480    | 1000          |
| 092520175TEG | 1/4-20 | 1.750   | 0.305   | 0.480    | 1000          |
| 092520200TEG | 1/4-20 | 2.000   | 0.305   | 0.480    | 500           |
| 092520250TEG | 1/4-20 | 2.500   | 0.305   | 0.480    | 500           |
| 092528018TEG | 1/4-28 | 0.188   | 0.305   | 0.480    | 500           |
| 092528025TEG | 1/4-28 | 0.250   | 0.305   | 0.480    | 500           |
| 092528037TEG | 1/4-28 | 0.375   | 0.305   | 0.480    | 500           |
| 092528050TEG | 1/4-28 | 0.500   | 0.305   | 0.480    | 500           |
| 092528075TEG | 1/4-28 | 0.750   | 0.305   | 0.480    | 500           |
| 092528100TEG | 1/4-28 | 1.000   | 0.305   | 0.480    | 500           |



**50T Series**  
**Metric Economy Grade Thumb Screw**



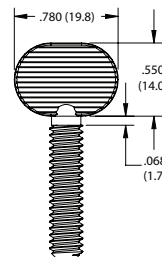
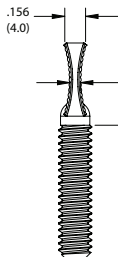
Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.      | Thread    | L mm | H mm | ØA mm | Bulk Pack Qty |
|---------------|-----------|------|------|-------|---------------|
| 50M030050T004 | M3 x .5   | 4.0  | 5.5  | 8.1   | 1000          |
| 50M030050T005 | M3 x .5   | 5.0  | 5.5  | 8.1   | 1000          |
| 50M030050T006 | M3 x .5   | 6.0  | 5.5  | 8.1   | 1000          |
| 50M030050T008 | M3 x .5   | 8.0  | 5.5  | 8.1   | 1000          |
| 50M030050T010 | M3 x .5   | 10.0 | 5.5  | 8.1   | 1000          |
| 50M030050T012 | M3 x .5   | 12.0 | 5.5  | 8.1   | 1000          |
| 50M030050T016 | M3 x .5   | 16.0 | 5.5  | 8.1   | 1000          |
| 50M030050T020 | M3 x .5   | 20.0 | 5.5  | 8.1   | 1000          |
| 50M030050T025 | M3 x .5   | 25.0 | 5.5  | 8.1   | 1000          |
| 50M030050T030 | M3 x .5   | 30.0 | 5.5  | 8.1   | 1000          |
| 50M030050T035 | M3 x .5   | 35.0 | 5.5  | 8.1   | 1000          |
| 50M030050T042 | M3 x .5   | 42.0 | 5.5  | 8.1   | 1000          |
| 50M035060T005 | M3.5 x .6 | 5.0  | 6.1  | 8.5   | 1000          |
| 50M035060T006 | M3.5 x .6 | 6.0  | 6.1  | 8.5   | 1000          |
| 50M035060T008 | M3.5 x .6 | 8.0  | 6.1  | 8.5   | 1000          |
| 50M035060T010 | M3.5 x .6 | 10.0 | 6.1  | 8.5   | 1000          |
| 50M035060T012 | M3.5 x .6 | 12.0 | 6.1  | 8.5   | 1000          |
| 50M035060T016 | M3.5 x .6 | 16.0 | 6.1  | 8.5   | 1000          |
| 50M035060T020 | M3.5 x .6 | 20.0 | 6.1  | 8.5   | 1000          |
| 50M035060T025 | M3.5 x .6 | 25.0 | 6.1  | 8.5   | 1000          |
| 50M035060T035 | M3.5 x .6 | 35.0 | 6.1  | 8.5   | 1000          |
| 50M035060T042 | M3.5 x .6 | 42.0 | 6.1  | 8.5   | 1000          |
| 50M040070T003 | M4 x .7   | 3.0  | 7.1  | 9.7   | 1000          |
| 50M040070T006 | M4 x .7   | 6.0  | 7.1  | 9.7   | 1000          |
| 50M040070T008 | M4 x .7   | 8.0  | 7.1  | 9.7   | 1000          |
| 50M040070T010 | M4 x .7   | 10.0 | 7.1  | 9.7   | 1000          |
| 50M040070T012 | M4 x .7   | 12.0 | 7.1  | 9.7   | 500           |
| 50M040070T016 | M4 x .7   | 16.0 | 7.1  | 9.7   | 1000          |
| 50M040070T020 | M4 x .7   | 20.0 | 7.1  | 9.7   | 1000          |

| Item No.      | Thread   | L mm | H mm | ØA mm | Bulk Pack Qty |
|---------------|----------|------|------|-------|---------------|
| 50M040070T025 | M4 x .7  | 25.0 | 7.1  | 9.7   | 1000          |
| 50M040070T030 | M4 x .7  | 30.0 | 7.1  | 9.7   | 1000          |
| 50M040070T035 | M4 x .7  | 35.0 | 7.1  | 9.7   | 500           |
| 50M040070T040 | M4 x .7  | 40.0 | 7.1  | 9.7   | 500           |
| 50M050080T006 | M5 x .8  | 6.0  | 7.8  | 10.0  | 1000          |
| 50M050080T008 | M5 x .8  | 8.0  | 7.8  | 10.0  | 1000          |
| 50M050080T010 | M5 x .8  | 10.0 | 7.8  | 10.0  | 1000          |
| 50M050080T012 | M5 x .8  | 12.0 | 7.8  | 10.0  | 500           |
| 50M050080T016 | M5 x .8  | 16.0 | 7.8  | 10.0  | 1000          |
| 50M050080T020 | M5 x .8  | 20.0 | 7.8  | 10.0  | 1000          |
| 50M050080T025 | M5 x .8  | 25.0 | 7.8  | 10.0  | 500           |
| 50M050080T030 | M5 x .8  | 30.0 | 7.8  | 10.0  | 500           |
| 50M050080T040 | M5 x .8  | 40.0 | 7.8  | 10.0  | 500           |
| 50M060100T005 | M6 x 1.0 | 5.0  | 7.8  | 12.2  | 1000          |
| 50M060100T008 | M6 x 1.0 | 8.0  | 7.8  | 12.2  | 1000          |
| 50M060100T010 | M6 x 1.0 | 10.0 | 7.8  | 12.2  | 500           |
| 50M060100T012 | M6 x 1.0 | 12.0 | 7.8  | 12.2  | 500           |
| 50M060100T016 | M6 x 1.0 | 16.0 | 7.8  | 12.2  | 500           |
| 50M060100T020 | M6 x 1.0 | 20.0 | 7.8  | 12.2  | 500           |
| 50M060100T022 | M6 x 1.0 | 22.0 | 7.8  | 12.2  | 500           |
| 50M060100T025 | M6 x 1.0 | 25.0 | 7.8  | 12.2  | 500           |
| 50M060100T035 | M6 x 1.0 | 35.0 | 7.8  | 12.2  | 500           |
| 50M060100T040 | M6 x 1.0 | 40.0 | 7.8  | 12.2  | 500           |
| 50M060100T045 | M6 x 1.0 | 45.0 | 7.8  | 12.2  | 500           |
| 50M060100T050 | M6 x 1.0 | 50.0 | 7.8  | 12.2  | 500           |
| 50M060100T060 | M6 x 1.0 | 60.0 | 7.8  | 12.2  | 500           |
| 50M060100T070 | M6 x 1.0 | 70.0 | 7.8  | 12.2  | 500           |
| 50M060100T075 | M6 x 1.0 | 75.0 | 7.8  | 12.2  | 500           |

**09V Series**  
**Oval Head Thumb Screw**



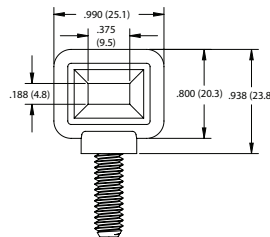
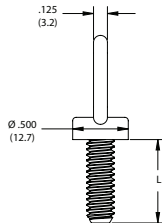
Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.   | Thread | L in  | Bulk Pack Qty |
|------------|--------|-------|---------------|
| 092520037V | 1/4-20 | 0.375 | 500           |
| 092520050V | 1/4-20 | 0.500 | 500           |
| 092520062V | 1/4-20 | 0.625 | 500           |
| 092520100V | 1/4-20 | 1.000 | 500           |

| Item No.   | Thread | L in  | Bulk Pack Qty |
|------------|--------|-------|---------------|
| 092520150V | 1/4-20 | 1.500 | 500           |
| 092520175V | 1/4-20 | 1.750 | 500           |
| 092520200V | 1/4-20 | 2.000 | 500           |
| 092520250V | 1/4-20 | 2.500 | 500           |

**01FHWS**  
**Flat Head Wing Screw**



Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.       | Thread | L in  | Bulk Pack Qty |
|----------------|--------|-------|---------------|
| 0101032FHWS050 | #10-32 | 0.500 | 500           |
| 0101032FHWS075 | #10-32 | 0.750 | 500           |
| 0101032FHWS100 | #10-32 | 1.000 | 500           |
| 0125020FHWS050 | 1/4-20 | 0.500 | 500           |
| 0125020FHWS075 | 1/4-20 | 0.750 | 500           |

| Item No.       | Thread  | L in  | Bulk Pack Qty |
|----------------|---------|-------|---------------|
| 0125020FHWS100 | 1/4-20  | 1.000 | 500           |
| 0131218FHWS050 | 5/16-18 | 0.500 | 500           |
| 0131218FHWS075 | 5/16-18 | 0.750 | 500           |
| 0131218FHWS100 | 5/16-18 | 1.000 | 500           |



## THUMB SCREWS / PLASTIC FASTENERS

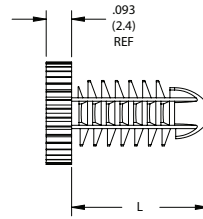
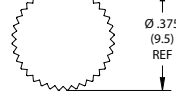
**27SCK Series**  
Knurled Spin Clip

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

## Features:

- Combines the advantages of a push-in type fastener with a screw
- Fast and easy assembly
- Can also be used as a standard fir tree rivet



| Item No.      | Screw Size |       | L    | Ø Hole Size |     | Bulk Pack Qty |
|---------------|------------|-------|------|-------------|-----|---------------|
|               | in         | in    |      | in          | mm  |               |
| 27SCK2520K037 | 1/4        | 0.375 | 9.5  | 0.203       | 5.2 | 1000          |
| 27SCK2520K050 | 1/4        | 0.500 | 12.7 | 0.203       | 5.2 | 1000          |
| 27SCK2520K062 | 1/4        | 0.625 | 15.9 | 0.203       | 5.2 | 1000          |
| 27SCK2520K075 | 1/4        | 0.750 | 19.1 | 0.203       | 5.2 | 1000          |
| 27SCK2520K100 | 1/4        | 1.000 | 25.4 | 0.203       | 5.2 | 1000          |

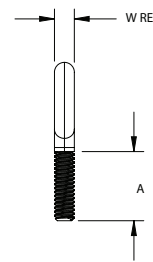
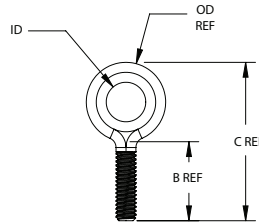
**01EYEB Series**  
Eye Bolts

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

## Features:

- For very light duty applications



| Item No.       | Thread  | A     |       | C     | OD    | ID    | W     | Bulk Pack Qty |
|----------------|---------|-------|-------|-------|-------|-------|-------|---------------|
|                |         | in    | in    |       |       |       |       |               |
| 0100632EYEB075 | #6-32   | 0.625 | 0.750 | 1.250 | 0.500 | 0.250 | 0.140 | 500           |
| 0100832EYEB112 | #8-32   | 1.000 | 1.125 | 1.700 | 0.575 | 0.250 | 0.166 | 500           |
| 0101024EYEB100 | #10-24  | 0.875 | 1.000 | 1.750 | 0.750 | 0.375 | 0.192 | 500           |
| 0125020EYEB100 | 1/4-20  | 0.875 | 1.000 | 2.000 | 1.000 | 0.500 | 0.250 | 500           |
| 0125020EYEB150 | 1/4-20  | 1.250 | 1.500 | 2.500 | 1.000 | 0.500 | 0.250 | 500           |
| 0125020EYEB200 | 1/4-20  | 1.250 | 2.000 | 3.000 | 1.000 | 0.500 | 0.252 | 500           |
| 0125020EYEB400 | 1/4-20  | 1.250 | 4.000 | 5.000 | 1.000 | 0.500 | 0.250 | 500           |
| 0131218EYEB100 | 5/16-18 | 0.875 | 1.000 | 2.250 | 1.250 | 0.625 | 0.312 | 500           |
| 0131218EYEB200 | 5/16-18 | 1.250 | 2.000 | 3.250 | 1.250 | 0.625 | 0.312 | 500           |
| 0137516EYEB100 | 3/8-16  | 0.875 | 1.000 | 2.500 | 1.500 | 0.750 | 0.375 | 500           |
| 0137516EYEB200 | 3/8-16  | 1.250 | 2.000 | 3.500 | 1.500 | 0.750 | 0.377 | 500           |
| 0137516EYEB250 | 3/8-16  | 1.500 | 2.500 | 4.000 | 1.500 | 0.750 | 0.377 | 500           |
| 0137516EYEB400 | 3/8-16  | 2.500 | 4.000 | 5.500 | 1.500 | 0.750 | 0.375 | 500           |

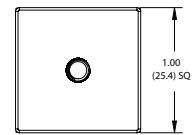
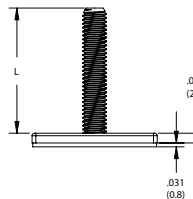
**01ABTS Series**  
Adhesive Mount Threaded Stud

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Tape Material: Very High Bond (VHB) adhesive
- Color: Natural

## Features:

- Shear and peel strength is very high
- Good solvent resistance



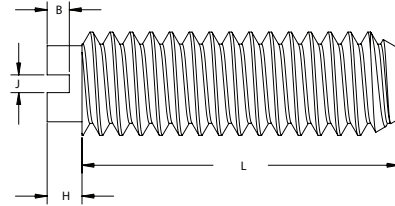
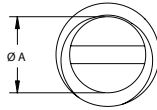
| Item No.      | Thread  | L     |      | Bulk Pack Qty |
|---------------|---------|-------|------|---------------|
|               |         | in    | mm   |               |
| 011032ABTS050 | #10-32  | 0.500 | 12.7 | 500           |
| 011032ABTS075 | #10-32  | 0.750 | 19.1 | 500           |
| 011032ABTS100 | #10-32  | 1.000 | 25.4 | 500           |
| 012520ABTS050 | 1/4-20  | 0.500 | 12.7 | 500           |
| 012520ABTS075 | 1/4-20  | 0.750 | 19.1 | 500           |
| 012520ABTS100 | 1/4-20  | 1.000 | 25.4 | 500           |
| 013118ABTS050 | 5/16-18 | 0.500 | 12.7 | 500           |
| 013118ABTS075 | 5/16-18 | 0.750 | 19.1 | 500           |
| 013118ABTS100 | 5/16-18 | 1.000 | 25.4 | 500           |





# SET SCREWS

## 01S Series Slotted Head Set Screw



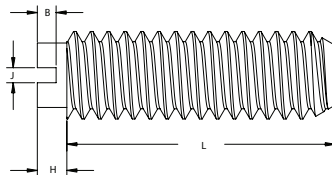
Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.   | Thread | L     |       | ØA    |       | H     |       | J    |    | B |  | Bulk Pack Qty |
|------------|--------|-------|-------|-------|-------|-------|-------|------|----|---|--|---------------|
|            |        | in    | in    | in    | in    | in    | in    | in   | in |   |  |               |
| 010256S006 | #2-56  | 0.063 | 0.055 | 0.035 | 0.018 | 0.020 | 0.020 | 1000 |    |   |  |               |
| 010256S009 | #2-56  | 0.094 | 0.055 | 0.035 | 0.018 | 0.020 | 0.020 | 1000 |    |   |  |               |
| 010256S012 | #2-56  | 0.125 | 0.055 | 0.035 | 0.018 | 0.020 | 0.020 | 1000 |    |   |  |               |
| 010256S015 | #2-56  | 0.156 | 0.055 | 0.035 | 0.018 | 0.020 | 0.020 | 1000 |    |   |  |               |
| 010256S018 | #2-56  | 0.188 | 0.055 | 0.035 | 0.018 | 0.020 | 0.020 | 1000 |    |   |  |               |
| 010256S025 | #2-56  | 0.250 | 0.055 | 0.035 | 0.018 | 0.020 | 0.020 | 1000 |    |   |  |               |
| 010256S028 | #2-56  | 0.281 | 0.055 | 0.035 | 0.018 | 0.020 | 0.020 | 1000 |    |   |  |               |
| 010256S031 | #2-56  | 0.313 | 0.055 | 0.035 | 0.018 | 0.020 | 0.020 | 1000 |    |   |  |               |
| 010256S037 | #2-56  | 0.375 | 0.055 | 0.035 | 0.018 | 0.020 | 0.020 | 1000 |    |   |  |               |
| 010256S043 | #2-56  | 0.438 | 0.055 | 0.035 | 0.018 | 0.020 | 0.020 | 1000 |    |   |  |               |
| 010256S050 | #2-56  | 0.500 | 0.055 | 0.035 | 0.018 | 0.020 | 0.020 | 1000 |    |   |  |               |
| 010256S056 | #2-56  | 0.563 | 0.055 | 0.035 | 0.018 | 0.020 | 0.020 | 1000 |    |   |  |               |
| 010256S062 | #2-56  | 0.625 | 0.055 | 0.035 | 0.018 | 0.020 | 0.020 | 1000 |    |   |  |               |
| 010256S075 | #2-56  | 0.750 | 0.055 | 0.035 | 0.018 | 0.020 | 0.020 | 1000 |    |   |  |               |
| 010256S087 | #2-56  | 0.875 | 0.055 | 0.035 | 0.018 | 0.020 | 0.020 | 1000 |    |   |  |               |
| 010256S100 | #2-56  | 1.000 | 0.055 | 0.035 | 0.018 | 0.020 | 0.020 | 1000 |    |   |  |               |
| 010256S112 | #2-56  | 1.125 | 0.055 | 0.035 | 0.018 | 0.020 | 0.020 | 1000 |    |   |  |               |
| 010264S018 | #2-64  | 0.188 | 0.055 | 0.035 | 0.018 | 0.020 | 0.020 | 1000 |    |   |  |               |
| 010264S037 | #2-64  | 0.375 | 0.055 | 0.035 | 0.018 | 0.020 | 0.020 | 1000 |    |   |  |               |
| 010436S050 | #4-36  | 0.500 | 0.075 | 0.045 | 0.020 | 0.025 | 0.025 | 1000 |    |   |  |               |
| 010440S009 | #4-40  | 0.094 | 0.075 | 0.045 | 0.020 | 0.025 | 0.025 | 1000 |    |   |  |               |
| 010440S012 | #4-40  | 0.125 | 0.075 | 0.045 | 0.020 | 0.025 | 0.025 | 1000 |    |   |  |               |
| 010440S014 | #4-40  | 0.141 | 0.075 | 0.045 | 0.020 | 0.025 | 0.025 | 1000 |    |   |  |               |
| 010440S015 | #4-40  | 0.156 | 0.075 | 0.045 | 0.020 | 0.025 | 0.025 | 1000 |    |   |  |               |
| 010440S018 | #4-40  | 0.188 | 0.075 | 0.045 | 0.020 | 0.025 | 0.025 | 1000 |    |   |  |               |
| 010440S025 | #4-40  | 0.250 | 0.075 | 0.045 | 0.020 | 0.025 | 0.025 | 1000 |    |   |  |               |
| 010440S028 | #4-40  | 0.281 | 0.075 | 0.045 | 0.020 | 0.025 | 0.025 | 1000 |    |   |  |               |
| 010440S031 | #4-40  | 0.313 | 0.075 | 0.045 | 0.020 | 0.025 | 0.025 | 1000 |    |   |  |               |
| 010440S037 | #4-40  | 0.375 | 0.075 | 0.045 | 0.020 | 0.025 | 0.025 | 1000 |    |   |  |               |
| 010440S043 | #4-40  | 0.438 | 0.075 | 0.045 | 0.020 | 0.025 | 0.025 | 1000 |    |   |  |               |
| 010440S050 | #4-40  | 0.500 | 0.075 | 0.045 | 0.020 | 0.025 | 0.025 | 1000 |    |   |  |               |
| 010440S056 | #4-40  | 0.563 | 0.075 | 0.045 | 0.020 | 0.025 | 0.025 | 1000 |    |   |  |               |
| 010440S062 | #4-40  | 0.625 | 0.075 | 0.045 | 0.020 | 0.025 | 0.025 | 1000 |    |   |  |               |
| 010440S068 | #4-40  | 0.688 | 0.075 | 0.045 | 0.020 | 0.025 | 0.025 | 1000 |    |   |  |               |
| 010440S075 | #4-40  | 0.750 | 0.075 | 0.045 | 0.020 | 0.025 | 0.025 | 1000 |    |   |  |               |
| 010440S087 | #4-40  | 0.875 | 0.075 | 0.045 | 0.020 | 0.025 | 0.025 | 1000 |    |   |  |               |
| 010440S100 | #4-40  | 1.000 | 0.075 | 0.045 | 0.020 | 0.025 | 0.025 | 1000 |    |   |  |               |
| 010440S112 | #4-40  | 1.125 | 0.075 | 0.045 | 0.020 | 0.025 | 0.025 | 1000 |    |   |  |               |
| 010440S118 | #4-40  | 1.188 | 0.075 | 0.045 | 0.020 | 0.025 | 0.025 | 1000 |    |   |  |               |
| 010440S125 | #4-40  | 1.250 | 0.075 | 0.045 | 0.020 | 0.025 | 0.025 | 1000 |    |   |  |               |
| 010440S137 | #4-40  | 1.375 | 0.075 | 0.045 | 0.020 | 0.025 | 0.025 | 1000 |    |   |  |               |
| 010440S150 | #4-40  | 1.500 | 0.075 | 0.045 | 0.020 | 0.025 | 0.025 | 1000 |    |   |  |               |
| 010440S162 | #4-40  | 1.625 | 0.075 | 0.045 | 0.020 | 0.025 | 0.025 | 1000 |    |   |  |               |
| 010440S175 | #4-40  | 1.750 | 0.075 | 0.045 | 0.020 | 0.025 | 0.025 | 1000 |    |   |  |               |
| 010448S025 | #4-48  | 0.250 | 0.075 | 0.045 | 0.020 | 0.025 | 0.025 | 1000 |    |   |  |               |
| 010632S009 | #6-32  | 0.094 | 0.100 | 0.055 | 0.025 | 0.028 | 0.028 | 1000 |    |   |  |               |
| 010632S012 | #6-32  | 0.125 | 0.100 | 0.055 | 0.025 | 0.028 | 0.028 | 1000 |    |   |  |               |
| 010632S015 | #6-32  | 0.156 | 0.100 | 0.055 | 0.025 | 0.030 | 0.030 | 1000 |    |   |  |               |
| 010632S018 | #6-32  | 0.188 | 0.100 | 0.055 | 0.025 | 0.030 | 0.030 | 1000 |    |   |  |               |
| 010632S025 | #6-32  | 0.250 | 0.100 | 0.055 | 0.025 | 0.030 | 0.030 | 1000 |    |   |  |               |
| 010632S031 | #6-32  | 0.313 | 0.100 | 0.055 | 0.025 | 0.030 | 0.030 | 1000 |    |   |  |               |
| 010632S037 | #6-32  | 0.375 | 0.100 | 0.055 | 0.025 | 0.030 | 0.030 | 1000 |    |   |  |               |
| 010632S043 | #6-32  | 0.438 | 0.100 | 0.055 | 0.025 | 0.030 | 0.030 | 1000 |    |   |  |               |
| 010632S050 | #6-32  | 0.500 | 0.100 | 0.055 | 0.025 | 0.030 | 0.030 | 1000 |    |   |  |               |
| 010632S056 | #6-32  | 0.563 | 0.100 | 0.055 | 0.025 | 0.030 | 0.030 | 1000 |    |   |  |               |
| 010632S062 | #6-32  | 0.625 | 0.100 | 0.055 | 0.025 | 0.030 | 0.030 | 1000 |    |   |  |               |
| 010632S068 | #6-32  | 0.688 | 0.100 | 0.055 | 0.025 | 0.030 | 0.030 | 1000 |    |   |  |               |
| 010632S075 | #6-32  | 0.750 | 0.100 | 0.055 | 0.025 | 0.030 | 0.030 | 1000 |    |   |  |               |
| 010632S087 | #6-32  | 0.875 | 0.100 | 0.055 | 0.025 | 0.030 | 0.030 | 1000 |    |   |  |               |
| 010632S100 | #6-32  | 1.000 | 0.100 | 0.055 | 0.025 | 0.030 | 0.030 | 1000 |    |   |  |               |
| 010632S112 | #6-32  | 1.125 | 0.100 | 0.055 | 0.025 | 0.030 | 0.030 | 1000 |    |   |  |               |
| 010632S125 | #6-32  | 1.250 | 0.100 | 0.055 | 0.025 | 0.030 | 0.030 | 1000 |    |   |  |               |
| 010632S150 | #6-32  | 1.500 | 0.100 | 0.055 | 0.025 | 0.030 | 0.030 | 1000 |    |   |  |               |
| 010632S162 | #6-32  | 1.625 | 0.100 | 0.055 | 0.025 | 0.030 | 0.030 | 1000 |    |   |  |               |
| 010632S175 | #6-32  | 1.750 | 0.100 | 0.055 | 0.025 | 0.030 | 0.030 | 1000 |    |   |  |               |
| 010632S187 | #6-32  | 1.875 | 0.100 | 0.055 | 0.025 | 0.030 | 0.030 | 1000 |    |   |  |               |
| 010632S200 | #6-32  | 2.000 | 0.100 | 0.055 | 0.025 | 0.030 | 0.030 | 1000 |    |   |  |               |
| 010632S225 | #6-32  | 2.250 | 0.100 | 0.055 | 0.025 | 0.030 | 0.030 | 1000 |    |   |  |               |
| 010640S025 | #6-40  | 0.250 | 0.100 | 0.055 | 0.025 | 0.030 | 0.030 | 1000 |    |   |  |               |
| 010640S037 | #6-40  | 0.375 | 0.100 | 0.055 | 0.025 | 0.030 | 0.030 | 1000 |    |   |  |               |

(Continued on next page > )




**01S Series (continued)  
Slotted Head Set Screw**


## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

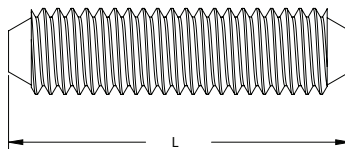
| Item No.    | Thread  | L     |  | ØA    |  | H     |  | J     |  | B     |  | Bulk Pack Qty |
|-------------|---------|-------|--|-------|--|-------|--|-------|--|-------|--|---------------|
|             |         | in    |  | in    |  | in    |  | in    |  | in    |  |               |
| 010640S075  | #6-40   | 0.750 |  | 0.100 |  | 0.055 |  | 0.025 |  | 0.030 |  | 1000          |
| 010640S100  | #6-40   | 1.000 |  | 0.100 |  | 0.055 |  | 0.025 |  | 0.030 |  | 1000          |
| 010832S012  | #8-32   | 0.125 |  | 0.120 |  | 0.055 |  | 0.028 |  | 0.035 |  | 1000          |
| 010832S018  | #8-32   | 0.188 |  | 0.120 |  | 0.055 |  | 0.028 |  | 0.035 |  | 1000          |
| 010832S025  | #8-32   | 0.250 |  | 0.120 |  | 0.055 |  | 0.028 |  | 0.035 |  | 1000          |
| 010832S028  | #8-32   | 0.281 |  | 0.120 |  | 0.055 |  | 0.028 |  | 0.035 |  | 1000          |
| 010832S031  | #8-32   | 0.313 |  | 0.120 |  | 0.055 |  | 0.028 |  | 0.035 |  | 1000          |
| 010832S037  | #8-32   | 0.375 |  | 0.120 |  | 0.055 |  | 0.028 |  | 0.035 |  | 1000          |
| 010832S043  | #8-32   | 0.438 |  | 0.120 |  | 0.055 |  | 0.028 |  | 0.035 |  | 1000          |
| 010832S050  | #8-32   | 0.500 |  | 0.120 |  | 0.055 |  | 0.028 |  | 0.035 |  | 1000          |
| 010832S062  | #8-32   | 0.625 |  | 0.120 |  | 0.055 |  | 0.028 |  | 0.035 |  | 1000          |
| 010832S075  | #8-32   | 0.750 |  | 0.120 |  | 0.055 |  | 0.028 |  | 0.035 |  | 1000          |
| 010832S087  | #8-32   | 0.875 |  | 0.120 |  | 0.055 |  | 0.028 |  | 0.035 |  | 1000          |
| 010832S100  | #8-32   | 1.000 |  | 0.120 |  | 0.055 |  | 0.028 |  | 0.035 |  | 1000          |
| 010832S112  | #8-32   | 1.125 |  | 0.120 |  | 0.055 |  | 0.028 |  | 0.035 |  | 1000          |
| 010832S125  | #8-32   | 1.250 |  | 0.120 |  | 0.055 |  | 0.028 |  | 0.035 |  | 1000          |
| 010832S137  | #8-32   | 1.375 |  | 0.120 |  | 0.055 |  | 0.028 |  | 0.035 |  | 500           |
| 010832S150  | #8-32   | 1.500 |  | 0.120 |  | 0.055 |  | 0.028 |  | 0.035 |  | 500           |
| 010832S175  | #8-32   | 1.750 |  | 0.120 |  | 0.055 |  | 0.028 |  | 0.035 |  | 500           |
| 010832S187  | #8-32   | 1.875 |  | 0.120 |  | 0.055 |  | 0.028 |  | 0.035 |  | 500           |
| 010832S200  | #8-32   | 2.000 |  | 0.120 |  | 0.055 |  | 0.028 |  | 0.035 |  | 500           |
| 011024S012  | #10-24  | 0.125 |  | 0.150 |  | 0.060 |  | 0.035 |  | 0.050 |  | 1000          |
| 011024S018  | #10-24  | 0.188 |  | 0.150 |  | 0.060 |  | 0.035 |  | 0.050 |  | 1000          |
| 011024S025  | #10-24  | 0.250 |  | 0.150 |  | 0.060 |  | 0.035 |  | 0.050 |  | 1000          |
| 011024S031  | #10-24  | 0.313 |  | 0.150 |  | 0.060 |  | 0.035 |  | 0.050 |  | 1000          |
| 011024S037  | #10-24  | 0.375 |  | 0.150 |  | 0.060 |  | 0.035 |  | 0.050 |  | 1000          |
| 011024S050  | #10-24  | 0.500 |  | 0.150 |  | 0.060 |  | 0.035 |  | 0.050 |  | 1000          |
| 011024S062  | #10-24  | 0.625 |  | 0.150 |  | 0.060 |  | 0.035 |  | 0.050 |  | 1000          |
| 011024S075  | #10-24  | 0.750 |  | 0.150 |  | 0.060 |  | 0.035 |  | 0.050 |  | 1000          |
| 011024S100  | #10-24  | 1.000 |  | 0.150 |  | 0.060 |  | 0.035 |  | 0.050 |  | 500           |
| 011024S125  | #10-24  | 1.250 |  | 0.150 |  | 0.060 |  | 0.035 |  | 0.050 |  | 500           |
| 011024S150  | #10-24  | 1.500 |  | 0.150 |  | 0.060 |  | 0.035 |  | 0.050 |  | 500           |
| 011032S012  | #10-32  | 0.125 |  | 0.150 |  | 0.060 |  | 0.035 |  | 0.050 |  | 1000          |
| 011032S018  | #10-32  | 0.188 |  | 0.150 |  | 0.060 |  | 0.035 |  | 0.050 |  | 1000          |
| 011032S025  | #10-32  | 0.250 |  | 0.150 |  | 0.060 |  | 0.035 |  | 0.050 |  | 1000          |
| 011032S031  | #10-32  | 0.313 |  | 0.150 |  | 0.060 |  | 0.035 |  | 0.050 |  | 1000          |
| 011032S037  | #10-32  | 0.375 |  | 0.150 |  | 0.060 |  | 0.035 |  | 0.050 |  | 1000          |
| 011032S050  | #10-32  | 0.500 |  | 0.150 |  | 0.060 |  | 0.035 |  | 0.050 |  | 1000          |
| 011032S062  | #10-32  | 0.625 |  | 0.150 |  | 0.060 |  | 0.035 |  | 0.050 |  | 1000          |
| 011032S075  | #10-32  | 0.750 |  | 0.150 |  | 0.060 |  | 0.035 |  | 0.050 |  | 500           |
| 011032S081  | #10-32  | 0.813 |  | 0.150 |  | 0.060 |  | 0.035 |  | 0.050 |  | 500           |
| 011032S087  | #10-32  | 0.875 |  | 0.150 |  | 0.060 |  | 0.035 |  | 0.050 |  | 500           |
| 011032S100  | #10-32  | 1.000 |  | 0.150 |  | 0.060 |  | 0.035 |  | 0.050 |  | 1000          |
| 011032S106  | #10-32  | 1.063 |  | 0.150 |  | 0.060 |  | 0.035 |  | 0.050 |  | 500           |
| 011032S125  | #10-32  | 1.250 |  | 0.150 |  | 0.060 |  | 0.035 |  | 0.050 |  | 500           |
| 011032S150  | #10-32  | 1.500 |  | 0.150 |  | 0.060 |  | 0.035 |  | 0.050 |  | 500           |
| 011032S175  | #10-32  | 1.750 |  | 0.150 |  | 0.060 |  | 0.035 |  | 0.050 |  | 500           |
| 011032S200  | #10-32  | 2.000 |  | 0.150 |  | 0.060 |  | 0.035 |  | 0.050 |  | 500           |
| 012520S025  | 1/4-20  | 0.250 |  | 0.175 |  | 0.080 |  | 0.040 |  | 0.060 |  | 1000          |
| 012520S031  | 1/4-20  | 0.313 |  | 0.175 |  | 0.080 |  | 0.040 |  | 0.060 |  | 1000          |
| 012520S037  | 1/4-20  | 0.375 |  | 0.175 |  | 0.080 |  | 0.040 |  | 0.060 |  | 1000          |
| 012520S050  | 1/4-20  | 0.500 |  | 0.175 |  | 0.080 |  | 0.040 |  | 0.060 |  | 1000          |
| 012520S062  | 1/4-20  | 0.625 |  | 0.175 |  | 0.080 |  | 0.040 |  | 0.060 |  | 500           |
| 012520S075  | 1/4-20  | 0.750 |  | 0.175 |  | 0.080 |  | 0.040 |  | 0.060 |  | 500           |
| 012520S087  | 1/4-20  | 0.875 |  | 0.175 |  | 0.080 |  | 0.040 |  | 0.060 |  | 500           |
| 012520S100  | 1/4-20  | 1.000 |  | 0.175 |  | 0.080 |  | 0.040 |  | 0.060 |  | 1000          |
| 012520S125  | 1/4-20  | 1.250 |  | 0.175 |  | 0.080 |  | 0.040 |  | 0.060 |  | 500           |
| 012520S150  | 1/4-20  | 1.500 |  | 0.175 |  | 0.080 |  | 0.040 |  | 0.060 |  | 500           |
| 012520S175  | 1/4-20  | 1.750 |  | 0.175 |  | 0.080 |  | 0.040 |  | 0.060 |  | 500           |
| 012520S200  | 1/4-20  | 2.000 |  | 0.175 |  | 0.080 |  | 0.040 |  | 0.060 |  | 500           |
| 012520S250  | 1/4-20  | 2.500 |  | 0.175 |  | 0.080 |  | 0.040 |  | 0.060 |  | 500           |
| 012528S018  | 1/4-28  | 0.188 |  | 0.175 |  | 0.080 |  | 0.040 |  | 0.060 |  | 1000          |
| 012528S025  | 1/4-28  | 0.250 |  | 0.175 |  | 0.080 |  | 0.040 |  | 0.060 |  | 1000          |
| 012528S031  | 1/4-28  | 0.313 |  | 0.175 |  | 0.080 |  | 0.040 |  | 0.060 |  | 500           |
| 012528S037  | 1/4-28  | 0.375 |  | 0.175 |  | 0.080 |  | 0.040 |  | 0.060 |  | 1000          |
| 012528S062  | 1/4-28  | 0.625 |  | 0.175 |  | 0.080 |  | 0.040 |  | 0.060 |  | 500           |
| 012528S075  | 1/4-28  | 0.750 |  | 0.175 |  | 0.080 |  | 0.040 |  | 0.060 |  | 500           |
| 012528S100  | 1/4-28  | 1.000 |  | 0.175 |  | 0.080 |  | 0.040 |  | 0.060 |  | 500           |
| 0137516S050 | 3/8-16  | 0.500 |  | 0.285 |  | 0.086 |  | 0.054 |  | 0.081 |  | 500           |
| 0137516S062 | 3/8-16  | 0.625 |  | 0.285 |  | 0.086 |  | 0.054 |  | 0.081 |  | 500           |
| 0137524S031 | 3/8-24  | 0.313 |  | 0.285 |  | 0.086 |  | 0.054 |  | 0.081 |  | 1000          |
| 0137524S041 | 3/8-24  | 0.422 |  | 0.285 |  | 0.086 |  | 0.054 |  | 0.081 |  | 500           |
| 0131224S081 | 5/16-24 | 0.813 |  | 0.246 |  | 0.078 |  | 0.051 |  | 0.078 |  | 500           |





# THREADED STUDS AND RODS

## 38SD Series Threaded Studs

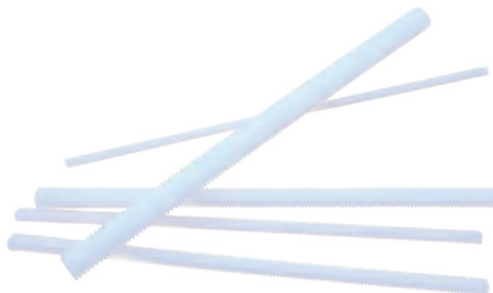


Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.     | Thread  | L in  | Bulk Pack Qty |
|--------------|---------|-------|---------------|
| 3801032075SD | #10-32  | 0.750 | 1000          |
| 3801032100SD | #10-32  | 1.000 | 500           |
| 3801032150SD | #10-32  | 1.500 | 500           |
| 3801032200SD | #10-32  | 2.000 | 500           |
| 3801032250SD | #10-32  | 2.500 | 500           |
| 3825020075SD | 1/4-20  | 0.750 | 500           |
| 3825020100SD | 1/4-20  | 1.000 | 1000          |
| 3825020150SD | 1/4-20  | 1.500 | 500           |
| 3825020200SD | 1/4-20  | 2.000 | 1000          |
| 3825020250SD | 1/4-20  | 2.500 | 500           |
| 3825020300SD | 1/4-20  | 3.000 | 500           |
| 3831218100SD | 5/16-18 | 1.000 | 500           |
| 3831218150SD | 5/16-18 | 1.500 | 500           |
| 3831218200SD | 5/16-18 | 2.000 | 500           |
| 3831218250SD | 5/16-18 | 2.500 | 500           |
| 3831218300SD | 5/16-18 | 3.000 | 500           |
| 3837516100SD | 3/8-16  | 1.000 | 500           |
| 3837516150SD | 3/8-16  | 1.500 | 1000          |
| 3837516200SD | 3/8-16  | 2.000 | 500           |
| 3837516250SD | 3/8-16  | 2.500 | 500           |
| 3837516300SD | 3/8-16  | 3.000 | 500           |
| 3837516400SD | 3/8-16  | 4.000 | 500           |
| 3850013150SD | 1/2-13  | 1.500 | 500           |
| 3850013200SD | 1/2-13  | 2.000 | 250           |

## 38TR Series Nylon Threaded Rod

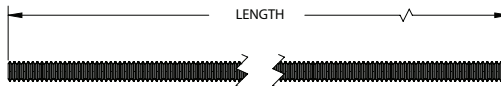


Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Easily cut to size
- Resistant to most chemicals, electrically insulating, non-magnetic, lightweight, low thermal conductivity, vibration and abrasion resistant
- Custom lengths available by special order



Imperial

| Item No.      |               |               | Thread  | Pack Qty |
|---------------|---------------|---------------|---------|----------|
| 2 Ft Length   | 4 Ft Length   | 6 Ft Length   |         |          |
| 3800440TR-2FT | 3800440TR-4FT | 3800440TR-6FT | #4-40   | 1        |
| 3800632TR-2FT | 3800632TR-4FT | 3800632TR-6FT | #6-32   | 1        |
| 3800832TR-2FT | 3800832TR-4FT | 3800832TR-6FT | #8-32   | 1        |
| 3801024TR-2FT | 3801024TR-4FT | 3801024TR-6FT | #10-24  | 1        |
| 3801032TR-2FT | 3801032TR-4FT | 3801032TR-6FT | #10-32  | 1        |
| 3825020TR-2FT | 3825020TR-4FT | 3825020TR-6FT | 1/4-20  | 1        |
| 3831218TR-2FT | 3831218TR-4FT | 3831218TR-6FT | 5/16-18 | 1        |
| 3837516TR-2FT | 3837516TR-4FT | 3837516TR-6FT | 3/8-16  | 1        |
| 3850013TR-2FT | 3850013TR-4FT | 3850013TR-6FT | 1/2-13  | 1        |
| 3862511TR-2FT | 3862511TR-4FT | 3862511TR-6FT | 5/8-11  | 1        |
| 3875010TR-2FT | 3875010TR-4FT | 3875010TR-6FT | 3/4-10  | 1        |
| 3887509TR-2FT | 3887509TR-4FT | 3887509TR-6FT | 7/8-9   | 1        |
| 3810008TR-2FT | 3810008TR-4FT | 3810008TR-6FT | 1-8     | 1        |

Metric

| Item No.       |  | Thread    | Pack Qty |
|----------------|--|-----------|----------|
| 1 Meter Length |  |           |          |
| 38M030050TR    |  | M3 x 0.5  | 1        |
| 38M040070TR    |  | M4 x 0.7  | 1        |
| 38M050080TR    |  | M5 x 0.8  | 1        |
| 38M060100TR    |  | M6 x 1.0  | 1        |
| 38M080125TR    |  | M8 x 1.25 | 1        |



## PLASTIC NUTS

04HN Series  
Standard Hex Nuts

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Acetal available by special order
- Color: Natural

## Imperial

| Item No.   | Thread | Across Flats |      | Height |     | Bulk Pack Qty |
|------------|--------|--------------|------|--------|-----|---------------|
|            |        | in           | mm   | in     | mm  |               |
| 0400256HN  | #2-56  | 0.180        | 4.6  | 0.070  | 1.8 | 1000          |
| 0400256HNS | #2-56  | 0.180        | 4.6  | 0.090  | 2.3 | 1000          |
| 0400348HN  | #3-48  | 0.180        | 4.6  | 0.070  | 1.8 | 1000          |
| 0400440HN  | #4-40  | 0.250        | 6.4  | 0.100  | 2.5 | 1000          |
| 0400440HNS | #4-40  | 0.250        | 6.4  | 0.124  | 3.2 | 1000          |
| 0400632HN  | #6-32  | 0.305        | 7.8  | 0.120  | 3.1 | 1000          |
| 0400632HNS | #6-32  | 0.305        | 7.8  | 0.146  | 3.7 | 1000          |
| 0400640HN  | #6-40  | 0.305        | 7.8  | 0.120  | 3.1 | 1000          |
| 0400832HN  | #8-32  | 0.335        | 8.5  | 0.130  | 3.3 | 1000          |
| 0400832HNS | #8-32  | 0.340        | 8.6  | 0.170  | 4.3 | 1000          |
| 0401024HN  | #10-24 | 0.365        | 9.3  | 0.135  | 3.4 | 1000          |
| 0401024HNS | #10-24 | 0.365        | 9.3  | 0.196  | 5.0 | 1000          |
| 0401032HN  | #10-32 | 0.365        | 9.3  | 0.135  | 3.4 | 1000          |
| 0401032HNS | #10-32 | 0.365        | 9.4  | 0.196  | 5.0 | 1000          |
| 0401224HN  | #12-24 | 0.425        | 10.8 | 0.207  | 5.3 | 1000          |
| 0425020HN  | 1/4-20 | 0.425        | 10.8 | 0.235  | 6.0 | 1000          |
| 0425020HNS | 1/4-20 | 0.425        | 10.8 | 0.258  | 6.6 | 1000          |

| Item No.  | Thread   | Across Flats |      | Height |      | Bulk Pack Qty |
|-----------|----------|--------------|------|--------|------|---------------|
|           |          | in           | mm   | in     | mm   |               |
| 0425028HN | 1/4-28   | 0.425        | 10.8 | 0.235  | 6.0  | 1000          |
| 0431218HN | 5/16-18  | 0.500        | 12.7 | 0.270  | 6.9  | 500           |
| 0431224HN | 5/16-24  | 0.500        | 12.7 | 0.270  | 6.9  | 500           |
| 0437516HN | 3/8-16   | 0.560        | 14.2 | 0.330  | 8.4  | 500           |
| 0437524HN | 3/8-24   | 0.560        | 14.2 | 0.330  | 8.4  | 500           |
| 0437532HN | 3/8-32   | 0.560        | 14.2 | 0.330  | 8.4  | 500           |
| 0443714HN | 7/16-14  | 0.685        | 17.4 | 0.380  | 9.7  | 500           |
| 0443720HN | 7/16-20  | 0.685        | 17.4 | 0.380  | 9.7  | 1000          |
| 0450013HN | 1/2-13   | 0.750        | 19.1 | 0.430  | 10.9 | 1000          |
| 0450020HN | 1/2-20   | 0.750        | 19.1 | 0.430  | 10.9 | 500           |
| 0462511HN | 5/8-11   | 0.925        | 23.4 | 0.550  | 14.0 | 250           |
| 0462518HN | 5/8-18   | 0.925        | 23.5 | 0.550  | 14.0 | 500           |
| 0468727HN | 11/16-27 | 1.000        | 25.4 | 0.250  | 6.4  | 500           |
| 0475010HN | 3/4-10   | 1.100        | 27.9 | 0.640  | 16.3 | 250           |
| 0487509HN | 7/8-9    | 1.280        | 32.5 | 0.750  | 19.1 | 500           |
| 0410008HN | 1-8      | 1.480        | 37.3 | 0.870  | 22.1 | 500           |

## Metric

| Item No.    | Thread      | Across Flats |     | Bulk Pack Qty |
|-------------|-------------|--------------|-----|---------------|
|             |             | mm           | mm  |               |
| 04M020040HN | M2 x 0.4    | 3.9          | 1.2 | 1000          |
| 04M025045HN | M2.5 x 0.45 | 4.9          | 1.8 | 1000          |
| 04M030050HN | M3 x 0.5    | 5.4          | 2.2 | 1000          |
| 04M035060HN | M3.5 x 0.6  | 6.9          | 2.7 | 1000          |
| 04M040070HN | M4 x 0.7    | 6.9          | 3.0 | 1000          |

| Item No.    | Thread     | Across Flats |      | Bulk Pack Qty |
|-------------|------------|--------------|------|---------------|
|             |            | mm           | mm   |               |
| 04M050080HN | M5 x 0.8   | 7.9          | 4.3  | 1000          |
| 04M060100HN | M6 x 1.00  | 10.0         | 5.4  | 1000          |
| 04M080125HN | M8 x 1.25  | 12.9         | 6.4  | 500           |
| 04M100150HN | M10 x 1.50 | 14.8         | 9.8  | 1000          |
| 04M120175HN | M12 x 1.75 | 17.7         | 10.5 | 1000          |

04HNPC  
Polycarbonate Hex Nut

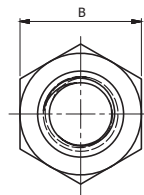
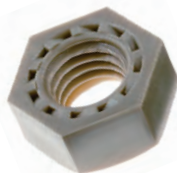
## Specifications:

- Material: Polycarbonate
- Color: Transparent

## Features:

- Polycarbonate has better impact and deflection temperature than Nylon
- Can be used with Polycarbonate screws for a transparent fastening

| Item No.    | Thread | Across Flats |     | Height |     | Bulk Pack Qty |
|-------------|--------|--------------|-----|--------|-----|---------------|
|             |        | in           | mm  | in     | mm  |               |
| 0400440HNPC | #4-40  | 0.250        | 6.4 | 0.100  | 2.5 | 1000          |
| 0400632HNPC | #6-32  | 0.305        | 7.8 | 0.120  | 3.1 | 1000          |
| 0400832HNPC | #8-32  | 0.335        | 8.5 | 0.130  | 3.3 | 1000          |
| 0401032HNPC | #10-32 | 0.365        | 9.3 | 0.135  | 3.4 | 1000          |

184 Series  
PEEK® Hex Nuts

## Specifications:

- Material: UL94 V-0 PEEK®
- Color: Light Brown

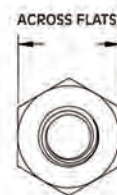
## Features:

- Heat Resistant up to 350°F
- Excellent mechanical and chemical resistance properties
- High abrasion resistance
- Resistant to water

| Item No.     | Thread      | B    |     | C   |     | Bulk Pack Qty |
|--------------|-------------|------|-----|-----|-----|---------------|
|              |             | mm   | mm  | mm  | mm  |               |
| 184020070409 | M2.6 x 0.45 | 5.0  | 2.0 | 2.0 | 2.5 | 25            |
| 184030070409 | M3 x 0.5    | 5.5  | 2.4 | 2.4 | 2.5 | 25            |
| 184040070409 | M4 x 0.7    | 7.0  | 3.2 | 3.2 | 2.5 | 25            |
| 184050070409 | M5 x 0.8    | 8.0  | 4.0 | 4.0 | 2.5 | 25            |
| 184060070409 | M6 x 1.00   | 10.0 | 5.0 | 5.0 | 2.5 | 25            |
| 184080070409 | M8 x 1.25   | 13.0 | 6.5 | 6.5 | 2.5 | 25            |
| 184100070409 | M10 x 1.50  | 17.0 | 8.0 | 8.0 | 2.5 | 25            |



### 04HNDIN34814 Metric Hex Nut DIN 34814



#### Specifications:

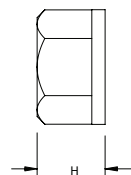
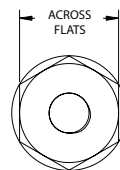
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

#### Features:

- Conformable with DIN 34814

| Item No.            | Thread     | Across Flats |        | Height |        | Bulk Pack Qty |
|---------------------|------------|--------------|--------|--------|--------|---------------|
|                     |            | Max mm       | Min mm | Max mm | Min mm |               |
| 04M030050HNDIN34814 | M3 x 0.5   | 5.5          | 5.3    | 2.4    | 2.2    | 1000          |
| 04M040070HNDIN34814 | M4 x 0.7   | 7.0          | 6.8    | 3.2    | 2.9    | 1000          |
| 04M050080HNDIN34814 | M5 x 0.8   | 8.0          | 7.8    | 4.7    | 4.4    | 1000          |
| 04M060100HNDIN34814 | M6 x 1.0   | 10.0         | 9.8    | 5.2    | 4.9    | 1000          |
| 04M080125HNDIN34814 | M8 x 1.25  | 13.0         | 12.7   | 6.8    | 6.4    | 500           |
| 04M100150HNDIN34814 | M10 x 1.50 | 16.0         | 15.7   | 8.4    | 8.0    | 1000          |
| 04M120175HNDIN34814 | M12 x 1.75 | 18.0         | 17.7   | 10.8   | 10.4   | 1000          |
| 04M160200HNDIN34814 | M16 x 2.00 | 24.0         | 23.7   | 14.8   | 14.1   | 1000          |

### 07LN Series Lock Nuts



#### Specifications:

- Material: UL94 V-2 Nylon 6/6
- Acetal available by special order
- Color: Natural

#### Features:

- Designed for use with steel screws

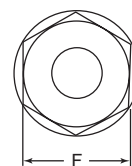
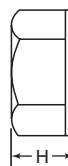
#### Imperial

| Item No.  | Thread | Across Flats |      | H     |     | OD    |      | Bulk Pack Qty |
|-----------|--------|--------------|------|-------|-----|-------|------|---------------|
|           |        | in           | mm   | in    | mm  | in    | mm   |               |
| 0700256LN | #2-56  | 0.180        | 4.6  | 0.140 | 3.6 | 0.205 | 5.2  | 1000          |
| 0700440LN | #4-40  | 0.250        | 6.4  | 0.180 | 4.6 | 0.285 | 7.2  | 1000          |
| 0700632LN | #6-32  | 0.305        | 7.8  | 0.200 | 5.1 | 0.350 | 8.9  | 1000          |
| 0700832LN | #8-32  | 0.335        | 8.5  | 0.230 | 5.8 | 0.385 | 9.8  | 1000          |
| 0701024LN | #10-24 | 0.365        | 9.3  | 0.250 | 6.4 | 0.425 | 10.8 | 1000          |
| 0701032LN | #10-32 | 0.365        | 9.3  | 0.250 | 6.4 | 0.425 | 10.8 | 1000          |
| 0725020LN | 1/4-20 | 0.425        | 10.8 | 0.275 | 7.0 | 0.510 | 13.0 | 1000          |
| 0725028LN | 1/4-28 | 0.425        | 10.8 | 0.275 | 7.0 | 0.510 | 13.0 | 1000          |

#### Metric

| Item No.    | Thread   | Across Flats |     | H    | Bulk Pack Qty |
|-------------|----------|--------------|-----|------|---------------|
|             |          | mm           | mm  |      |               |
| 07M060100LN | M6 x 1.0 | 10.9         | 6.7 | 1000 |               |

### 17SLN Series Self-Threading Lock Nuts



#### Specifications:

- Material: UL94 V-2 Nylon 6/6
- Acetal available by special order
- Color: Natural

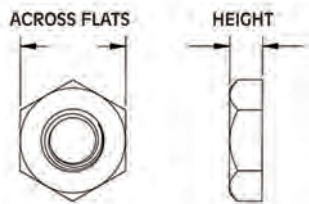
#### Features:

- Designed for use with steel bolts
- Threads are created when assembled to ensure a snug fit
- Ideal for applications seeing vibration or movement
- Resistant to corrosion, oil, abrasion and most chemicals

| Item No.   | For Use With Screw size | F     |      | H     |     | Bulk Pack Qty |
|------------|-------------------------|-------|------|-------|-----|---------------|
|            |                         | in    | mm   | in    | mm  |               |
| 0700256SLN | #2-56                   | 0.180 | 4.6  | 0.140 | 3.6 | 1000          |
| 0700440SLN | #4-40                   | 0.250 | 6.4  | 0.200 | 5.1 | 1000          |
| 0700632SLN | #6-32                   | 0.305 | 7.8  | 0.200 | 5.1 | 1000          |
| 0700832SLN | #8-32                   | 0.335 | 8.5  | 0.230 | 5.8 | 1000          |
| 0701024SLN | #10-24                  | 0.365 | 9.3  | 0.250 | 6.4 | 1000          |
| 0701032SLN | #10-32                  | 0.365 | 9.3  | 0.250 | 6.4 | 1000          |
| 0725020SLN | 1/4-20                  | 0.425 | 10.8 | 0.275 | 7.0 | 1000          |



## PLASTIC NUTS

04HJN Series  
Hex Jam Nut

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

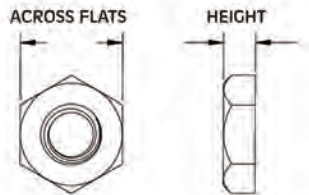
## Features:

- Can be used to run up against a hex nut locking it in place
- Can be used for leveling



| Item No.    | Thread   | Across Flats |      | Height |     | Bulk Pack Qty |
|-------------|----------|--------------|------|--------|-----|---------------|
|             |          | in           | mm   | in     | mm  |               |
| 0425020HJN  | 1/4-20   | 0.437        | 11.1 | 0.158  | 4.0 | 1000          |
| 0431218HJN  | 5/16-18  | 0.500        | 12.7 | 0.190  | 4.8 | 1000          |
| 0431224HJN  | 5/16-24  | 0.500        | 12.7 | 0.190  | 4.8 | 1000          |
| 0437516HJN  | 3/8-16   | 0.500        | 12.7 | 0.125  | 3.2 | 1000          |
| 0437524HJN  | 3/8-24   | 0.500        | 12.7 | 0.125  | 3.2 | 1000          |
| 0437532HJN  | 3/8-32   | 0.500        | 12.7 | 0.125  | 3.2 | 1000          |
| 0437516HHJN | 3/8-16   | 0.670        | 17.0 | 0.219  | 5.6 | 1000          |
| 0443714HJN  | 7/16-14  | 0.687        | 17.5 | 0.375  | 9.5 | 1000          |
| 0443720HJN  | 7/16-20  | 0.687        | 17.5 | 0.250  | 6.4 | 1000          |
| 0446832HJN  | 15/32-32 | 0.625        | 15.9 | 0.125  | 3.2 | 1000          |
| 0450013HJN  | 1/2-13   | 0.687        | 17.5 | 0.220  | 5.6 | 1000          |
| 0450020HJN  | 1/2-20   | 0.687        | 17.5 | 0.220  | 5.6 | 1000          |

| Item No.   | Thread  | Across Flats |      | Height |      | Bulk Pack Qty |
|------------|---------|--------------|------|--------|------|---------------|
|            |         | in           | mm   | in     | mm   |               |
| 0450024HJN | 1/2-24  | 0.687        | 17.5 | 0.220  | 5.6  | 1000          |
| 0450028HJN | 1/2-28  | 0.660        | 16.8 | 0.125  | 3.2  | 1000          |
| 0456218HJN | 9/16-18 | 0.750        | 19.1 | 0.250  | 6.4  | 1000          |
| 0456224HJN | 9/16-24 | 0.750        | 19.1 | 0.250  | 6.4  | 1000          |
| 0462511HJN | 5/8-11  | 0.937        | 23.8 | 0.375  | 9.5  | 500           |
| 0462518HJN | 5/8-18  | 0.937        | 23.8 | 0.375  | 9.5  | 500           |
| 0475010HJN | 3/4-10  | 1.120        | 28.5 | 0.250  | 6.4  | 500           |
| 0475016HJN | 3/4-16  | 1.120        | 28.5 | 0.250  | 6.4  | 500           |
| 0475027HJN | 3/4-27  | 1.000        | 25.4 | 0.125  | 3.2  | 1000          |
| 0487514HJN | 7/8-14  | 1.250        | 31.8 | 0.340  | 8.6  | 250           |
| 0487520HJN | 7/8-20  | 1.000        | 25.4 | 0.125  | 3.2  | 1000          |
| 0410008HJN | 1-8     | 1.480        | 37.6 | 0.410  | 10.4 | 250           |

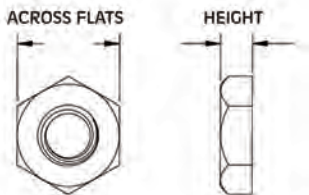
04PJN Series  
NPT Hex Jam Nut

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural



| Item No.   | Thread | Across Flats |      | Height |      | Bulk Pack Qty |
|------------|--------|--------------|------|--------|------|---------------|
|            |        | in           | mm   | in     | mm   |               |
| 0412527PJN | 1/8-27 | 0.560        | 14.2 | 0.110  | 2.8  | 1000          |
| 0425018PJN | 1/4-18 | 0.740        | 18.8 | 0.187  | 4.8  | 500           |
| 0437518PJN | 3/8-18 | 1.000        | 25.4 | 0.280  | 7.1  | 500           |
| 0450014PJN | 1/2-14 | 1.250        | 31.8 | 0.340  | 8.6  | 250           |
| 0475014PJN | 3/4-14 | 1.480        | 37.6 | 0.410  | 10.4 | 250           |

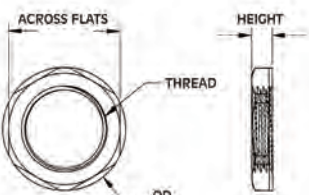
04SJJN Series  
NPS Hex Jam Nut

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural



| Item No.    | Thread | Across Flats |      | Height |      | Bulk Pack Qty |
|-------------|--------|--------------|------|--------|------|---------------|
|             |        | in           | mm   | in     | mm   |               |
| 0425018SJJN | 1/4-18 | 0.687        | 17.5 | 0.225  | 5.7  | 500           |
| 0437518SJJN | 3/8-18 | 1.000        | 25.4 | 0.280  | 7.1  | 500           |
| 0450014SJJN | 1/2-14 | 1.250        | 31.8 | 0.340  | 8.6  | 500           |
| 0475014SJJN | 3/4-14 | 1.480        | 37.6 | 0.410  | 10.4 | 250           |

04PJN  
NPT Washer Face Hex Jam Nut

## Specifications:

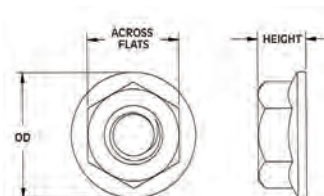
- Material: UL94 V-2 Nylon 6/6
- Color: Natural



| Item No.   | Thread       | OD    |      | Across Flats |      | Height |     | Bulk Pack Qty |
|------------|--------------|-------|------|--------------|------|--------|-----|---------------|
|            |              | in    | mm   | in           | mm   | in     | mm  |               |
| 0410011PJN | 1-11-1/2     | 1.844 | 46.8 | 1.656        | 42.1 | 0.313  | 7.9 | 250           |
| 0412511PJN | 1-1/4-11-1/2 | 2.344 | 59.5 | 2.125        | 54.0 | 0.375  | 9.5 | 250           |



### 04HFN Series Hex Flange Nut



#### Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

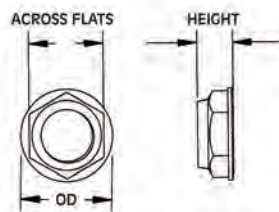
#### Imperial

| Item No.   | Thread | OD    |       | Across Flats |      | Height |      | Bulk Pack Qty |
|------------|--------|-------|-------|--------------|------|--------|------|---------------|
|            |        | in    | mm    | in           | mm   | in     | mm   |               |
| 0401032HFN | 10-32  | 0.492 | 120.5 | 0.364        | 9.3  | 0.208  | 5.3  | 1000          |
| 0425020HFN | 1/4-20 | 0.582 | 14.8  | 0.428        | 10.9 | 0.226  | 5.7  | 1000          |
| 0425028HFN | 1/4-28 | 0.582 | 14.8  | 0.428        | 10.9 | 0.226  | 5.7  | 1000          |
| 0462511HFN | 5/8-11 | 1.265 | 32.1  | 0.930        | 23.6 | 0.557  | 14.1 | 1000          |

#### Metric

| Item No.      | Thread     | OD<br>mm | Across Flats<br>mm | Height<br>mm | Bulk Pack Qty | Item No.      | Thread     | OD<br>mm | Across Flats<br>mm | Height<br>mm | Bulk Pack Qty |
|---------------|------------|----------|--------------------|--------------|---------------|---------------|------------|----------|--------------------|--------------|---------------|
|               |            |          |                    |              |               |               |            |          |                    |              |               |
| 04M040070WFHN | M4 x 0.7   | 8.8      | 7.0                | 3.4          | 1000          | 04M160150WFHN | M16 x 1.50 | 22.0     | 18.9               | 6.7          | 1000          |
| 04M050080WFHN | M5 x 0.8   | 9.8      | 7.9                | 5.2          | 1000          | 04M160200WFHN | M16 x 2.00 | 39.0     | 24.0               | 19.5         | 1000          |
| 04M060100WFHN | M6 x 1.00  | 13.0     | 10.0               | 6.0          | 1000          | 04M200150WFHN | M20 x 1.50 | 27.0     | 22.9               | 8.0          | 1000          |
| 04M080125WFHN | M8 x 1.25  | 17.0     | 13.0               | 8.0          | 1000          | 04M250150WFHN | M25 x 1.50 | 32.0     | 27.9               | 9.0          | 1000          |
| 04M100150WFHN | M10 x 1.50 | 22.0     | 16.0               | 10.0         | 1000          | 04M320150WFHN | M32 x 1.50 | 42.0     | 36.5               | 9.0          | 1000          |

### 04HDN Series Dress Nut



#### Specifications:

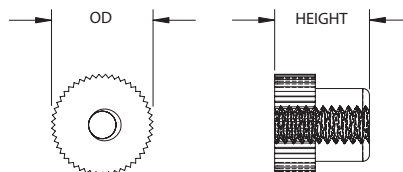
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

#### Features:

- The aesthetic contour of the nut includes a washer that gives a finished look to panel fronts

| Item No.   | Thread | OD    |      | Across Flats |      | Height |     | Bulk Pack Qty |
|------------|--------|-------|------|--------------|------|--------|-----|---------------|
|            |        | in    | mm   | in           | mm   | in     | mm  |               |
| 0437532HDN | 3/8-32 | 0.615 | 15.6 | 0.500        | 12.7 | 0.245  | 6.2 | 1000          |

### 08TNA/08MTN Series Knurled Thumb Nuts



#### Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

#### Imperial

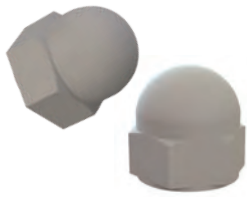
| Item No.   | Thread  | OD    |      | Height |      | Bulk Pack Qty |
|------------|---------|-------|------|--------|------|---------------|
|            |         | in    | mm   | in     | mm   |               |
| 0800440TNA | #4-40   | 0.300 | 7.6  | 0.280  | 7.1  | 1000          |
| 0800632TNA | #6-32   | 0.360 | 9.1  | 0.275  | 7.0  | 1000          |
| 0800832TNA | #8-32   | 0.425 | 10.8 | 0.305  | 7.8  | 1000          |
| 0801024TNA | #10-24  | 0.425 | 10.8 | 0.325  | 8.3  | 1000          |
| 0801032TNA | #10-32  | 0.425 | 10.8 | 0.325  | 8.3  | 1000          |
| 0825020TNA | 1/4-20  | 0.540 | 13.7 | 0.365  | 9.3  | 500           |
| 0831218TNA | 5/16-18 | 0.615 | 15.6 | 0.385  | 9.8  | 1000          |
| 0837516TNA | 3/8-16  | 0.687 | 17.5 | 0.430  | 10.9 | 1000          |
| 0850013TNA | 1/2-13  | 0.750 | 19.1 | 0.468  | 11.9 | 500           |

#### Metric

| Item No.    | Thread | OD   |    | Height |    | Bulk Pack Qty |
|-------------|--------|------|----|--------|----|---------------|
|             |        | mm   | mm | mm     | mm |               |
| 08M040070TN | M4     | 10.8 |    | 7.8    |    | 1000          |



## PLASTIC NUTS

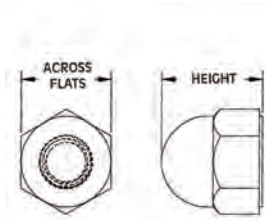
05CN Series  
Cap Nuts

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Acetal available by special order
- Color: See Table

## Features:

- Encloses external thread
- Gives a finished appearance

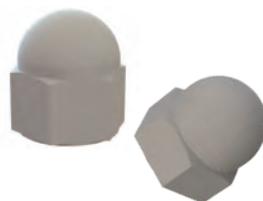


## Imperial

| Item No.  |            | Thread  | Across Flats |      | Height |      | Bulk Pack Qty |
|-----------|------------|---------|--------------|------|--------|------|---------------|
| Natural   | Black      |         | in           | mm   | in     | mm   |               |
| 0500440CN | 0500440CNB | #4-40   | 0.250        | 6.4  | 0.280  | 7.1  | 1000          |
| 0500632CN | 0500632CNB | #6-32   | 0.305        | 7.8  | 0.345  | 8.8  | 1000          |
| 0500832CN | 0500832CNB | #8-32   | 0.330        | 8.4  | 0.375  | 9.5  | 1000          |
| 0501024CN | 0501024CNB | #10-24  | 0.365        | 9.3  | 0.400  | 10.2 | 1000          |
| 0501032CN | 0501032CNB | #10-32  | 0.365        | 9.3  | 0.400  | 10.2 | 1000          |
| 0525018CN | 0525018CNB | 1/4-18  | 0.750        | 19.1 | 0.810  | 20.6 | 500           |
| 0525020CN | 0525020CNB | 1/4-20  | 0.425        | 10.8 | 0.475  | 12.1 | 500           |
| 0525028CN | 0525028CNB | 1/4-28  | 0.425        | 10.8 | 0.475  | 12.1 | 500           |
| 0531218CN | 0531218CNB | 5/16-18 | 0.500        | 12.7 | 0.530  | 13.5 | 500           |
| 0531224CN | 0531224CNB | 5/16-24 | 0.500        | 12.7 | 0.530  | 13.5 | 500           |
| 0537516CN | 0537516CNB | 3/8-16  | 0.565        | 14.4 | 0.620  | 15.7 | 1000          |
| 0537524CN | 0537524CNB | 3/8-24  | 0.565        | 14.4 | 0.620  | 15.7 | 1000          |
| 0537532CN | 0537532CNB | 3/8-32  | 0.565        | 14.4 | 0.620  | 15.7 | 500           |
| 0543714CN | 0543714CNB | 7/16-14 | 0.750        | 19.1 | 0.810  | 20.6 | 500           |
| 0550013CN | 0550013CNB | 1/2-13  | 0.750        | 19.1 | 0.810  | 20.6 | 500           |
| 0550020CN | 0550020CNB | 1/2-20  | 0.750        | 19.1 | 0.810  | 20.6 | 500           |
| 0562511CN | 0562511CNB | 5/8-11  | 0.935        | 23.8 | 0.970  | 24.6 | 250           |

## Metric

| Item No.    | Thread     | Across Flats |  | Height | Bulk Pack Qty |
|-------------|------------|--------------|--|--------|---------------|
|             |            | mm           |  | mm     |               |
| 05M040070CN | M4 x 0.7   | 7.0          |  | 8.0    | 1000          |
| 05M050080CN | M5 x 0.8   | 8.0          |  | 10.0   | 1000          |
| 05M060100CN | M6 x 1.00  | 10.0         |  | 12.0   | 1000          |
| 05M080125CN | M8 x 1.25  | 13.0         |  | 15.0   | 1000          |
| 05M100150CN | M10 x 1.50 | 17.0         |  | 18.0   | 500           |
| 05M120175CN | M12 x 1.75 | 18.9         |  | 20.5   | 500           |
| 05M160200CN | M16 x 2.0  | 23.7         |  | 24.8   | 250           |
| 05M200250CN | M20 x 2.5  | 26.7         |  | 29.1   | 1000          |

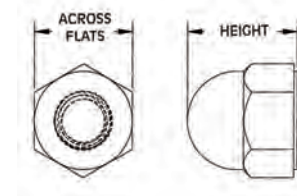
05LCN Series  
Locking Cap Nut

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Acetal available by special order
- Color: See Table

## Features:

- Molded-in locking thread for applications which require higher torque or a more secure assembly



## Imperial

| Item No.   |             | Thread  | Across Flats |      | Height |      | Bulk Pack Qty |
|------------|-------------|---------|--------------|------|--------|------|---------------|
| Natural    | Black       |         | in           | mm   | in     | mm   |               |
| 0500440LCN | 0500440LCNB | #4-40   | 0.250        | 6.4  | 0.280  | 7.1  | 500           |
| 0500632LCN | 0500632LCNB | #6-32   | 0.305        | 7.8  | 0.345  | 8.8  | 500           |
| 0500832LCN | 0500832LCNB | #8-32   | 0.330        | 8.4  | 0.375  | 9.5  | 500           |
| 0501024LCN | 0501024LCNB | #10-24  | 0.365        | 9.3  | 0.400  | 10.2 | 500           |
| 0501032LCN | 0501032LCNB | #10-32  | 0.365        | 9.3  | 0.400  | 10.2 | 500           |
| 0525020LCN | 0525020LCNB | 1/4-20  | 0.425        | 10.8 | 0.475  | 12.1 | 500           |
| 0531218LCN | 0531218LCNB | 5/16-18 | 0.500        | 12.7 | 0.530  | 13.5 | 500           |
| 0537516LCN | 0537516LCNB | 3/8-16  | 0.565        | 14.3 | 0.620  | 15.7 | 500           |

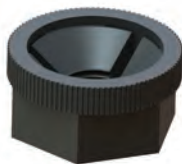
## Metric

| Item No.     | Thread   | Across Flats |  | Height | Bulk Pack Qty |
|--------------|----------|--------------|--|--------|---------------|
|              |          | mm           |  | mm     |               |
| 05M040070LCN | M4 x 0.7 | 7.0          |  | 8.0    | 1000          |
| 05M050080LCN | M5 x 0.8 | 8.0          |  | 10.0   | 1000          |
| 05M060100LCN | M6 x 1.0 | 10.0         |  | 12.0   | 1000          |





### KNF Series Metric Quick Nut

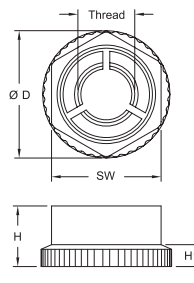


#### Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Black

#### Features:

- To install, push down the length of the threaded fastener to desired location and lock with a 180° turn
- Reduces assembly time
- Corrosion resistant
- Lightweight
- To remove, unscrew with a wrench



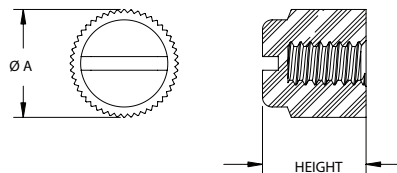
| Item No. | Thread | SW<br>mm | Ø D<br>mm | H<br>mm | H1<br>mm | Bulk Pack Qty |
|----------|--------|----------|-----------|---------|----------|---------------|
| 1442505  | M4     | 8.0      | 9.4       | 4.7     | 1.8      | 1000          |

### 05SCN Series Slotted Knurled Thumb Nuts



#### Specifications:

- Material: UL94 V-2 Nylon 6/6
- Acetal available by special order
- Color: Natural



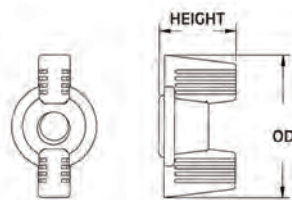
| Item No.   | Thread | Ø A   |      | Height |     | Bulk Pack Qty |
|------------|--------|-------|------|--------|-----|---------------|
|            |        | in    | mm   | in     | mm  |               |
| 0500440SCN | #4-40  | 0.317 | 8.1  | 0.295  | 7.5 | 1000          |
| 0500632SCN | #6-32  | 0.348 | 8.8  | 0.334  | 8.5 | 1000          |
| 0500832SCN | #8-32  | 0.381 | 9.7  | 0.378  | 9.6 | 1000          |
| 0501024SCN | #10-24 | 0.400 | 10.2 | 0.359  | 9.1 | 1000          |
| 0501032SCN | #10-32 | 0.400 | 10.2 | 0.359  | 9.1 | 1000          |
| 0525020SCN | 1/4-20 | 0.478 | 12.1 | 0.370  | 9.4 | 1000          |

### 06DWN Series Deco Wing Nuts



#### Specifications:

- Material: UL94 V-2 Nylon 6/6
- Acetal available by special order
- Color: Natural



#### Imperial

| Item No.      | Thread  | OD    |      | Height |      | Bulk Pack Qty |
|---------------|---------|-------|------|--------|------|---------------|
|               |         | in    | mm   | in     | mm   |               |
| 0600440DECOWN | #4-40   | 0.625 | 15.9 | 0.313  | 7.9  | 1000          |
| 0600632DECOWN | #6-32   | 0.625 | 15.9 | 0.313  | 7.9  | 1000          |
| 0600832DECOWN | #8-32   | 0.625 | 15.9 | 0.313  | 7.9  | 1000          |
| 0601024DECOWN | #10-24  | 0.875 | 22.2 | 0.438  | 11.1 | 1000          |
| 0601032DECOWN | #10-32  | 0.875 | 22.2 | 0.438  | 11.1 | 1000          |
| 0631218DECOWN | 5/16-18 | 1.563 | 39.7 | 0.453  | 11.5 | 1000          |
| 0637516DECOWN | 3/8-16  | 1.563 | 39.7 | 0.453  | 11.5 | 1000          |
| 0637524DECOWN | 3/8-24  | 1.563 | 39.7 | 0.453  | 11.5 | 1000          |

#### Metric

| Item No.     | Thread   | OD<br>mm | Height<br>mm | Bulk Pack Qty |
|--------------|----------|----------|--------------|---------------|
| 06M040070DWN | M4 x 0.7 | 16.0     | 8.0          | 500           |
| 06M050080DWN | M5 x 0.8 | 22.2     | 11.1         | 500           |
| 06M060100DWN | M6 x 1.0 | 29.7     | 13.4         | 1000          |



## PLASTIC NUTS

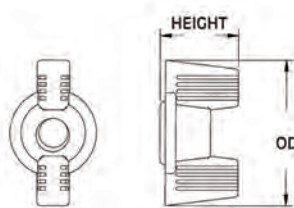
**06DLWN Series**  
Locking Deco Wing Nuts

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Acetal available by special order
- Color: Natural

## Features:

- Molded-in locking thread for applications which require higher torque or a more secure assembly



## Imperial

| Item No.    | Thread  | OD    |      | Height |      | Bulk Pack Qty |
|-------------|---------|-------|------|--------|------|---------------|
|             |         | in    | mm   | in     | mm   |               |
| 0600440DLWN | #4-40   | 0.625 | 15.9 | 0.313  | 7.9  | 1000          |
| 0600632DLWN | #6-32   | 0.625 | 15.9 | 0.313  | 7.9  | 1000          |
| 0600832DLWN | #8-32   | 0.625 | 15.9 | 0.313  | 7.9  | 1000          |
| 0601024DLWN | #10-24  | 0.875 | 22.2 | 0.438  | 11.1 | 1000          |
| 0601032DLWN | #10-32  | 0.875 | 22.2 | 0.438  | 11.1 | 1000          |
| 0625020DLWN | 1/4-20  | 1.172 | 29.7 | 0.531  | 13.5 | 1000          |
| 0631218DLWN | 5/16-18 | 1.563 | 39.7 | 0.453  | 11.5 | 1000          |

## Metric

| Item No.      | Thread | OD   |  | Height |  | Bulk Pack Qty |
|---------------|--------|------|--|--------|--|---------------|
|               |        | mm   |  | mm     |  |               |
| 06M040070DLWN | M4     | 16.0 |  | 8.0    |  | 1000          |
| 06M050080DLWN | M5     | 22.2 |  | 11.1   |  | 1000          |
| 06M060100DLWN | M6     | 29.7 |  | 13.4   |  | 1000          |

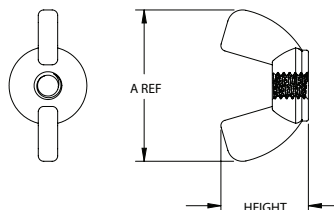
**06WN/06WNA Series**  
Wing Nuts

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Acetal available by special order
- Color: Natural

## Features:

- Easily tightened and loosened by hand without tools



## Imperial

| Item No.   | Thread | A Ref |      | Height |      | Bulk Pack Qty |
|------------|--------|-------|------|--------|------|---------------|
|            |        | in    | mm   | in     | mm   |               |
| 0600440WN  | #4-40  | 0.900 | 22.9 | 0.480  | 12.2 | 500           |
| 0600632WN  | #6-32  | 0.900 | 22.9 | 0.480  | 12.2 | 1000          |
| 0600832WN  | #8-32  | 0.900 | 22.9 | 0.480  | 12.2 | 500           |
| 0601024WN  | #10-24 | 0.900 | 22.9 | 0.480  | 12.2 | 500           |
| 0601032WN  | #10-32 | 0.900 | 22.9 | 0.480  | 12.2 | 1000          |
| 0601024WNA | #10-24 | 1.090 | 27.7 | 0.630  | 16.3 | 500           |
| 0601032WNA | #10-32 | 1.090 | 27.7 | 0.630  | 16.3 | 1000          |
| 0625020WNA | 1/4-20 | 1.090 | 27.7 | 0.630  | 16.3 | 1000          |

| Item No.   | Thread  | A Ref |      | Height |      | Bulk Pack Qty |
|------------|---------|-------|------|--------|------|---------------|
|            |         | in    | mm   | in     | mm   |               |
| 0625028WNA | 1/4-28  | 1.090 | 27.7 | 0.630  | 16.3 | 1000          |
| 0625020WN  | 1/4-20  | 1.360 | 34.5 | 0.710  | 18.0 | 1000          |
| 0625028WN  | 1/4-28  | 1.360 | 34.5 | 0.710  | 18.0 | 1000          |
| 0631218WN  | 5/16-18 | 1.370 | 34.8 | 0.720  | 18.3 | 500           |
| 0637516WN  | 3/8-16  | 1.370 | 34.8 | 0.720  | 18.3 | 1000          |
| 0637524WN  | 3/8-24  | 1.370 | 34.8 | 0.720  | 18.3 | 1000          |
| 0643714WN  | 7/16-14 | 1.760 | 44.7 | 0.900  | 22.9 | 500           |
| 0650013WN  | 1/2-13  | 1.760 | 44.7 | 0.900  | 22.9 | 500           |
| 0656212WN  | 9/16-12 | 1.760 | 44.7 | 0.900  | 22.9 | 1000          |

## Metric

| Item No.    | Thread    | A Ref |  | Height |  | Bulk Pack Qty |
|-------------|-----------|-------|--|--------|--|---------------|
|             |           | mm    |  | mm     |  |               |
| 06M040070WN | M4 x 0.7  | 22.8  |  | 12.2   |  | 500           |
| 06M050080WN | M5 x 0.8  | 22.8  |  | 12.2   |  | 500           |
| 06M060100WN | M6 x 1.00 | 27.7  |  | 16.0   |  | 500           |

| Item No.    | Thread     | A Ref |  | Height |  | Bulk Pack Qty |
|-------------|------------|-------|--|--------|--|---------------|
|             |            | mm    |  | mm     |  |               |
| 06M080125WN | M8 x 1.25  | 34.8  |  | 18.3   |  | 1000          |
| 06M100150WN | M10 x 1.50 | 34.8  |  | 18.3   |  | 1000          |
| 06M120175WN | M12 x 1.75 | 44.7  |  | 22.7   |  | 500           |

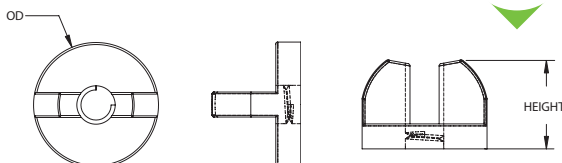
**06WNC Series**  
Transparent Decorative Wing Nuts

## Specifications:

- Material: Copolyester
- Color: Transparent

## Features:

- Can be used with transparent Polycarbonate screws



| Item No.   | Thread | Ø     |      | Height |      | Bulk Pack Qty |
|------------|--------|-------|------|--------|------|---------------|
|            |        | in    | mm   | in     | mm   |               |
| 0600832WNC | #8-32  | 0.625 | 15.9 | 0.453  | 11.5 | 500           |
| 0601024WNC | #10-24 | 0.625 | 15.9 | 0.453  | 11.5 | 500           |

| Item No.   | Thread | Ø     |      | Height |      | Bulk Pack Qty |
|------------|--------|-------|------|--------|------|---------------|
|            |        | in    | mm   | in     | mm   |               |
| 0601032WNC | #10-32 | 0.625 | 15.9 | 0.453  | 11.5 | 500           |
| 0625020WNC | 1/4-20 | 0.625 | 15.9 | 0.453  | 11.5 | 500           |





















**16M Series  
Metric Nylon Flat Washers**



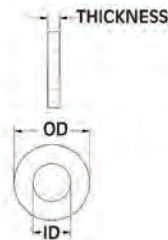
Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.    | ID mm | OD mm | Thickness mm | Fits Screw | Bulk Pack Qty |
|-------------|-------|-------|--------------|------------|---------------|
| 16M02050080 | 2.2   | 5.0   | 0.8          | M2         | 1000          |
| 16M02556080 | 2.7   | 5.6   | 0.8          | M2.5       | 1000          |
| 16M03080080 | 3.2   | 8.0   | 0.8          | M3         | 1000          |
| 16M03580080 | 3.7   | 8.0   | 0.8          | M3.5       | 1000          |
| 16M04080200 | 4.3   | 8.0   | 2.0          | M4         | 1000          |
| 16M04090080 | 4.3   | 9.0   | 0.8          | M4         | 1000          |
| 16M05011100 | 5.3   | 11.0  | 1.0          | M5         | 1000          |

| Item No.    | ID mm | OD mm | Thickness mm | Fits Screw | Bulk Pack Qty |
|-------------|-------|-------|--------------|------------|---------------|
| 16M06012150 | 6.4   | 12.0  | 1.5          | M6         | 1000          |
| 16M08018200 | 8.4   | 18.0  | 2.0          | M8         | 500           |
| 16M08525200 | 8.5   | 25.0  | 2.0          | M8.5       | 500           |
| 16M08535110 | 8.5   | 35.0  | 1.1          | M8         | 1000          |
| 16M10022250 | 10.5  | 22.0  | 2.5          | M10        | 500           |
| 16M12025200 | 13.4  | 25.1  | 2.5          | M12        | 500           |
| 16M12034250 | 13.4  | 33.6  | 3.1          | M12        | 1000          |
| 16M70074500 | 70.0  | 74.5  | 5.0          | M64        | 1000          |

**MFW/17M34815 Series  
DIN 34815 / 125 Nylon Flat Washers**



Specifications:

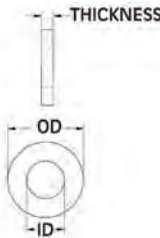
- Material: UL94 V-2 Nylon 6/6
- Color: See Table

Features:

- Conforms to DIN 34815 / DIN 125

| Item No.              | ID mm | OD mm | Thickness mm | Fits Screw | Bulk Pack Qty |
|-----------------------|-------|-------|--------------|------------|---------------|
| Natural MFW010A       | 2.2   | 5.0   | 0.3          | M2         | 1000          |
| Black MFW020A         | 2.7   | 6.0   | 0.5          | M2.5       | 1000          |
| Natural MFW030A       | 3.2   | 7.0   | 0.5          | M3         | 1000          |
| Black MFW040A         | 3.7   | 8.0   | 0.5          | M3.5       | 1000          |
| Natural 17M04DIN34815 | 4.3   | 9.0   | 0.8          | M4         | 1000          |
| Black 17M05DIN34815   | 5.3   | 10.0  | 1.0          | M5         | 1000          |
| Natural 17M06DIN34815 | 6.4   | 12.0  | 1.6          | M6         | 1000          |
| Black 17M08DIN34815   | 8.4   | 16.0  | 1.6          | M8         | 1000          |
| Natural 17M10DIN34815 | 10.5  | 20.0  | 2.0          | M10        | 1000          |
| Black 17M12DIN34815   | 13.0  | 24.0  | 2.5          | M12        | 500           |
| Natural MFW110A       | 15.0  | 30.0  | 3.0          | M14        | 1000          |
| Black 17M16DIN34815   | 17.0  | 30.0  | 3.0          | M16        | 1000          |
| Natural MFW130A       | 19.0  | 34.0  | 3.0          | M18        | 250           |
| Black 17M20DIN34815   | 21.0  | 37.0  | 3.0          | M20        | 500           |
| Natural MFW150A       | 25.0  | 44.0  | 4.0          | M22        | 250           |
| Black MFW160A         | 28.0  | 50.0  | 4.0          | M24        | 250           |
| Natural MFW170A       | 31.0  | 56.0  | 4.0          | M27        | 250           |
| Black MFW180A         | 37.0  | 66.0  | 5.0          | M30        | 250           |
| Natural MFW190A       | 40.0  | 72.0  | 6.0          | M36        | 250           |

**17M34816 Series  
DIN 34816 / 9021 Nylon Flat Washers**



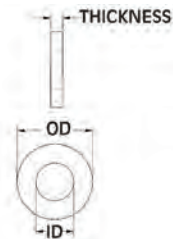
Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Conforms to DIN 34816 / DIN 9021

| Item No.      | ID mm | OD mm | Thickness mm | Fits Screw | Bulk Pack Qty |
|---------------|-------|-------|--------------|------------|---------------|
| 17M03DIN34816 | 3.2   | 9.0   | 0.9          | M3         | 1000          |
| 17M04DIN34816 | 4.3   | 12.0  | 1.1          | M4         | 1000          |
| 17M05DIN34816 | 5.3   | 15.0  | 1.4          | M5         | 1000          |
| 17M06DIN34816 | 6.4   | 18.0  | 1.8          | M6         | 1000          |
| 17M08DIN34816 | 8.4   | 24.0  | 2.2          | M8         | 500           |
| 17M10DIN34816 | 10.5  | 30.0  | 2.7          | M10        | 1000          |
| 17M12DIN34816 | 13.0  | 37.0  | 3.3          | M12        | 500           |
| 17M16DIN34816 | 17.0  | 50.0  | 3.3          | M16        | 1000          |

**PLASTIC WASHERS****185 Series  
PEEK® Flat Washers**

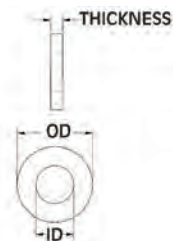
## Specifications:

- Material: UL94 V-0 PEEK®
- Color: Light Brown

## Features:

- Heat Resistant up to 350°F
- Excellent mechanical and chemical resistance

| Item No.     | ID    |      | OD    |      | Thickness |     | Fits Screw |        | Bulk Pack Qty |
|--------------|-------|------|-------|------|-----------|-----|------------|--------|---------------|
|              | in    | mm   | in    | mm   | in        | mm  | Imperial   | Metric |               |
| 185020070409 | 0.106 | 2.7  | 0.236 | 6.0  | 0.020     | 0.5 | #3         | M2.5   | 250           |
| 185030070409 | 0.126 | 3.2  | 0.276 | 7.0  | 0.020     | 0.5 | #5         | M3     | 250           |
| 185040070409 | 0.169 | 4.3  | 0.354 | 9.0  | 0.031     | 0.8 | #8         | M4     | 250           |
| 185050070409 | 0.209 | 5.3  | 0.394 | 10.0 | 0.039     | 1.0 | #10        | M5     | 250           |
| 185060070409 | 0.252 | 6.4  | 0.492 | 12.5 | 0.063     | 1.6 | 1/4        | M6     | 250           |
| 185080070409 | 0.331 | 8.4  | 0.669 | 17.5 | 0.063     | 1.6 | 5/16       | M8     | 100           |
| 185100070409 | 0.413 | 10.5 | 0.827 | 21.0 | 0.079     | 2.0 | 3/8        | M10    | 100           |

**173 Series  
Polycarbonate Flat Washer**

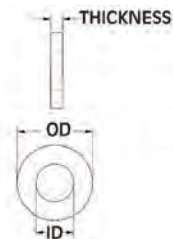
## Specifications:

- Material: Polycarbonate
- Color: Clear

## Features:

- High transparency

| Item No.     | ID    |     | OD    |      | Thickness |     | Fits Screw |        | Bulk Pack Qty |
|--------------|-------|-----|-------|------|-----------|-----|------------|--------|---------------|
|              | in    | mm  | in    | mm   | in        | mm  | Imperial   | Metric |               |
| 173000200022 | 0.083 | 2.1 | 0.157 | 4.0  | 0.020     | 0.5 | #2         | M2     | 100           |
| 173002600022 | 0.106 | 2.7 | 0.236 | 6.0  | 0.020     | 0.5 | #3         | M2.5   | 100           |
| 173000300022 | 0.160 | 3.3 | 0.315 | 8.0  | 0.031     | 0.8 | #5         | M3     | 100           |
| 173000400022 | 0.177 | 4.5 | 0.394 | 10.0 | 0.031     | 0.8 | #8         | M4     | 100           |
| 173000500022 | 0.217 | 5.5 | 0.472 | 12.0 | 0.039     | 1.0 | #12        | M5     | 100           |
| 173000600022 | 0.256 | 6.5 | 0.512 | 13.0 | 0.063     | 1.6 | 1/4        | M6     | 100           |
| 173000800022 | 0.335 | 8.5 | 0.709 | 18.0 | 0.063     | 1.6 | 5/16       | M8     | 100           |

**032/033 Series  
PVC Flat Washer**

## Specifications:

- Material: PVC
- Color: Black

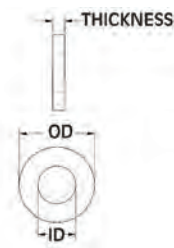
## Features:

- Moisture resistant
- Abrasion resistant

| Item No.     | ID    |      | OD    |      | Thickness |     | Fits Screw |        | Bulk Pack Qty |
|--------------|-------|------|-------|------|-----------|-----|------------|--------|---------------|
|              | in    | mm   | in    | mm   | in        | mm  | Imperial   | Metric |               |
| 032030011407 | 0.126 | 3.2  | 0.354 | 9.0  | 0.059     | 1.5 | #5         | M3     | 1000          |
| 032040011407 | 0.169 | 4.3  | 0.472 | 12.0 | 0.055     | 1.4 | #8         | M4     | 1000          |
| 032050011407 | 0.209 | 5.3  | 0.591 | 15.0 | 0.059     | 1.5 | #10        | M5     | 500           |
| 032060011407 | 0.252 | 6.4  | 0.709 | 18.2 | 0.079     | 2.0 | 1/4        | M6     | 500           |
| 032080011407 | 0.331 | 8.4  | 0.984 | 25.0 | 0.098     | 2.5 | 5/16       | M8     | 500           |
| 032100011407 | 0.413 | 10.5 | 1.181 | 30.0 | 0.118     | 3.0 | 3/8        | M10    | 250           |
| 032120011407 | 0.512 | 13.0 | 1.575 | 40.0 | 0.118     | 3.0 | 1/2        | M13    | 100           |
| 033030011407 | 0.126 | 3.2  | 0.591 | 15.0 | 0.059     | 1.5 | #5         | M3     | 500           |
| 033040011407 | 0.169 | 4.3  | 0.709 | 18.0 | 0.079     | 2.0 | #8         | M4     | 500           |
| 033050011407 | 0.209 | 5.3  | 0.984 | 25.0 | 0.098     | 2.5 | #10        | M5     | 500           |
| 033060011407 | 0.252 | 6.4  | 1.181 | 30.0 | 0.118     | 3.0 | 1/4        | M6     | 100           |
| 033080011407 | 0.331 | 8.4  | 1.575 | 40.0 | 0.118     | 3.0 | 5/16       | M8     | 100           |



**585 Series  
Polypropylene Flat Washer**



Specifications:

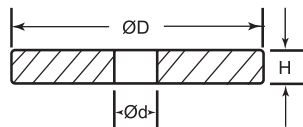
- Material: Polypropylene
- Color: Natural

Features:

- Excellent chemical resistance
- Moisture resistant

| Item No.     | ID    |      | Ø     |      | Thickness |     | Fits Screw |        | Bulk Pack Qty |
|--------------|-------|------|-------|------|-----------|-----|------------|--------|---------------|
|              | in    | mm   | in    | mm   | in        | mm  | Imperial   | Metric |               |
| 585010000011 | 0.169 | 4.3  | 0.354 | 9.0  | 0.031     | 0.8 | #8         | M4     | 100           |
| 585020000011 | 0.209 | 5.3  | 0.394 | 10.0 | 0.039     | 1.0 | #10        | M5     | 100           |
| 585030000011 | 0.252 | 6.4  | 0.472 | 12.0 | 0.063     | 1.6 | 1/4        | M6     | 100           |
| 585040000011 | 0.331 | 8.4  | 0.630 | 16.0 | 0.063     | 1.6 | 5/16       | M8     | 100           |
| 585060000011 | 0.413 | 10.5 | 0.787 | 20.0 | 0.079     | 2.0 | 3/8        | M10    | 100           |
| 585050000011 | 0.512 | 13.0 | 0.945 | 24.0 | 0.098     | 2.5 | 1/2        | M12    | 100           |

**RWM Series  
Metric Retaining Washers**



Specifications:

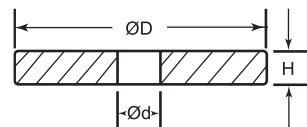
- Material: Nylon
- Color: Natural

Features:

- Designed to grip outside of screw shank
- Easily slides on to the screw but is retained by the screw once assembled
- Ideal for applications requiring pre-assembly of the screw and washer

| Item No. | Screw Size | Ø D  |      | Ø d |      | H  |    | Bulk Pack Qty |
|----------|------------|------|------|-----|------|----|----|---------------|
|          |            | mm   | mm   | mm  | mm   | mm | mm |               |
| RWM050A  | M2         | 5.0  | 2.7  | 1.5 | 1000 |    |    |               |
| RWM100A  | M3         | 9.0  | 3.2  | 1.5 | 1000 |    |    |               |
| RWM150A  | M3         | 5.5  | 3.2  | 2.2 | 1000 |    |    |               |
| RWM200A  | M4         | 7.0  | 4.3  | 2.3 | 1000 |    |    |               |
| RWM250A  | M4         | 12.0 | 4.3  | 1.4 | 1000 |    |    |               |
| RWM300A  | M5         | 11.5 | 5.3  | 1.4 | 1000 |    |    |               |
| RWM350A  | M5         | 8.5  | 5.3  | 2.8 | 1000 |    |    |               |
| RWM400A  | M6         | 18.0 | 6.4  | 2.0 | 1000 |    |    |               |
| RWM450A  | M6         | 10.0 | 6.4  | 2.8 | 500  |    |    |               |
| RWM500A  | M8         | 13.0 | 8.4  | 2.8 | 500  |    |    |               |
| RWM550A  | M10        | 21.0 | 10.5 | 2.5 | 500  |    |    |               |

**015 Series  
Retaining Polyethylene Washer**



Specifications:

- Material: Polyethylene
- Color: See Table

Features:

- Designed to grip outside of screw shank
- Easily slides on to the screw but is retained by the screw once assembled
- Ideal when pre-assembly of the screw and washer is required
- Reduces assembly time and cost

| Item No      | Screw Size   |              |      | Ø D      |        | Ø d  |       | H    |       | Bulk Pack Qty |      |
|--------------|--------------|--------------|------|----------|--------|------|-------|------|-------|---------------|------|
|              | Red          | Grey         | Blue | Imperial | Metric | in   | mm    | in   | mm    |               |      |
| 015002500503 | 015102500203 | 015202508703 | #3   | M2.5     | 0.256  | 6.5  | 0.106 | 2.7  | 0.043 | 1.1           | 1000 |
| 015005000503 | 015105000203 | 015205008703 | #10  | M5       | 0.433  | 11.0 | 0.209 | 5.3  | 0.051 | 1.3           | 1000 |
| 015006000503 | 015106000203 | 015206008703 | 1/4  | M6       | 0.472  | 12.0 | 0.252 | 6.4  | 0.063 | 1.6           | 500  |
| 015008000503 | 015108000203 | 015208008703 | 5/16 | M7       | 0.669  | 17.0 | 0.331 | 8.4  | 0.079 | 2.0           | 500  |
| —            | 015102500203 | 015210008703 | 3/8  | M10      | 0.709  | 18.0 | 0.413 | 10.5 | 0.059 | 1.5           | 500  |



## PLASTIC WASHERS

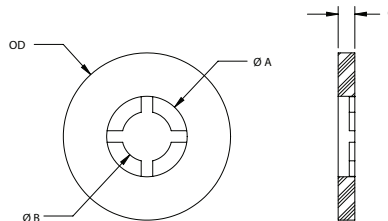
16FWRT Series  
Retaining Flat Washers

## Specifications:

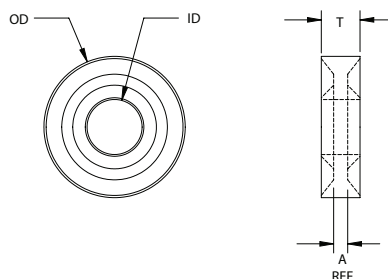
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

## Features:

- ID designed to grip the outside of the screw shank
- Washer slides onto the screw easily, but is retained on the screw
- For use in applications requiring pre-assembly of the screw and washer
- Reduces final assembly cost



| Item No.      | Screw Size | Ø A   |      | OD    |      | C     |     | Ø B   |      | Bulk Pack Qty |
|---------------|------------|-------|------|-------|------|-------|-----|-------|------|---------------|
|               |            | in    | mm   | in    | mm   | in    | mm  | in    | mm   |               |
| 16FWRT002032  | #2         | 0.115 | 2.9  | 0.203 | 5.2  | 0.032 | 0.8 | 0.078 | 2.0  | 1000          |
| 16FWRT002062  | #2         | 0.115 | 2.9  | 0.203 | 5.2  | 0.062 | 1.6 | 0.078 | 2.0  | 1000          |
| 16FWRT004032  | #4         | 0.156 | 4.0  | 0.266 | 6.8  | 0.032 | 0.8 | 0.102 | 2.6  | 1000          |
| 16FWRT004050  | #4         | 0.156 | 4.0  | 0.250 | 6.4  | 0.050 | 1.3 | 0.102 | 2.6  | 1000          |
| 16FWRT004062  | #4         | 0.156 | 4.0  | 0.266 | 6.8  | 0.062 | 1.6 | 0.102 | 2.6  | 1000          |
| 16FWRT004125  | #4         | 0.156 | 4.0  | 0.266 | 6.8  | 0.125 | 3.2 | 0.102 | 2.6  | 1000          |
| 16FWRT006032  | #6         | 0.198 | 5.0  | 0.328 | 8.3  | 0.032 | 0.8 | 0.128 | 3.3  | 1000          |
| 16FWRT006062  | #6         | 0.198 | 5.0  | 0.328 | 8.3  | 0.062 | 1.6 | 0.128 | 3.3  | 1000          |
| 16FWRT007062  | #7         | 0.375 | 9.5  | 0.750 | 19.1 | 0.062 | 1.6 | 0.215 | 5.5  | 500           |
| 16FWRT007062A | #7         | 0.375 | 9.5  | 1.000 | 25.4 | 0.062 | 1.6 | 0.215 | 5.5  | 250           |
| 16FWRT008045  | #8         | 0.218 | 5.5  | 0.453 | 11.5 | 0.045 | 1.1 | 0.135 | 3.4  | 1000          |
| 16FWRT008032  | #8         | 0.235 | 6.0  | 0.391 | 9.9  | 0.032 | 0.8 | 0.152 | 3.9  | 1000          |
| 16FWRT008032A | #8         | 0.235 | 6.0  | 0.390 | 9.9  | 0.032 | 0.8 | 0.135 | 3.4  | 1000          |
| 16FWRT008032C | #8         | 0.235 | 6.0  | 0.328 | 8.3  | 0.032 | 0.8 | 0.152 | 3.9  | 1000          |
| 16FWRT008062  | #8         | 0.235 | 6.0  | 0.391 | 9.9  | 0.062 | 1.6 | 0.152 | 3.9  | 1000          |
| 16FWRT010059  | #10        | 0.275 | 7.0  | 0.787 | 20.0 | 0.059 | 1.5 | 0.177 | 4.5  | 500           |
| 16FWRT010032  | #10        | 0.277 | 7.0  | 0.453 | 11.5 | 0.032 | 0.8 | 0.177 | 4.5  | 1000          |
| 16FWRT010055  | #10        | 0.277 | 7.0  | 0.400 | 10.2 | 0.055 | 1.4 | 0.177 | 4.5  | 1000          |
| 16FWRT010062  | #10        | 0.277 | 7.0  | 0.453 | 11.5 | 0.062 | 1.6 | 0.177 | 4.5  | 1000          |
| 16FWRT010062A | #10        | 0.277 | 7.0  | 0.500 | 12.7 | 0.062 | 1.6 | 0.177 | 4.5  | 1000          |
| 16FWRT010062C | #10        | 0.277 | 7.0  | 0.630 | 16.0 | 0.062 | 1.6 | 0.177 | 4.5  | 1000          |
| 16FWRT250032A | 1/4        | 0.344 | 8.7  | 0.500 | 12.7 | 0.032 | 0.8 | 0.234 | 5.9  | 1000          |
| 16FWRT250032  | 1/4        | 0.375 | 9.5  | 0.594 | 15.1 | 0.032 | 0.8 | 0.234 | 5.9  | 1000          |
| 16FWRT250062  | 1/4        | 0.375 | 9.5  | 0.594 | 15.1 | 0.062 | 1.6 | 0.234 | 5.9  | 1000          |
| 16FWRT250062C | 1/4        | 0.375 | 9.5  | 1.500 | 38.1 | 0.062 | 1.6 | 0.234 | 5.9  | 1000          |
| 16FWRT250062E | 1/4        | 0.375 | 9.5  | 0.734 | 18.7 | 0.062 | 1.6 | 0.234 | 5.9  | 1000          |
| 16FWRT250062A | 1/4        | 0.450 | 11.4 | 1.500 | 38.1 | 0.062 | 1.6 | 0.234 | 5.9  | 1000          |
| 16FWRT312032  | 5/16       | 0.470 | 11.9 | 0.734 | 18.7 | 0.032 | 0.8 | 0.292 | 7.4  | 1000          |
| 16FWRT312062  | 5/16       | 0.470 | 11.9 | 0.734 | 18.7 | 0.062 | 1.6 | 0.292 | 7.4  | 1000          |
| 16FWRT375062A | 3/8        | 0.563 | 14.3 | 1.260 | 32.0 | 0.062 | 1.6 | 0.350 | 8.9  | 1000          |
| 16FWRT375032  | 3/8        | 0.564 | 14.3 | 0.891 | 22.6 | 0.032 | 0.8 | 0.350 | 8.9  | 1000          |
| 16FWRT375062  | 3/8        | 0.564 | 14.3 | 0.891 | 22.6 | 0.062 | 1.6 | 0.350 | 8.9  | 500           |
| 16FWRT375062C | 3/8        | 0.564 | 14.3 | 0.734 | 18.7 | 0.062 | 1.6 | 0.350 | 8.9  | 1000          |
| 16FWRT437032  | 7/16       | 0.570 | 14.5 | 1.031 | 26.2 | 0.032 | 0.8 | 0.410 | 10.4 | 500           |
| 16FWRT437062  | 7/16       | 0.570 | 14.5 | 1.031 | 26.2 | 0.062 | 1.6 | 0.410 | 10.4 | 500           |
| 16FWRT500032  | 1/2        | 0.690 | 17.5 | 1.125 | 28.6 | 0.032 | 0.8 | 0.468 | 11.9 | 500           |
| 16FWRT500062  | 1/2        | 0.690 | 17.5 | 1.125 | 28.6 | 0.062 | 1.6 | 0.468 | 11.9 | 500           |
| 16FWRT875062  | 7/8        | 0.940 | 23.9 | 1.344 | 34.1 | 0.062 | 1.6 | 0.825 | 21.0 | 250           |
| 16FWRT999062  | 1          | 1.070 | 27.2 | 1.385 | 35.2 | 0.062 | 1.6 | 0.970 | 24.6 | 250           |

16SRRW Series  
Sealing and Retaining Washers

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

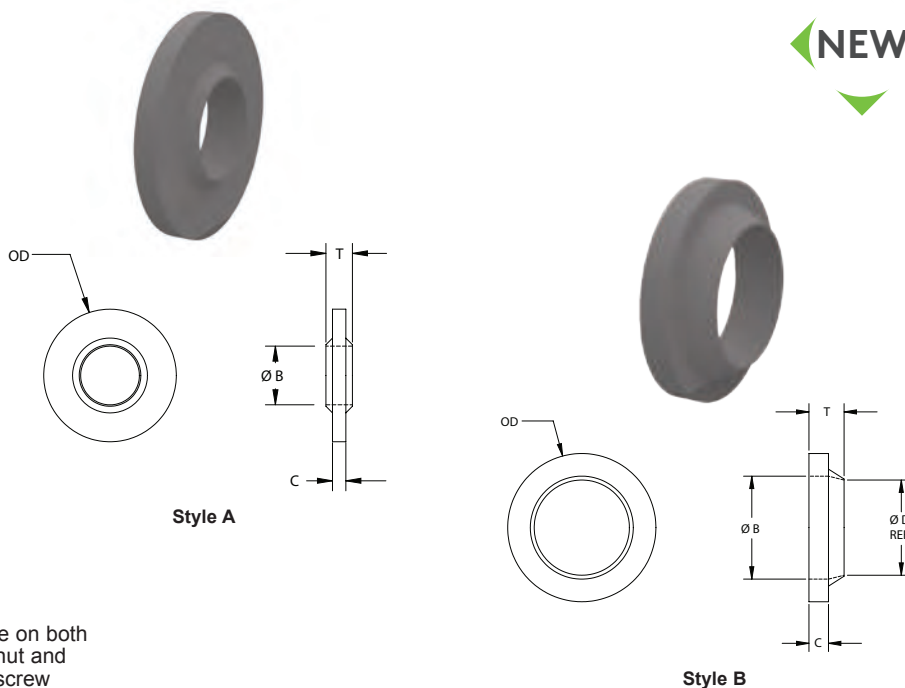
## Features:

- Allows preliminary mounting of the bolt before securing with a nut
- The tapered design retains the screw prior to assembly; it cold forms and fully enters the pitch of the screw to provide sealing

| Item No.        | Screw Size | ID    |      | OD    |      | T     |     | A Ref |     | Bulk Pack Qty |
|-----------------|------------|-------|------|-------|------|-------|-----|-------|-----|---------------|
|                 |            | in    | mm   | in    | mm   | in    | mm  | in    | mm  |               |
| 16SRRW004209083 | #4         | 0.125 | 3.2  | 0.321 | 8.2  | 0.088 | 2.2 | 0.032 | 0.8 | 1000          |
| 16SRRW006354150 | #6         | 0.154 | 3.9  | 0.363 | 9.2  | 0.095 | 2.4 | 0.037 | 0.9 | 1000          |
| 16SRRW008374163 | #8         | 0.161 | 4.1  | 0.380 | 9.7  | 0.103 | 2.6 | 0.039 | 1.0 | 1000          |
| 16SRRW010421200 | #10        | 0.200 | 5.1  | 0.421 | 10.7 | 0.120 | 3.1 | 0.060 | 1.5 | 1000          |
| 16SRRW025500242 | 1/4        | 0.242 | 6.2  | 0.500 | 12.7 | 0.139 | 3.5 | 0.070 | 1.8 | 1000          |
| 16SRRW025500256 | 1/4        | 0.256 | 6.5  | 0.505 | 12.8 | 0.139 | 3.5 | 0.070 | 1.8 | 1000          |
| 16SRRW031637318 | 5/16       | 0.318 | 8.1  | 0.640 | 16.3 | 0.158 | 4.0 | 0.060 | 1.5 | 500           |
| 16SRRW037771381 | 3/8        | 0.381 | 9.7  | 0.775 | 19.7 | 0.177 | 4.5 | 0.070 | 1.8 | 1000          |
| 16SRRW050100504 | 1/2        | 0.504 | 12.8 | 1.000 | 25.4 | 0.197 | 5.0 | 0.079 | 2.0 | 1000          |



### 16MLSW Series Metric Locking and Sealing Washer



#### Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

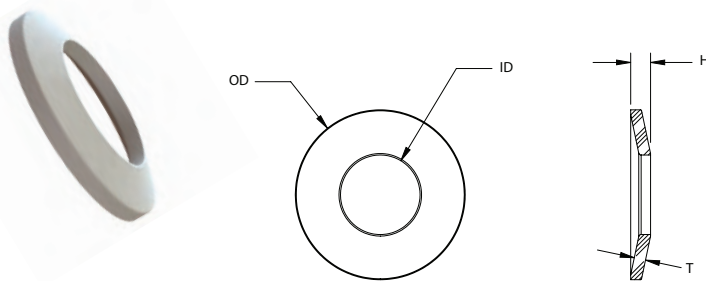
#### Features:

- Designed to create interference on both the outside diameter of a hex nut and on the inside diameter on the screw

| Item No.          | Screw Size |          | Style | Ø B  | Ø D  | Ø    | C   | T   | Bulk Pack Qty |
|-------------------|------------|----------|-------|------|------|------|-----|-----|---------------|
|                   | Metric     | Imperial |       | mm   | mm   | mm   | mm  | mm  |               |
| 16MLSW030070070   | M3         | #4       | A     | 3.1  | —    | 7.0  | 0.7 | 1.4 | 1000          |
| 16MLSW040090125   | M4         | #8       | A     | 4.2  | —    | 8.9  | 1.3 | 2.8 | 1000          |
| 16MLSW050104140   | M5         | #10      | A     | 5.2  | —    | 10.4 | 1.4 | 3.5 | 1000          |
| 16MLSW060120160   | M6         | #12      | A     | 6.1  | —    | 12.0 | 1.6 | 4.0 | 1000          |
| 16MLSW080158210   | M8         | 5/16     | A     | 8.1  | —    | 15.8 | 2.1 | 4.6 | 500           |
| 16MLSW100196210   | M10        | 3/8      | A     | 10.0 | —    | 19.6 | 2.1 | 5.3 | 500           |
| 16MLSW140252250   | M14        | 9/16     | A     | 14.0 | —    | 25.2 | 2.5 | 5.5 | 1000          |
| 16MLSW042090120   | M3.5       | #6       | B     | 4.2  | 3.7  | 9.0  | 1.2 | 3.0 | 1000          |
| 16MLSW048100150   | M4         | —        | B     | 4.8  | 4.1  | 10.0 | 1.5 | 3.2 | 1000          |
| 16MLSW060125150   | M5         | #10      | B     | 6.3  | 5.0  | 12.5 | 1.5 | 2.8 | 1000          |
| 16MLSW080160160   | M7         | 1/4      | B     | 8.2  | 7.0  | 16.0 | 1.6 | 3.1 | 500           |
| 16MLSW103150200 * | R 1/8      | —        | B     | 10.3 | 9.5  | 15.0 | 2.0 | 4.0 | 1000          |
| 16MLSW132190250 * | R 1/4      | —        | B     | 13.2 | 12.2 | 19.0 | 2.5 | 4.5 | 500           |

\*Whitworth Tapered Pipe Thread

### 17SPRING Series Spring Washers



#### Specifications:

- Material: Acetal
- Color: Natural

#### Features:

- Acetal material has excellent spring properties and is light weight. It is naturally lubricated and allows use in rotating assemblies as well as under water applications
- Used to eliminate rattles, take up tolerance variables and provide accurate spacing and tension
- May be used singly, in parallel, in series or in series parallel for a wide range of deflection and load capacity

| Item No.     | Screw Size |        | ID    |      | OD    |      | H     |     | T     |     | Max Compressed Ø |      | Bulk Pack Qty |
|--------------|------------|--------|-------|------|-------|------|-------|-----|-------|-----|------------------|------|---------------|
|              | Imperial   | Metric | in    | mm   | in    | mm   | in    | mm  | in    | mm  | in               | mm   |               |
| 17SPRINGW100 | #6         | M3.5   | 0.152 | 3.9  | 0.316 | 8.0  | 0.045 | 1.1 | 0.027 | 0.7 | 0.330            | 8.4  | 1000          |
| 17SPRINGW200 | #8         | M4     | 0.173 | 4.4  | 0.297 | 7.5  | 0.046 | 1.2 | 0.028 | 0.8 | 0.310            | 7.9  | 1000          |
| 17SPRINGW300 | #10        | M5     | 0.204 | 5.2  | 0.365 | 9.3  | 0.053 | 1.4 | 0.030 | 0.8 | 0.372            | 9.5  | 1000          |
| 17SPRINGW320 | #10        | M5     | 0.235 | 6.0  | 0.416 | 10.6 | 0.062 | 1.6 | 0.035 | 0.9 | 0.430            | 10.9 | 1000          |
| 17SPRINGW360 | 1/4        | M6     | 0.276 | 7.0  | 0.448 | 11.4 | 0.062 | 1.6 | 0.035 | 0.9 | 0.485            | 12.3 | 1000          |
| 17SPRINGW400 | 1/4        | M6     | 0.264 | 6.7  | 0.564 | 14.4 | 0.066 | 1.7 | 0.038 | 1.0 | 0.579            | 14.7 | 1000          |
| 17SPRINGW500 | 5/16       | M8     | 0.328 | 8.3  | 0.660 | 16.8 | 0.080 | 2.0 | 0.048 | 1.2 | 0.680            | 17.3 | 1000          |
| 17SPRINGW600 | 3/8        | M10    | 0.451 | 11.5 | 0.848 | 21.5 | 0.095 | 2.4 | 0.055 | 1.4 | 0.865            | 22.0 | 1000          |
| 17SPRINGW650 | 3/8        | M10    | 0.451 | 11.5 | 0.848 | 21.5 | 0.080 | 2.0 | 0.039 | 1.0 | 0.865            | 22.0 | 1000          |



## PLASTIC WASHERS

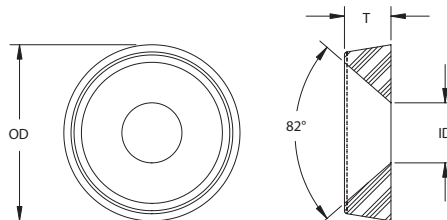
11SFW Series  
Finishing Washers

## Specifications:

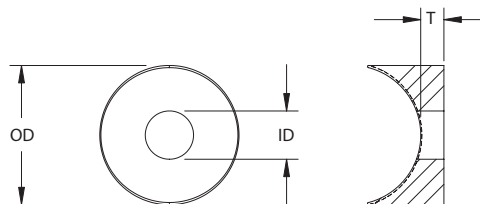
- Material: UL94 V-2 Nylon 6/6
- Color: See Table

## Features:

- These molded washers protect cabinets from scratching, cover misaligned holes, etc.
- May also be used as glides, bumpers, feet and spacers



| Item No.  |            | Screw Size | OD    |      | ID    |     | T     |     | Bulk Pack Qty |
|-----------|------------|------------|-------|------|-------|-----|-------|-----|---------------|
| Natural   | Black      |            | in    | mm   | in    | mm  | in    | mm  |               |
| 11SFW0006 | 11SFW0006B | #6         | 0.437 | 11.1 | 0.143 | 3.6 | 0.100 | 2.5 | 1000          |
| 11SFW0008 | 11SFW0008B | #8         | 0.510 | 13.0 | 0.171 | 4.3 | 0.115 | 2.9 | 1000          |
| 11SFW0010 | 11SFW0010B | #10        | 0.575 | 14.6 | 0.196 | 5.0 | 0.152 | 3.9 | 1000          |
| 11SFW0012 | 11SFW0012B | #12        | 0.609 | 15.5 | 0.225 | 5.8 | 0.160 | 4.1 | 1000          |
| 11SFW0025 | 11SFW0025B | 1/4        | 0.683 | 17.4 | 0.260 | 6.6 | 0.180 | 4.6 | 500           |

13CS Series  
Coved Spacers

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: See Table

## Features:

- For attaching parts to rods, tubes or curved contours

| Item No. |           | Tube Size |      | Screw Size | OD    |      | ID    |      | T     |      | Bulk Pack Qty |
|----------|-----------|-----------|------|------------|-------|------|-------|------|-------|------|---------------|
| Natural  | Black     | in        | mm   |            | in    | mm   | in    | mm   | in    | mm   |               |
| 13CS0001 | 13CS0001B | 0.750     | 19.1 | 1/4        | 0.750 | 19.1 | 0.260 | 6.6  | 0.125 | 3.2  | 1000          |
| 13CS0002 | 13CS0002B | 0.875     | 22.2 | 1/4        | 0.843 | 21.4 | 0.257 | 6.5  | 0.156 | 4.0  | 1000          |
| 13CS0003 | 13CS0003B | 1.000     | 25.4 | #12        | 0.835 | 21.2 | 0.218 | 5.5  | 0.500 | 12.7 | 1000          |
| 13CS0004 | 13CS0004B | 1.000     | 25.4 | 1/4        | 1.000 | 25.4 | 0.260 | 6.6  | 0.250 | 6.4  | 1000          |
| 13CS0005 | 13CS0005B | 1.000     | 25.4 | 5/16       | 1.000 | 25.4 | 0.325 | 8.3  | 0.250 | 6.4  | 1000          |
| 13CS0006 | 13CS0006B | 1.100     | 27.9 | 1/4        | 1.000 | 25.4 | 0.250 | 6.4  | 0.125 | 3.2  | 1000          |
| 13CS0007 | 13CS0007B | 1.125     | 28.6 | 3/8        | 0.875 | 22.2 | 0.375 | 9.5  | 0.250 | 6.4  | 1000          |
| 13CS0009 | 13CS0009B | 1.000     | 25.4 | 5/16       | 0.984 | 25.0 | 0.323 | 8.2  | 0.157 | 4.0  | 1000          |
| 13CS0013 | 13CS0013B | 1.250     | 31.8 | 3/8        | 1.260 | 32.0 | 0.409 | 10.4 | 0.134 | 3.4  | 1000          |

## For 90° Flat or Oval Head Screw

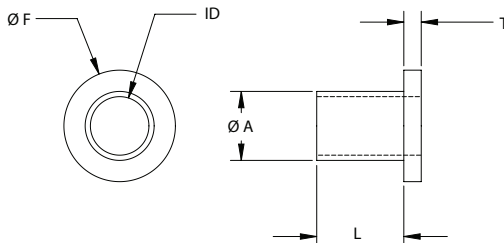
| Item No. |           | Tube Size |      | Screw Size | OD    |      | ID    |     | T     |     | Bulk Pack Qty |
|----------|-----------|-----------|------|------------|-------|------|-------|-----|-------|-----|---------------|
| Natural  | Black     | in        | mm   |            | in    | mm   | in    | mm  | in    | mm  |               |
| 13CS0008 | 13CS0008B | 0.996     | 25.3 | 5/16       | 0.866 | 22.0 | 0.323 | 8.2 | 0.217 | 5.5 | 1000          |
| 13CS0010 | 13CS0010B | 1.125     | 28.6 | 1/4        | 0.750 | 19.1 | 0.257 | 6.5 | 0.085 | 2.2 | 1000          |
| 13CS0011 | 13CS0011B | 1.000     | 25.4 | 3/8        | 0.875 | 22.2 | 0.375 | 9.5 | 0.250 | 6.4 | 1000          |
| 13CS0012 | 13CS0012B | 0.875     | 22.2 | 5/16       | 0.750 | 19.1 | 0.318 | 8.1 | 0.070 | 1.8 | 1000          |



# SHOULDER & INSULATING WASHERS



## 10SC Series Screw Insulators



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

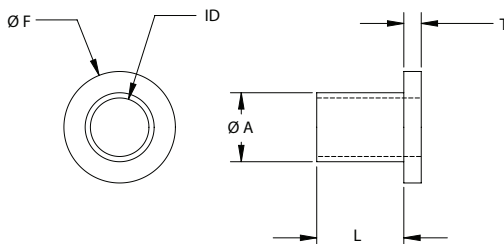
**Features:**

- Strong and corrosion resistant
- Provides electrical insulation

| Item No.   | Screw Size | Dimensions |       |       |       |       | Bulk Pack Qty |
|------------|------------|------------|-------|-------|-------|-------|---------------|
|            |            | L          | ID    | Ø A   | Ø F   | T     |               |
|            |            | in         | in    | in    | in    | in    |               |
| 10SC002012 | #2         | 0.125      | 0.090 | 0.120 | 0.181 | 0.047 | 1000          |
| 10SC002018 | #2         | 0.188      | 0.090 | 0.120 | 0.181 | 0.047 | 1000          |
| 10SC002025 | #2         | 0.250      | 0.090 | 0.120 | 0.181 | 0.047 | 1000          |
| 10SC002037 | #2         | 0.375      | 0.090 | 0.120 | 0.181 | 0.047 | 1000          |
| 10SC004003 | #4         | 0.031      | 0.115 | 0.145 | 0.235 | 0.047 | 1000          |
| 10SC004004 | #4         | 0.047      | 0.115 | 0.145 | 0.235 | 0.047 | 1000          |
| 10SC004006 | #4         | 0.063      | 0.115 | 0.145 | 0.235 | 0.047 | 1000          |
| 10SC004009 | #4         | 0.093      | 0.115 | 0.145 | 0.235 | 0.047 | 1000          |
| 10SC004012 | #4         | 0.125      | 0.115 | 0.145 | 0.235 | 0.047 | 1000          |
| 10SC004015 | #4         | 0.156      | 0.115 | 0.145 | 0.235 | 0.047 | 1000          |
| 10SC004018 | #4         | 0.188      | 0.115 | 0.145 | 0.235 | 0.047 | 1000          |
| 10SC004025 | #4         | 0.250      | 0.115 | 0.145 | 0.235 | 0.047 | 1000          |
| 10SC004037 | #4         | 0.375      | 0.115 | 0.145 | 0.235 | 0.047 | 1000          |
| 10SC004050 | #4         | 0.500      | 0.115 | 0.145 | 0.235 | 0.047 | 1000          |
| 10SC006004 | #6         | 0.047      | 0.140 | 0.170 | 0.290 | 0.047 | 1000          |
| 10SC006006 | #6         | 0.063      | 0.140 | 0.170 | 0.290 | 0.047 | 1000          |
| 10SC006009 | #6         | 0.093      | 0.140 | 0.170 | 0.290 | 0.047 | 1000          |
| 10SC006012 | #6         | 0.125      | 0.140 | 0.170 | 0.290 | 0.047 | 1000          |
| 10SC006015 | #6         | 0.156      | 0.140 | 0.170 | 0.290 | 0.047 | 1000          |
| 10SC006018 | #6         | 0.188      | 0.140 | 0.170 | 0.290 | 0.047 | 1000          |
| 10SC006025 | #6         | 0.250      | 0.140 | 0.170 | 0.290 | 0.047 | 1000          |
| 10SC006037 | #6         | 0.375      | 0.140 | 0.170 | 0.290 | 0.047 | 1000          |
| 10SC006050 | #6         | 0.500      | 0.140 | 0.170 | 0.290 | 0.047 | 1000          |
| 10SC008012 | #8         | 0.125      | 0.173 | 0.205 | 0.344 | 0.063 | 1000          |
| 10SC008014 | #8         | 0.141      | 0.173 | 0.205 | 0.344 | 0.063 | 1000          |
| 10SC008025 | #8         | 0.250      | 0.173 | 0.205 | 0.344 | 0.063 | 1000          |
| 10SC008037 | #8         | 0.375      | 0.173 | 0.205 | 0.344 | 0.063 | 1000          |

| Item No.   | Screw Size | Dimensions |       |       |       |       | Bulk Pack Qty |
|------------|------------|------------|-------|-------|-------|-------|---------------|
|            |            | L          | ID    | Ø A   | Ø F   | T     |               |
|            |            | in         | in    | in    | in    | in    |               |
| 10SC008050 | #8         | 0.500      | 0.173 | 0.205 | 0.344 | 0.063 | 500           |
| 10SC008062 | #8         | 0.625      | 0.173 | 0.205 | 0.344 | 0.063 | 500           |
| 10SC008075 | #8         | 0.750      | 0.173 | 0.205 | 0.344 | 0.063 | 500           |
| 10SC010006 | #10        | 0.063      | 0.200 | 0.260 | 0.399 | 0.063 | 1000          |
| 10SC010014 | #10        | 0.141      | 0.200 | 0.260 | 0.399 | 0.063 | 1000          |
| 10SC010018 | #10        | 0.188      | 0.200 | 0.260 | 0.399 | 0.063 | 1000          |
| 10SC010025 | #10        | 0.250      | 0.200 | 0.260 | 0.399 | 0.063 | 1000          |
| 10SC010037 | #10        | 0.375      | 0.200 | 0.260 | 0.399 | 0.063 | 1000          |
| 10SC010050 | #10        | 0.500      | 0.200 | 0.260 | 0.399 | 0.063 | 1000          |
| 10SC010056 | #10        | 0.563      | 0.200 | 0.260 | 0.399 | 0.063 | 500           |
| 10SC010062 | #10        | 0.625      | 0.200 | 0.260 | 0.399 | 0.063 | 500           |
| 10SC010075 | #10        | 0.750      | 0.200 | 0.260 | 0.399 | 0.063 | 500           |
| 10SC250012 | 1/4        | 0.125      | 0.260 | 0.312 | 0.513 | 0.063 | 1000          |
| 10SC250014 | 1/4        | 0.141      | 0.260 | 0.312 | 0.513 | 0.063 | 1000          |
| 10SC250018 | 1/4        | 0.188      | 0.260 | 0.312 | 0.513 | 0.063 | 500           |
| 10SC250032 | 1/4        | 0.250      | 0.260 | 0.312 | 0.513 | 0.031 | 500           |
| 10SC250025 | 1/4        | 0.250      | 0.260 | 0.312 | 0.513 | 0.063 | 500           |
| 10SC250037 | 1/4        | 0.375      | 0.260 | 0.312 | 0.513 | 0.063 | 500           |
| 10SC250050 | 1/4        | 0.500      | 0.260 | 0.312 | 0.513 | 0.063 | 500           |
| 10SC250062 | 1/4        | 0.625      | 0.260 | 0.312 | 0.513 | 0.063 | 500           |
| 10SC250075 | 1/4        | 0.750      | 0.260 | 0.312 | 0.513 | 0.063 | 500           |
| 10SC312012 | 5/16       | 0.125      | 0.320 | 0.360 | 0.620 | 0.063 | 500           |
| 10SC312025 | 5/16       | 0.250      | 0.320 | 0.360 | 0.620 | 0.063 | 1000          |
| 10SC312037 | 5/16       | 0.375      | 0.320 | 0.360 | 0.620 | 0.063 | 500           |
| 10SC312050 | 5/16       | 0.500      | 0.320 | 0.360 | 0.620 | 0.063 | 500           |
| 10SC312062 | 5/16       | 0.625      | 0.320 | 0.360 | 0.620 | 0.063 | 1000          |

## 10SCM Metric Screw Insulators

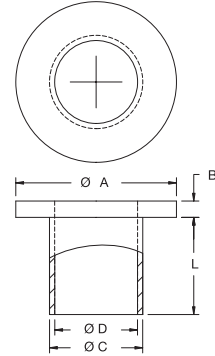
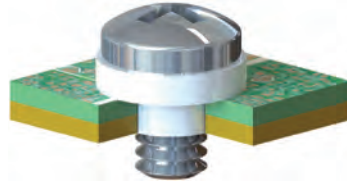


**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.    | Screw Size | Dimensions |     |     |     |     | Bulk Pack Qty |
|-------------|------------|------------|-----|-----|-----|-----|---------------|
|             |            | L          | ID  | Ø A | Ø F | T   |               |
|             |            | mm         | mm  | mm  | mm  | mm  |               |
| 10SCM002003 | M2         | 3.0        | 2.1 | 3.0 | 4.2 | 1.0 | 1000          |
| 10SCM002004 | M2         | 4.0        | 2.1 | 3.0 | 4.2 | 1.0 | 1000          |
| 10SCM002005 | M2         | 5.0        | 2.1 | 3.0 | 4.2 | 1.0 | 1000          |
| 10SCM002006 | M2         | 6.0        | 2.1 | 3.0 | 4.2 | 1.0 | 1000          |
| 10SCM003001 | M3         | 1.0        | 3.1 | 4.0 | 6.2 | 1.0 | 1000          |
| 10SCM003002 | M3         | 2.0        | 3.1 | 4.0 | 6.2 | 1.0 | 1000          |
| 10SCM003003 | M3         | 3.0        | 3.1 | 4.0 | 6.2 | 1.0 | 1000          |
| 10SCM003004 | M3         | 4.0        | 3.1 | 4.0 | 6.2 | 1.0 | 1000          |
| 10SCM003005 | M3         | 5.0        | 3.1 | 4.0 | 6.2 | 1.0 | 1000          |
| 10SCM003006 | M3         | 6.0        | 3.1 | 4.0 | 6.2 | 1.0 | 1000          |
| 10SCM003007 | M3         | 7.0        | 3.1 | 4.0 | 6.2 | 1.0 | 1000          |
| 10SCM003008 | M3         | 8.0        | 3.1 | 4.0 | 6.2 | 1.0 | 1000          |
| 10SCM003009 | M3         | 9.0        | 3.1 | 4.0 | 6.2 | 1.0 | 1000          |
| 10SCM003010 | M3         | 10.0       | 3.1 | 4.0 | 6.2 | 1.0 | 1000          |
| 10SCM004003 | M4         | 3.0        | 4.1 | 6.0 | 8.4 | 1.5 | 1000          |
| 10SCM004004 | M4         | 4.0        | 4.1 | 6.0 | 8.4 | 1.5 | 1000          |
| 10SCM004005 | M4         | 5.0        | 4.1 | 6.0 | 8.4 | 1.5 | 1000          |

| Item No.    | Screw Size | Dimensions |     |      |      |     | Bulk Pack Qty |
|-------------|------------|------------|-----|------|------|-----|---------------|
|             |            | L          | ID  | Ø A  | Ø F  | T   |               |
|             |            | mm         | mm  | mm   | mm   | mm  |               |
| 10SCM004007 | M4         | 7.0        | 4.1 | 6.0  | 8.4  | 1.5 | 1000          |
| 10SCM004009 | M4         | 9.0        | 4.1 | 6.0  | 8.4  | 1.5 | 1000          |
| 10SCM005003 | M5         | 3.0        | 5.1 | 7.0  | 10.2 | 2.0 | 1000          |
| 10SCM005004 | M5         | 4.0        | 5.1 | 7.0  | 10.2 | 2.0 | 1000          |
| 10SCM005005 | M5         | 5.0        | 5.1 | 7.0  | 10.2 | 2.0 | 1000          |
| 10SCM005007 | M5         | 7.0        | 5.1 | 7.0  | 10.2 | 2.0 | 1000          |
| 10SCM005009 | M5         | 9.0        | 5.1 | 7.0  | 10.2 | 2.0 | 1000          |
| 10SCM006004 | M6         | 4.0        | 6.1 | 8.0  | 12.2 | 2.0 | 500           |
| 10SCM006006 | M6         | 6.0        | 6.1 | 8.0  | 12.2 | 2.0 | 500           |
| 10SCM006008 | M6         | 8.0        | 6.1 | 8.0  | 12.2 | 2.0 | 1000          |
| 10SCM006010 | M6         | 10.0       | 6.1 | 8.0  | 12.2 | 2.0 | 500           |
| 10SCM006012 | M6         | 12.0       | 6.1 | 8.0  | 12.2 | 2.0 | 500           |
| 10SCM008004 | M8         | 4.0        | 8.1 | 10.0 | 14.2 | 2.5 | 500           |
| 10SCM008006 | M8         | 6.0        | 8.1 | 10.0 | 14.2 | 2.5 | 500           |
| 10SCM008008 | M8         | 8.0        | 8.1 | 10.0 | 14.2 | 2.5 | 500           |
| 10SCM008010 | M8         | 10.0       | 8.1 | 10.0 | 14.2 | 2.5 | 500           |
| 10SCM008012 | M8         | 12.0       | 8.1 | 10.0 | 14.2 | 2.5 | 1000          |

**SHOULDER & INSULATING WASHERS****MNI Series  
Screw Insulator**

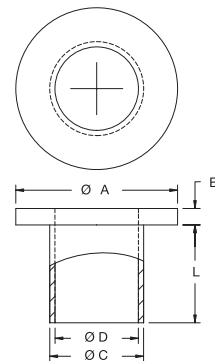
## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

## Features:

- Used as a screw insulator and in many bushing applications
- Lightweight
- Resistant to corrosion and abrasion
- High dielectric strength

| Item No.     | Fits Screw |        | L     |     | Ø A   |      | B     |     | Ø C   |     | Ø D   |     | Bulk Pack Qty |
|--------------|------------|--------|-------|-----|-------|------|-------|-----|-------|-----|-------|-----|---------------|
|              | Imperial   | Metric | in    | mm  | in    | mm   | in    | mm  | in    | mm  | in    | mm  |               |
| MNI-2-2      | #2         | M2     | 0.031 | 0.8 | 0.181 | 4.6  | 0.047 | 1.2 | 0.120 | 3.0 | 0.090 | 2.3 | 1000          |
| MNI-2-4      | #2         | M2     | 0.063 | 1.6 | 0.181 | 4.6  | 0.047 | 1.2 | 0.120 | 3.0 | 0.090 | 2.3 | 1000          |
| MNI-4-5      | #4         | M2.5   | 0.084 | 2.1 | 0.252 | 6.4  | 0.047 | 1.2 | 0.140 | 3.6 | 0.115 | 2.9 | 1000          |
| MNI-5-3      | #5         | M3     | 0.051 | 1.3 | 0.370 | 9.4  | 0.047 | 1.2 | 0.236 | 6.0 | 0.128 | 3.3 | 1000          |
| MNI-6-4      | #6         | M3.5   | 0.063 | 1.6 | 0.290 | 7.4  | 0.047 | 1.2 | 0.170 | 4.3 | 0.140 | 3.6 | 1000          |
| MNI-6-16     | #6         | M3.5   | 0.250 | 6.4 | 0.290 | 7.4  | 0.047 | 1.2 | 0.170 | 4.3 | 0.140 | 3.6 | 1000          |
| MNI-8-2      | #8         | M4     | 0.031 | 0.8 | 0.344 | 8.7  | 0.063 | 1.6 | 0.205 | 5.2 | 0.173 | 4.4 | 1000          |
| MNI-8-4      | #8         | M4     | 0.063 | 1.6 | 0.344 | 8.7  | 0.063 | 1.6 | 0.205 | 5.2 | 0.173 | 4.4 | 1000          |
| MNI-8-6      | #8         | M4     | 0.093 | 2.4 | 0.344 | 8.7  | 0.063 | 1.6 | 0.205 | 5.2 | 0.173 | 4.4 | 1000          |
| MNI-8-12     | #8         | M4     | 0.187 | 4.7 | 0.344 | 8.7  | 0.063 | 1.6 | 0.205 | 5.2 | 0.173 | 4.4 | 1000          |
| MNI-10-4     | #10        | M5     | 0.063 | 1.6 | 0.399 | 10.1 | 0.063 | 1.6 | 0.260 | 6.6 | 0.200 | 5.1 | 1000          |
| MNI-10-6     | #10        | M5     | 0.093 | 2.4 | 0.399 | 10.1 | 0.063 | 1.6 | 0.260 | 6.6 | 0.200 | 5.1 | 1000          |
| MNI-10-8     | #10        | M5     | 0.125 | 3.2 | 0.399 | 10.1 | 0.063 | 1.6 | 0.260 | 6.6 | 0.200 | 5.1 | 1000          |
| MNI1/4-6     | 1/4        | M6     | 0.093 | 2.4 | 0.513 | 13.0 | 0.065 | 1.7 | 0.312 | 7.9 | 0.260 | 6.6 | 1000          |
| MNI5/16-6    | 5/16       | M8     | 0.093 | 2.4 | 0.620 | 15.7 | 0.063 | 1.6 | 0.360 | 9.1 | 0.320 | 8.1 | 1000          |
| MNI5/16-12   | 5/16       | M8     | 0.187 | 4.7 | 0.620 | 15.7 | 0.063 | 1.6 | 0.360 | 9.1 | 0.320 | 8.1 | 1000          |
| MNI5/16-16   | 5/16       | M8     | 0.250 | 6.4 | 0.620 | 15.7 | 0.063 | 1.6 | 0.360 | 9.1 | 0.320 | 8.1 | 1000          |
| MNI-M2.5-1.3 | #2         | M2.5   | 0.051 | 1.3 | 0.248 | 6.3  | 0.047 | 1.2 | 0.138 | 3.5 | 0.114 | 2.9 | 1000          |
| MNI-M2.5-3.6 | #2         | M2.5   | 0.142 | 3.6 | 0.280 | 7.1  | 0.059 | 1.5 | 0.150 | 3.8 | 0.110 | 2.8 | 1000          |
| MNIM3-1.0    | #4         | M3     | 0.039 | 1.0 | 0.280 | 7.1  | 0.039 | 1.0 | 0.150 | 3.8 | 0.122 | 3.1 | 1000          |
| MNI-M3-1.3   | #4         | M3     | 0.051 | 1.3 | 0.347 | 8.8  | 0.047 | 1.2 | 0.236 | 6.0 | 0.126 | 3.2 | 1000          |
| MNIM3-2.5    | #4         | M3     | 0.098 | 2.5 | 0.280 | 7.1  | 0.039 | 1.0 | 0.150 | 3.8 | 0.122 | 3.1 | 1000          |
| MNIM3-3.5    | #4         | M3     | 0.137 | 3.5 | 0.280 | 7.1  | 0.039 | 1.0 | 0.150 | 3.8 | 0.122 | 3.1 | 1000          |

**MNI-HT Series  
High Temperature Screw Insulator**

## Specifications:

- Material: UL94 V-0 Glass Filled Polyphenylene Sulfide
- Color: Black

## Features:

- Temperature: up to 428°F (220°C)

| Item No.     | Fits Screw |        | L     |     | Ø A   |      | B     |     | Ø C   |     | Ø D   |     | Bulk Pack Qty |
|--------------|------------|--------|-------|-----|-------|------|-------|-----|-------|-----|-------|-----|---------------|
|              | Imperial   | Metric | in    | mm  | in    | mm   | in    | mm  | in    | mm  | in    | mm  |               |
| MNI-HT-4-2   | #4         | M3     | 0.031 | 0.8 | 0.280 | 7.1  | 0.047 | 1.2 | 0.145 | 3.7 | 0.118 | 3.0 | 1000          |
| MNI-HT-4-220 | #4         | M3     | 0.032 | 0.8 | 0.215 | 5.5  | 0.040 | 1.0 | 0.135 | 3.4 | 0.116 | 2.9 | 1000          |
| MNI-HT-10-6  | #10        | M4.5   | 0.093 | 2.4 | 0.399 | 10.0 | 0.063 | 1.6 | 0.260 | 6.6 | 0.200 | 5.1 | 1000          |

## SHOULDER &amp; INSULATING WASHERS

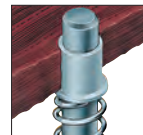
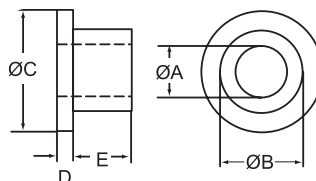
FB / FBM Series  
Flanged Bushings

## Specifications:

- Material: Nylon
- Color: Natural

## Features:

- Suitable for light-load bearings or bushing
- Will not rust, corrode or deteriorate
- Acts as an electrical insulator by preventing metal-to-metal contact
- Low-friction coefficient
- Can be used as a locator, sleeve, liner or glide



## Imperial

| Item No. | Ø A   |      | Ø B   |      | Ø C   |      | D     |     | E     |      | Bulk Pack Qty |
|----------|-------|------|-------|------|-------|------|-------|-----|-------|------|---------------|
|          | in    | mm   | in    | mm   | in    | mm   | in    | mm  | in    | mm   |               |
| FB1080A  | 0.190 | 4.8  | 0.343 | 8.7  | 0.875 | 22.2 | 0.140 | 3.6 | 0.141 | 3.6  | 2500          |
| FB1090A  | 0.190 | 4.8  | 0.375 | 9.5  | 0.500 | 12.7 | 0.113 | 2.9 | 0.325 | 8.3  | 4000          |
| FB1120A  | 0.196 | 5.0  | 0.300 | 7.6  | 0.500 | 12.7 | 0.125 | 3.2 | 0.375 | 9.5  | 2000          |
| FB1150A  | 0.196 | 5.0  | 0.344 | 8.7  | 0.500 | 12.7 | 0.187 | 4.7 | 0.407 | 10.3 | 4000          |
| FB1170A  | 0.219 | 5.6  | 0.315 | 8.0  | 0.562 | 14.3 | 0.082 | 2.1 | 0.137 | 3.5  | 18000         |
| FB1200A  | 0.253 | 6.4  | 0.440 | 11.2 | 0.937 | 23.8 | 0.125 | 3.2 | 0.165 | 4.2  | 1000          |
| FB1250A  | 0.255 | 6.5  | 0.372 | 9.4  | 0.550 | 14.0 | 0.062 | 1.6 | 0.522 | 13.3 | 1000          |
| FB1260A  | 0.255 | 6.5  | 0.375 | 9.5  | 0.635 | 16.1 | 0.062 | 1.6 | 0.213 | 5.4  | 5000          |
| FB1270A  | 0.255 | 6.5  | 0.490 | 12.4 | 0.750 | 19.1 | 0.090 | 2.3 | 0.110 | 2.8  | 4500          |
| FB1280A  | 0.258 | 6.6  | 0.317 | 8.1  | 0.562 | 14.3 | 0.062 | 1.6 | 0.313 | 8.0  | 6000          |
| FB1370A  | 0.316 | 8.0  | 0.365 | 9.3  | 0.568 | 14.4 | 0.065 | 1.7 | 0.385 | 9.8  | 5000          |
| FB1430A  | 0.375 | 9.5  | 0.469 | 11.9 | 0.687 | 17.4 | 0.078 | 2.0 | 0.094 | 2.4  | 4000          |
| FB1440A  | 0.375 | 9.5  | 0.500 | 12.7 | 0.625 | 15.9 | 0.062 | 1.6 | 0.253 | 6.4  | 9000          |
| FB1460A  | 0.375 | 9.5  | 0.500 | 12.7 | 0.745 | 18.9 | 0.062 | 1.6 | 0.750 | 19.1 | 5000          |
| FB1480A  | 0.375 | 9.5  | 0.505 | 12.8 | 0.750 | 19.1 | 0.200 | 5.1 | 0.500 | 12.7 | 2000          |
| FB1510A  | 0.383 | 9.7  | 0.500 | 12.7 | 0.750 | 19.1 | 0.125 | 3.2 | 0.360 | 9.1  | 3000          |
| FB1530A  | 0.380 | 9.7  | 0.625 | 15.9 | 1.125 | 28.6 | 0.125 | 3.2 | 0.250 | 6.4  | 4000          |
| FB1550A  | 0.385 | 9.8  | 0.625 | 15.9 | 0.750 | 19.1 | 0.094 | 2.4 | 0.500 | 12.7 | 6000          |
| FB1600A  | 0.510 | 13.0 | 0.625 | 15.9 | 0.875 | 22.2 | 0.125 | 3.2 | 0.375 | 9.5  | 6000          |
| FB1620A  | 0.750 | 19.1 | 0.875 | 22.2 | 1.125 | 28.6 | 0.062 | 1.6 | 0.313 | 8.0  | 4250          |
| FB1640A  | 0.760 | 19.3 | 1.000 | 25.4 | 1.375 | 34.9 | 0.125 | 3.2 | 0.312 | 7.9  | 2500          |
| FB1650A  | 0.765 | 19.4 | 0.875 | 22.2 | 1.125 | 28.6 | 0.125 | 3.2 | 0.750 | 19.1 | 2000          |
| FB1660A  | 1.000 | 25.4 | 1.250 | 31.8 | 1.328 | 33.7 | 0.125 | 3.2 | 0.625 | 15.9 | 1300          |

## Metric

| Item No. | A     |      | B     |      | C     |      | D     |     | E     |      | Bulk Pack Qty |
|----------|-------|------|-------|------|-------|------|-------|-----|-------|------|---------------|
|          | in    | mm   | in    | mm   | in    | mm   | in    | mm  | in    | mm   |               |
| FBM1000A | 0.197 | 5.0  | 0.315 | 8.0  | 0.433 | 11.0 | 0.079 | 2.0 | 0.315 | 8.0  | 1000          |
| FBM1010A | 0.236 | 6.0  | 0.354 | 9.0  | 0.472 | 12.0 | 0.079 | 2.0 | 0.157 | 4.0  | 1000          |
| FBM1020A | 0.236 | 6.0  | 0.394 | 10.0 | 0.591 | 15.0 | 0.059 | 1.5 | 0.276 | 7.0  | 1000          |
| FBM1030A | 0.315 | 8.0  | 0.433 | 11.0 | 0.630 | 16.0 | 0.079 | 2.0 | 0.433 | 11.0 | 1000          |
| FBM1040A | 0.315 | 8.0  | 0.472 | 12.0 | 0.630 | 16.0 | 0.079 | 2.0 | 0.157 | 4.0  | 1000          |
| FBM1050A | 0.315 | 8.0  | 0.551 | 14.0 | 0.787 | 20.0 | 0.079 | 2.0 | 0.315 | 8.0  | 1000          |
| FBM1060A | 0.394 | 10.0 | 0.472 | 12.0 | 0.630 | 16.0 | 0.079 | 2.0 | 0.157 | 4.0  | 1000          |
| FBM1070A | 0.394 | 10.0 | 0.512 | 13.0 | 0.709 | 18.0 | 0.079 | 2.0 | 0.236 | 6.0  | 1000          |
| FBM1080A | 0.394 | 10.0 | 0.512 | 13.0 | 0.709 | 18.0 | 0.118 | 3.0 | 0.512 | 13.0 | 1000          |
| FBM1090A | 0.394 | 10.0 | 0.551 | 14.0 | 0.787 | 20.0 | 0.079 | 2.0 | 0.315 | 8.0  | 1000          |
| FBM1100A | 0.394 | 10.0 | 0.630 | 16.0 | 0.827 | 21.0 | 0.079 | 2.0 | 0.315 | 8.0  | 1000          |
| FBM1110A | 0.472 | 12.0 | 0.551 | 14.0 | 0.787 | 20.0 | 0.079 | 2.0 | 0.315 | 8.0  | 1000          |
| FBM1120A | 0.472 | 12.0 | 0.630 | 16.0 | 0.827 | 21.0 | 0.079 | 2.0 | 0.315 | 8.0  | 1000          |
| FBM1130A | 0.472 | 12.0 | 0.630 | 16.0 | 0.827 | 21.0 | 0.118 | 3.0 | 0.630 | 16.0 | 1000          |
| FBM1150A | 0.709 | 18.0 | 0.866 | 22.0 | 1.181 | 30.0 | 0.118 | 3.0 | 0.866 | 22.0 | 1000          |
| FBM1160A | 0.984 | 25.0 | 1.181 | 30.0 | 1.457 | 37.0 | 0.118 | 3.0 | 1.063 | 27.0 | 1000          |
| FBM1170A | 1.102 | 28.0 | 1.299 | 33.0 | 1.575 | 40.0 | 0.118 | 3.0 | 1.181 | 30.0 | 750           |





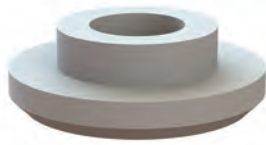








## SHOULDER &amp; INSULATING WASHERS

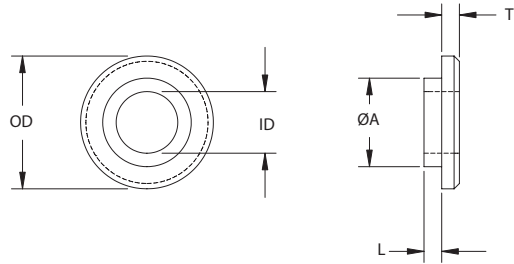
24SW Series  
Shoulder Washers

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

## Features:

- Resistant to corrosion, oil and most chemicals
- Designed to protect the head of a metal screw from electrical contact



| Item No. | Screw Size | ID    |      | OD    |       | L     |      | Ø A   |       | T     |      | Bulk Pack Qty |
|----------|------------|-------|------|-------|-------|-------|------|-------|-------|-------|------|---------------|
|          |            | in    | mm   | in    | mm    | in    | mm   | in    | mm    | in    | mm   |               |
| 24SW0002 | #2         | 0.093 | 2.36 | 0.250 | 6.35  | 0.040 | 1.02 | 0.156 | 3.96  | 0.040 | 1.02 | 1000          |
| 24SW0004 | #4         | 0.122 | 3.09 | 0.281 | 7.14  | 0.040 | 1.02 | 0.187 | 4.75  | 0.040 | 1.02 | 1000          |
| 24SW0006 | #6         | 0.146 | 3.71 | 0.328 | 8.33  | 0.040 | 1.02 | 0.218 | 5.54  | 0.040 | 1.02 | 1000          |
| 24SW0008 | #8         | 0.174 | 4.42 | 0.375 | 9.53  | 0.050 | 1.27 | 0.250 | 6.35  | 0.050 | 1.27 | 1000          |
| 24SW0010 | #10        | 0.201 | 5.11 | 0.437 | 11.10 | 0.050 | 1.27 | 0.281 | 7.14  | 0.050 | 1.27 | 1000          |
| 24SW0250 | 1/4        | 0.260 | 6.60 | 0.562 | 14.27 | 0.060 | 1.52 | 0.375 | 9.53  | 0.060 | 1.52 | 1000          |
| 24SW0375 | 3/8        | 0.385 | 9.78 | 0.750 | 19.05 | 0.060 | 1.52 | 0.500 | 12.70 | 0.060 | 1.52 | 500           |

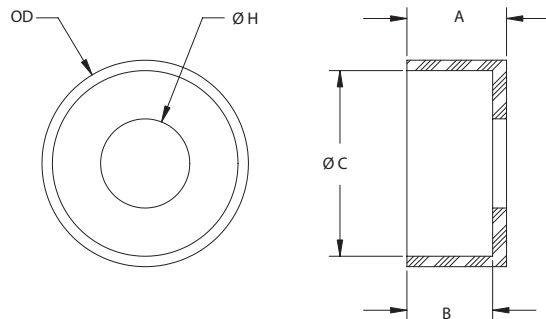
16CW Series  
Cup Washers

## Specifications:

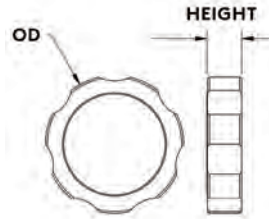
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

## Features:

- Resistant to corrosion, oil and most chemicals
- Designed to protect the head of a metal screw from electrical contact
- Accommodates the most common screw head-styles including: Cheese, Pan and Fillister



| Item No.   | Screw Size | ID    |      | OD    |      | Ø C   |      | B     |      | A     |      | Bulk Pack Qty |
|------------|------------|-------|------|-------|------|-------|------|-------|------|-------|------|---------------|
|            |            | in    | mm   | in    | mm   | in    | mm   | in    | mm   | in    | mm   |               |
| 16CW004257 | #4         | 0.115 | 2.9  | 0.305 | 7.7  | 0.245 | 6.2  | 0.217 | 5.5  | 0.257 | 6.5  | 1000          |
| 16CW004040 | #4         | 0.115 | 2.9  | 0.305 | 7.8  | 0.245 | 6.2  | 0.117 | 3.0  | 0.157 | 4.0  | 1000          |
| 16CW006040 | #6         | 0.140 | 3.6  | 0.360 | 9.1  | 0.300 | 7.6  | 0.142 | 3.6  | 0.182 | 4.6  | 1000          |
| 16CW008040 | #8         | 0.171 | 4.3  | 0.414 | 10.5 | 0.354 | 9.0  | 0.166 | 4.2  | 0.206 | 5.2  | 1000          |
| 16CW008042 | #8         | 0.187 | 4.8  | 0.497 | 12.6 | 0.389 | 9.9  | 0.093 | 2.4  | 0.139 | 3.5  | 1000          |
| 16CW008041 | #8         | 0.171 | 4.3  | 0.414 | 10.5 | 0.354 | 9.0  | 0.130 | 3.3  | 0.170 | 4.3  | 1000          |
| 16CW008043 | #8         | 0.172 | 4.4  | 0.343 | 8.7  | 0.281 | 7.1  | 0.182 | 4.6  | 0.218 | 5.5  | 1000          |
| 16CW010030 | #10        | 0.201 | 5.1  | 0.568 | 14.4 | 0.375 | 9.5  | 0.127 | 3.2  | 0.157 | 4.0  | 1000          |
| 16CW010040 | #10        | 0.194 | 4.9  | 0.470 | 11.9 | 0.410 | 10.4 | 0.190 | 4.8  | 0.230 | 5.9  | 1000          |
| 16CW250250 | 1/4        | 0.260 | 6.6  | 1.000 | 25.4 | 0.500 | 12.7 | 0.150 | 3.8  | 0.198 | 5.0  | 500           |
| 16CW250040 | 1/4        | 0.257 | 6.5  | 0.595 | 15.1 | 0.535 | 13.6 | 0.247 | 6.3  | 0.287 | 7.3  | 500           |
| 16CW250042 | 1/4        | 0.257 | 6.6  | 0.531 | 13.5 | 0.465 | 11.8 | 0.650 | 16.5 | 0.787 | 20.0 | 1000          |
| 16CW312050 | 5/16       | 0.320 | 8.1  | 0.500 | 12.7 | 0.400 | 10.2 | 0.122 | 3.1  | 0.170 | 4.3  | 1000          |
| 16CW312375 | 5/16       | 0.344 | 8.7  | 0.875 | 22.2 | 0.625 | 15.9 | 0.250 | 6.4  | 0.375 | 9.5  | 500           |
| 16CW312500 | 5/16       | 0.344 | 8.7  | 0.875 | 22.2 | 0.625 | 15.9 | 0.378 | 9.6  | 0.500 | 12.7 | 500           |
| 16CW375225 | 3/8        | 0.380 | 9.7  | 1.000 | 25.4 | 0.750 | 19.1 | 0.125 | 3.2  | 0.225 | 5.7  | 500           |
| 16CW437520 | 3/8        | 0.437 | 11.1 | 1.094 | 27.8 | 0.786 | 20.0 | 0.196 | 5.0  | 0.531 | 13.5 | 500           |

**KNOB & THUMB SCREW KNOBS****29F Series  
Flowerette Knobs**

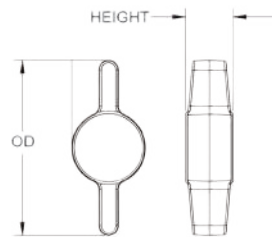
## Specifications:

- Material: Acetal
- Color: See Table

## Features:

- Presses onto any standard socket hex cap screw

| Item No. |          |          |          |          | For Screw Size | OD    |      | Height |     | Bulk Pack Qty |
|----------|----------|----------|----------|----------|----------------|-------|------|--------|-----|---------------|
| Black    | Blue     | Red      | White    | Green    |                | in    | mm   | in     | mm  |               |
| 29F014B  | 29F014BL | 29F014RD | 29F014WT | 29F014GR | 1/4            | 1.500 | 38.1 | 0.375  | 9.5 | 250           |
| 29F516B  | 29F516BL | 29F516RD | 29F516WT | 29F516GR | 5/16           | 1.500 | 38.1 | 0.375  | 9.5 | 250           |
| 29F038B  | 29F038BL | 29F038RD | 29F038WT | 29F038GR | 3/8            | 1.500 | 38.1 | 0.375  | 9.5 | 250           |

**29W Series  
Wing Head Knobs**

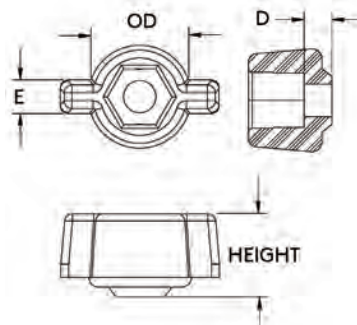
## Specifications:

- Material: Acetal
- Color: See Table

## Features:

- Presses onto any standard socket hex cap screw

| Item No. |          |          |          |          | For Screw Size | OD    |      | Height |      | Bulk Pack Qty |
|----------|----------|----------|----------|----------|----------------|-------|------|--------|------|---------------|
| Black    | Blue     | Red      | White    | Green    |                | in    | mm   | in     | mm   |               |
| 29W010B  | 29W010BL | 29W010RD | 29W010WT | 29W010GR | #10            | 1.000 | 25.4 | 0.250  | 6.4  | 500           |
| 29W014B  | 29W014BL | 29W014RD | 29W014WT | 29W014GR | 1/4            | 1.266 | 32.2 | 0.344  | 8.7  | 500           |
| 29W516B  | 29W516BL | 29W516RD | 29W516WT | 29W516GR | 5/16           | 1.500 | 38.1 | 0.406  | 10.3 | 500           |
| 29W038B  | 29W038BL | 29W038RD | 29W038WT | 29W038GR | 3/8            | 1.781 | 45.2 | 0.484  | 12.3 | 250           |

**29WN Series  
Hex Press-Loc Wing Thumb Screw Knobs**

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: See Table

## Features:

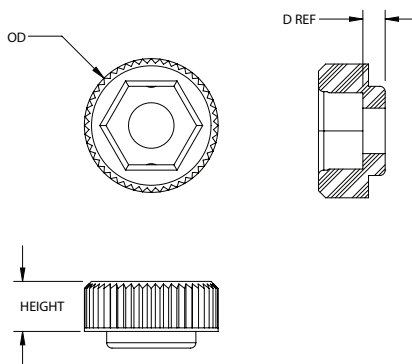
- Fits hex nuts and hex head cap screws

| Item No. |           |          | For Screw Size | OD    | Height | D     | E     | Bulk Pack Qty |
|----------|-----------|----------|----------------|-------|--------|-------|-------|---------------|
| Natural  | White     | Black    |                | in    | in     | in    | in    |               |
| 29WN014N | 29WN014WT | 29WN014B | 1/4            | 0.813 | 0.656  | 0.219 | 0.266 | 1000          |



# THUMB SCREW KNOBS / SHEET EDGE INSERTS

## 29RN Series Hex Press-Loc Round Thumb Screw Knobs



**Specifications:**

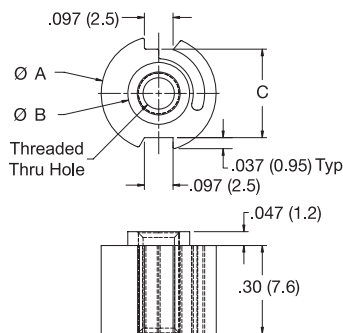
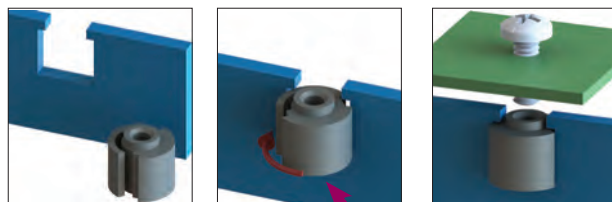
- Material: UL94 V-2 Nylon 6/6
- Color: See Table

**Features:**

- Fits hex nuts and hex head cap screws
- Easily assembled by pressing a steel nut or screw into the plastic knob

| Item No. |           |          | For Screw Size | OD    | Height | D     | Bulk Pack Qty |
|----------|-----------|----------|----------------|-------|--------|-------|---------------|
| Natural  | White     | Black    |                | in    | in     | in    |               |
| 29RN147N | 29RN147WT | 29RN147B | 1/4            | 0.750 | 0.375  | 0.125 | 1000          |

## SEI Series Sheet Edge Insert



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Black

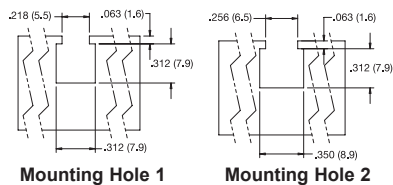
**Features:**

- Provides strong threads in metal sheets too thin to be tapped
- Fastens to the edges of thin sheets
- Alternative to self-clinching inserts
- Can be removed by pinching the spring legs and rotating
- Internal thread requires a screwdriver for installation

**Installation:**

1. Install insert notch into the side of the panel opening
2. Rotate spring leg of insert toward the panel. This compresses the spring leg allowing it to pass through the notch in the panel
3. Leg will snap back to its normal position securing insert in panel

**NOTE: Screwdriver required for installation**



| Item No. | Thread Type | Ø A  |      | Ø B  |     | C    |     | Panel Thickness |             | Mounting Hole | Bulk Pack Qty |
|----------|-------------|------|------|------|-----|------|-----|-----------------|-------------|---------------|---------------|
|          |             | in   | mm   | in   | mm  | in   | mm  | in              | mm          |               |               |
| SEI-1    | #6-32 UNC   | 0.39 | 9.9  | 0.21 | 5.3 | 0.30 | 7.6 | 0.050 - 0.095   | 1.27 - 2.41 | 1             | 1000          |
| SEI-2    | M4          | 0.39 | 9.9  | 0.21 | 5.3 | 0.30 | 7.6 | 0.050 - 0.091   | 1.27 - 2.30 | 1             | 1000          |
| SEI-3    | M3          | 0.39 | 9.9  | 0.21 | 5.3 | 0.30 | 7.6 | 0.050 - 0.091   | 1.27 - 2.30 | 1             | 1000          |
| SEI-4    | M5          | 0.43 | 10.9 | 0.25 | 6.3 | 0.34 | 8.6 | 0.050 - 0.095   | 1.27 - 2.41 | 2             | 1000          |
| SEI-5    | M6          | 0.43 | 10.9 | 0.25 | 6.3 | 0.34 | 8.6 | 0.050 - 0.095   | 1.27 - 2.41 | 2             | 1000          |

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# SNAP IN BEARINGS & HOOKS

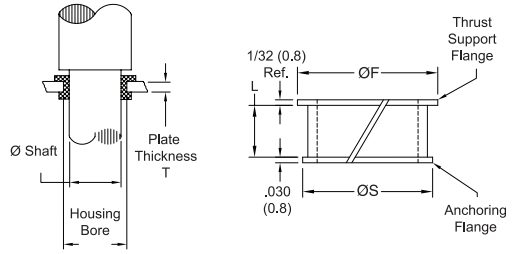
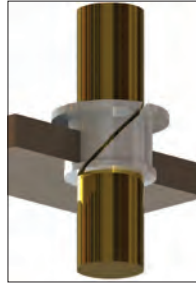
## R Series Snap In Bearing

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Effective at damping out noise and vibration
- Does not require lubrication
- Axiam slot helps maintain proper fit and compensate for humidity and temperature changes



| Item No. | Maximum Shaft Ø |      | Minimum Housing Bore |      | Bearing ID Installed |      | F Ø  |      | S Ø   |      | L     |     | T             |           | Bulk Pack Qty |
|----------|-----------------|------|----------------------|------|----------------------|------|------|------|-------|------|-------|-----|---------------|-----------|---------------|
|          | in              | mm   | in                   | mm   | in                   | mm   | in   | mm   | in    | mm   | in    | mm  | in            | mm        |               |
| R3L1-C   | 3/16            | 4.8  | 0.234                | 5.9  | 0.189                | 4.8  | 5/16 | 7.9  | 1/4   | 6.4  | 0.078 | 2.0 | 0.040 - 0.075 | 1.0 - 1.9 | 1000          |
| R3L2-C   | 3/16            | 4.8  | 0.234                | 5.9  | 0.189                | 4.8  | 5/16 | 7.9  | 1/4   | 6.4  | 0.140 | 3.6 | 0.072 - 0.135 | 1.8 - 3.4 | 1000          |
| R4L1-C   | 1/4             | 6.4  | 5/16                 | 7.9  | 0.251                | 6.4  | 7/16 | 11.1 | 11/32 | 8.7  | 0.078 | 2.0 | 0.040 - 0.075 | 1.0 - 1.9 | 1000          |
| R5L1-C   | 5/16            | 7.9  | 3/8                  | 9.5  | 0.314                | 8    | 1/2  | 12.7 | 13/32 | 10.3 | 0.078 | 2.0 | 0.040 - 0.075 | 1.0 - 1.9 | 1000          |
| R6L2-C   | 3/8             | 9.5  | 7/16                 | 11.1 | 0.376                | 9.6  | 9/16 | 14.3 | 15/32 | 11.9 | 0.140 | 3.6 | 0.072 - 0.135 | 1.8 - 3.4 | 1000          |
| R12L1-C  | 3/4             | 19.1 | 13/16                | 20.6 | 0.751                | 19.1 | 1    | 25.4 | 27/32 | 21.4 | 0.078 | 2.0 | 0.040 - 0.075 | 1.0 - 1.9 | 1000          |

**Radial Load Capacity (in lbs.)**

| Item No. | Nominal Bearing ID |      | Static | RPM |    |     |     |
|----------|--------------------|------|--------|-----|----|-----|-----|
|          | in                 | mm   |        | 10  | 50 | 100 | 250 |
| R3L1-C   | 3/16               | 4.8  | 24     | 4   | 4  | 3   | 2   |
| R3L2-C   | 3/16               | 4.8  | 48     | 9   | 8  | 6   | 4   |
| R4L1-C   | 1/4                | 6.4  | 32     | 5   | 5  | 4   | 2   |
| R5L1-C   | 5/16               | 7.9  | 40     | 8   | 6  | 4   | 2   |
| R6L2-C   | 3/8                | 9.5  | 96     | 19  | 15 | 10  | 4   |
| R12L1-C  | 3/4                | 19.1 | 100    | 20  | 14 | 6   | 2.5 |

**Installation**

Bearings should always be installed in a housing bore that provides good support for the bearing.

When operated continuously without lubrication at the maximum permissible speed of 500 rpm, shafts should be hardened or plated in the bearing area to minimize wear.

Unhardened stainless steel shafts are not recommended. Use chromium plated or nickel plated shafts where corrosion is a problem.

**Correct Clearances**

Housing bore diameters should not be smaller than the minimum diameters specified in tables presented in this catalog. To check bearing I.D.'s for clearance, the bearing should be installed in its housing bore. Plug gauges with diameters corresponding to the minimum and maximum recommended I.D.'s can be used to determine whether the clearance is correct for the bearing when operated on recommended shaft.

When bearings must operate in liquids, the wall thickness of the bearing will increase due to absorption of liquid. Wall thicknesses also increase when bearings are used in a consistently humid environment.

The compensation gap allows for the bearing to be collapsed sufficiently so that the small flange can be easily spiraled through the mounting hole. Position the bearing over the hole with the gap facing up. With light finger pressure immediately to the left of the compensation gap, the bearing is spiraled into position.

Bearings perform effectively in temperature ratings from -40°F to +200°F. Bearing load ratings to 8,000 PSI and speed ratings up to 2,000 feet per minute ensure durability.

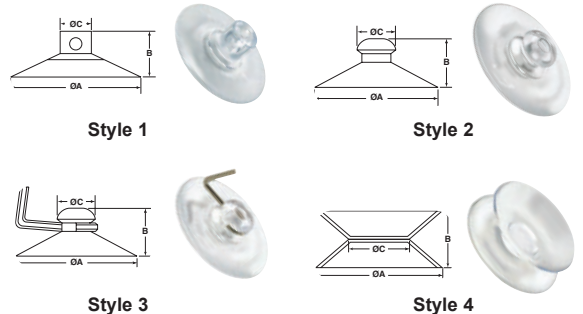
## SUC Series Suction Cups

**Specifications:**

- Material: PVC
- Color: Clear

**Features:**

- **Style 1** is designed with a side pilot hole to be used with string hanger, wire dowels or various other fasteners
- **Style 2** with the mushroom head design can be used with a wide range of self hanging products
- **Style 3** with the hook design is perfect for window mounted signs, ornaments and decorations
- **Style 4** or the double suction cup securely holds, separates, and cushions parallel glass or related surfaces



| Item No. | Style | Ø A   | B     | Ø C   | Ø Hole | Bulk Pack Qty |
|----------|-------|-------|-------|-------|--------|---------------|
|          |       | in    | in    | in    | in     |               |
| SUC100A  | 1     | 0.866 | 0.331 | 0.244 | 0.110  | 3000          |
| SUC105A  | 1     | 0.984 | 0.394 | 0.311 | 0.157  | 2000          |
| SUC110A  | 1     | 1.181 | 0.551 | 0.374 | 0.185  | 1500          |
| SUC115A  | 1     | 1.378 | 0.492 | 0.354 | 0.185  | 1000          |
| SUC120A  | 1     | 1.575 | 0.630 | 0.354 | 0.197  | 800           |
| SUC125A  | 1     | 1.772 | 0.748 | 0.492 | 0.197  | 500           |
| SUC130A  | 1     | 1.969 | 0.661 | 0.394 | 0.213  | 350           |
| SUC135A  | 1     | 2.165 | 0.787 | 0.551 | 0.256  | 250           |
| SUC140A  | 1     | 2.480 | 0.787 | 0.591 | 0.256  | 230           |
| SUC200A  | 2     | 0.748 | 0.394 | 0.327 | —      | 3000          |
| SUC205A  | 2     | 0.866 | 0.325 | 0.315 | —      | 3500          |
| SUC210A  | 2     | 1.181 | 0.449 | 0.449 | —      | 1500          |
| SUC215A  | 2     | 1.378 | 0.492 | 0.541 | —      | 1000          |
| SUC220A  | 2     | 1.575 | 0.598 | 0.531 | —      | 800           |

| Item No. | Style | Ø A   | B     | Ø C   | Ø Hole | Bulk Pack Qty |
|----------|-------|-------|-------|-------|--------|---------------|
|          |       | in    | in    | in    | in     |               |
| SUC225A  | 2     | 1.772 | 0.561 | 0.587 | —      | 500           |
| SUC230A  | 2     | 1.969 | 0.433 | 0.610 | —      | 350           |
| SUC235A  | 2     | 2.165 | 0.787 | 0.626 | —      | 250           |
| SUC240A  | 2     | 2.480 | 0.917 | 0.709 | —      | 230           |
| SUC300A  | 3     | 0.866 | 0.295 | 0.287 | —      | 2000          |
| SUC305A  | 3     | 1.181 | 0.449 | 0.449 | —      | 1000          |
| SUC310A  | 3     | 1.378 | 0.492 | 0.541 | —      | 700           |
| SUC315A  | 3     | 1.575 | 0.551 | 0.531 | —      | 500           |
| SUC320A  | 3     | 1.654 | 0.598 | 0.453 | —      | 500           |
| SUC325A  | 3     | 1.772 | 0.561 | 0.587 | —      | 400           |
| SUC330A  | 3     | 1.969 | 0.689 | 0.610 | —      | 300           |
| SUC335A  | 3     | 2.165 | 0.787 | 0.626 | —      | 250           |
| SUC400A  | 4     | 0.787 | 0.374 | 0.374 | —      | 2000          |
| SUC405A  | 4     | 1.181 | 0.591 | 0.512 | —      | 1000          |

# VIBRATION MOUNTS



## QM Series Quiet Mounts

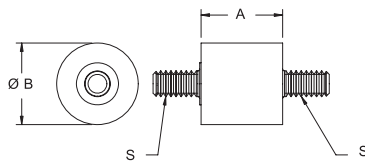
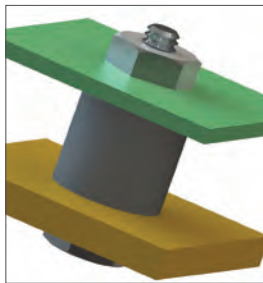


Fig. 1

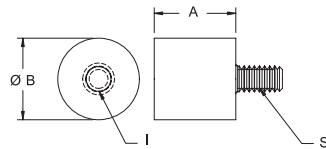


Fig. 2

Specifications:

- Material: 40 Shore A Neoprene Rubber, 1010-1020 Steel
- Color: Black

Features:

- Absorbs vibration, noise and shock
- For heavy duty applications

| Item No. | Fig | A    |      | Ø B  |      | S            |               | Ref Loadat 15% Deflection |    | Bulk Pack Qty |
|----------|-----|------|------|------|------|--------------|---------------|---------------------------|----|---------------|
|          |     | in   | mm   | in   | mm   | in           | in            | lbs                       | kg |               |
| QM1      | 1   | 7/16 | 11.1 | 7/16 | 11.1 | #6-32 x 1/4  | —             | 8                         | 4  | 100           |
| QM1T     | 2   | 7/16 | 11.1 | 7/16 | 11.1 | #6-32 x 1/4  | #6-32 x 3/16  | 5                         | 2  | 100           |
| QM2T     | 2   | 7/16 | 11.1 | 7/16 | 11.1 | #6-32 x 1/2  | #6-32 x 3/16  | 7                         | 3  | 100           |
| QM3      | 1   | 1/2  | 12.7 | 7/16 | 11.1 | #8-32 x 3/8  | —             | 9                         | 4  | 100           |
| QM3T     | 2   | 1/2  | 12.7 | 7/16 | 11.1 | #8-32 x 3/8  | #8-32 x 3/16  | 8                         | 4  | 100           |
| QM4      | 1   | 1/2  | 12.7 | 9/16 | 14.3 | #8-32 x 3/8  | —             | 15                        | 7  | 100           |
| QM4T     | 2   | 1/2  | 12.7 | 9/16 | 14.3 | #8-32 x 3/8  | #8-32 x 3/16  | 28                        | 13 | 100           |
| QM5      | 1   | 3/4  | 19.1 | 1.2  | 25.4 | 1/4-20 x 1/2 | —             | 43                        | 20 | 100           |
| QM7      | 1   | 9/16 | 14.3 | 1/2  | 12.7 | #10-32 x 3/8 | —             | 3                         | 1  | 100           |
| QM7T     | 2   | 9/16 | 14.3 | 1/2  | 12.7 | #10-32 x 3/8 | #10-32 x 3/16 | 10                        | 5  | 100           |

## VG Series Vibration Grommet

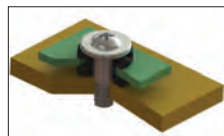
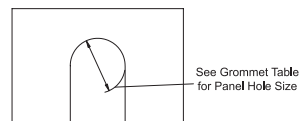
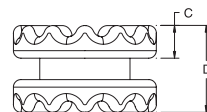
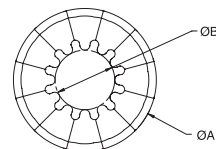
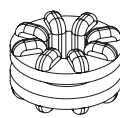


Fig. 1



Fig. 2



Specifications:

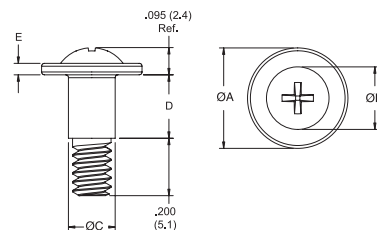
- Material: Neoprene Rubber, 60 Shore A
- Color: Black

Features:

- Provides vibration and noise control
- Shock protection
- VG grommet is mounted with VGS screw (sold separately see below)

| Item No. | Ø A   |      | Ø B   |     | Panel Thickness |      | Ø Hole |      | C Typ. |     | D Ref. |     | Fig. | Mating Screws | Bulk Pack Qty |
|----------|-------|------|-------|-----|-----------------|------|--------|------|--------|-----|--------|-----|------|---------------|---------------|
|          | in    | mm   | in    | mm  | in              | mm   | in     | mm   | in     | mm  | in     | mm  |      |               |               |
| VG-1     | 0.380 | 9.7  | 0.158 | 4.0 | 0.057           | 1.45 | 0.250  | 6.35 | 0.087  | 2.2 | 0.231  | 5.9 | 1    | VG-1 or VGS-4 | 1000          |
| VG-2     | 0.565 | 14.4 | 0.188 | 4.8 | 0.063           | 1.60 | 0.375  | 9.53 | 0.131  | 3.3 | 0.324  | 8.2 | 1    | VG-2 or VGS-5 | 1000          |
| VG-3     | 0.380 | 9.4  | 0.158 | 4.0 | 0.031           | 0.79 | 0.250  | 6.35 | 0.100  | 2.5 | 0.231  | 5.9 | 1    | VG-1 or VGS-4 | 1000          |
| VG-4     | 0.565 | 14.4 | 0.188 | 4.8 | 0.043           | 1.09 | 0.375  | 9.50 | 0.141  | 3.6 | 0.324  | 8.2 | 1    | VG-2 or VGS-5 | 1000          |
| VG-5     | 0.374 | 9.5  | 0.142 | 3.6 | 0.055           | 1.40 | 0.217  | 5.50 | 0.083  | 2.1 | 0.217  | 5.5 | 2    | VG-3 or VGS-6 | 1000          |

## VGS Series Vibration Grommet Screw



Specifications:

- Material: Zinc Plated 1022 Carbon Steel

Features:

- Mounts the VG grommet seen above

| Item No. | Thread       | Use With Grommet Item No. | Ø A   |      | Ø B Ref. |     | Ø C   |     | D     |     | E     |     | Bulk Pack Qty |
|----------|--------------|---------------------------|-------|------|----------|-----|-------|-----|-------|-----|-------|-----|---------------|
|          |              |                           | in    | mm   | in       | mm  | in    | mm  | in    | mm  | in    | mm  |               |
| VG-1     | #6-32 UNC-2A | VG-1, VG-3                | 0.350 | 8.9  | 0.218    | 5.5 | 0.163 | 4.1 | 0.205 | 5.2 | 0.050 | 1.3 | 1000          |
| VG-2     | #6-32 UNC-2A | VG-2, VG-4                | 0.500 | 12.7 | 0.320    | 8.1 | 0.194 | 4.9 | 0.290 | 7.4 | 0.040 | 1.0 | 1000          |
| VG-3     | #6-32 UNC-2A | VG-5                      | 0.350 | 8.9  | 0.218    | 5.5 | 0.146 | 3.7 | 0.195 | 5.0 | 0.050 | 1.3 | 1000          |
| VG-4     | M3 x 0.5     | VG-1, VG-3                | 0.350 | 8.9  | 0.218    | 5.5 | 0.163 | 4.1 | 0.205 | 5.2 | 0.050 | 1.3 | 1000          |
| VG-5     | M3 x 0.5     | VG-2, VG-4                | 0.500 | 12.7 | 0.320    | 8.1 | 0.194 | 4.9 | 0.290 | 7.4 | 0.040 | 1.0 | 1000          |
| VG-6     | M3 x 0.5     | VG-5                      | 0.350 | 8.9  | 0.218    | 5.5 | 0.146 | 3.7 | 0.196 | 5.0 | 0.050 | 1.3 | 1000          |



# ROTARY DAMPERS

## RFRT-G Series Two Way Rotary Damper

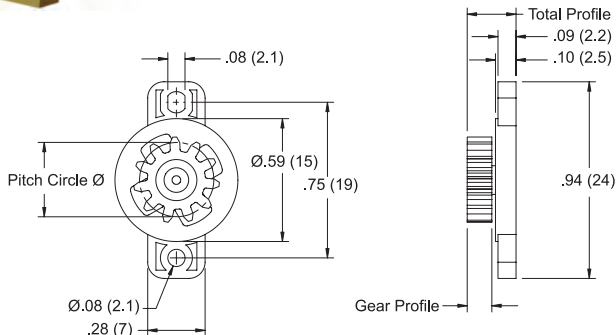


**Specifications:**

- Material: Housing: UL94 HB Polycarbonate, Shaft and Gear: Acetal
- Color: Black

**Features:**

- Enables products to function with a smooth, mechanical motion
- Prevents lid and access panel closure damage
- Dampens in both directions of rotation
- Mounts with M2 screws or SR-20XX Snap Rivets (see page 120)



| Item No.       | Torque (gf.cm) @ 20RPM and 23° C | Gear Style |
|----------------|----------------------------------|------------|
| RFRT-G2-200-G1 | 20 ± 7                           | 1          |
| RFRT-G2-200-G2 | 20 ± 7                           | 2          |
| RFRT-G2-200-G3 | 20 ± 7                           | 3          |
| RFRT-G2-300-G1 | 30 ± 8                           | 1          |
| RFRT-G2-300-G2 | 30 ± 8                           | 2          |
| RFRT-G2-300-G3 | 30 ± 8                           | 3          |
| RFRT-G2-450-G1 | 45 ± 10                          | 1          |
| RFRT-G2-450-G2 | 45 ± 10                          | 2          |
| RFRT-G2-450-G3 | 45 ± 10                          | 3          |
| RFRT-G2-600-G1 | 60 ± 12                          | 1          |
| RFRT-G2-600-G2 | 60 ± 12                          | 2          |
| RFRT-G2-600-G3 | 60 ± 12                          | 3          |
| RFRT-G2-101-G1 | 100 ± 20                         | 1          |
| RFRT-G2-101-G2 | 100 ± 20                         | 2          |
| RFRT-G2-101-G3 | 100 ± 20                         | 3          |

| Gear              | Gear Style    |               |               |
|-------------------|---------------|---------------|---------------|
|                   | 1             | 2             | 3             |
| Type              | Standard Spur | Standard Spur | Standard Spur |
| Tooth Profile     | Involute Gear | Involute Gear | Involute Gear |
| Pressure Angle    | 20°           | 20°           | 20°           |
| No of Teeth       | 14            | 10            | 11            |
| Pitch Circle Ø    | .28 (7)       | .39 (10)      | .35 (8.8)     |
| Gear Profile      | .15 (3.7)     | .12 (3)       | .14 (3.6)     |
| Total Profile Ref | .26 (6.6)     | .23 (5.9)     | .26 (6.5)     |

## RFRT-D2 Series Two Way High Torque Rotary Damper

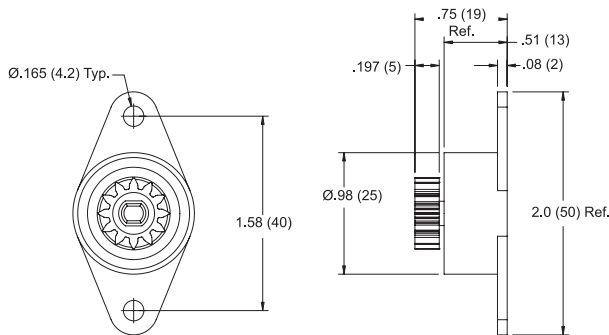


**Specifications:**

- Material: Housing: UL94 HB Polycarbonate, Shaft and Gear: Acetal
- Color: Black

**Features:**

- Enables products to function with a smooth, mechanical motion
- Prevents lid and access panel closure damage
- Dampens in both directions of rotation
- Mounts with #8/M4 screws or SR-40XX Snap Rivets (see page 120)



| Item No.       | Torque (gf.cm) @ 20RPM and 23° C |
|----------------|----------------------------------|
| RFRT-D2-102-G2 | 1000 ± 200                       |
| RFRT-D2-152-G2 | 1500 ± 300                       |

| Gear           |               |
|----------------|---------------|
| Type           | Standard Spur |
| Tooth Profile  | Involute Gear |
| Pressure Angle | 20°           |
| No of Teeth    | 12            |
| Pitch Circle   | .47           |

## SHELF ACCESSORIES AND SNAP RINGS

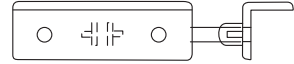

**GSS Series**  
**Glass Shelf Supports**


## Specifications:

- Material: Butyrate
- Color: Clear

## Features:

- Clamps easily to metal brackets
- Clear butyrate is glass-like in appearance as well as stress and impact resistant



| Item No. | Bracket Thickness |  | Style             | Bulk Pack Qty |
|----------|-------------------|--|-------------------|---------------|
|          | in                |  |                   |               |
| GSS1000A | 0.093             |  | Center Back Clip  | 5000          |
| GSS1100A | 0.093             |  | Center Front Clip | 3500          |

**RCL Series**  
**Retainer Clips**


## Specifications:

- Material: See Table
- Color: See Table

## Features:

- Used for retaining panels or screens to an opening in a door
- Attractive and economical method of securing a mirror to a wall or as a means of mounting a picture into a frame

| Item No. | Panel Thickness |  | Color   | Material | Bulk Pack Qty |
|----------|-----------------|--|---------|----------|---------------|
|          | in              |  |         |          |               |
| RCL1000A | 0.156           |  | Natural | Nylon    | 21000         |
| RCL1000B | 0.156           |  | Clear   | Butyrate | 16500         |

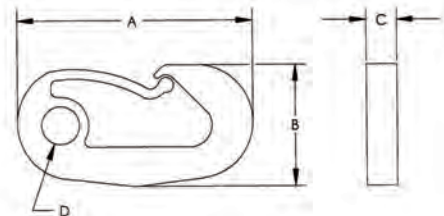
**45SNHK Series**  
**Snap Rings**


## Specifications:

- Material: See Table
- Color: Black

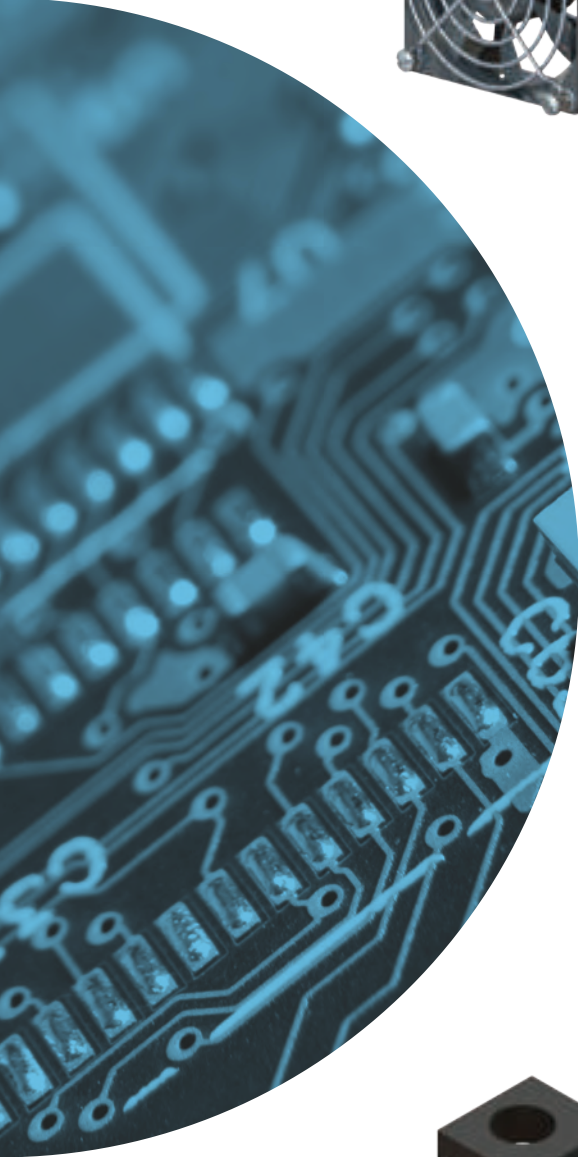
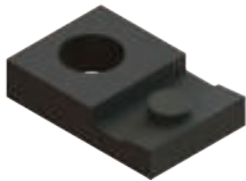
## Features:

- Great for securing light cargo in cars, vans, trucks, and boats
- Good for outdoor use
- Won't scratch painted or decorative surfaces
- Resists corrosion and abrasion



| Item No.  | A     |      | B     |      | C     |      | Ø D   |      | Max Load | Material               | Bulk Pack Qty |
|-----------|-------|------|-------|------|-------|------|-------|------|----------|------------------------|---------------|
|           | in    | mm   | in    | mm   | in    | mm   | in    | mm   |          |                        |               |
| 45SNHK250 | 1.590 | 40.5 | 0.843 | 21.4 | 0.312 | 7.9  | 0.250 | 6.4  | 5 lbs    | UV Resistant Nylon 6/6 | 500           |
| 45SNHK375 | 2.375 | 60.3 | 1.250 | 31.8 | 0.375 | 9.5  | 0.375 | 9.5  | 13 lbs   | UV Resistant Nylon 6/6 | 250           |
| 45SNHK500 | 3.156 | 80.2 | 1.656 | 42.1 | 0.406 | 10.3 | 0.500 | 12.7 | 40 lbs   | Impact Modified Nylon  | 250           |

# PCB & ELECTRONICS HARDWARE







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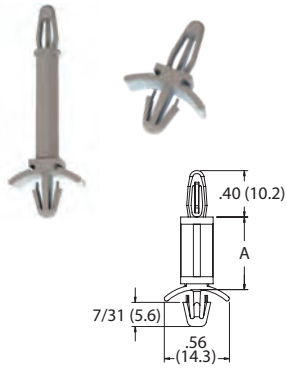
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# PCB & ELECTRONICS HARDWARE



# LOCKING CIRCUIT BOARD SUPPORTS

## LCBS/27LLP/CBLS Series Locking PCB Support



Top Hole:  
Snap-lock: .156 (4.0)  
Panel Thickness:  
.062 (1.57)

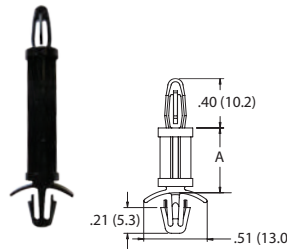
Bottom Hole:  
Snap-lock: .187 (4.8)  
Panel Thickness:  
.031 - .078 (.79 - 1.98)

- Specifications:
- Material: Nylon 6/6
  - Color: Natural
  - Flame Class: See Table

| Item No.    | UL94 V-2  | UL94 V-0 | A     |      | Bulk Pack Qty |
|-------------|-----------|----------|-------|------|---------------|
|             |           |          | in    | mm   |               |
| 27LLP0125   | —         | —        | 0.125 | 3.2  | 1000          |
| CBLS005A    | —         | —        | 0.138 | 3.5  | 1000          |
| LCBS-3-01   | LCBS-3-19 | —        | 0.188 | 4.8  | 1000          |
| LCBS-6M-01  | —         | —        | 0.236 | 6.0  | 1000          |
| LCBS-4-01   | LCBS-4-19 | —        | 0.250 | 6.4  | 1000          |
| LCBS-5-01   | LCBS-5-19 | —        | 0.312 | 7.9  | 1000          |
| LCBS-6-01   | LCBS-6-19 | —        | 0.375 | 9.5  | 1000          |
| LCBS-10M-01 | —         | —        | 0.394 | 10.0 | 1000          |
| LCBS-7-01   | LCBS-7-19 | —        | 0.437 | 11.1 | 1000          |
| LCBS-8-01   | LCBS-8-19 | —        | 0.500 | 12.7 | 1000          |

| Item No.   | UL94 V-2   | UL94 V-0 | A     |      | Bulk Pack Qty |
|------------|------------|----------|-------|------|---------------|
|            |            |          | in    | mm   |               |
| LCBS-10-01 | LCBS-10-19 | —        | 0.625 | 15.9 | 1000          |
| LCBS-12-01 | LCBS-12-19 | —        | 0.750 | 19.1 | 1000          |
| LCBS-14-01 | LCBS-14-19 | —        | 0.875 | 22.2 | 1000          |
| CBLS060A   | —          | —        | 0.945 | 24.0 | 1000          |
| LCBS-16-01 | LCBS-16-19 | —        | 1.000 | 25.4 | 1000          |
| LCBS-18-01 | LCBS-18-19 | —        | 1.125 | 28.6 | 1000          |
| CBLS075A   | —          | —        | 1.224 | 31.1 | 1000          |
| LCBS-20-01 | LCBS-20-19 | —        | 1.250 | 31.8 | 1000          |
| LCBS-22-01 | LCBS-22-19 | —        | 1.375 | 34.9 | 1000          |
| 27LLP1750  | —          | —        | 1.750 | 44.5 | 1000          |

## LCBS-HT Series Locking PCB Support High Temperature



Top Hole:  
Snap-lock: .156 (4.0)  
Panel Thickness:  
.062 (1.57)

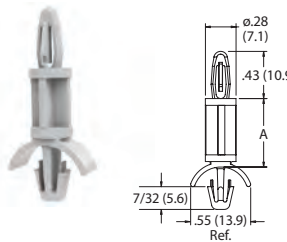
Bottom Hole:  
Snap-lock: .187 (4.8)  
Panel Thickness:  
.031 - .078 (0.8 - 2.0)

- Specifications:
- Material: UL94 V-0 PEI
  - Color: Black
- Features:
- Temperature rating up to 392°F (200°C)

| Item No.   | A     |      | Bulk Pack Qty |
|------------|-------|------|---------------|
|            | in    | mm   |               |
| LCBS-3-HT  | 0.188 | 4.8  | 1000          |
| LCBS-4-HT  | 0.250 | 6.4  | 1000          |
| LCBS-5-HT  | 0.313 | 7.9  | 1000          |
| LCBS-6-HT  | 0.375 | 9.5  | 1000          |
| LCBS-7-HT  | 0.438 | 11.1 | 1000          |
| LCBS-8-HT  | 0.500 | 12.7 | 1000          |
| LCBS-10-HT | 0.625 | 15.9 | 1000          |

| Item No.   | A     |      | Bulk Pack Qty |
|------------|-------|------|---------------|
|            | in    | mm   |               |
| LCBS-12-HT | 0.750 | 19.1 | 1000          |
| LCBS-14-HT | 0.875 | 22.2 | 1000          |
| LCBS-16-HT | 1.000 | 25.4 | 1000          |
| LCBS-18-HT | 1.125 | 28.6 | 1000          |
| LCBS-20-HT | 1.250 | 31.8 | 1000          |
| LCBS-22-HT | 1.375 | 34.9 | 1000          |

## LCBS-2 Series Locking PCB Support



Top Hole:  
Snap-lock: .156 (4)  
Panel Thickness:  
.062 (1.6)

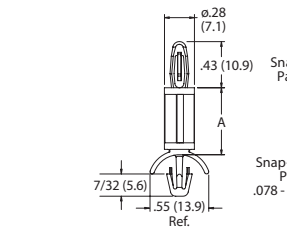
Bottom Hole:  
Snap-lock: .187 (4.75)  
Panel Thickness:  
.078 - .141 (1.98 - 3.58)

- Specifications:
- Material: Nylon 6/6
  - Color: Natural
  - Flame Class: See Table

| Item No.     | UL94 V-2     | UL94 V-0 | A     |      | Bulk Pack Qty |
|--------------|--------------|----------|-------|------|---------------|
|              |              |          | in    | mm   |               |
| LCBS-2-3-01  | LCBS-2-3-19  | —        | 0.188 | 4.8  | 1000          |
| LCBS-2-4-01  | LCBS-2-4-19  | —        | 0.250 | 6.4  | 1000          |
| LCBS-2-5-01  | LCBS-2-5-19  | —        | 0.313 | 7.9  | 1000          |
| LCBS-2-6-01  | LCBS-2-6-19  | —        | 0.375 | 9.5  | 1000          |
| LCBS-2-7-01  | LCBS-2-7-19  | —        | 0.438 | 11.1 | 1000          |
| LCBS-2-8-01  | LCBS-2-8-19  | —        | 0.500 | 12.7 | 1000          |
| LCBS-2-10-01 | LCBS-2-10-19 | —        | 0.625 | 15.9 | 1000          |

| Item No.     | UL94 V-2     | UL94 V-0 | A     |      | Bulk Pack Qty |
|--------------|--------------|----------|-------|------|---------------|
|              |              |          | in    | mm   |               |
| LCBS-2-12-01 | LCBS-2-12-19 | —        | 0.750 | 19.1 | 1000          |
| LCBS-2-14-01 | LCBS-2-14-19 | —        | 0.875 | 22.2 | 1000          |
| LCBS-2-16-01 | LCBS-2-16-19 | —        | 1.000 | 25.4 | 1000          |
| LCBS-2-18-01 | LCBS-2-18-19 | —        | 1.125 | 28.6 | 1000          |
| LCBS-2-20-01 | LCBS-2-20-19 | —        | 1.250 | 31.8 | 1000          |
| LCBS-2-22-01 | LCBS-2-22-19 | —        | 1.375 | 34.9 | 1000          |

## LCBSA-6 Series Locking PCB Support



Top Hole:  
Snap-lock: .156 (4)  
Panel Thickness:  
.093 (2.4)

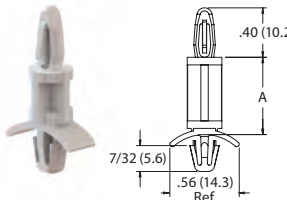
Bottom Hole:  
Snap-lock: .187 (4.75)  
Panel Thickness:  
.078 - .141 (1.98 - 3.58)

- Specifications:
- Material: Nylon 6/6
  - Flame Class: See Table
  - Color: Natural

| Item No.      | UL94 V-2      | UL94 V-0 | A     |      | Bulk Pack Qty |
|---------------|---------------|----------|-------|------|---------------|
|               |               |          | in    | mm   |               |
| LCBSA-6-3-01  | LCBSA-6-3-19  | —        | 0.188 | 4.8  | 1000          |
| LCBSA-6-4-01  | LCBSA-6-4-19  | —        | 0.250 | 6.4  | 1000          |
| LCBSA-6-5-01  | LCBSA-6-5-19  | —        | 0.313 | 7.9  | 1000          |
| LCBSA-6-6-01  | LCBSA-6-6-19  | —        | 0.375 | 9.5  | 1000          |
| LCBSA-6-7-01  | LCBSA-6-7-19  | —        | 0.438 | 11.1 | 1000          |
| LCBSA-6-8-01  | LCBSA-6-8-19  | —        | 0.500 | 12.7 | 1000          |
| LCBSA-6-10-01 | LCBSA-6-10-19 | —        | 0.625 | 15.9 | 1000          |

| Item No.      | UL94 V-2      | UL94 V-0 | A     |      | Bulk Pack Qty |
|---------------|---------------|----------|-------|------|---------------|
|               |               |          | in    | mm   |               |
| LCBSA-6-12-01 | LCBSA-6-12-19 | —        | 0.750 | 19.1 | 1000          |
| LCBSA-6-14-01 | LCBSA-6-14-19 | —        | 0.875 | 22.2 | 1000          |
| LCBSA-6-16-01 | LCBSA-6-16-19 | —        | 1.000 | 25.4 | 1000          |
| LCBSA-6-18-01 | LCBSA-6-18-19 | —        | 1.125 | 28.6 | 1000          |
| LCBSA-6-20-01 | LCBSA-6-20-19 | —        | 1.250 | 31.8 | 1000          |
| LCBSA-6-22-01 | LCBSA-6-22-19 | —        | 1.375 | 34.9 | 1000          |

## LCBS-8 Series Locking PCB Support



Top Hole:  
Snap-lock: .156 (4)  
Panel Thickness:  
.062 (1.57)

Bottom Hole:  
Snap-lock: .187 (4.75)  
Panel Thickness:  
.008 - .055 (0.2 - 1.4)

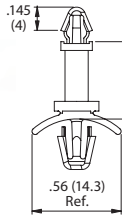
- Specifications:
- Material: UL94 V-2 Nylon 6/6
  - Color: Natural
  - UL94 V-0 Available by special order

| Item No.     | A     |      | Bulk Pack Qty |
|--------------|-------|------|---------------|
|              | in    | mm   |               |
| LCBS-8-3-01  | 0.188 | 4.8  | 1000          |
| LCBS-8-4-01  | 0.250 | 6.4  | 1000          |
| LCBS-8-5-01  | 0.313 | 7.9  | 1000          |
| LCBS-8-6-01  | 0.375 | 9.5  | 1000          |
| LCBS-8-7-01  | 0.438 | 11.1 | 1000          |
| LCBS-8-8-01  | 0.500 | 12.7 | 1000          |
| LCBS-8-10-01 | 0.625 | 15.9 | 1000          |

| Item No.     | A     |      | Bulk Pack Qty |
|--------------|-------|------|---------------|
|              | in    | mm   |               |
| LCBS-8-12-01 | 0.750 | 19.1 | 1000          |
| LCBS-8-14-01 | 0.875 | 22.2 | 1000          |
| LCBS-8-16-01 | 1.000 | 25.4 | 1000          |
| LCBS-8-18-01 | 1.125 | 28.6 | 1000          |
| LCBS-8-20-01 | 1.250 | 31.8 | 1000          |
| LCBS-8-22-01 | 1.375 | 34.9 | 1000          |



**LCBS-7 Series  
Locking PCB Support**



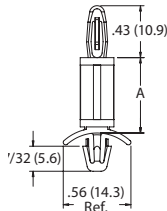
Top Hole:  
Snap-lock: .156 (4)  
Panel Thickness:  
.062 (1.57)

Bottom Hole:  
Snap-lock: .187 (4.75)  
Panel Thickness:  
.031 - .078 (0.8 - 2.0)

- Specifications:
- Material: Nylon 6/6
  - Color: Natural
  - Flame Class: See Table

| Item No.     | UL94 V-2     | UL94 V-0 | A     |      | Bulk Pack Qty |
|--------------|--------------|----------|-------|------|---------------|
|              |              |          | in    | mm   |               |
| LCBS-7-3-01  | LCBS-7-3-19  |          | 0.188 | 4.8  | 1000          |
| LCBS-7-4-01  | LCBS-7-4-19  |          | 0.250 | 6.4  | 1000          |
| LCBS-7-5-01  | LCBS-7-5-19  |          | 0.312 | 7.9  | 1000          |
| LCBS-7-6-01  | —            |          | 0.375 | 9.5  | 1000          |
| LCBS-7-7-01  | LCBS-7-7-19  |          | 0.438 | 11.1 | 1000          |
| LCBS-7-8-01  | LCBS-7-8-19  |          | 0.500 | 12.7 | 1000          |
| LCBS-7-10-01 | LCBS-7-10-19 |          | 0.625 | 15.9 | 1000          |
| LCBS-7-12-01 | LCBS-7-12-19 |          | 0.750 | 19.1 | 1000          |
| LCBS-7-14-01 | —            |          | 0.875 | 22.2 | 1000          |
| LCBS-7-16-01 | LCBS-7-16-19 |          | 1.000 | 25.4 | 1000          |
| LCBS-7-18-01 | LCBS-7-18-19 |          | 1.125 | 28.6 | 1000          |
| LCBS-7-20-01 | LCBS-7-20-19 |          | 1.250 | 31.8 | 1000          |
| LCBS-7-22-01 | LCBS-7-22-19 |          | 1.375 | 34.9 | 1000          |

**LCBSA-3 Series  
Locking PCB Support**



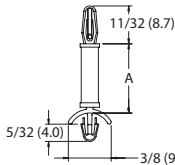
Top Hole:  
Snap-lock: .156 (4)  
Panel Thickness:  
.093 (2.4)

Bottom Hole:  
Snap-lock: .187 (4.75)  
Panel Thickness:  
.031 - .078 (0.8 - 2.0)

- Specifications:
- Material: UL94 V-2 Nylon 6/6
  - Color: Natural
  - UL94 V-0 Available by special order

| Item No.      | A     |      | Bulk Pack Qty | Item No.      | A     |      | Bulk Pack Qty |
|---------------|-------|------|---------------|---------------|-------|------|---------------|
|               | in    | mm   |               |               | in    | mm   |               |
| LCBSA-3-3-01  | 0.188 | 4.8  | 1000          | LCBSA-3-12-01 | 0.750 | 19.1 | 1000          |
| LCBSA-3-4-01  | 0.250 | 6.4  | 1000          | LCBSA-3-14-01 | 0.875 | 22.2 | 1000          |
| LCBSA-3-5-01  | 0.313 | 7.9  | 1000          | LCBSA-3-16-01 | 1.000 | 25.4 | 1000          |
| LCBSA-3-6-01  | 0.375 | 9.5  | 1000          | LCBSA-3-18-01 | 1.125 | 28.6 | 1000          |
| LCBSA-3-7-01  | 0.438 | 11.1 | 1000          | LCBSA-3-20-01 | 1.250 | 31.8 | 1000          |
| LCBSA-3-8-01  | 0.500 | 12.7 | 1000          | LCBSA-3-22-01 | 1.375 | 34.9 | 1000          |
| LCBSA-3-10-01 | 0.625 | 15.9 | 1000          |               |       |      |               |

**LCBSM Series  
Locking PCB Support - Mini**



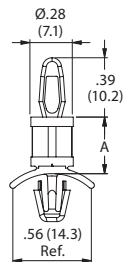
Top Hole:  
Snap-Lock: .125  
Panel Thickness:  
.062 (1.57)

Bottom Hole:  
Snap-Lock: .125  
Panel Thickness:  
.031 - .078 (0.8 - 2.0)

- Specifications:
- Material: UL94 V-2 Nylon 6/6
  - Color: Natural
  - UL94 V-0 Available by special order

| Item No.   | A     |     | Bulk Pack Qty | Item No.    | A     |      | Bulk Pack Qty |
|------------|-------|-----|---------------|-------------|-------|------|---------------|
|            | in    | mm  |               |             | in    | mm   |               |
| LCBSM-2-01 | 0.125 | 3.2 | 1000          | LCBSM-7-01  | 0.438 | 11.1 | 1000          |
| LCBSM-3-01 | 0.188 | 4.8 | 1000          | LCBSM-8-01  | 0.500 | 12.7 | 1000          |
| LCBSM-4-01 | 0.250 | 6.4 | 1000          | LCBSM-9-01  | 0.563 | 14.3 | 1000          |
| LCBSM-5-01 | 0.313 | 7.9 | 1000          | LCBSM-10-01 | 0.625 | 15.9 | 1000          |
| LCBSM-6-01 | 0.375 | 9.5 | 1000          |             |       |      |               |

**LCBS-4/27LTP Series  
Non-Locking PCB Support**



Top Hole:  
Snap-fit: .156 (4)  
Panel Thickness:  
.062 (1.52)

Bottom Hole:  
Snap-Lock: .187 (4.75)  
Panel Thickness:  
.031 - .078 (0.8 - 2.0)

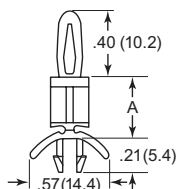
- Specifications:
- Material: Nylon 6/6
  - Flame Class: See Table
  - Color: Natural

- Features:
- PC board is removable



| Item No.     | UL94 V-2     | UL94 V-0 | A     |      | Bulk Pack Qty | Item No.     | UL94 V-2     | UL94 V-0 | A     |      | Bulk Pack Qty |
|--------------|--------------|----------|-------|------|---------------|--------------|--------------|----------|-------|------|---------------|
|              |              |          | in    | mm   |               |              |              |          | in    | mm   |               |
| LCBS-4-3-01  | LCBS-4-3-19  |          | 0.188 | 4.8  | 1000          | LCBS-4-12-01 | LCBS-4-12-19 | 0.750    | 19.1  | 1000 |               |
| LCBS-4-4-01  | LCBS-4-4-19  |          | 0.250 | 6.4  | 1000          | LCBS-4-14-01 | LCBS-4-14-19 | 0.875    | 22.2  | 1000 |               |
| LCBS-4-5-01  | LCBS-4-5-19  |          | 0.313 | 7.9  | 1000          | LCBS-4-16-01 | LCBS-4-16-19 | 1.000    | 25.4  | 1000 |               |
| LCBS-4-6-01  | LCBS-4-6-19  |          | 0.375 | 9.5  | 1000          | LCBS-4-18-01 | LCBS-4-18-19 | 1.125    | 28.6  | 1000 |               |
| LCBS-4-7-01  | LCBS-4-7-19  |          | 0.438 | 11.1 | 1000          | LCBS-4-20-01 | LCBS-4-20-19 | 1.250    | 31.8  | 1000 |               |
| LCBS-4-8-01  | LCBS-4-8-19  |          | 0.500 | 12.7 | 1000          | LCBS-4-22-01 | LCBS-4-22-19 | 1.375    | 34.9  | 1000 |               |
| LCBS-4-10-01 | LCBS-4-10-19 |          | 0.625 | 15.9 | 1000          | • 27LTP1750  | —            | 1.750    | 44.45 | 1000 |               |

**CBS Series  
Non-Locking PCB Support**



Top Hole:  
Snap-fit: .156 (4)  
Panel Thickness:  
.047-.067 (1.2-1.7)

Bottom Hole:  
Snap-lock: .187 (4.8)  
Panel Thickness:  
.031-.098 (0.8-2.5)

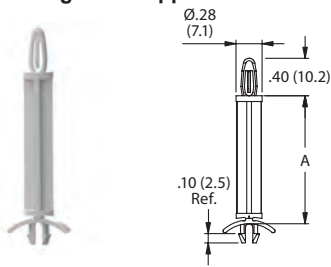
- Specifications:
- Material: Nylon 6/6
  - Flame Class: See Table
  - Color: Natural

- Features:
- PC board is removable

| Item No.  | UL94 V-2  | UL94 V-0 | A     |      | Bulk Pack Qty |
|-----------|-----------|----------|-------|------|---------------|
|           |           |          | in    | mm   |               |
| CBS-3-01  | CBS-3-19  |          | 0.188 | 4.8  | 1000          |
| CBS-4-01  | CBS-4-19  |          | 0.250 | 6.4  | 1000          |
| CBS-6-01  | CBS-6-19  |          | 0.375 | 9.5  | 1000          |
| CBS-8-01  | CBS-8-19  |          | 0.500 | 12.7 | 1000          |
| CBS-10-01 | CBS-10-19 |          | 0.625 | 15.9 | 1000          |
| CBS-12-01 | CBS-12-19 |          | 0.750 | 19.1 | 1000          |
| CBS-14-01 | CBS-14-19 |          | 0.875 | 22.2 | 1000          |



## LOCKING CIRCUIT BOARD SUPPORTS

LCBS-5 Series  
Locking PCB Support

Top Hole:  
Snap-lock: .156 (4)  
Panel Thickness:  
.062 (1.57)

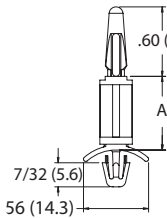
Bottom Hole:  
Snap-lock: .187 (4.75)  
Panel Thickness:  
.031 - .078 (0.8 - 2.0)

## Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

| Item No.    | A     |      | Bulk Pack Qty |
|-------------|-------|------|---------------|
|             | in    | mm   |               |
| LCBS-5-3-01 | 0.188 | 4.8  | 1000          |
| LCBS-5-4-01 | 0.250 | 6.4  | 1000          |
| LCBS-5-5-01 | 0.313 | 7.9  | 1000          |
| LCBS-5-6-01 | 0.375 | 9.5  | 1000          |
| LCBS-5-7-01 | 0.438 | 11.1 | 1000          |

| Item No.     | A     |      | Bulk Pack Qty |
|--------------|-------|------|---------------|
|              | in    | mm   |               |
| LCBS-5-8-01  | 0.500 | 12.7 | 1000          |
| LCBS-5-10-01 | 0.625 | 15.9 | 1000          |
| LCBS-5-12-01 | 0.750 | 19.1 | 1000          |
| LCBS-5-18-01 | 1.125 | 28.6 | 1000          |
| LCBS-5-20-01 | 1.250 | 31.8 | 1000          |
| LCBS-5-22-01 | 1.375 | 34.9 | 1000          |

LNCBS Series  
Long Nose PCB Support

Top Hole:  
Snap-fit: .156 (4.0)  
Panel Thickness:  
.062 (1.57)

Bottom Hole:  
Snap-lock: .187 (4.8)  
Panel Thickness:  
.031 - .078 (0.8 - 2.0)

## Specifications:

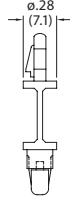
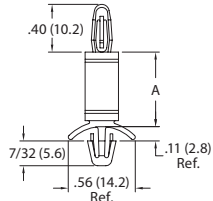
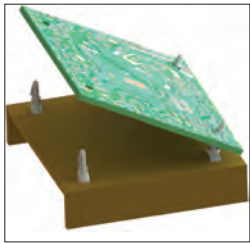
- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

## Features:

- Long "nose" automatically locates and aligns connector pins with socket

| Item No.   | A     |      | Bulk Pack Qty |
|------------|-------|------|---------------|
|            | in    | mm   |               |
| LNCBS-3-01 | 0.187 | 4.8  | 1000          |
| LNCBS-4-01 | 0.250 | 6.4  | 1000          |
| LNCBS-6-01 | 0.375 | 9.5  | 1000          |
| LNCBS-8-01 | 0.500 | 12.7 | 1000          |

| Item No.    | A     |      | Bulk Pack Qty |
|-------------|-------|------|---------------|
|             | in    | mm   |               |
| LNCBS-10-01 | 0.625 | 15.9 | 1000          |
| LNCBS-12-01 | 0.750 | 19.1 | 1000          |
| LNCBS-14-01 | 0.875 | 22.2 | 1000          |

FLCBS Series  
Flexible PCB Support

Top Hole:  
Snap-lock: .156 (4)  
Panel Thickness:  
.062 (1.57)

Bottom Hole:  
Snap-lock: .187 (4.75)  
Panel Thickness:  
.031 - .078 (0.8 - 2.0)

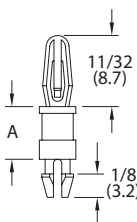
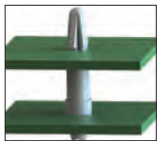
## Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

## Features:

- Flexible spacer allows access to underside of board for maintenance and repair

| Item No.    | A     |      | Bulk Pack Qty |
|-------------|-------|------|---------------|
|             | in    | mm   |               |
| FLCBS-6-01  | 0.375 | 9.5  | 1000          |
| FLCBS-7-01  | 0.438 | 11.1 | 1000          |
| FLCBS-8-01  | 0.500 | 12.7 | 1000          |
| FLCBS-10-01 | 0.625 | 15.9 | 1000          |
| FLCBS-12-01 | 0.750 | 19.1 | 1000          |
| FLCBS-14-01 | 0.875 | 22.2 | 1000          |
| FLCBS-16-01 | 1.000 | 25.4 | 1000          |
| FLCBS-18-01 | 1.125 | 28.6 | 1000          |
| FLCBS-20-01 | 1.250 | 31.8 | 1000          |
| FLCBS-22-01 | 1.375 | 34.9 | 1000          |

LMSP Series  
Locking PCB Support - Mini

Top Hole:  
Snap-lock: .125 (3.2)  
Panel Thickness:  
.062 (1.57)

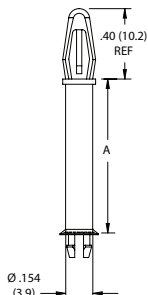
Bottom Hole:  
Snap-lock: .125 (3.2)  
Panel Thickness:  
.062 (1.6)

## Specifications:

- Material: Nylon 6/6
- Color: Natural
- Flame Class: See Table

| Item No.  | A         |       | Bulk Pack Qty |      |
|-----------|-----------|-------|---------------|------|
|           | in        | mm    |               |      |
| UL94 V-2  | UL94 V-0  | 0.125 | 3.2           | 1000 |
| LMSP-2-01 | LMSP-2-19 | 0.188 | 4.8           | 1000 |
| LMSP-3-01 | LMSP-3-19 | 0.250 | 6.4           | 1000 |
| LMSP-4-01 | LMSP-4-19 | 0.313 | 7.9           | 1000 |
| LMSP-5-01 | LMSP-5-19 | 0.375 | 9.5           | 1000 |
| LMSP-6-01 | LMSP-6-19 | 0.438 | 11.1          | 1000 |

| Item No.   | A          |       | Bulk Pack Qty |      |
|------------|------------|-------|---------------|------|
|            | in         | mm    |               |      |
| LMSP-8-01  | LMSP-8-19  | 0.500 | 12.7          | 1000 |
| LMSP-9-01  | LMSP-9-19  | 0.563 | 14.3          | 1000 |
| LMSP-10-01 | LMSP-10-19 | 0.625 | 15.9          | 1000 |
| LMSP-12-01 | LMSP-12-19 | 0.750 | 19.1          | 1000 |
| LMSP-14-01 | LMSP-14-19 | 0.875 | 22.2          | 1000 |

27LMSP Series  
PCB Support

Top Hole:  
Snap-Lock: .156 (4.0)  
Panel thickness:  
.062 (1.6)

Bottom Hole:  
Snap-Lock: .125 (3.2)  
Panel thickness:  
.062 (1.6)

## Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

## Features:

- Cupped base adds stability to mounting

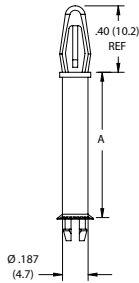
| Item No.    | A     |      | Bulk Pack Qty |
|-------------|-------|------|---------------|
|             | in    | mm   |               |
| 27LMSP00125 | 0.125 | 3.2  | 1000          |
| 27LMSP00250 | 0.250 | 6.4  | 1000          |
| 27LMSP00312 | 0.312 | 7.9  | 1000          |
| 27LMSP00375 | 0.375 | 9.5  | 1000          |
| 27LMSP00437 | 0.438 | 11.1 | 1000          |

| Item No.    | A     |      | Bulk Pack Qty |
|-------------|-------|------|---------------|
|             | in    | mm   |               |
| 27LMSP00500 | 0.500 | 12.7 | 1000          |
| 27LMSP00625 | 0.625 | 15.9 | 1000          |
| 27LMSP00750 | 0.750 | 19.1 | 1000          |
| 27LMSP00875 | 0.875 | 22.2 | 1000          |
| 27LMSP01000 | 1.000 | 25.4 | 1000          |





**27LCSP Series**  
**Locking PCB Support**



Top Hole:  
 Snap-Lock: .156 (4.0)  
 Panel thickness:  
 .062 (1.6)

Bottom Hole:  
 Snap-Lock: .156 (3.2)  
 Panel thickness:  
 .062 (1.6)

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

**Features:**

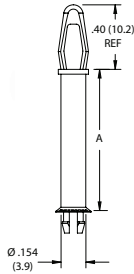
- Cupped base adds stability to mounting



| Item No.    | A     |      | Bulk Pack Qty |
|-------------|-------|------|---------------|
|             | in    | mm   |               |
| 27LCSP00125 | 0.125 | 3.2  | 1000          |
| 27LCSP00250 | 0.250 | 6.4  | 1000          |
| 27LCSP00312 | 0.312 | 7.9  | 1000          |
| 27LCSP00375 | 0.375 | 9.5  | 1000          |
| 27LCSP00437 | 0.438 | 11.1 | 1000          |

| Item No.    | A     |      | Bulk Pack Qty |
|-------------|-------|------|---------------|
|             | in    | mm   |               |
| 27LCSP00500 | 0.500 | 12.7 | 1000          |
| 27LCSP00625 | 0.625 | 15.9 | 1000          |
| 27LCSP00750 | 0.750 | 19.1 | 1000          |
| 27LCSP00875 | 0.875 | 22.2 | 1000          |
| 27LCSP01000 | 1.000 | 25.4 | 1000          |

**27TMSP Series**  
**Non-Locking PCB Support**



Top Hole:  
 Snap-Fit: .156 (4.0)  
 Panel thickness:  
 .062 (1.6)

Bottom Hole:  
 Snap-Lock: .125 (3.2)  
 Panel thickness:  
 .062 (1.6)

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

**Features:**

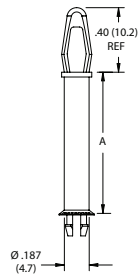
- PC board is removable
- Cupped base adds stability to mounting



| Item No.    | A     |      | Bulk Pack Qty |
|-------------|-------|------|---------------|
|             | in    | mm   |               |
| 27TMSP00125 | 0.125 | 3.2  | 1000          |
| 27TMSP00250 | 0.250 | 6.4  | 1000          |
| 27TMSP00312 | 0.312 | 7.9  | 1000          |
| 27TMSP00375 | 0.375 | 9.5  | 1000          |
| 27TMSP00437 | 0.438 | 11.1 | 1000          |

| Item No.    | A     |      | Bulk Pack Qty |
|-------------|-------|------|---------------|
|             | in    | mm   |               |
| 27TMSP00500 | 0.500 | 12.7 | 1000          |
| 27TMSP00625 | 0.625 | 15.9 | 1000          |
| 27TMSP00750 | 0.750 | 19.1 | 1000          |
| 27TMSP00875 | 0.875 | 22.2 | 1000          |
| 27TMSP01000 | 1.000 | 25.4 | 1000          |

**27TCSP Series**  
**Non-Locking PCB Support**



Top Hole:  
 Snap-Fit: .156 (4.0)  
 Panel thickness:  
 .062 (1.6)

Bottom Hole:  
 Snap-Lock: .156 (4.0)  
 Panel thickness:  
 .062 (1.6)

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

**Features:**

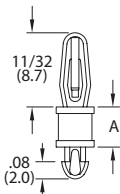
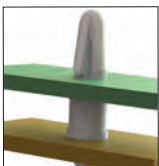
- PC board is removable
- Cupped base adds stability to mounting



| Item No.    | A     |      | Bulk Pack Qty |
|-------------|-------|------|---------------|
|             | in    | mm   |               |
| 27TCSP00125 | 0.125 | 3.2  | 1000          |
| 27TCSP00250 | 0.250 | 6.4  | 1000          |
| 27TCSP00312 | 0.312 | 7.9  | 1000          |
| 27TCSP00375 | 0.375 | 9.5  | 1000          |
| 27TCSP00437 | 0.438 | 11.1 | 1000          |

| Item No.    | A     |      | Bulk Pack Qty |
|-------------|-------|------|---------------|
|             | in    | mm   |               |
| 27TCSP00500 | 0.500 | 12.7 | 1000          |
| 27TCSP00625 | 0.625 | 15.9 | 1000          |
| 27TCSP00750 | 0.750 | 19.1 | 1000          |
| 27TCSP00875 | 0.875 | 22.2 | 1000          |
| 27TCSP01000 | 1.000 | 25.4 | 1000          |

**LCBST Series**  
**Locking PCB Support**



Top Hole:  
 Snap-lock: .125 (4.0)  
 Panel Thickness:  
 .062 (1.57)

Bottom Hole:  
 Snap-lock: .100 (2.5)  
 Panel Thickness:  
 .064 (1.63) Max

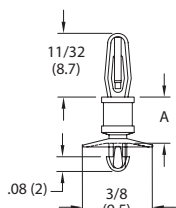
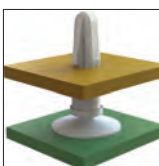
**Specifications:**

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

| Item No.   | A     |     | Bulk Pack Qty |
|------------|-------|-----|---------------|
|            | in    | mm  |               |
| LCBST-2-01 | 0.125 | 3.2 | 1000          |
| LCBST-3-01 | 0.188 | 4.8 | 1000          |
| LCBST-4-01 | 0.250 | 6.4 | 1000          |
| LCBST-5-01 | 0.313 | 7.9 | 1000          |
| LCBST-6-01 | 0.375 | 9.5 | 1000          |

| Item No.    | A     |      | Bulk Pack Qty |
|-------------|-------|------|---------------|
|             | in    | mm   |               |
| LCBST-7-01  | 0.438 | 11.1 | 1000          |
| LCBST-8-01  | 0.500 | 12.7 | 1000          |
| LCBST-9-01  | 0.563 | 14.3 | 1000          |
| LCBST-10-01 | 0.625 | 15.9 | 1000          |

**CLCBST Series**  
**Cupped Locking PCB Support**



Top Hole:  
 Snap-lock: .125 (3.18)  
 Panel Thickness:  
 .062 (1.57)

Bottom Hole:  
 Snap-lock: .100 (2.54)  
 Panel Thickness:  
 .062 (1.57)

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

**Features:**

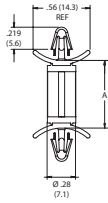
- Cupped base covers hole completely
- Low profile

| Item No.    | A     |     | Bulk Pack Qty |
|-------------|-------|-----|---------------|
|             | in    | mm  |               |
| CLCBST-2-01 | 0.125 | 3.2 | 1000          |
| CLCBST-3-01 | 0.188 | 4.8 | 1000          |
| CLCBST-4-01 | 0.250 | 6.4 | 1000          |
| CLCBST-5-01 | 0.313 | 7.9 | 1000          |
| CLCBST-6-01 | 0.375 | 9.5 | 1000          |

| Item No.     | A     |      | Bulk Pack Qty |
|--------------|-------|------|---------------|
|              | in    | mm   |               |
| CLCBST-7-01  | 0.438 | 11.1 | 1000          |
| CLCBST-8-01  | 0.500 | 12.7 | 1000          |
| CLCBST-9-01  | 0.563 | 14.3 | 1000          |
| CLCBST-10-01 | 0.625 | 15.9 | 1000          |



## LOCKING CIRCUIT BOARD SUPPORTS

DLCBS Series  
Dual Locking PCB Support

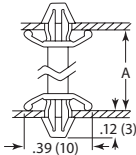
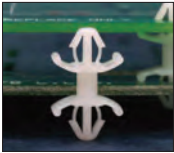
Top Hole:  
Snap-Lock: .156 (4.0)  
Panel thickness:  
.031 - .078 (0.79 - 1.98)

Bottom Hole:  
Snap-Lock: .156 (4.0)  
Panel thickness:  
.031 - .078 (0.79 - 1.98)

## Specifications:

- Material: Nylon 6/6
- Flame Class: See Table
- Color: Natural

| Item No.    |             | A     |      | Bulk Pack Qty |
|-------------|-------------|-------|------|---------------|
| UL94 V-2    | UL94 V-0    | in    | mm   |               |
| DLCBS-3-01  | DLCBS-3-19  | 0.187 | 4.8  | 1000          |
| DLCBS-4-01  | DLCBS-4-19  | 0.250 | 6.4  | 1000          |
| DLCBS-6-01  | DLCBS-6-19  | 0.375 | 9.5  | 1000          |
| DLCBS-8-01  | DLCBS-8-19  | 0.500 | 12.7 | 1000          |
| DLCBS-9-01  | DLCBS-9-19  | 0.563 | 14.3 | 1000          |
| DLCBS-10-01 | DLCBS-10-19 | 0.625 | 15.9 | 1000          |
| DLCBS-12-01 | DLCBS-12-19 | 0.750 | 19.1 | 1000          |
| DLCBS-14-01 | DLCBS-14-19 | 0.875 | 22.2 | 1000          |

CBDLS1 Series  
Dual Locking PCB Support

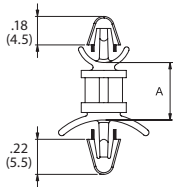
Top Hole:  
Snap-Lock: .156 (4.0)  
Panel Thickness:  
.062 (1.6)

Bottom Hole:  
Snap-Lock: .156 (4.0)  
Panel Thickness:  
.062 (1.6)

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.  | A     |      | Bulk Pack Qty | Item No.  | A     |      | Bulk Pack Qty |
|-----------|-------|------|---------------|-----------|-------|------|---------------|
|           | in    | mm   |               |           | in    | mm   |               |
| CBDLS105A | 0.236 | 6.0  | 1000          | CBDLS130A | 0.551 | 14.0 | 1000          |
| CBDLS110A | 0.315 | 8.0  | 1000          | CBDLS135A | 0.630 | 16.0 | 1000          |
| CBDLS115A | 0.394 | 10.0 | 1000          | CBDLS140A | 0.661 | 16.8 | 1000          |
| CBDLS120A | 0.472 | 12.0 | 1000          | CBDLS145A | 0.709 | 18.0 | 1000          |
| CBDLS125A | 0.512 | 13.0 | 1000          | CBDLS150A | 0.787 | 20.0 | 1000          |

DLCBS7 Series  
Dual Locking PCB Support

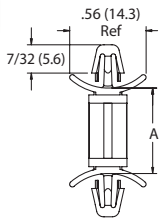
Top Hole:  
Snap-Lock: .156 (4)  
Panel Thickness:  
.062 (1.6)

Bottom Hole:  
Snap-Lock: .156 (4)  
Panel Thickness:  
.062 (1.6)

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- UL94 V-0 Available by special order
- Color: Natural

| Item No.    | A     |      | Bulk Pack Qty | Item No.     | A     |      | Bulk Pack Qty |
|-------------|-------|------|---------------|--------------|-------|------|---------------|
|             | in    | mm   |               |              | in    | mm   |               |
| DLCBS7-3-01 | 0.188 | 4.8  | 1000          | DLCBS7-8-01  | 0.500 | 12.7 | 1000          |
| DLCBS7-4-01 | 0.250 | 6.4  | 1000          | DLCBS7-9-01  | 0.563 | 14.3 | 1000          |
| DLCBS7-5-01 | 0.312 | 7.9  | 1000          | DLCBS7-10-01 | 0.625 | 15.9 | 1000          |
| DLCBS7-6-01 | 0.375 | 9.5  | 1000          | DLCBS7-12-01 | 0.750 | 19.1 | 1000          |
| DLCBS7-7-01 | 0.412 | 11.1 | 1000          |              |       |      |               |

DLCBS2/27DLP Series  
Dual Locking PCB Support

Top Hole:  
Snap-lock: .187 (4.75)  
Panel Thickness:  
.031 - .078 (0.8 - 2.0)

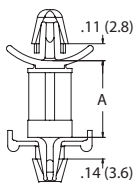
Bottom Hole:  
Snap-lock: .187 (4.75)  
Panel Thickness:  
.031 - .078 (0.8 - 2.0)

## Specifications:

- Material: Nylon 6/6
- Flame Class: See Table
- Color: Natural



| Item No.     |              | A     |      | Bulk Pack Qty |
|--------------|--------------|-------|------|---------------|
| UL94 V-2     | UL94 V-0     | in    | mm   |               |
| DLCBS2-3-01  | DLCBS2-3-19  | 0.188 | 4.8  | 1000          |
| DLCBS2-4-01  | DLCBS2-4-19  | 0.250 | 6.4  | 1000          |
| 27DLP00295   | —            | 0.295 | 10.7 | 1000          |
| DLCBS2-6-01  | DLCBS2-6-19  | 0.375 | 9.5  | 1000          |
| • 27DLP00437 | —            | 0.438 | 14.2 | 500           |
| DLCBS2-8-01  | DLCBS2-8-19  | 0.500 | 12.7 | 1000          |
| DLCBS2-9-01  | DLCBS2-9-19  | 0.563 | 14.3 | 1000          |
| DLCBS2-10-01 | DLCBS2-10-19 | 0.625 | 15.9 | 1000          |
| DLCBS2-12-01 | DLCBS2-12-19 | 0.750 | 19.1 | 1000          |
| DLCBS2-14-01 | DLCBS2-14-19 | 0.875 | 22.2 | 1000          |
| • 27DLP01000 | —            | 1.000 | 28.5 | 500           |
| • 27DLP01125 | —            | 1.125 | 31.6 | 1000          |
| • 27DLP01250 | —            | 1.250 | 34.8 | 1000          |
| • 27DLP01375 | —            | 1.375 | 37.9 | 1000          |
| • 27DLP01831 | —            | 1.831 | 46.5 | 1000          |

DLCBSRA3 Series  
Removable PCB Support

Top Hole:  
Snap-lock: .187 (4.8)  
Panel Thickness:  
.031 - .078 (0.8 - 2.0)

Bottom Hole:  
Snap-lock: .187 (4.8)  
Panel Thickness:  
.062 (1.57)

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- UL94 V-0 Available by special order
- Color: Natural

## Features:

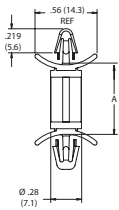
- Removable from the top side of the chassis

| Item No.       | A     |      | Bulk Pack Qty |
|----------------|-------|------|---------------|
|                | in    | mm   |               |
| DLCBSRA3-6-01  | 0.375 | 9.5  | 1000          |
| DLCBSRA3-8-01  | 0.500 | 12.7 | 1000          |
| DLCBSRA3-10-01 | 0.625 | 15.9 | 1000          |
| DLCBSRA3-12-01 | 0.750 | 19.1 | 1000          |
| DLCBSRA3-14-01 | 0.875 | 22.2 | 1000          |



# LOCKING CIRCUIT BOARD SUPPORTS

## DLCBS3/CBDLS2 Series Dual Locking PCB Support



Top Hole:  
Snap-Lock: .156 (4.0)  
Panel thickness:  
.031 - .078 (0.8 - 2.0)

Bottom Hole:  
Snap-Lock: .187 (4.75)  
Panel thickness:  
.031 - .078 (0.8 - 2.0)

Specifications:

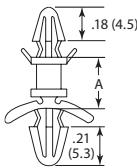
- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

| Item No.    | A           |            | Bulk Pack Qty |
|-------------|-------------|------------|---------------|
|             | in          | mm         |               |
| DLCBS3-3-01 | DLCBS3-3-19 | 0.188 4.8  | 1000          |
| DLCBS3-4-01 | DLCBS3-4-19 | 0.250 6.4  | 1000          |
| CBDLS215A*  | —           | 0.312 7.9  | 1000          |
| DLCBS3-6-01 | DLCBS3-6-19 | 0.375 9.5  | 1000          |
| DLCBS3-8-01 | DLCBS3-8-19 | 0.500 12.7 | 1000          |

| Item No.     | A            |            | Bulk Pack Qty |
|--------------|--------------|------------|---------------|
|              | in           | mm         |               |
| DLCBS3-10-01 | DLCBS3-10-19 | 0.625 15.9 | 1000          |
| DLCBS3-12-01 | DLCBS3-12-19 | 0.750 19.1 | 1000          |
| DLCBS3-14-01 | DLCBS3-14-19 | 0.875 22.2 | 1000          |
| CBDLS245A*   | —            | 1.000 25.4 | 1000          |
| CBDLS250A*   | —            | 1.125 28.6 | 1000          |

\* Style differs

## CBDLS3 Series Dual Locking PCB Support



Top Hole:  
Snap-lock: .156 (4.0)  
Panel Thickness:  
.062 (1.6)

Bottom Hole:  
Snap-lock: .187 (4.8)  
Panel Thickness:  
.031 - .078 (0.8 - 2.0)

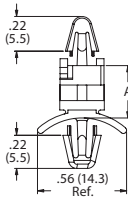
Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

| Item No.  | A     |      | Bulk Pack Qty |
|-----------|-------|------|---------------|
|           | in    | mm   |               |
| CBDLS305A | 0.157 | 4.0  | 1000          |
| CBDLS310A | 0.197 | 5.0  | 1000          |
| CBDLS315A | 0.250 | 6.4  | 1000          |
| CBDLS320A | 0.276 | 7.0  | 1000          |
| CBDLS325A | 0.362 | 9.2  | 1000          |
| CBDLS330A | 0.394 | 10.0 | 1000          |
| CBDLS335A | 0.492 | 12.5 | 1000          |
| CBDLS340A | 0.618 | 15.7 | 1000          |
| CBDLS345A | 0.748 | 19.0 | 1000          |

| Item No.  | A     |      | Bulk Pack Qty |
|-----------|-------|------|---------------|
|           | in    | mm   |               |
| CBDLS350A | 0.787 | 20.0 | 500           |
| CBDLS355A | 0.866 | 22.0 | 500           |
| CBDLS360A | 1.000 | 25.4 | 500           |
| CBDLS365A | 1.125 | 28.6 | 500           |
| CBDLS370A | 1.181 | 30.0 | 500           |
| CBDLS375A | 1.378 | 35.0 | 500           |
| CBDLS380A | 1.496 | 38.0 | 500           |
| CBDLS385A | 1.772 | 45.0 | 500           |

## DLCBS4 Series Dual Locking PCB Support



Top Hole:  
Snap-lock: .156 (4)  
Panel Thickness:  
.050 - .078 (1.3 - 2)

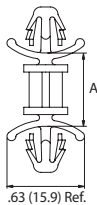
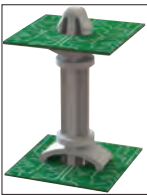
Bottom Hole:  
Snap-lock: .187 (4.75)  
Panel Thickness:  
.031 - .078 (0.8 - 2)

Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

| Item No.      | A     |      | Bulk Pack Qty |
|---------------|-------|------|---------------|
|               | in    | mm   |               |
| DLCBS4-3.5-01 | 0.217 | 5.5  | 1000          |
| DLCBS4-4-01   | 0.240 | 6.1  | 1000          |
| DLCBS4-5-01   | 0.358 | 9.1  | 1000          |
| DLCBS4-6-01   | 0.488 | 12.4 | 1000          |
| DLCBS4-8-01   | 0.740 | 18.8 | 1000          |
| DLCBS4-10-01  | 0.862 | 21.9 | 1000          |

## DLCBSHD Series Dual Locking PCB Support Heavy Duty



Top Hole:  
Snap-lock: .250 (6.3)  
Panel Thickness:  
.03 - .09 (0.8 - 2.2)

Bottom Hole:  
Snap-lock: .250 (6.3)  
Panel Thickness:  
.03 - .09 (0.8 - 2.2)

Specifications:

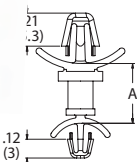
- Material: Nylon 6/6
- Flame Class: See table
- Color: Natural

Features:

- Larger design provides a strong, sturdy mounting method for heavily loaded PCBs

| Item No.       | A              |          | Bulk Pack Qty |
|----------------|----------------|----------|---------------|
|                | UL94 V-2       | UL94 V-0 |               |
| DLCBSHD-10M-01 | DLCBSHD-10M-19 | 10.0     | 1000          |
| DLCBSHD-20M-01 | DLCBSHD-20M-19 | 20.0     | 1000          |
| DLCBSHD-25M-01 | DLCBSHD-25M-19 | 25.0     | 1000          |
| DLCBSHD-30M-01 | DLCBSHD-30M-19 | 30.0     | 1000          |
| DLCBSHD-35M-01 | DLCBSHD-35M-19 | 35.0     | 1000          |

## DLCBS6 Series Dual Locking PCB Support



Top Hole:  
Snap-lock: .187 (4.75)  
Panel Thickness:  
.031 - .078 (0.8 - 2)

Bottom Hole:  
Snap-lock: .137 (3.5)  
Panel Thickness:  
.031 - .078 (0.8 - 2)

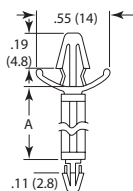
Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

| Item No.     | A     |      | Bulk Pack Qty |
|--------------|-------|------|---------------|
|              | in    | mm   |               |
| DLCBS6-3-01  | 0.188 | 4.8  | 1000          |
| DLCBS6-4-01  | 0.250 | 6.4  | 1000          |
| DLCBS6-5-01  | 0.313 | 7.9  | 1000          |
| DLCBS6-6-01  | 0.375 | 9.5  | 1000          |
| DLCBS6-7-01  | 0.438 | 11.1 | 1000          |
| DLCBS6-8-01  | 0.500 | 12.7 | 1000          |
| DLCBS6-9-01  | 0.563 | 14.3 | 1000          |
| DLCBS6-10-01 | 0.625 | 15.9 | 1000          |



## LOCKING CIRCUIT BOARD SUPPORTS

**CBLS1 Series**  
Dual Locking PCB Support

Top Hole:  
Snap-lock: .187 (4.8)  
Panel Thickness:  
.031-.086 (0.8-2.2)

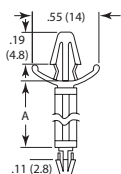
Bottom Hole:  
Snap-lock: .137 (3.5)  
Panel Thickness:  
.047-.067 (1.2-1.7)

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No. | A     |      | Bulk Pack Qty |
|----------|-------|------|---------------|
|          | in    | mm   |               |
| CBLS105A | 0.125 | 3.2  | 1000          |
| CBLS110A | 0.197 | 5.0  | 1000          |
| CBLS115A | 0.248 | 6.3  | 1000          |
| CBLS120A | 0.315 | 8.0  | 1000          |
| CBLS125A | 0.394 | 10.0 | 1000          |

| Item No. | A     |      | Bulk Pack Qty |
|----------|-------|------|---------------|
|          | in    | mm   |               |
| CBLS130A | 0.472 | 12.0 | 1000          |
| CBLS135A | 0.551 | 14.0 | 1000          |
| CBLS140A | 0.630 | 16.0 | 1000          |
| CBLS145A | 0.709 | 18.0 | 1000          |
| CBLS150A | 0.984 | 25.0 | 1000          |

**CBLS2 Series**  
Dual Locking PCB Support

Top Hole:  
Snap-lock: .187 (4.8)  
Panel Thickness:  
.031-.086 (0.8-2.2)

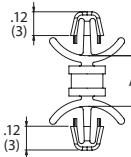
Bottom Hole:  
Snap-lock: .118 (3.0)  
Panel Thickness:  
.047-.067 (1.2-1.7)

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No. | A     |      | Bulk Pack Qty |
|----------|-------|------|---------------|
|          | in    | mm   |               |
| CBLS205A | 0.125 | 3.2  | 1000          |
| CBLS210A | 0.187 | 4.8  | 1000          |
| CBLS215A | 0.248 | 6.3  | 1000          |
| CBLS220A | 0.315 | 8.0  | 1000          |
| CBLS225A | 0.394 | 10.0 | 1000          |

| Item No. | A     |      | Bulk Pack Qty |
|----------|-------|------|---------------|
|          | in    | mm   |               |
| CBLS230A | 0.472 | 12.0 | 1000          |
| CBLS235A | 0.551 | 14.0 | 1000          |
| CBLS240A | 0.630 | 16.0 | 1000          |
| CBLS245A | 0.709 | 18.0 | 1000          |
| CBLS250A | 0.984 | 25.0 | 1000          |

**DLCBS5 Series**  
Dual Locking PCB Support

Top Hole:  
Snap-lock: .137 (3.5)  
Panel Thickness:  
.031-.078 (0.8-2)

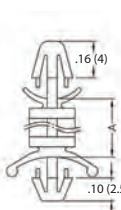
Bottom Hole:  
Snap-lock: .137 (3.5)  
Panel Thickness:  
.031-.078 (0.8-2)

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- UL94 V-0 Available by special order
- Color: Natural

| Item No.    | A     |     | Bulk Pack Qty |
|-------------|-------|-----|---------------|
|             | in    | mm  |               |
| DLCBS5-3-01 | 0.188 | 4.8 | 1000          |
| DLCBS5-4-01 | 0.250 | 6.4 | 1000          |
| DLCBS5-5-01 | 0.313 | 7.9 | 1000          |
| DLCBS5-6-01 | 0.375 | 9.5 | 1000          |

| Item No.     | A     |      | Bulk Pack Qty |
|--------------|-------|------|---------------|
|              | in    | mm   |               |
| DLCBS5-7-01  | 0.438 | 11.1 | 1000          |
| DLCBS5-8-01  | 0.500 | 12.7 | 1000          |
| DLCBS5-9-01  | 0.563 | 14.3 | 1000          |
| DLCBS5-10-01 | 0.625 | 15.9 | 1000          |

**CBDL56 Series**  
Dual Locking PCB Support

Top Hole:  
Snap-lock: .137 (3.5)  
Panel Thickness:  
.062 (1.6)

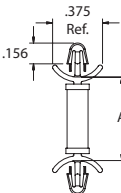
Bottom Hole:  
Snap-lock: .137 (3.5)  
Panel Thickness:  
.031-.078 (0.8-2.0)

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.  | A     |     | Bulk Pack Qty |
|-----------|-------|-----|---------------|
|           | in    | mm  |               |
| CBDL5605A | 0.125 | 3.2 | 2000          |
| CBDL5610A | 0.157 | 4.0 | 2000          |
| CBDL5615A | 0.188 | 4.8 | 1000          |
| CBDL5620A | 0.250 | 6.4 | 1000          |
| CBDL5625A | 0.276 | 7.0 | 1000          |
| CBDL5630A | 0.315 | 8.0 | 1000          |
| CBDL5635A | 0.378 | 9.6 | 1000          |

| Item No.  | A     |      | Bulk Pack Qty |
|-----------|-------|------|---------------|
|           | in    | mm   |               |
| CBDL5640A | 0.441 | 11.2 | 1000          |
| CBDL5645A | 0.500 | 12.7 | 1000          |
| CBDL5650A | 0.551 | 14.0 | 1000          |
| CBDL5655A | 0.630 | 16.0 | 1000          |
| CBDL5660A | 0.709 | 18.0 | 1000          |
| CBDL5665A | 0.750 | 19.1 | 1000          |

**DLCBSM Series**  
Dual Locking PCB Support

Top Hole:  
Snap-lock: .125  
Panel Thickness:  
.031-.078 (0.8-2.0)

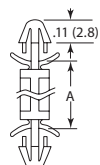
Bottom Hole:  
Snap-lock: .125  
Panel Thickness:  
.031-.078 (0.8-2.0)

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- UL94 V-0 Available by special order
- Color: Natural

| Item No.    | A     |     | Bulk Pack Qty |
|-------------|-------|-----|---------------|
|             | in    | mm  |               |
| DLCBSM-3-01 | 0.188 | 4.8 | 1000          |
| DLCBSM-4-01 | 0.250 | 6.4 | 1000          |
| DLCBSM-5-01 | 0.313 | 7.9 | 1000          |
| DLCBSM-6-01 | 0.375 | 9.5 | 1000          |

| Item No.     | A     |      | Bulk Pack Qty |
|--------------|-------|------|---------------|
|              | in    | mm   |               |
| DLCBSM-7-01  | 0.438 | 11.1 | 1000          |
| DLCBSM-8-01  | 0.500 | 12.7 | 1000          |
| DLCBSM-9-01  | 0.563 | 14.3 | 1000          |
| DLCBSM-10-01 | 0.625 | 15.9 | 1000          |

**CBDL55 Series**  
Dual Locking PCB Support

Top Hole:  
Snap-lock: .118 (3.0)  
Panel Thickness:  
.047-.078 (1.2-2.0)

Bottom Hole:  
Snap-lock: .118 (3.0)  
Panel Thickness:  
.047-.078 (1.2-2.0)

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.  | A     |      | Bulk Pack Qty |
|-----------|-------|------|---------------|
|           | in    | mm   |               |
| CBDL5505A | 0.125 | 3.2  | 1000          |
| CBDL5510A | 0.197 | 5.0  | 1000          |
| CBDL5515A | 0.250 | 6.4  | 1000          |
| CBDL5520A | 0.276 | 7.0  | 1000          |
| CBDL5525A | 0.315 | 8.0  | 1000          |
| CBDL5530A | 0.375 | 9.5  | 1000          |
| CBDL5535A | 0.441 | 11.2 | 1000          |

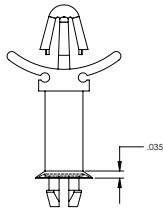
| Item No.  | A     |      | Bulk Pack Qty |
|-----------|-------|------|---------------|
|           | in    | mm   |               |
| CBDL5540A | 0.472 | 12.0 | 1000          |
| CBDL5545A | 0.591 | 15.0 | 1000          |
| CBDL5550A | 0.630 | 16.0 | 1000          |
| CBDL5555A | 0.669 | 17.0 | 1000          |
| CBDL5560A | 0.787 | 20.0 | 1000          |
| CBDL5565A | 0.866 | 22.0 | 1000          |
| CBDL5570A | 1.000 | 25.4 | 1000          |



# LOCKING CIRCUIT BOARD SUPPORTS



## 27LSP Series Locking Support Post



Top Hole:  
Snap-lock: .187 (4.8)  
Panel Thickness:  
.030-.078 (0.8 - 2.0)

Bottom Hole:  
Snap-lock: .156 (4.0)  
Panel Thickness:  
.062 (1.6)

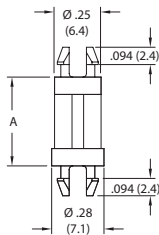
**Specifications:**

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

| Item No.   | Spacer Length |      | Bulk Pack Qty | Item No.   | Spacer Length |      | Bulk Pack Qty |
|------------|---------------|------|---------------|------------|---------------|------|---------------|
|            | in            | mm   |               |            | in            | mm   |               |
| 27LSP00187 | 0.188         | 4.8  | 1000          | 27LSP00750 | 0.750         | 19.1 | 1000          |
| 27LSP00250 | 0.250         | 6.4  | 1000          | 27LSP00875 | 0.875         | 22.2 | 1000          |
| 27LSP00375 | 0.375         | 9.5  | 1000          | 27LSP01000 | 1.000         | 25.4 | 1000          |
| 27LSP00437 | 0.438         | 11.1 | 1000          | 27LSP01125 | 1.125         | 28.6 | 1000          |
| 27LSP00500 | 0.500         | 12.7 | 1000          | 27LSP01250 | 1.250         | 31.8 | 1000          |
| 27LSP00625 | 0.625         | 15.9 | 1000          | 27LSP01375 | 1.375         | 34.9 | 1000          |



## SP2 Series Locking Support Post



Top Hole:  
Snap-LOCK: .187 (4.8)  
Panel Thickness:  
.062 (1.6)

Bottom Hole:  
Snap-LOCK: .187 (4.8)  
Panel Thickness:  
.062 (1.6)

**Specifications:**

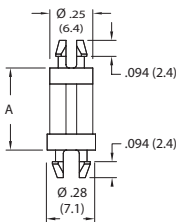
- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

**Features:**

- Larger base on one end differentiates one end from another

| Item No.  | A     |      | Bulk Pack Qty |
|-----------|-------|------|---------------|
|           | in    | mm   |               |
| SP2-3-01  | 0.188 | 4.8  | 1000          |
| SP2-4-01  | 0.250 | 6.4  | 1000          |
| SP2-6-01  | 0.375 | 9.5  | 1000          |
| SP2-8-01  | 0.500 | 12.7 | 1000          |
| SP2-10-01 | 0.625 | 15.9 | 1000          |
| SP2-12-01 | 0.750 | 19.1 | 1000          |
| SP2-14-01 | 0.875 | 22.2 | 1000          |
| SP2-16-01 | 1.000 | 25.4 | 1000          |

## SP3 Series Locking Support Post



Top Hole:  
Snap-LOCK: .156 (4.0)  
Panel Thickness:  
.062 (1.6)

Bottom Hole:  
Snap-LOCK: .187 (4.75)  
Panel Thickness:  
.062 (1.6)

**Specifications:**

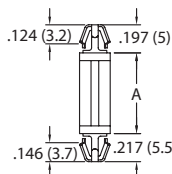
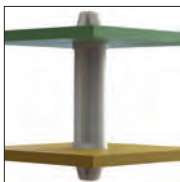
- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

**Features:**

- Larger base on one end differentiates one end from another

| Item No. | A     |      | Bulk Pack Qty | Item No.  | A     |      | Bulk Pack Qty |
|----------|-------|------|---------------|-----------|-------|------|---------------|
|          | in    | mm   |               |           | in    | mm   |               |
| SP3-3-01 | 0.188 | 4.8  | 1000          | SP3-10-01 | 0.625 | 15.9 | 1000          |
| SP3-4-01 | 0.250 | 6.4  | 1000          | SP3-12-01 | 0.750 | 19.1 | 1000          |
| SP3-6-01 | 0.375 | 9.5  | 1000          | SP3-14-01 | 0.875 | 22.2 | 1000          |
| SP3-8-01 | 0.500 | 12.7 | 1000          | SP3-16-01 | 1.000 | 25.4 | 1000          |

## DLSP-3 Series Locking Support Post



Top Hole:  
Snap-lock: .156 (4)  
Panel Thickness:  
.062 (1.6)

Bottom Hole:  
Snap-lock: .187 (4.8)  
Panel Thickness:  
.062 (1.6)

**Specifications:**

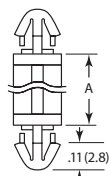
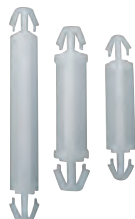
- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

**Features:**

- Recess shoulder fits into PCB to provide greater stability

| Item No.      | A     |      | Bulk Pack Qty |
|---------------|-------|------|---------------|
|               | in    | mm   |               |
| DLSP-3-3M-01  | 0.118 | 3.0  | 1000          |
| DLSP-3-4M-01  | 0.157 | 4.0  | 1000          |
| DLSP-3-6M-01  | 0.236 | 6.0  | 1000          |
| DLSP-3-8M-01  | 0.315 | 8.0  | 1000          |
| DLSP-3-10M-01 | 0.394 | 10.0 | 1000          |
| DLSP-3-14M-01 | 0.551 | 14.0 | 1000          |

## CBLSP2 Series Locking Support Posts



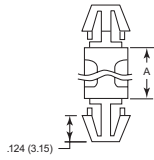
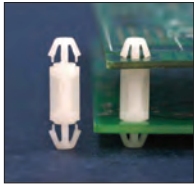
Top Hole:  
Snap-lock: .156 (4.0)  
Panel Thickness:  
.062 (1.6)

Bottom Hole:  
Snap-lock: .187 (4.8)  
Panel Thickness:  
.062 (1.6)

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.  | A     |      | Bulk Pack Qty | Item No.  | A     |      | Bulk Pack Qty |
|-----------|-------|------|---------------|-----------|-------|------|---------------|
|           | in    | mm   |               |           | in    | mm   |               |
| CBLSP205A | 0.118 | 3.0  | 1000          | CBLSP230A | 0.472 | 12.0 | 1000          |
| CBLSP210A | 0.157 | 4.0  | 1000          | CBLSP235A | 0.551 | 14.0 | 1000          |
| CBLSP215A | 0.236 | 6.0  | 1000          | CBLSP240A | 0.630 | 16.0 | 1000          |
| CBLSP220A | 0.315 | 8.0  | 1000          | CBLSP245A | 0.709 | 18.0 | 1000          |
| CBLSP225A | 0.394 | 10.0 | 1000          |           |       |      |               |

**DLSP-1/CBLSP0/CBLSP1 Series  
Locking Support Post**

Top Hole:  
Snap-Lock: .157 (4.0)  
Panel Thickness:  
.047-.067 (1.2-1.7)

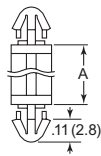
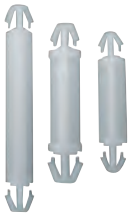
Bottom Hole:  
Snap-Lock: .157 (4.0)  
Panel Thickness:  
.047-.067 (1.2-1.7)

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.      | A     |      | Bulk Pack Qty |
|---------------|-------|------|---------------|
|               | in    | mm   |               |
| DLSP-1-3M-01  | 0.118 | 3.0  | 1000          |
| CBLSP010A     | 0.138 | 3.5  | 2000          |
| DLSP-1-4M-01  | 0.157 | 4.0  | 1000          |
| CBLSP020A     | 0.197 | 5.0  | 2000          |
| DLSP-1-6M-01  | 0.236 | 6.0  | 1000          |
| CBLSP030A     | 0.250 | 6.4  | 1000          |
| DLSP-1-8M-01  | 0.315 | 8.0  | 1000          |
| DLSP-1-10M-01 | 0.394 | 10.0 | 1000          |
| CBLSP045A     | 0.413 | 10.5 | 1000          |
| CBLSP050A     | 0.453 | 11.5 | 1000          |
| DLSP-1-12M-01 | 0.472 | 12.0 | 1000          |
| CBLSP060A     | 0.500 | 12.7 | 1000          |
| DLSP-1-14M-01 | 0.551 | 14.0 | 1000          |

| Item No.      | A     |      | Bulk Pack Qty |
|---------------|-------|------|---------------|
|               | in    | mm   |               |
| DLSP-1-16M-01 | 0.625 | 15.9 | 1000          |
| DLSP-1-18M-01 | 0.709 | 18.0 | 1000          |
| CBLSP080A     | 0.748 | 19.0 | 1000          |
| CBLSP085A     | 0.787 | 20.0 | 1000          |
| CBLSP095A     | 1.063 | 27.0 | 1000          |
| CBLSP105A     | 1.339 | 34.0 | 1000          |
| CBLSP110A     | 2.717 | 69.0 | 500           |
| CBLSP115A     | 2.803 | 71.2 | 500           |
| CBLSP120A     | 2.835 | 72.0 | 500           |
| CBLSP125A     | 2.921 | 74.2 | 500           |
| CBLSP130A     | 3.150 | 80.0 | 500           |
| DLSP-1-25M-01 | 0.984 | 25.0 | 1000          |
| DLSP-1-30M-01 | 1.181 | 30.0 | 1000          |

**CBLSP3 Series  
Locking Support Post**

Top Hole:  
Snap-Lock: .137 (3.5)  
Panel Thickness:  
.047-.067 (1.2-1.7)

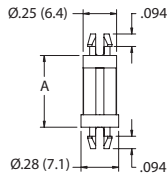
Bottom Hole:  
Snap-Lock: .137 (3.5)  
Panel Thickness:  
.047-.067 (1.2-1.7)

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.  | A     |     | Bulk Pack Qty |
|-----------|-------|-----|---------------|
|           | in    | mm  |               |
| CBLSP305A | 0.098 | 2.5 | 2000          |
| CBLSP310A | 0.118 | 3.0 | 2000          |
| CBLSP315A | 0.138 | 3.5 | 2000          |
| CBLSP320A | 0.157 | 4.0 | 2000          |
| CBLSP325A | 0.177 | 4.5 | 2000          |
| CBLSP330A | 0.197 | 5.0 | 2000          |
| CBLSP335A | 0.217 | 5.5 | 1000          |
| CBLSP340A | 0.236 | 6.0 | 1000          |

| Item No.  | A     |      | Bulk Pack Qty |
|-----------|-------|------|---------------|
|           | in    | mm   |               |
| CBLSP345A | 0.250 | 6.4  | 1000          |
| CBLSP350A | 0.276 | 7.0  | 1000          |
| CBLSP355A | 0.315 | 8.0  | 1000          |
| CBLSP360A | 0.354 | 9.0  | 1000          |
| CBLSP365A | 0.394 | 10.0 | 1000          |
| CBLSP370A | 0.433 | 11.0 | 1000          |
| CBLSP375A | 0.472 | 12.0 | 1000          |
| CBLSP380A | 0.591 | 15.0 | 1000          |

**SP1 Series  
Locking Support Post**

Top Hole:  
Snap-Lock: .156 (4.0)  
Panel Thickness:  
.062 (1.6)

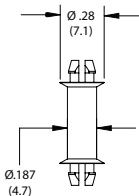
Bottom Hole:  
Snap-Lock: .156 (4.0)  
Panel Thickness:  
.062 (1.6)

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural
- UL94 V-0 Available by special order

| Item No. | A     |      | Bulk Pack Qty |
|----------|-------|------|---------------|
|          | in    | mm   |               |
| SP1-3-01 | 0.188 | 4.8  | 1000          |
| SP1-4-01 | 0.250 | 6.4  | 1000          |
| SP1-6-01 | 0.375 | 9.5  | 1000          |
| SP1-8-01 | 0.500 | 12.7 | 1000          |

| Item No.  | A     |      | Bulk Pack Qty |
|-----------|-------|------|---------------|
|           | in    | mm   |               |
| SP1-10-01 | 0.625 | 15.9 | 1000          |
| SP1-12-01 | 0.750 | 19.1 | 1000          |
| SP1-14-01 | 0.875 | 22.2 | 1000          |
| SP1-16-01 | 1.000 | 25.4 | 1000          |

**27DSP Series  
Locking Cupped Support Post**

Top Hole:  
Snap-Lock: .156 (4.0)  
Panel Thickness:  
.062 (1.6)

Bottom Hole:  
Snap-Lock: .156 (4.0)  
Panel Thickness:  
.062 (1.6)

**Specifications:**

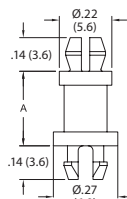
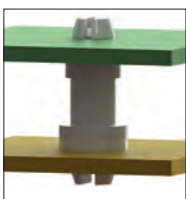
- Material: UL94 V-2 Nylon 6/6
- Color: Natural
- UL94 V-0 Available by special order

**Features:**

- Cupped base adds stability to mounting

| Item No.   | A     |      | Bulk Pack Qty |
|------------|-------|------|---------------|
|            | in    | mm   |               |
| 27DSP00125 | 0.125 | 3.2  | 1000          |
| 27DSP00229 | 0.230 | 5.8  | 1000          |
| 27DSP00250 | 0.250 | 6.4  | 1000          |
| 27DSP00260 | 0.260 | 6.6  | 1000          |
| 27DSP00276 | 0.276 | 7.0  | 1000          |
| 27DSP00312 | 0.312 | 7.9  | 1000          |
| 27DSP00375 | 0.375 | 9.5  | 1000          |
| 27DSP00437 | 0.438 | 11.1 | 1000          |

| Item No.   | A     |      | Bulk Pack Qty |
|------------|-------|------|---------------|
|            | in    | mm   |               |
| 27DSP00472 | 0.472 | 12.0 | 1000          |
| 27DSP00500 | 0.500 | 12.7 | 1000          |
| 27DSP00625 | 0.625 | 15.9 | 1000          |
| 27DSP00750 | 0.750 | 19.1 | 1000          |
| 27DSP00788 | 0.788 | 20.0 | 1000          |
| 27DSP00875 | 0.875 | 22.2 | 1000          |
| 27DSP01000 | 1.000 | 25.4 | 500           |
| 27DSP01250 | 1.250 | 31.8 | 1000          |

**MSPS Series  
Removable Mini Support Post**

Top Hole:  
Snap-fit: .156 (4)  
Panel Thickness:  
.062 (1.6)

Bottom Hole:  
Snap-lock: .156 (4)  
Panel Thickness:  
.062 (1.6)

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural
- UL94 V-0 Available by special order

**Features:**

- Board mount head is releasable
- Shoulder on bottom for locating to facilitate automated assembly

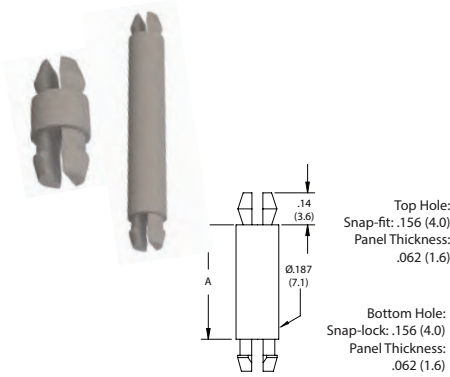
| Item No.  | A     |      | Bulk Pack Qty |
|-----------|-------|------|---------------|
|           | in    | mm   |               |
| MSPS-3-01 | 0.188 | 4.8  | 1000          |
| MSPS-4-01 | 0.250 | 6.4  | 1000          |
| MSPS-5-01 | 0.313 | 7.9  | 1000          |
| MSPS-6-01 | 0.375 | 9.5  | 1000          |
| MSPS-7-01 | 0.438 | 11.1 | 1000          |

| Item No.   | A     |      | Bulk Pack Qty |
|------------|-------|------|---------------|
|            | in    | mm   |               |
| MSPS-8-01  | 0.500 | 12.7 | 1000          |
| MSPS-10-01 | 0.625 | 15.9 | 1000          |
| MSPS-11-01 | 0.688 | 17.5 | 1000          |
| MSPS-12-01 | 0.750 | 19.1 | 1000          |
| MSPS-14-01 | 0.875 | 22.2 | 1000          |

# CIRCUIT BOARD SUPPORTS



## 27MP/CBMSPP2 Series Removable Mini Support Post



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

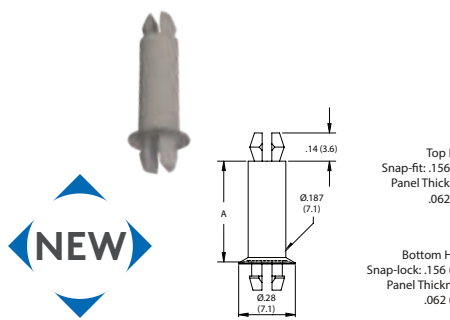
**Features:**

- Board mount head is releasable

| Item No.   | A     |      | Bulk Pack Qty |
|------------|-------|------|---------------|
|            | in    | mm   |               |
| 27MP00125  | 0.125 | 3.2  | 1000          |
| CBMSPP210A | 0.156 | 4.0  | 1000          |
| CBMSPP215A | 0.177 | 4.5  | 1000          |
| 27MP00197  | 0.197 | 5.0  | 1000          |
| 27MP00250  | 0.250 | 6.4  | 1000          |
| CBMSPP230A | 0.276 | 7.0  | 1000          |
| 27MP00312  | 0.312 | 7.9  | 1000          |
| 27MP00375  | 0.375 | 9.5  | 1000          |
| CBMSPP245A | 0.413 | 10.5 | 1000          |
| 27MP00437  | 0.438 | 11.1 | 1000          |

| Item No.   | A     |      | Bulk Pack Qty |
|------------|-------|------|---------------|
|            | in    | mm   |               |
| 27MP00437S | 0.437 | 11.1 | 1000          |
| 27MP00500  | 0.500 | 12.7 | 1000          |
| CBMSPP255A | .551  | 14.0 | 1000          |
| 27MP00625  | 0.625 | 15.9 | 1000          |
| 27MP00750  | 0.750 | 19.1 | 1000          |
| 27MP00875  | 0.875 | 22.2 | 1000          |
| 27MP01000  | 1.000 | 25.4 | 1000          |
| 27MP01950  | 1.950 | 49.5 | 1000          |

## 27MSP Series Removable Cupped Support Post



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

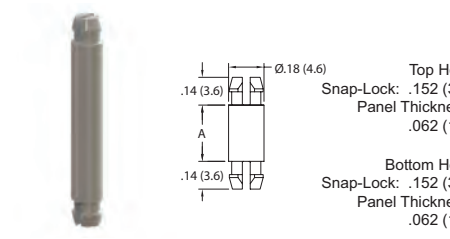
**Features:**

- Board mount head is releasable
- Cupped base adds stability to mounting

| Item No.   | A     |      | Bulk Pack Qty |
|------------|-------|------|---------------|
|            | in    | mm   |               |
| 27MSP00125 | 0.125 | 3.2  | 1000          |
| 27MSP00156 | 0.156 | 4.0  | 1000          |
| 27MSP00250 | 0.250 | 6.4  | 1000          |
| 27MSP00276 | 0.276 | 7.0  | 1000          |
| 27MSP00312 | 0.312 | 7.9  | 1000          |
| 27MSP00375 | 0.375 | 9.5  | 1000          |
| 27MSP00437 | 0.438 | 11.1 | 1000          |
| 27MSP00472 | 0.472 | 12.0 | 1000          |

| Item No.   | A     |      | Bulk Pack Qty |
|------------|-------|------|---------------|
|            | in    | mm   |               |
| 27MSP00500 | 0.500 | 12.7 | 1000          |
| 27MSP00625 | 0.625 | 15.9 | 1000          |
| 27MSP00700 | 0.690 | 17.5 | 1000          |
| 27MSP00750 | 0.750 | 19.1 | 1000          |
| 27MSP00875 | 0.875 | 22.2 | 1000          |
| 27MSP01000 | 1.000 | 25.4 | 1000          |
| 27MSP01800 | 1.800 | 45.7 | 1000          |

## DLMSPP Series Locking Mini Support Post



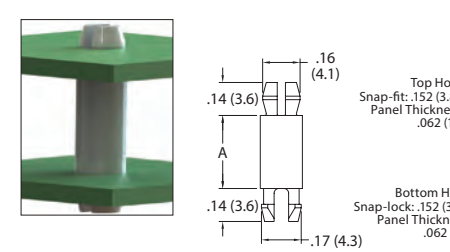
**Specifications:**

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

| Item No.    | A     |      | Bulk Pack Qty |
|-------------|-------|------|---------------|
|             | in    | mm   |               |
| DLMSPP-2-01 | 0.125 | 3.2  | 1000          |
| DLMSPP-3-01 | 0.188 | 4.8  | 1000          |
| DLMSPP-4-01 | 0.250 | 6.4  | 1000          |
| DLMSPP-5-01 | 0.313 | 7.9  | 1000          |
| DLMSPP-6-01 | 0.375 | 9.5  | 1000          |
| DLMSPP-7-01 | 0.438 | 11.1 | 1000          |
| DLMSPP-8-01 | 0.500 | 12.7 | 1000          |
| DLMSPP-9-01 | 0.563 | 14.3 | 1000          |

| Item No.     | A     |      | Bulk Pack Qty |
|--------------|-------|------|---------------|
|              | in    | mm   |               |
| DLMSPP-10-01 | 0.625 | 15.9 | 1000          |
| DLMSPP-12-01 | 0.750 | 19.1 | 1000          |
| DLMSPP-14-01 | 0.875 | 22.2 | 1000          |
| DLMSPP-16-01 | 1.000 | 25.4 | 1000          |
| DLMSPP-18-01 | 1.125 | 28.6 | 1000          |
| DLMSPP-20-01 | 1.250 | 31.8 | 1000          |
| DLMSPP-22-01 | 1.375 | 34.9 | 1000          |
| DLMSPP-24-01 | 1.500 | 38.1 | 1000          |

## MSP Series Removable Mini Support Post



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

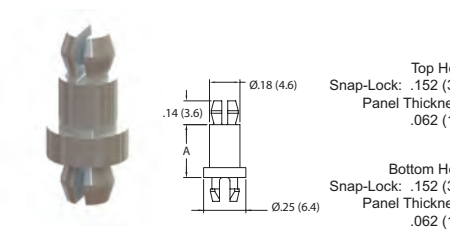
**Features:**

- Board mount head is releasable

| Item No.  | A     |      | Bulk Pack Qty |
|-----------|-------|------|---------------|
|           | in    | mm   |               |
| MSP-2-01  | 0.125 | 3.2  | 1000          |
| MSP-3-01  | 0.188 | 4.8  | 1000          |
| MSP-4-01  | 0.250 | 6.4  | 1000          |
| MSP-5-01  | 0.313 | 7.9  | 1000          |
| MSP-6-01  | 0.375 | 9.5  | 1000          |
| MSP-7-01  | 0.438 | 11.1 | 1000          |
| MSP-8-01  | 0.500 | 12.7 | 1000          |
| MSP-9-01  | 0.563 | 14.3 | 1000          |
| MSP-10-01 | 0.625 | 15.9 | 1000          |

| Item No.  | A     |      | Bulk Pack Qty |
|-----------|-------|------|---------------|
|           | in    | mm   |               |
| MSP-11-01 | 0.688 | 17.5 | 1000          |
| MSP-12-01 | 0.750 | 19.1 | 1000          |
| MSP-13-01 | 0.811 | 20.6 | 1000          |
| MSP-14-01 | 0.875 | 22.2 | 1000          |
| MSP-16-01 | 1.000 | 25.4 | 1000          |
| MSP-18-01 | 1.125 | 28.6 | 1000          |
| MSP-20-01 | 1.250 | 31.8 | 1000          |
| MSP-22-01 | 1.375 | 34.9 | 1000          |
| MSP-24-01 | 1.500 | 38.1 | 1000          |

## MSPE Series Removable Mini Support Post



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 available by special order
- Color: Natural

**Features:**

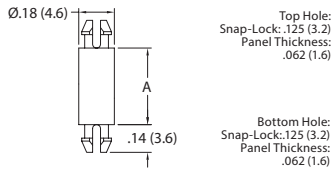
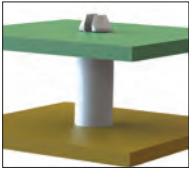
- Board mount head is releasable
- Larger base on one end differentiates one end from another

| Item No.  | A     |      | Bulk Pack Qty |
|-----------|-------|------|---------------|
|           | in    | mm   |               |
| MSPE-2-01 | 0.125 | 3.2  | 1000          |
| MSPE-3-01 | 0.188 | 4.8  | 1000          |
| MSPE-4-01 | 0.250 | 6.4  | 1000          |
| MSPE-5-01 | 0.313 | 7.9  | 1000          |
| MSPE-6-01 | 0.375 | 9.5  | 1000          |
| MSPE-7-01 | 0.438 | 11.1 | 1000          |
| MSPE-8-01 | 0.500 | 12.7 | 1000          |

| Item No.   | A     |      | Bulk Pack Qty |
|------------|-------|------|---------------|
|            | in    | mm   |               |
| MSPE-10-01 | 0.625 | 15.9 | 1000          |
| MSPE-11-01 | 0.688 | 17.5 | 1000          |
| MSPE-12-01 | 0.750 | 19.1 | 1000          |
| MSPE-14-01 | 0.875 | 22.2 | 1000          |
| MSPE-16-01 | 1.000 | 25.4 | 1000          |
| MSPE-20-01 | 1.250 | 31.8 | 1000          |
| MSPE-22-01 | 1.375 | 34.9 | 1000          |



### DLMSPM Series Locking Mini Support Post



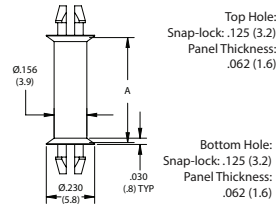
## Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

| Item No.     | A     |      | Bulk Pack Qty |
|--------------|-------|------|---------------|
|              | in    | mm   |               |
| DLMSPM-2-01  | 0.125 | 3.2  | 1000          |
| DLMSPM-3-01  | 0.188 | 4.8  | 1000          |
| DLMSPM-4-01  | 0.250 | 6.4  | 1000          |
| DLMSPM-5-01  | 0.313 | 7.9  | 1000          |
| DLMSPM-6-01  | 0.375 | 9.5  | 1000          |
| DLMSPM-7-01  | 0.438 | 11.1 | 1000          |
| DLMSPM-8-01  | 0.500 | 12.7 | 1000          |
| DLMSPM-9-01  | 0.563 | 14.3 | 1000          |
| DLMSPM-10-01 | 0.625 | 15.9 | 1000          |

| Item No.     | A     |      | Bulk Pack Qty |
|--------------|-------|------|---------------|
|              | in    | mm   |               |
| DLMSPM-12-01 | 0.750 | 19.1 | 1000          |
| DLMSPM-13-01 | 0.813 | 20.6 | 1000          |
| DLMSPM-14-01 | 0.875 | 22.2 | 1000          |
| DLMSPM-16-01 | 1.000 | 25.4 | 1000          |
| DLMSPM-18-01 | 1.125 | 28.6 | 1000          |
| DLMSPM-20-01 | 1.250 | 31.8 | 1000          |
| DLMSPM-22-01 | 1.375 | 34.9 | 1000          |
| DLMSPM-24-01 | 1.500 | 38.1 | 1000          |

### 27DMSP Series Locking Cupped Mini Support Post



## Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

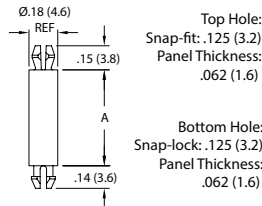
## Features:

- Cupped base adds stability to mounting

| Item No.    | A     |      | Bulk Pack Qty |
|-------------|-------|------|---------------|
|             | in    | mm   |               |
| 27DMSP00125 | 0.125 | 3.2  | 1000          |
| 27DMSP00250 | 0.250 | 6.4  | 1000          |
| 27DMSP00312 | 0.312 | 7.9  | 1000          |
| 27DMSP00375 | 0.375 | 9.5  | 1000          |
| 27DMSP00437 | 0.438 | 11.1 | 1000          |
| 27DMSP00500 | 0.500 | 12.7 | 1000          |
| 27DMSP00625 | 0.625 | 15.9 | 1000          |

| Item No.    | A     |      | Bulk Pack Qty |
|-------------|-------|------|---------------|
|             | in    | mm   |               |
| 27DMSP00720 | 0.720 | 18.3 | 1000          |
| 27DMSP00750 | 0.750 | 19.1 | 1000          |
| 27DMSP00820 | 0.820 | 20.8 | 1000          |
| 27DMSP00875 | 0.875 | 22.2 | 1000          |
| 27DMSP00950 | 0.950 | 24.1 | 1000          |
| 27DMSP01000 | 1.000 | 25.4 | 500           |

### MSPM/CBMSP0 Series Removable Mini Support Post



## Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

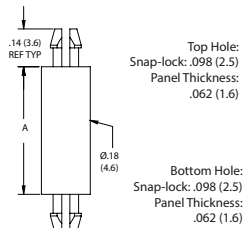
## Features:

- Board mount head is releasable

| Item No.   | A     |      | Bulk Pack Qty |
|------------|-------|------|---------------|
|            | in    | mm   |               |
| MSPM-2-01  | 0.125 | 3.2  | 1000          |
| MSPM-3-01  | 0.188 | 4.8  | 1000          |
| MSPM-4-01  | 0.250 | 6.4  | 1000          |
| MSPM-5-01  | 0.312 | 7.9  | 1000          |
| MSPM-6-01  | 0.375 | 9.5  | 1000          |
| MSPM-7-01  | 0.438 | 11.1 | 1000          |
| MSPM-8-01  | 0.500 | 12.7 | 1000          |
| MSPM-9-01  | 0.562 | 14.3 | 1000          |
| MSPM-10-01 | 0.625 | 15.9 | 1000          |
| CBMSP055A  | 0.687 | 17.5 | 1000          |

| Item No.   | A     |      | Bulk Pack Qty |
|------------|-------|------|---------------|
|            | in    | mm   |               |
| MSPM-12-01 | 0.750 | 19.1 | 1000          |
| MSPM-13-01 | 0.811 | 20.6 | 1000          |
| CBMSP070A  | 0.827 | 21.0 | 1000          |
| MSPM-14-01 | 0.875 | 22.2 | 1000          |
| MSPM-16-01 | 1.000 | 25.4 | 1000          |
| MSPM-18-01 | 1.122 | 28.5 | 1000          |
| MSPM-20-01 | 1.250 | 31.7 | 1000          |
| MSPM-22-01 | 1.375 | 34.9 | 1000          |
| MSPM-24-01 | 1.500 | 38.1 | 1000          |

### 27MMP Series Locking Mini Support Post



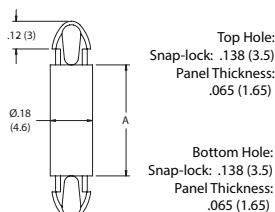
## Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

| Item No.  | A     |     | Bulk Pack Qty |
|-----------|-------|-----|---------------|
|           | in    | mm  |               |
| 27MMP002  | 0.078 | 2.0 | 1000          |
| 27MMP003  | 0.118 | 3.0 | 1000          |
| 27MMP003A | 0.138 | 3.5 | 1000          |
| 27MMP004  | 0.156 | 4.0 | 1000          |
| 27MMP005  | 0.197 | 5.0 | 1000          |
| 27MMP006  | 0.236 | 6.0 | 1000          |
| 27MMP008  | 0.314 | 8.0 | 1000          |

| Item No. | A     |      | Bulk Pack Qty |
|----------|-------|------|---------------|
|          | in    | mm   |               |
| 27MMP010 | 0.394 | 10.0 | 1000          |
| 27MMP012 | 0.472 | 12.0 | 1000          |
| 27MMP014 | 0.551 | 14.0 | 1000          |
| 27MMP016 | 0.630 | 16.0 | 1000          |
| 27MMP018 | 0.709 | 18.0 | 1000          |
| 27MMP020 | 0.787 | 20.0 | 1000          |
| 27MMP022 | 0.866 | 22.0 | 1000          |

### MDLSP2 Series Locking Mini Support Post



## Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

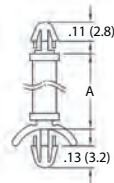
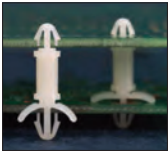
| Item No.      | A     |     | Bulk Pack Qty |
|---------------|-------|-----|---------------|
|               | in    | mm  |               |
| MDLSP2-02M-01 | 0.078 | 2.0 | 1000          |
| MDLSP2-03M-01 | 0.118 | 3.0 | 1000          |
| MDLSP2-04M-01 | 0.156 | 4.0 | 1000          |
| MDLSP2-05M-01 | 0.197 | 5.0 | 1000          |
| MDLSP2-06M-01 | 0.236 | 6.0 | 1000          |
| MDLSP2-07M-01 | 0.276 | 7.0 | 1000          |
| MDLSP2-08M-01 | 0.314 | 8.0 | 1000          |
| MDLSP2-09M-01 | 0.354 | 9.0 | 1000          |

| Item No.      | A     |      | Bulk Pack Qty |
|---------------|-------|------|---------------|
|               | in    | mm   |               |
| MDLSP2-10M-01 | 0.394 | 10.0 | 1000          |
| MDLSP2-12M-01 | 0.472 | 12.0 | 1000          |
| MDLSP2-14M-01 | 0.551 | 14.0 | 1000          |
| MDLSP2-16M-01 | 0.630 | 16.0 | 1000          |
| MDLSP2-18M-01 | 0.709 | 18.0 | 1000          |
| MDLSP2-20M-01 | 0.787 | 20.0 | 1000          |
| MDLSP2-22M-01 | 0.866 | 22.0 | 1000          |



# LOCKING CIRCUIT BOARD SUPPORTS

## CBLS3 Series Locking PCB Support



Top Hole:  
Snap-lock: .118 (3.0)  
Panel Thickness:  
.047-.067 (1.2-1.7)

Bottom Hole:  
Snap-lock: .118 (3.0)  
Panel Thickness:  
.047-.067 (1.2-1.7)

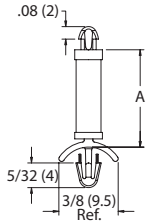
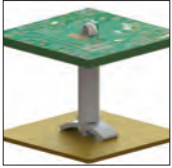
Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No. | A     |     | Bulk Pack Qty |
|----------|-------|-----|---------------|
|          | in    | mm  |               |
| CBLS305A | 0.125 | 3.2 | 1000          |
| CBLS310A | 0.188 | 4.8 | 1000          |
| CBLS315A | 0.250 | 6.4 | 1000          |
| CBLS320A | 0.312 | 7.9 | 1000          |
| CBLS325A | 0.375 | 9.5 | 1000          |

| Item No. | A     |      | Bulk Pack Qty |
|----------|-------|------|---------------|
|          | in    | mm   |               |
| CBLS330A | 0.438 | 11.1 | 1000          |
| CBLS335A | 0.500 | 12.7 | 1000          |
| CBLS340A | 0.562 | 14.3 | 1000          |
| CBLS345A | 0.625 | 15.9 | 1000          |
| CBLS350A | 0.748 | 19.0 | 1000          |

## DLCSAT Series Dual Locking PCB Support



Top Hole:  
Snap-lock: .100 (2.54)  
Panel Thickness:  
.064 (1.63) Max.

Bottom Hole:  
Snap-lock: .125 (3.18)  
Panel Thickness:  
.031-.078 (0.8-2.0)

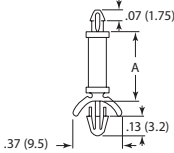
Specifications:

- Material: UL94 V-2 Nylon 6/6
- UL94 V-0 Available by special order
- Color: Natural

| Item No.    | A     |     | Bulk Pack Qty |
|-------------|-------|-----|---------------|
|             | in    | mm  |               |
| DLCSAT-2-01 | 0.125 | 3.2 | 1000          |
| DLCSAT-3-01 | 0.188 | 4.8 | 1000          |
| DLCSAT-4-01 | 0.250 | 6.4 | 1000          |
| DLCSAT-5-01 | 0.312 | 7.9 | 1000          |
| DLCSAT-6-01 | 0.375 | 9.5 | 1000          |

| Item No.     | A     |      | Bulk Pack Qty |
|--------------|-------|------|---------------|
|              | in    | mm   |               |
| DLCSAT-7-01  | 0.438 | 11.1 | 1000          |
| DLCSAT-8-01  | 0.500 | 12.7 | 1000          |
| DLCSAT-9-01  | 0.562 | 14.3 | 1000          |
| DLCSAT-10-01 | 0.625 | 15.9 | 1000          |

## CBLS5 Series Locking PCB Support



Top Hole:  
Snap-lock: .078 (2.0)  
Panel Thickness:  
.062 (1.6)

Bottom Hole:  
Snap-lock: .118-.125 (3.0-3.2)  
Panel Thickness:  
.031-.078 (0.8-2.0)

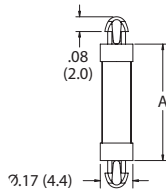
Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No. | A     |     | Bulk Pack Qty |
|----------|-------|-----|---------------|
|          | in    | mm  |               |
| CBLS505A | 0.125 | 3.2 | 1000          |
| CBLS510A | 0.188 | 4.8 | 1000          |
| CBLS515A | 0.250 | 6.4 | 1000          |
| CBLS520A | 0.312 | 7.9 | 1000          |
| CBLS525A | 0.375 | 9.5 | 1000          |

| Item No. | A     |      | Bulk Pack Qty |
|----------|-------|------|---------------|
|          | in    | mm   |               |
| CBLS530A | 0.438 | 11.1 | 1000          |
| CBLS535A | 0.500 | 12.7 | 1000          |
| CBLS540A | 0.562 | 14.3 | 1000          |
| CBLS545A | 0.625 | 15.9 | 1000          |

## DLCBST Series Dual Locking PCB Support



Top Hole:  
Snap-lock: .100 (2.5)  
Panel Thickness:  
.064 (1.6) Max

Bottom Hole:  
Snap-lock: .100 (2.5)  
Panel Thickness:  
.064 (1.6) Max

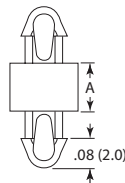
Specifications:

- Material: UL94 V-2 Nylon 6/6
- UL94 V-0 Available by special order
- Color: Natural

| Item No.    | A     |     | Bulk Pack Qty |
|-------------|-------|-----|---------------|
|             | in    | mm  |               |
| DLCBST-1-01 | 0.063 | 1.6 | 1000          |
| DLCBST-2-01 | 0.125 | 3.2 | 1000          |
| DLCBST-3-01 | 0.188 | 4.8 | 1000          |
| DLCBST-4-01 | 0.250 | 6.4 | 1000          |
| DLCBST-5-01 | 0.312 | 7.9 | 1000          |

| Item No.     | A     |      | Bulk Pack Qty |
|--------------|-------|------|---------------|
|              | in    | mm   |               |
| DLCBST-6-01  | 0.375 | 9.5  | 1000          |
| DLCBST-7-01  | 0.438 | 11.1 | 1000          |
| DLCBST-8-01  | 0.500 | 12.7 | 1000          |
| DLCBST-9-01  | 0.562 | 14.3 | 1000          |
| DLCBST-10-01 | 0.625 | 15.9 | 1000          |

## MDLSP1/CBMLSP0 Series Dual Locking PCB Support



Top Hole:  
Snap-lock: .098 (2.5)  
Panel Thickness:  
.065 (1.65)

Bottom Hole:  
Snap-lock: .098 (2.5)  
Panel Thickness:  
.065 (1.65)

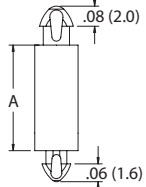
Specifications:

- Material: UL94 V-2 Nylon 6/6
- UL94 V-0 Available by special order
- Color: Natural

| Item No.      | A     |     | Bulk Pack Qty |
|---------------|-------|-----|---------------|
|               | in    | mm  |               |
| MDLSP1-02M-01 | 0.078 | 2.0 | 1000          |
| MDLSP1-03M-01 | 0.118 | 3.0 | 1000          |
| MDLSP1-04M-01 | 0.156 | 4.0 | 1000          |
| MDLSP1-05M-01 | 0.197 | 5.0 | 1000          |
| MDLSP1-06M-01 | 0.236 | 6.0 | 1000          |
| MDLSP1-07M-01 | 0.276 | 7.0 | 1000          |
| MDLSP1-08M-01 | 0.314 | 8.0 | 1000          |
| CBMLSP040A    | 0.334 | 8.5 | 2000          |

| Item No.      | A     |      | Bulk Pack Qty |
|---------------|-------|------|---------------|
|               | in    | mm   |               |
| MDLSP1-09M-01 | 0.354 | 9.0  | 1000          |
| MDLSP1-10M-01 | 0.394 | 10.0 | 1000          |
| MDLSP1-12M-01 | 0.472 | 12.0 | 1000          |
| MDLSP1-14M-01 | 0.551 | 14.0 | 1000          |
| MDLSP1-16M-01 | 0.630 | 16.0 | 1000          |
| MDLSP1-18M-01 | 0.709 | 18.0 | 1000          |
| MDLSP1-20M-01 | 0.787 | 20.0 | 1000          |
| MDLSP1-22M-01 | 0.866 | 22.0 | 1000          |

## MDLSP3 Series Dual Locking PCB Support



Top Hole:  
Snap-lock: .098 (2.5)  
Panel Thickness:  
.063 (1.6)

Bottom Hole:  
Snap-lock: .079 (2.0)  
Panel Thickness:  
.042 (1.07)

Specifications:

- Material: UL94 V-2 Nylon 6/6
- UL94 V-0 Available by special order
- Color: Natural

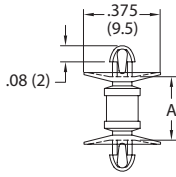
| Item No.    | A     |     | Bulk Pack Qty |
|-------------|-------|-----|---------------|
|             | in    | mm  |               |
| MDLSP3-1-01 | 0.063 | 1.6 | 1000          |
| MDLSP3-2-01 | 0.125 | 3.2 | 1000          |
| MDLSP3-3-01 | 0.188 | 4.8 | 1000          |

| Item No.    | A     |     | Bulk Pack Qty |
|-------------|-------|-----|---------------|
|             | in    | mm  |               |
| MDLSP3-4-01 | 0.250 | 6.4 | 1000          |
| MDLSP3-5-01 | 0.313 | 7.9 | 1000          |
| MDLSP3-6-01 | 0.375 | 9.5 | 1000          |



# LOCKING CIRCUIT BOARD SUPPORTS

## CDLCBST Series Cupped Dual Locking PCB Support



Top Hole:  
Snap-lock: .100 (2.54)  
Panel Thickness:  
.062 (1.6)

Bottom Hole:  
Snap-lock: .100 (2.54)  
Panel Thickness:  
.062 (1.6)

### Specifications:

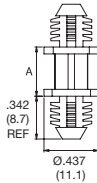
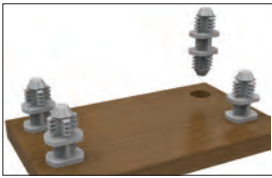
- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

### Features:

- Cupped base completely covers hole and also adds stability

| Item No.      | A     |      | Bulk Pack Qty |
|---------------|-------|------|---------------|
|               | in    | mm   |               |
| CDLCBST-3-01  | 0.188 | 4.8  | 1000          |
| CDLCBST-4-01  | 0.250 | 6.4  | 1000          |
| CDLCBST-5-01  | 0.313 | 7.9  | 1000          |
| CDLCBST-6-01  | 0.375 | 9.5  | 1000          |
| CDLCBST-7-01  | 0.438 | 11.1 | 1000          |
| CDLCBST-8-01  | 0.500 | 12.7 | 1000          |
| CDLCBST-9-01  | 0.563 | 14.3 | 1000          |
| CDLCBST-10-01 | 0.625 | 15.9 | 1000          |

## BHDF Series Double Fir-Tree Mount PCB Support



Top Hole:  
Press-fit: .312 (7.92)  
Panel Thickness:  
.250 (6.35) Min

Bottom Hole:  
Press-fit: .312 (7.92)  
Panel Thickness:  
.250 (6.35) Min

### Specifications:

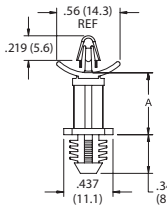
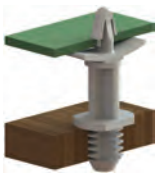
- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

### Features:

- Fir-tree mount is flexible and will lock into round, threaded, punched or drilled blind holes

| Item No.    | A     |      | Bulk Pack Qty |
|-------------|-------|------|---------------|
|             | in    | mm   |               |
| BHDF-3M-01  | 0.118 | 3.0  | 1000          |
| BHDF-4M-01  | 0.156 | 4.0  | 1000          |
| BHDF-6M-01  | 0.236 | 6.0  | 1000          |
| BHDF-8M-01  | 0.314 | 8.0  | 1000          |
| BHDF-12M-01 | 0.472 | 12.0 | 1000          |
| BHDF-14M-01 | 0.551 | 14.0 | 1000          |
| BHDF-16M-01 | 0.630 | 16.0 | 1000          |
| BHDF-18M-01 | 0.709 | 18.0 | 1000          |
| BHDF-20M-01 | 0.787 | 20.0 | 1000          |

## BHDL Series Fir-Tree Locking PCB Support



Top Hole:  
Snap-lock: .156 (4)  
Panel Thickness:  
.031-.078 (0.79-1.98)

Bottom Hole:  
Press-fit: .312 (7.92)  
Panel Thickness:  
.250 (6.4) Min.

### Specifications:

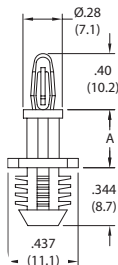
- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

### Features:

- Fir-tree mount is flexible and will lock into round, threaded, punched or drilled blind holes
- Available for a .250 (6.4) blind hole by special order

| Item No.   | A     |      | Bulk Pack Qty |
|------------|-------|------|---------------|
|            | in    | mm   |               |
| BHDL-4-01  | 0.250 | 6.4  | 1000          |
| BHDL-6-01  | 0.375 | 9.5  | 1000          |
| BHDL-8-01  | 0.500 | 12.7 | 1000          |
| BHDL-10-01 | 0.625 | 15.9 | 1000          |
| BHDL-12-01 | 0.750 | 19.1 | 1000          |
| BHDL-14-01 | 0.875 | 22.2 | 1000          |

## BHL/CBBHS Series Fir-Tree Locking PCB Support



Top Hole:  
Snap-lock: .156 (4.0)  
Panel Thickness:  
.062 (1.6)

Bottom Hole:  
Press-fit: .312 (7.9)  
Panel Thickness:  
.250 (6.4) Min

### Specifications:

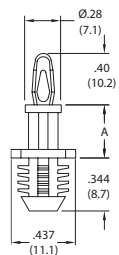
- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

### Features:

- Fir-tree mount is flexible and will lock into round, threaded, punched or drilled blind holes
- Available for a .250 (6.4) blind hole by special order

| Item No.  | A     |      | Bulk Pack Qty |
|-----------|-------|------|---------------|
|           | in    | mm   |               |
| BHL-3-01  | 0.188 | 4.8  | 1000          |
| BHL-4-01  | 0.250 | 6.4  | 1000          |
| BHL-6-01  | 0.375 | 9.5  | 1000          |
| BHL-7-01  | 0.438 | 11.1 | 1000          |
| BHL-8-01  | 0.500 | 12.7 | 1000          |
| BHL-10-01 | 0.625 | 15.9 | 1000          |
| BHL-12-01 | 0.750 | 19.1 | 1000          |
| BHL-14-01 | 0.875 | 22.2 | 1000          |
| CBBHS045A | 1.000 | 25.4 | 1000          |

## BHC Series Fir-Tree Non-Locking PCB Support



Top Hole:  
Snap-fit: .312 (7.9)  
Panel Thickness:  
.062 (1.6)

Bottom Hole:  
Press-fit: .312 (7.9)  
Panel Thickness:  
.250 (6.4) Min

### Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

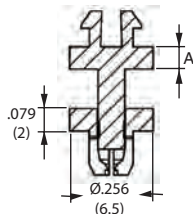
### Features:

- Fir-tree mount is flexible and will lock into round, threaded, punched or drilled blind holes
- Available for a .250 (6.4) blind hole by special order

| Item No.  | A     |      | Bulk Pack Qty |
|-----------|-------|------|---------------|
|           | in    | mm   |               |
| BHC-3-01  | 0.188 | 4.8  | 1000          |
| BHC-4-01  | 0.250 | 6.4  | 1000          |
| BHC-6-01  | 0.375 | 9.5  | 1000          |
| BHC-8-01  | 0.500 | 12.7 | 1000          |
| BHC-10-01 | 0.625 | 15.9 | 1000          |
| BHC-12-01 | 0.750 | 19.1 | 1000          |
| BHC-14-01 | 0.875 | 22.2 | 1000          |



**5517 Series**  
Rivet Mount PCB Spacer



Top Hole:  
Snap-lock: .138 (3.5)  
Panel Thickness:  
.062 (1.6)  
Bottom Hole:  
Snap-lock: .138 (3.5)  
Panel Thickness:  
.031-.078 (0.8-2.0)

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

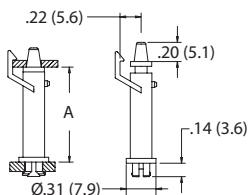
**Features:**

- Spacer that is designed to be installed like a rivet; legs expand as pin is inserted into the grommet locking it in place

| Item No. | A     |      | Bulk Pack Qty |
|----------|-------|------|---------------|
|          | in    | mm   |               |
| 551773   | 0.118 | 3.0  | 1000          |
| 551774   | 0.157 | 4.0  | 1000          |
| 551775   | 0.197 | 5.0  | 1000          |
| 551776   | 0.236 | 6.0  | 1000          |
| 551777   | 0.276 | 7.0  | 1000          |
| 551778   | 0.315 | 8.0  | 1000          |
| 551779   | 0.394 | 10.0 | 1000          |

| Item No. | A     |      | Bulk Pack Qty |
|----------|-------|------|---------------|
|          | in    | mm   |               |
| 551780   | 0.472 | 12.0 | 1000          |
| 551781   | 0.551 | 14.0 | 1000          |
| 551782   | 0.630 | 16.0 | 1000          |
| 551783   | 0.709 | 18.0 | 1000          |
| 551784   | 0.787 | 20.0 | 1000          |
| 551785   | 0.866 | 22.0 | 1000          |

**REHCBS Series**  
Rivet Edge Holding PCB Support



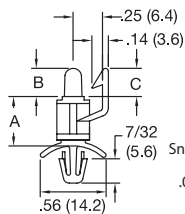
Top Hole:  
Snap-Lock:  
.157 (4.0)  
Panel Thickness:  
.070 (1.8) Max  
Bottom Hole:  
.187 (4.8)  
Panel Thickness:  
.047 - .105 (1.2 - 2.7)

**Specifications:**

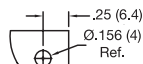
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.    | A     |      | Bulk Pack Qty |
|-------------|-------|------|---------------|
|             | in    | mm   |               |
| REHCBS-4-01 | 0.250 | 6.4  | 1000          |
| REHCBS-8-01 | 0.500 | 12.7 | 1000          |

**EHCBS Series**  
Edge Holding Circuit Board Support



Top Hole:  
Fit: .156 (4)  
Panel Thickness:  
.062 (1.57)  
Bottom Hole:  
Snap-lock: .187 (4.75)  
Panel Thickness:  
.031 - .078 (0.8 - 2.0)



**Top Board Hole Location**

**Specifications:**

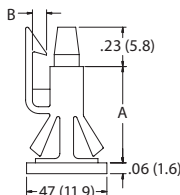
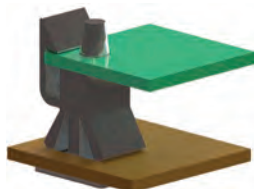
- Material: UL94 V-2 Nylon 6/6
- UL94 V-0 Available by special order
- Color: Natural

**Features:**

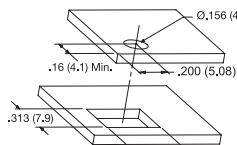
- Long nose facilitates alignment of components on board with the mating parts on the chassis
- PCB is easy to remove for service

| Item No.                        | A                              |                                | Bulk Pack Qty   |
|---------------------------------|--------------------------------|--------------------------------|-----------------|
|                                 | in                             | mm                             |                 |
| B = .60 (15.2)<br>C = .29 (7.5) | B = .24 (6.1)<br>C = .24 (6.1) | B = .24 (6.1)<br>C = .29 (7.5) |                 |
| EHCBS-5-01                      | EHCBS-6-5-01                   | EHCBS-7-5-01                   | 0.312 7.9 1000  |
| EHCBS-6-01                      | EHCBS-6-6-01                   | EHCBS-7-6-01                   | 0.375 9.5 1000  |
| EHCBS-8-01                      | EHCBS-6-8-01                   | EHCBS-7-8-01                   | 0.500 12.7 1000 |
| EHCBS-10-01                     | EHCBS-6-10-01                  | EHCBS-7-10-01                  | 0.625 15.9 1000 |
| EHCBS-12-01                     | EHCBS-6-12-01                  | EHCBS-7-12-01                  | 0.750 19.1 1000 |
| EHCBS-14-01                     | EHCBS-6-14-01                  | EHCBS-7-14-01                  | 0.875 22.2 1000 |
| EHCBS-16-01                     | EHCBS-6-16-01                  | EHCBS-7-16-01                  | 1.000 25.4 1000 |

**RLEHCBS Series**  
Reverse Locking Edge Holding Circuit Board Support



Top Hole:  
Fit: .156 (4)  
Panel Thickness:  
.062 (1.57)  
Bottom Hole:  
Snap-lock:  
.313 (7.9) x .375 (9.5) Square  
Panel Thickness:  
.062 (1.57)



**Mounting Hole Detail**

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- UL94 V-0 Available by special order
- Color: Black

**Features:**

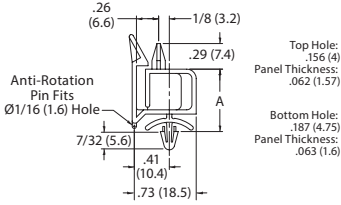
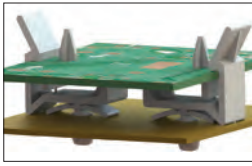
- Use in a square hole to prevent rotation
- Locking arm secures the board
- Board is removable for repair or service

| Item No.       | A    |      | B    |     | Bulk Pack Qty |
|----------------|------|------|------|-----|---------------|
|                | in   | mm   | in   | mm  |               |
| RLEHCBS-5-01BK | 0.38 | 9.5  | 0.06 | 1.5 | 1000          |
| RLEHCBS-6-01BK | 0.44 | 11.1 | 0.06 | 1.5 | 1000          |
| RLEHCBS-7-01BK | 0.50 | 12.7 | 0.08 | 2.1 | 1000          |
| RLEHCBS-8-01BK | 0.56 | 14.3 | 0.08 | 2.1 | 1000          |



# CIRCUIT BOARD SUPPORTS

## PCBEH Series Edge Holding Circuit Board Support



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

**Features:**

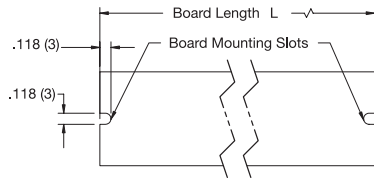
- Pin prevents rotation
- PCB is easy to remove for service

| Item No.    | A    |      | Bulk Pack Qty |
|-------------|------|------|---------------|
|             | in   | mm   |               |
| PCBEH-7-01  | 0.47 | 11.9 | 1000          |
| PCBEH-10-01 | 0.66 | 16.8 | 1000          |
| PCBEH-14-01 | 0.91 | 23.1 | 1000          |

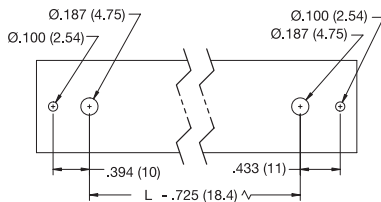
## UBM/UBMC Series Universal Board Mount



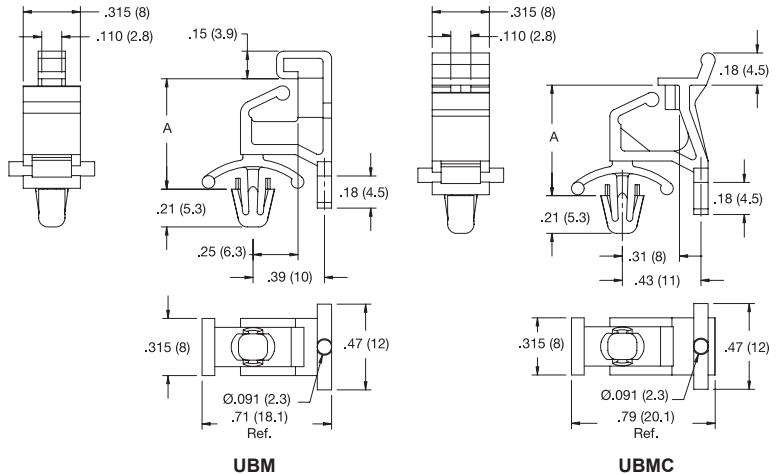
**Top Hole:** See Below  
**Panel Thickness:** .06 - .09 (1.6 - 2.3)



**Bottom Hole:** See Below  
**Panel Thickness:** .04 - .09 (1 - 2.3)



**Mounting Holes**



**Specifications:**

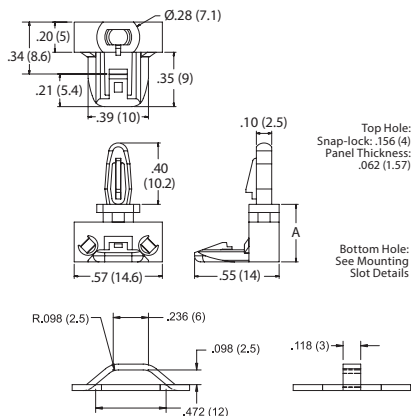
- UL94 V-2 Material: Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

**Features:**

- Wide base minimizes rocking
- Releasable board lock
- Anti-rotation pins

| Item No.     | Item No.      | A    |      | Bulk Pack Qty |
|--------------|---------------|------|------|---------------|
|              |               | in   | mm   |               |
| UBM-12.3M-01 | UBMC-12.3M-01 | 0.48 | 12.3 | 500           |
| UBM-15.5M-01 | UBMC-15.5M-01 | 0.61 | 15.5 | 500           |
| UBM-22.0M-01 | UBMC-22.0M-01 | 0.87 | 22.0 | 500           |

## SMLCBS Series Side Mount Locking Circuit Board Support



**Recommended Mounting Slot**

**Specifications:**

- Material: Nylon 6/6
- Flame Class: See Table
- Color: Natural

**Features:**

- Slides easily into pre-formed slot, leaving no protrusion under the chassis
- Removable by pressing the locking tab

| Item No.    | Item No.    | A     |      | Bulk Pack Qty |
|-------------|-------------|-------|------|---------------|
|             |             | in    | mm   |               |
| UL94 V-2    | UL94 V-0    |       |      |               |
| SMLCBS-5-01 | SMLCBS-5-19 | 0.313 | 7.9  | 1000          |
| SMLCBS-6-01 | SMLCBS-6-19 | 0.375 | 9.5  | 1000          |
| SMLCBS-7-01 | SMLCBS-7-19 | 0.437 | 11.1 | 1000          |
| SMLCBS-8-01 | SMLCBS-8-19 | 0.500 | 12.7 | 1000          |

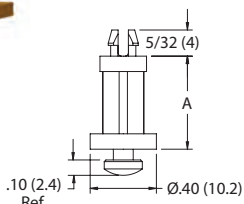
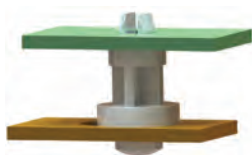




# LOCKING CIRCUIT BOARD SUPPORTS

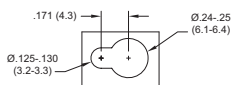


## KSLSP/27KYP Series Key Slot Locking Support Post



Top Hole:  
Snap-lock:  
KSLSP1: .156 (4)  
KSLSP2: .187 (4.75)  
Panel Thickness:  
.062 (1.57)

Bottom Hole:  
See Mounting  
Key Slot Detail  
Panel Thickness:  
.062 (1.57)



**Recommended Mounting Slot**

**Specifications:**

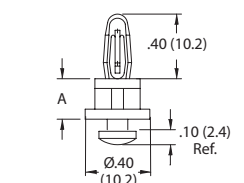
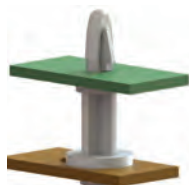
- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

**Features:**

- Key Slot design allows for easy removal to facilitate repairs
- Minimal .10" protrusion under chassis
- Larger base on key slot side for easy identification of mounting end

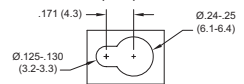
| Item No.     | A            |             | Bulk Pack Qty |      |
|--------------|--------------|-------------|---------------|------|
|              | .156 Ø Hole  | .187 Ø Hole |               |      |
| KSLSP1-3-01  | KSLSP2-3-01  | 0.188       | 4.8           | 1000 |
| KSLSP1-4-01  | KSLSP2-4-01  | 0.250       | 6.4           | 1000 |
| KSLSP1-6-01  | KSLSP2-6-01  | 0.375       | 9.5           | 1000 |
| KSLSP1-8-01  | KSLSP2-8-01  | 0.500       | 12.7          | 1000 |
| KSLSP1-10-01 | KSLSP2-10-01 | 0.625       | 15.9          | 1000 |
| • 27KYP00750 | —            | 0.750       | 19.1          | 500  |
| • 27KYP00875 | —            | 0.875       | 22.2          | 500  |
| • 27KYP01000 | —            | 1.000       | 25.4          | 500  |

## KSLBN Series Key Slot Locking Bayonet Nose



Top Hole:  
Snap-lock: .156 (4)  
Panel Thickness:  
.062 (1.57)

Bottom Hole:  
See Mounting  
Key Slot Detail  
Panel Thickness:  
.062 (1.57)



**Recommended Mounting Slot**

**Specifications:**

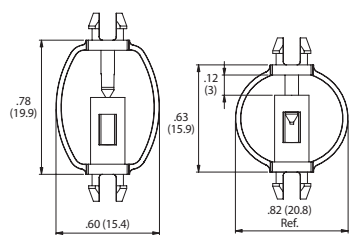
- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

**Features:**

- Key Slot design allows for easy removal to facilitate repairs
- Minimal .10" protrusion under chassis
- Larger base on key slot side for easy identification of mounting end

| Item No.   | A     |      | Bulk Pack Qty |
|------------|-------|------|---------------|
|            | in    | mm   |               |
| KSLBN-2-01 | 0.125 | 3.2  | 1000          |
| KSLBN-4-01 | 0.250 | 6.4  | 1000          |
| KSLBN-6-01 | 0.375 | 9.5  | 1000          |
| KSLBN-8-01 | 0.500 | 12.7 | 1000          |

## CBSP Series PCB Spring Spacer



Top Hole:  
Snap-lock: .189 (4.8)  
Panel Thickness:  
.062 (1.57)

Bottom Hole:  
Snap-lock: .189 (4.8)  
Panel Thickness:  
.062 (1.57)

**As Molded**

**Assembled**

**Specifications:**

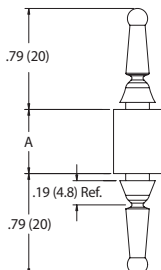
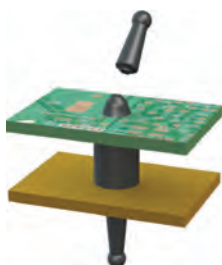
- Material: UL94 HB Acetal
- Color: Natural

**Features:**

- When pin is inserted into spacer, part flexes and acts as a plastic spring
- One piece design reduces the need for hardware
- Provides continuous support to PCB
- Keeps light sensors on the PCB in constant contact with touch control cover

| Item No. | Bulk Pack Qty |
|----------|---------------|
| CBSP-1   | 1000          |

## CBSPM Series Rubber Pull Mount Circuit Board Support



Top Hole:  
Snap-fit: .187 (4.75)  
Panel Thickness:  
.094 (2.4) Max

Bottom Hole:  
Snap-fit: .187 (4.75)  
Panel Thickness:  
.094 (2.4) Max

**Specifications:**

- Material: EPDM, 45 Shore A
- Color: Black

**Features:**

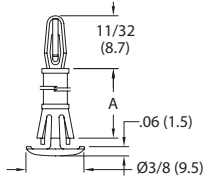
- Rubber spacer provides shock and vibration protection
- Pull mount ends are easily fed into panel holes and pulled into a locked position
- Once installed, the ends are easily cut off leaving low profile mounting ends

| Item No. | A     |       | Bulk Pack Qty |
|----------|-------|-------|---------------|
|          | in    | mm    |               |
| CBSPM-4  | 0.250 | 6.35  | 500           |
| CBSPM-6  | 0.375 | 9.53  | 500           |
| CBSPM-8  | 0.500 | 12.70 | 500           |
| CBSPM-10 | 0.625 | 15.88 | 500           |
| CBSPM-12 | 0.750 | 19.05 | 500           |



## REVERSE MOUNT CIRCUIT BOARD SUPPORTS

### RLCBSR Series Reverse Mount Locking PCB Support



Top Hole:  
Snap-Lock:  
.125 (3.2)  
Panel Thickness:  
.062 (1.6)

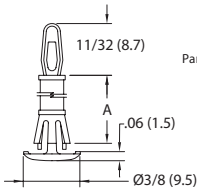
Bottom Hole:  
Snap-Lock:  
.187 (4.8)  
Panel Thickness:  
.059-.063 (1.5-1.6)

## Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

| Item No.     | A     |      | Bulk Pack Qty |
|--------------|-------|------|---------------|
|              | in    | mm   |               |
| RLCBSR-4-01  | 0.250 | 6.4  | 1000          |
| RLCBSR-5-01  | 0.313 | 7.9  | 1000          |
| RLCBSR-6-01  | 0.375 | 9.5  | 1000          |
| RLCBSR-7-01  | 0.438 | 11.1 | 1000          |
| RLCBSR-8-01  | 0.500 | 12.7 | 1000          |
| RLCBSR-9-01  | 0.563 | 14.3 | 1000          |
| RLCBSR-10-01 | 0.625 | 15.9 | 1000          |

### RCBSR Series Reverse Mount Non-Locking PCB Support



Top Hole:  
Snap-Lock:  
.125 (3.2)  
Panel Thickness:  
.062 (1.6)

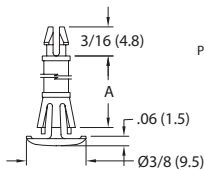
Bottom Hole:  
Snap-Lock:  
.187 (4.8)  
Panel Thickness:  
.059-.063 (1.5-1.6)

## Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

| Item No.    | A     |      | Bulk Pack Qty |
|-------------|-------|------|---------------|
|             | in    | mm   |               |
| RCBSR-4-01  | 0.250 | 6.4  | 1000          |
| RCBSR-5-01  | 0.313 | 7.9  | 1000          |
| RCBSR-6-01  | 0.375 | 9.5  | 1000          |
| RCBSR-7-01  | 0.438 | 11.1 | 1000          |
| RCBSR-8-01  | 0.500 | 12.7 | 1000          |
| RCBSR-9-01  | 0.563 | 14.3 | 1000          |
| RCBSR-10-01 | 0.625 | 15.9 | 1000          |

### RLCBSR Series Reverse Mount Locking PCB Support



Top Hole:  
Snap-Lock:  
.125 (3.2)  
Panel Thickness:  
.062 (1.6)

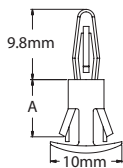
Bottom Hole:  
Snap-Lock:  
.187 (4.8)  
Panel Thickness:  
.059-.063 (1.5-1.6)

## Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

| Item No.     | A     |      | Bulk Pack Qty |
|--------------|-------|------|---------------|
|              | in    | mm   |               |
| RLCBSR-4-01  | 0.250 | 6.4  | 1000          |
| RLCBSR-5-01  | 0.313 | 7.9  | 1000          |
| RLCBSR-6-01  | 0.375 | 9.5  | 1000          |
| RLCBSR-7-01  | 0.438 | 11.1 | 1000          |
| RLCBSR-8-01  | 0.500 | 12.7 | 1000          |
| RLCBSR-9-01  | 0.563 | 14.3 | 1000          |
| RLCBSR-10-01 | 0.625 | 15.9 | 1000          |

### RLCBSC Series Reverse Mount Locking Metric PCB Support



Top Hole:  
Snap-lock: 3.2mm  
Panel Thickness: 1.6mm

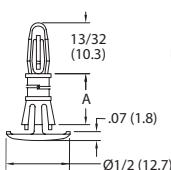
Bottom Hole:  
Snap-lock: 5.4mm  
Panel Thickness: 0.8mm

## Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

| Item No.     | A     |      | Bulk Pack Qty |
|--------------|-------|------|---------------|
|              | in    | mm   |               |
| RLCBSC-5-01  | 0.197 | 5.0  | 1000          |
| RLCBSC-6-01  | 0.236 | 6.0  | 1000          |
| RLCBSC-8-01  | 0.315 | 8.0  | 1000          |
| RLCBSC-10-01 | 0.394 | 10.0 | 1000          |
| RLCBSC-12-01 | 0.472 | 12.0 | 1000          |
| RLCBSC-14-01 | 0.551 | 14.0 | 1000          |

### RLCBSRE Series Reverse Mount Locking PCB Support



Top Hole:  
Snap-Lock:  
.157 (4.0)  
Panel Thickness:  
.062 (1.6)

Bottom Hole:  
Snap-Lock:  
.213 (5.4)  
Panel Thickness:  
.059-.063 (1.5-1.7)

## Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

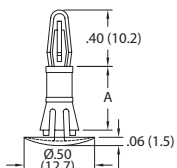
| Item No.      | A     |      | Bulk Pack Qty |
|---------------|-------|------|---------------|
|               | in    | mm   |               |
| RLCBSRE-3-01  | 0.188 | 4.8  | 1000          |
| RLCBSRE-4-01  | 0.250 | 6.4  | 1000          |
| RLCBSRE-6-01  | 0.375 | 9.5  | 1000          |
| RLCBSRE-8-01  | 0.500 | 12.7 | 1000          |
| RLCBSRE-10-01 | 0.625 | 15.9 | 1000          |





# REVERSE MOUNT CIRCUIT BOARD SUPPORTS

## CRLCBSRE Series Cupped Reverse Mount Locking PCB Support



Top Hole:  
Snap Lock: .157 (4.0)  
Panel Thickness: .063 (1.6)

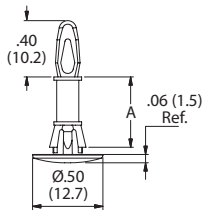
Bottom Hole:  
Snap Lock: .213 (5.4)  
Panel Thickness: .047 - .079 (1.2 - 2.0)

Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

| Item No.       | A     |      | Bulk Pack Qty |
|----------------|-------|------|---------------|
|                | in    | mm   |               |
| CRLCBSRE-4-01  | 0.250 | 6.4  | 1000          |
| CRLCBSRE-6-01  | 0.375 | 9.5  | 1000          |
| CRLCBSRE-8-01  | 0.500 | 12.7 | 1000          |
| CRLCBSRE-10-01 | 0.625 | 15.9 | 1000          |

## CRCBSRE Series Cupped Reverse Mount Non-Locking PCB Support



Top Hole:  
Snap-fit: .156 (4)  
Panel Thickness: .062 (1.6)

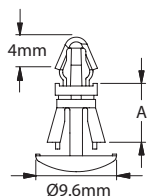
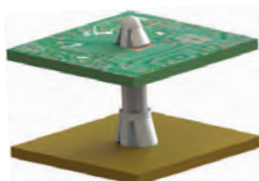
Bottom Hole:  
Snap-lock: .213 (5.4)  
Panel Thickness: .047 - .079 (1.2 - 2.0)

Specifications:

- UL94 V-2 Material: Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

| Item No.      | A     |      | Bulk Pack Qty |
|---------------|-------|------|---------------|
|               | in    | mm   |               |
| CRCBSRE-3-01  | 0.188 | 4.8  | 1000          |
| CRCBSRE-4-01  | 0.250 | 6.4  | 1000          |
| CRCBSRE-6-01  | 0.375 | 9.5  | 1000          |
| CRCBSRE-8-01  | 0.500 | 12.7 | 1000          |
| CRCBSRE-10-01 | 0.625 | 15.9 | 1000          |

## RLCBSK Series Reverse Mount Locking Metric PCB Support



Top Hole:  
Snap-lock: 4mm  
Panel Thickness: 1.6mm

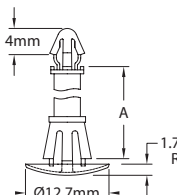
Bottom Hole:  
Snap-lock: 5.4mm  
Panel Thickness: 1.6mm

Specifications:

- UL94 V-2 Material: Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

| Item No.     | A     |      | Bulk Pack Qty |
|--------------|-------|------|---------------|
|              | in    | mm   |               |
| RLCBSK-6-01  | 0.236 | 6.0  | 1000          |
| RLCBSK-7-01  | 0.275 | 7.0  | 1000          |
| RLCBSK-8-01  | 0.315 | 8.0  | 1000          |
| RLCBSK-10-01 | 0.394 | 10.0 | 1000          |
| RLCBSK-12-01 | 0.472 | 12.0 | 1000          |
| RLCBSK-14-01 | 0.551 | 14.0 | 1000          |
| RLCBSK-16-01 | 0.630 | 16.0 | 1000          |

## CRLCBSK Series Cupped Reverse Locking Metric PCB Support



Top Hole:  
Snap-lock: 4mm  
Panel Thickness: 1.6mm

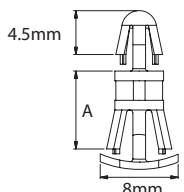
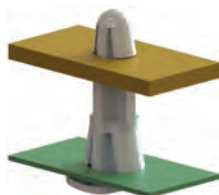
Bottom Hole:  
Snap-lock: 5.4mm  
Panel Thickness: 1mm - 1.6mm

Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

| Item No.        | A     |      | Bulk Pack Qty |
|-----------------|-------|------|---------------|
|                 | in    | mm   |               |
| CRLCBSK-2-8-01  | 0.295 | 7.5  | 1000          |
| CRLCBSK-2-10-01 | 0.394 | 10.0 | 1000          |
| CRLCBSK-2-12-01 | 0.472 | 12.0 | 1000          |
| CRLCBSK-2-14-01 | 0.551 | 14.0 | 1000          |

## RLCBSA Series Reverse Mount Locking Metric PCB Support



Top Hole:  
Snap-lock: 4mm  
Panel Thickness: 1.6mm

Bottom Hole:  
Snap-lock: 5.5mm  
Panel Thickness: 0.5mm - 1mm

Specifications:

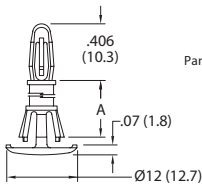
- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

| Item No.     | A     |      | Bulk Pack Qty |
|--------------|-------|------|---------------|
|              | in    | mm   |               |
| RLCBSA-5-01  | 0.197 | 5.0  | 1000          |
| RLCBSA-6-01  | 0.236 | 6.0  | 1000          |
| RLCBSA-8-01  | 0.315 | 8.0  | 1000          |
| RLCBSA-10-01 | 0.394 | 10.0 | 1000          |
| RLCBSA-12-01 | 0.472 | 12.0 | 1000          |
| RLCBSA-14-01 | 0.551 | 14.0 | 1000          |



# REVERSE MOUNT & RIVET MOUNT CIRCUIT BOARD SUPPORTS

## RLCBSR1 Series Reverse Mount Locking PCB Support



Top Hole:  
Snap-Lock:  
Panel Thickness:

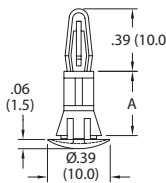
Bottom Hole:  
Snap-Lock:  
Panel Thickness:

### Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

| Item No.      | A     |      | Bulk Pack Qty |
|---------------|-------|------|---------------|
|               | in    | mm   |               |
| RLCBSR1-4-01  | 0.250 | 6.4  | 1000          |
| RLCBSR1-6-01  | 0.375 | 9.5  | 1000          |
| RLCBSR1-8-01  | 0.500 | 12.7 | 1000          |
| RLCBSR1-10-01 | 0.625 | 15.9 | 1000          |

## CRLCBSR Series Cupped Reverse Mount Locking PCB Support



Top Hole:  
Snap-Lock:  
Panel Thickness:

Bottom Hole:  
Snap-Lock:  
Panel Thickness:

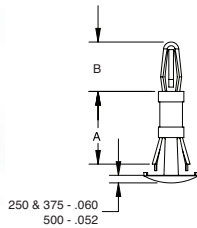
### Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

| Item No.     | A     |     | Bulk Pack Qty |
|--------------|-------|-----|---------------|
|              | in    | mm  |               |
| CRLCBSR-3-01 | 0.188 | 4.8 | 1000          |
| CRLCBSR-4-01 | 0.250 | 6.4 | 1000          |
| CRLCBSR-5-01 | 0.313 | 7.9 | 1000          |

| Item No.      | A     |      | Bulk Pack Qty |
|---------------|-------|------|---------------|
|               | in    | mm   |               |
| CRLCBSR-6-01  | 0.375 | 9.5  | 1000          |
| CRLCBSR-8-01  | 0.500 | 12.7 | 1000          |
| CRLCBSR-12-01 | 0.750 | 19.1 | 1000          |

## 27RV Series Cupped Reverse Mount Locking PCB Support



Top Hole:  
Snap-Lock:  
Panel Thickness:

Bottom Hole:  
Snap-Lock:  
Panel Thickness:

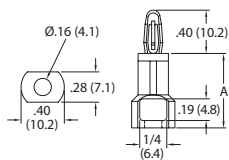
### Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

| Item No.   | A     |      | B     |     | Bulk Pack Qty |
|------------|-------|------|-------|-----|---------------|
|            | in    | mm   | in    | mm  |               |
| 27RV00250  | 0.255 | 6.5  | 0.344 | 8.7 | 1000          |
| 27RV00375  | 0.375 | 9.5  | 0.344 | 8.7 | 1000          |
| 27RV00500A | 0.500 | 12.7 | 0.340 | 8.6 | 1000          |



## SRLCBS/SRLAHS Series Snap Rivet Mount Locking Support



Top Hole:  
Snap-Lock:  
Panel Thickness:

Bottom Hole:  
For Snap Rivet:

### Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

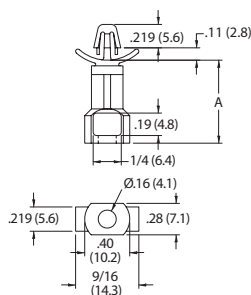
### Features:

- Designed to mount easily on chassis with plastic SR rivet, see Rivet Table
- Allows mounting to a range of panel thicknesses, up to 0.341" thick
- Button head on rivet for minimal protrusion on chassis underside

| Item No.     | A     |      | Bulk Pack Qty |
|--------------|-------|------|---------------|
|              | in    | mm   |               |
| SRLCBS-6-01  | 0.375 | 9.5  | 1000          |
| SRLCBS-7-01  | 0.438 | 11.1 | 1000          |
| SRLCBS-8-01  | 0.500 | 12.7 | 1000          |
| SRLCBS-10-01 | 0.625 | 15.9 | 1000          |
| SRLCBS-12-01 | 0.750 | 19.1 | 1000          |
| SRLCBS-14-01 | 0.875 | 22.2 | 1000          |
| SRLCBS-16-01 | 1.000 | 25.4 | 1000          |

| Item No.     | A     |      | Bulk Pack Qty |
|--------------|-------|------|---------------|
|              | in    | mm   |               |
| SRLAHS-7-01  | 0.438 | 11.1 | 1000          |
| SRLAHS-8-01  | 0.500 | 12.7 | 1000          |
| SRLAHS-10-01 | 0.625 | 15.9 | 1000          |
| SRLAHS-12-01 | 0.750 | 19.1 | 1000          |
| SRLAHS-14-01 | 0.875 | 22.2 | 1000          |
| SRLAHS-16-01 | 1.000 | 25.4 | 1000          |

| Use Rivet Item No. | Rivet Table           |    |           |
|--------------------|-----------------------|----|-----------|
|                    | Panel Thickness Range |    |           |
|                    | in                    | mm |           |
| SR-4050            | 0.026 - 0.062         |    | 0.7 - 1.6 |
| SR-4060            | 0.062 - 0.105         |    | 1.5 - 2.7 |
| SR-4070            | 0.105 - 0.145         |    | 2.7 - 3.7 |
| SR-4080            | 0.145 - 0.184         |    | 3.7 - 4.7 |
| SR-4090            | 0.184 - 0.223         |    | 4.7 - 5.7 |
| SR-4100            | 0.223 - 0.263         |    | 5.7 - 6.7 |
| SR-4120            | 0.282 - 0.341         |    | 7.2 - 8.7 |



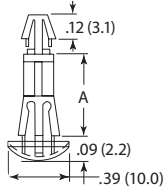
Top Hole:  
Snap-Lock:  
Panel Thickness:

Bottom Hole:  
For Snap Rivet:  
Panel Thickness:  
See Rivet Table



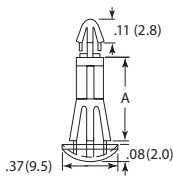
# REVERSE MOUNT & ADHESIVE MOUNT CIRCUIT BOARD SUPPORTS

## CBRLDS Series Reverse Mount Locking PCB Support



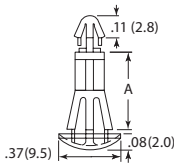
Snap Lock:  
.157 (4.0)  
Panel Thickness:  
.047-.066 (1.2-1.7)

Snap Lock:  
.216 (5.5)  
Panel Thickness:  
.031-.062 (0.8-1.6)



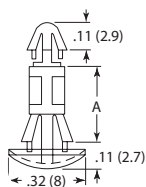
Top Hole:  
Snap Lock:  
.137 (3.5)  
Panel Thickness:  
.062 (1.6)

Bottom Hole:  
Snap Lock:  
.216 (5.5)  
Panel Thickness:  
.031-.062 (0.8-1.6)



Top Hole:  
Snap Lock:  
.137 (3.5)  
Panel Thickness:  
.047-.066 (1.2-1.7)

Bottom Hole:  
Snap Lock:  
.216 (5.5)  
Panel Thickness:  
.023-.047 (0.1-1.2)



Top Hole:  
Snap Lock:  
.118 (3.0)  
Panel Thickness:  
.062 (1.6)

Bottom Hole:  
Snap Lock:  
.157 (4.0)  
Panel Thickness:

Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.   | A     |      | Bulk Pack Qty |
|------------|-------|------|---------------|
|            | in    | mm   |               |
| CBRLDS005A | 0.138 | 3.5  | 1000          |
| CBRLDS010A | 0.197 | 5.0  | 1000          |
| CBRLDS015A | 0.250 | 6.4  | 1000          |
| CBRLDS020A | 0.276 | 7.0  | 1000          |
| CBRLDS025A | 0.315 | 8.0  | 1000          |
| CBRLDS030A | 0.335 | 8.5  | 1000          |
| CBRLDS035A | 0.394 | 10.0 | 1000          |
| CBRLDS040A | 0.472 | 12.0 | 1000          |
| CBRLDS045A | 0.500 | 12.7 | 1000          |
| CBRLDS050A | 0.531 | 13.5 | 1000          |

| Item No.   | A     |      | Bulk Pack Qty |
|------------|-------|------|---------------|
|            | in    | mm   |               |
| CBRLDS055A | 0.551 | 14.0 | 1000          |
| CBRLDS060A | 0.598 | 15.2 | 1000          |
| CBRLDS065A | 0.625 | 15.9 | 1000          |
| CBRLDS070A | 0.709 | 18.0 | 1000          |
| CBRLDS075A | 0.748 | 19.0 | 1000          |
| CBRLDS080A | 1.787 | 20.0 | 1000          |
| CBRLDS085A | 1.854 | 21.7 | 1000          |
| CBRLDS090A | 1.945 | 24.0 | 1000          |
| CBRLDS095A | 1.000 | 25.4 | 1000          |
| CBRLDS100A | 1.181 | 30.0 | 500           |

| Item No.   | A     |     | Bulk Pack Qty |
|------------|-------|-----|---------------|
|            | in    | mm  |               |
| CBRLDS205A | 0.138 | 3.5 | 1000          |
| CBRLDS210A | 0.187 | 4.8 | 1000          |
| CBRLDS215A | 0.250 | 6.4 | 1000          |
| CBRLDS220A | 0.276 | 7.0 | 1000          |
| CBRLDS225A | 0.315 | 8.0 | 1000          |

| Item No.   | A     |      | Bulk Pack Qty |
|------------|-------|------|---------------|
|            | in    | mm   |               |
| CBRLDS230A | 0.394 | 10.0 | 1000          |
| CBRLDS235A | 0.433 | 11.0 | 1000          |
| CBRLDS240A | 0.500 | 12.7 | 1000          |
| CBRLDS245A | 0.625 | 15.9 | 1000          |

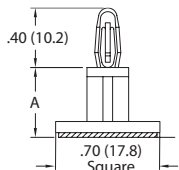
| Item No.   | A     |     | Bulk Pack Qty |
|------------|-------|-----|---------------|
|            | in    | mm  |               |
| CBRLDS305A | 0.138 | 3.5 | 1000          |
| CBRLDS310A | 0.188 | 4.8 | 1000          |
| CBRLDS315A | 0.250 | 6.4 | 1000          |
| CBRLDS320A | 0.276 | 7.0 | 1000          |
| CBRLDS325A | 0.315 | 8.0 | 1000          |

| Item No.   | A     |      | Bulk Pack Qty |
|------------|-------|------|---------------|
|            | in    | mm   |               |
| CBRLDS330A | 0.394 | 10.0 | 1000          |
| CBRLDS335A | 0.433 | 11.0 | 1000          |
| CBRLDS340A | 0.500 | 12.7 | 1000          |
| CBRLDS345A | 0.625 | 15.9 | 1000          |

| Item No.   | A     |     | Bulk Pack Qty |
|------------|-------|-----|---------------|
|            | in    | mm  |               |
| CBRLDS405A | 0.098 | 2.5 | 2000          |
| CBRLDS410A | 0.125 | 3.2 | 2000          |
| CBRLDS415A | 0.157 | 4.0 | 2000          |
| CBRLDS420A | 0.197 | 5.0 | 2000          |
| CBRLDS425A | 0.236 | 6.0 | 2000          |
| CBRLDS430A | 0.276 | 7.0 | 1000          |

| Item No.   | A     |      | Bulk Pack Qty |
|------------|-------|------|---------------|
|            | in    | mm   |               |
| CBRLDS435A | 0.315 | 8.0  | 1000          |
| CBRLDS440A | 0.354 | 9.0  | 1000          |
| CBRLDS445A | 0.394 | 10.0 | 1000          |
| CBRLDS450A | 0.472 | 12.0 | 1000          |
| CBRLDS455A | 0.551 | 14.0 | 1000          |
| CBRLDS460A | 0.630 | 16.0 | 1000          |

## LCBSB/27LAD Series Adhesive Mount Locking PCB Support



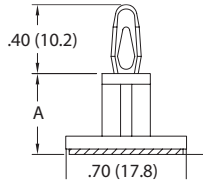
Snap Lock:  
.156 (4.0)  
Panel Thickness:  
.062 (1.6)

Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural



| Item No.        | A     |      | Bulk Pack Qty |
|-----------------|-------|------|---------------|
|                 | in    | mm   |               |
| LCBSB-3-01A-RT  | 0.188 | 4.8  | 1000          |
| LCBSB-4-01A-RT  | 0.250 | 6.4  | 1000          |
| 27LAD0312       | 0.312 | 7.9  | 500           |
| LCBSB-6-01A-RT  | 0.375 | 9.5  | 1000          |
| LCBSB-8-01A-RT  | 0.500 | 12.7 | 1000          |
| LCBSB-9-01A-RT  | 0.563 | 14.3 | 1000          |
| LCBSB-10-01A-RT | 0.625 | 15.9 | 1000          |
| LCBSB-12-01A-RT | 0.750 | 19.1 | 1000          |
| LCBSB-14-01A-RT | 0.875 | 22.2 | 1000          |
| LCBSB-16-01A-RT | 1.000 | 25.4 | 1000          |
| LCBSB-18-01A-RT | 1.125 | 28.6 | 1000          |

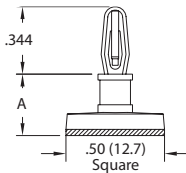
**ADHESIVE MOUNT CIRCUIT BOARD SUPPORTS****CBSB Series  
Adhesive Mount Non-Locking PCB Support**

Snap Fit:  
.156 (4.0)  
Panel Thickness:  
.062 (1.6)

## Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

| Item No.       | A     |      | Bulk Pack Qty |
|----------------|-------|------|---------------|
|                | in    | mm   |               |
| CBSB-3-01A-RT  | 0.188 | 4.8  | 1000          |
| CBSB-4-01A-RT  | 0.250 | 6.4  | 1000          |
| CBSB-6-01A-RT  | 0.375 | 9.5  | 1000          |
| CBSB-8-01A-RT  | 0.500 | 12.7 | 1000          |
| CBSB-9-01A-RT  | 0.563 | 14.3 | 1000          |
| CBSB-10-01A-RT | 0.625 | 15.9 | 1000          |
| CBSB-12-01A-RT | 0.750 | 19.1 | 1000          |
| CBSB-14-01A-RT | 0.875 | 22.2 | 1000          |
| CBSB-16-01A-RT | 1.000 | 25.4 | 1000          |
| CBSB-18-01A-RT | 1.125 | 28.6 | 1000          |

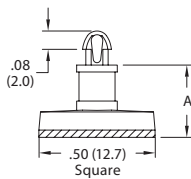
**LCBSBM Series  
Adhesive Mount Mini Locking PCB Support**

Snap Lock:  
.125 (3.2)  
Panel Thickness:  
.062 (1.6)

## Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

| Item No.        | A     |      | Bulk Pack Qty |
|-----------------|-------|------|---------------|
|                 | in    | mm   |               |
| LCBSBM-3-01A-RT | 0.188 | 4.8  | 1000          |
| LCBSBM-4-01A-RT | 0.250 | 6.4  | 1000          |
| LCBSBM-5-01A-RT | 0.313 | 7.9  | 1000          |
| LCBSBM-6-01A-RT | 0.375 | 9.5  | 1000          |
| LCBSBM-7-01A-RT | 0.438 | 11.1 | 1000          |
| LCBSBM-8-01A-RT | 0.500 | 12.7 | 1000          |
| LCBSBM-9-01A-RT | 0.563 | 14.3 | 1000          |
| LCBSBM-10-01A   | 0.625 | 15.9 | 1000          |

**CBSBT/CBABS33 Series  
Adhesive Mount Mini Locking PCB Support**

Snap-Lock:  
.100 (2.54)  
Panel Thickness:  
.064 (1.63) Max

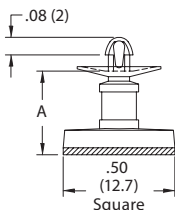
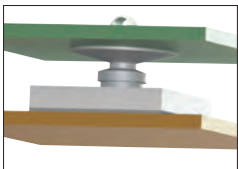
## Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

## Features:

- Low protrusion above the PCB

| Item No.        | A     |      | Bulk Pack Qty |
|-----------------|-------|------|---------------|
|                 | in    | mm   |               |
| CBSBT-3-01A-RT  | 0.188 | 4.8  | 1000          |
| CBSBT-4-01A-RT  | 0.250 | 6.4  | 1000          |
| CBSBT-5-01A-RT  | 0.312 | 7.9  | 1000          |
| CBSBT-6-01A-RT  | 0.375 | 9.5  | 1000          |
| CBSBT-7-01A-RT  | 0.438 | 11.1 | 1000          |
| CBSBT-8-01A-RT  | 0.500 | 12.7 | 1000          |
| CBSBT-9-01A-RT  | 0.563 | 14.3 | 1000          |
| CBSBT-10-01A-RT | 0.625 | 15.9 | 1000          |
| CBABS335A       | 0.750 | 19.1 | 1000          |

**CCBSBT Series  
Adhesive Mount Cupped PCB Support**

Top Hole:  
Snap-lock: .100 (2.54)  
Panel Thickness:  
.062 (1.6)

## Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

## Features:

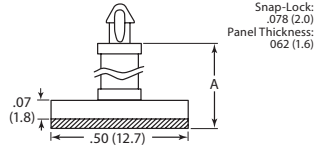
- Cupped base provides a tight fit to the board and completely covers the hole

| Item No.        | A     |      | Bulk Pack Qty |
|-----------------|-------|------|---------------|
|                 | in    | mm   |               |
| CCBSBT-4-01A-RT | 0.250 | 6.4  | 1000          |
| CCBSBT-5-01A-RT | 0.312 | 7.9  | 1000          |
| CCBSBT-6-01A-RT | 0.375 | 9.5  | 1000          |
| CCBSBT-7-01A-RT | 0.438 | 11.1 | 1000          |
| CCBSBT-8-01A-RT | 0.500 | 12.7 | 1000          |
| CCBSBT-9-01A-RT | 0.563 | 14.3 | 1000          |
| CCBSBT-10-01A   | 0.625 | 15.9 | 1000          |



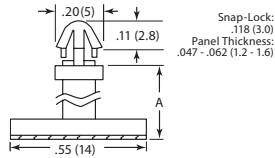
# ADHESIVE MOUNT & PUSH CIRCUIT BOARD SUPPORTS

## CBABS Series Adhesive Mount Locking PCB Support

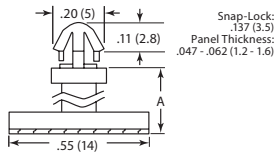


- Specifications:
- Material: UL94 V-2 Nylon 6/6
  - Color: Natural

| Item No.  | A     |      | Bulk Pack Qty |
|-----------|-------|------|---------------|
|           | in    | mm   |               |
| CBABS405A | 0.188 | 4.8  | 1000          |
| CBABS410A | 0.250 | 6.4  | 1000          |
| CBABS415A | 0.375 | 9.5  | 1000          |
| CBABS420A | 0.438 | 11.1 | 1000          |
| CBABS425A | 0.500 | 12.7 | 1000          |
| CBABS430A | 0.625 | 15.9 | 1000          |
| CBABS435A | 0.750 | 19.1 | 1000          |

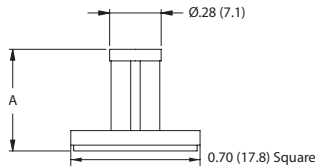


| Item No.  | A     |      | Bulk Pack Qty |
|-----------|-------|------|---------------|
|           | in    | mm   |               |
| CBABS205A | 0.138 | 3.5  | 1000          |
| CBABS210A | 0.188 | 4.8  | 1000          |
| CBABS215A | 0.250 | 6.4  | 1000          |
| CBABS220A | 0.315 | 8.0  | 1000          |
| CBABS225A | 0.394 | 10.0 | 1000          |



| Item No.  | A     |      | Bulk Pack Qty |
|-----------|-------|------|---------------|
|           | in    | mm   |               |
| CBABS105A | 0.138 | 3.5  | 1000          |
| CBABS110A | 0.188 | 4.8  | 1000          |
| CBABS115A | 0.250 | 6.4  | 1000          |
| CBABS120A | 0.315 | 8.0  | 1000          |
| CBABS125A | 0.394 | 10.0 | 1000          |

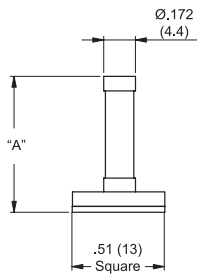
## PSB Series Adhesive Mount Push Spacer



- Specifications:
- Material: Nylon 6/6
  - Flame Class: See Table
  - Color: Natural

| Item No.        |                 | A     |      | Bulk Pack Qty |
|-----------------|-----------------|-------|------|---------------|
| UL94 V-2        | UL94 V-0        | in    | mm   |               |
| PSB-6M-01A2-RT  | PSB-6M-19A2-RT  | 0.236 | 6.0  | 1000          |
| PSB-8M-01A2-RT  | PSB-8M-19A2-RT  | 0.314 | 8.0  | 1000          |
| PSB-10M-01A2-RT | PSB-10M-19A2-RT | 0.393 | 10.0 | 1000          |
| PSB-12M-01A2-RT | PSB-12M-19A2-RT | 0.472 | 12.0 | 1000          |
| PSB-14M-01A2-RT | PSB-14M-19A2-RT | 0.551 | 14.0 | 1000          |
| PSB-16M-01A2-RT | PSB-16M-19A2-RT | 0.629 | 16.0 | 1000          |

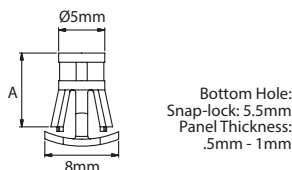
## PSBM Series Mini Adhesive Mount Push Spacer



- Specifications:
- Material: Nylon 6/6
  - Flame Class: See Table
  - Color: Natural

| Item No.       |                | A     |      | Bulk Pack Qty |
|----------------|----------------|-------|------|---------------|
| UL94 V-2       | UL94 V-0       | in    | mm   |               |
| PSBM-3-01A-RT  | PSBM-3-19A-RT  | 0.188 | 4.8  | 1000          |
| PSBM-4-01A-RT  | PSBM-4-19A-RT  | 0.250 | 6.4  | 1000          |
| PSBM-5-01A-RT  | PSBM-5-19A-RT  | 0.313 | 7.9  | 1000          |
| PSBM-6-01A-RT  | PSBM-6-19A-RT  | 0.375 | 9.5  | 1000          |
| PSBM-7-01A-RT  | PSBM-7-19A-RT  | 0.438 | 11.1 | 1000          |
| PSBM-8-01A-RT  | PSBM-8-19A-RT  | 0.500 | 12.7 | 1000          |
| PSBM-9-01A-RT  | PSBM-9-19A-RT  | 0.563 | 14.3 | 1000          |
| PSBM-10-01A-RT | PSBM-10-19A-RT | 0.625 | 15.9 | 1000          |
| PSBM-12-01A-RT | PSBM-12-19A-RT | 0.750 | 19.1 | 1000          |
| PSBM-14-01A-RT | PSBM-14-19A-RT | 0.875 | 22.2 | 1000          |

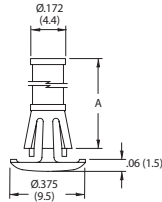
## RLCBSB Series Metric Reverse Mount Circuit Board Support Push Spacer



- Specifications:
- UL94 V-2 Material: Nylon 6/6
  - UL94 V-0 Available by special order
  - Color: Natural

- Features:
- Mounts from the outside of the chassis

| Item No.     | A     |      | Bulk Pack Qty |
|--------------|-------|------|---------------|
|              | in    | mm   |               |
| RLCBSB-5-01  | 0.197 | 5.0  | 1000          |
| RLCBSB-6-01  | 0.236 | 6.0  | 1000          |
| RLCBSB-8-01  | 0.315 | 8.0  | 1000          |
| RLCBSB-10-01 | 0.394 | 10.0 | 1000          |
| RLCBSB-12-01 | 0.472 | 12.0 | 1000          |
| RLCBSB-14-01 | 0.551 | 14.0 | 1000          |

**PUSH SPACERS****RLCBSRS Series**  
Reverse Mount Locking PCB Support Push SpacerSnap-lock:  
.187 (4.75)  
Panel Thickness:  
.059 - .063 (1.5 - 1.6)

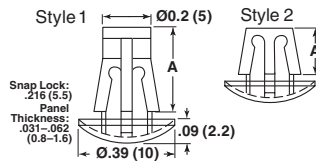
## Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

## Features:

- Supports heavily loaded PC boards
- Minimal protrusion under the board
- Inserted from the outside the chassis

| Item No.      | A     |      | Bulk Pack Qty |
|---------------|-------|------|---------------|
|               | in    | mm   |               |
| RLCBSRS-4-01  | 0.250 | 6.4  | 1000          |
| RLCBSRS-5-01  | 0.313 | 7.9  | 1000          |
| RLCBSRS-6-01  | 0.375 | 9.5  | 1000          |
| RLCBSRS-7-01  | 0.438 | 11.1 | 1000          |
| RLCBSRS-8-01  | 0.500 | 12.7 | 1000          |
| RLCBSRS-9-01  | 0.563 | 14.3 | 1000          |
| RLCBSRS-10-01 | 0.625 | 15.9 | 1000          |

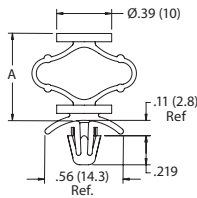
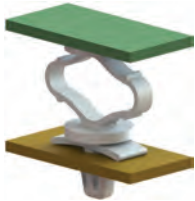
**CBRLSS Series**  
Reverse Mount Locking PCB Support Push SpacerSnap Lock:  
.216 (5.5)  
Panel Thickness:  
.031 - .062  
(0.8 - 1.6)

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.   | A     |      | Style | Bulk Pack Qty |
|------------|-------|------|-------|---------------|
|            | in    | mm   |       |               |
| CBRLSS005A | 0.138 | 3.5  | 2     | 1000          |
| CBRLSS010A | 0.197 | 5.0  | 2     | 1000          |
| CBRLSS020A | 0.276 | 7.0  | 1     | 1000          |
| CBRLSS030A | 0.335 | 8.5  | 1     | 1000          |
| CBRLSS035A | 0.394 | 10.0 | 1     | 1000          |
| CBRLSS040A | 0.472 | 12.0 | 1     | 1000          |
| CBRLSS050A | 0.531 | 13.5 | 1     | 1000          |
| CBRLSS055A | 0.551 | 14.0 | 1     | 1000          |

| Item No.   | A     |      | Style | Bulk Pack Qty |
|------------|-------|------|-------|---------------|
|            | in    | mm   |       |               |
| CBRLSS060A | 0.598 | 15.2 | 1     | 1000          |
| CBRLSS070A | 0.709 | 18.0 | 1     | 1000          |
| CBRLSS075A | 0.750 | 19.1 | 1     | 1000          |
| CBRLSS080A | 0.787 | 20.0 | 1     | 1000          |
| CBRLSS085A | 0.854 | 21.7 | 1     | 500           |
| CBRLSS090A | 0.945 | 24.0 | 1     | 500           |
| CBRLSS095A | 1.000 | 25.4 | 1     | 500           |
| CBRLSS100A | 1.181 | 30.0 | 1     | 500           |

**PSC Series**  
Push Spacer with CushionSnap-lock:  
.187 (4.75)  
Panel Thickness:  
.031 - .078 (0.8 - 2.0)

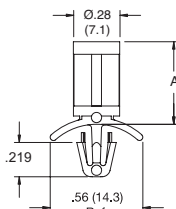
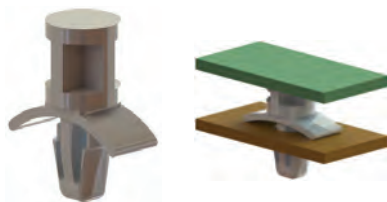
## Specifications:

- Material: UL94 HB Impact Modified UV Stabilized Nylon 6/6
- Color: Natural

## Features:

- Flexible spring spacer absorbs vibration and shock
- Mounts to chassis and supports the PC board

| Item No. | A Spacer Length Uncompressed |      | Bulk Pack Qty |
|----------|------------------------------|------|---------------|
|          | in                           | mm   |               |
| PSC-1    | 0.375                        | 9.5  | 1000          |
| PSC-2    | 0.500                        | 12.7 | 1000          |
| PSC-3    | 0.625                        | 15.9 | 1000          |
| PSC-4    | 0.750                        | 19.1 | 1000          |

**PS/27PS/CBPS Series**  
Push SpacerSnap Lock:  
.187 (4.8)  
Panel Thickness:  
.031 - .078 (0.8 - 2.0)\*

## Specifications:

- Material: Nylon 6/6
- Flame Class: See Table
- Color: Natural



| Item No.     | A        |       | Bulk Pack Qty |      |
|--------------|----------|-------|---------------|------|
|              | in       | mm    |               |      |
| UL94 V-2     | UL94 V-0 |       |               |      |
| CBPS005A     | —        | 0.138 | 3.5           | 1000 |
| PS-3-01      | PS-3-19  | 0.188 | 4.8           | 1000 |
| CBPS015A     | —        | 0.236 | 6.0           | 1000 |
| PS-4-01      | PS-4-19  | 0.250 | 6.4           | 1000 |
| PS-6-01      | PS-6-19  | 0.375 | 9.5           | 1000 |
| PS-7-01      | PS-7-19  | 0.438 | 11.1          | 1000 |
| • 27PS00500* | —        | 0.500 | 12.7          | 500  |
| PS-8-01      | PS-8-19  | 0.500 | 12.7          | 1000 |
| PS-9-01      | —        | 0.563 | 14.3          | 1000 |
| PS-10-01     | PS-10-19 | 0.625 | 15.9          | 1000 |
| PS-12-01     | PS-12-19 | 0.750 | 19.1          | 1000 |
| PS-14-01     | PS-14-19 | 0.875 | 22.2          | 1000 |
| CBPS060A     | —        | 0.945 | 24.0          | 1000 |
| CBPS065A     | —        | 1.000 | 25.4          | 1000 |
| CBPS070A     | —        | 1.125 | 28.6          | 500  |
| • 27PS01250  | —        | 1.250 | 31.8          | 500  |
| CBPS080A     | —        | 1.375 | 34.9          | 500  |

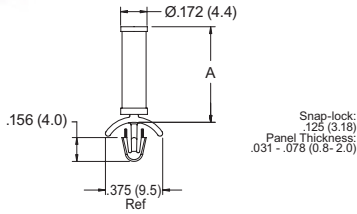
\*Panel thickness - .093 (2.4)





# PUSH SPACERS

## PSM Series Mini Push Spacer

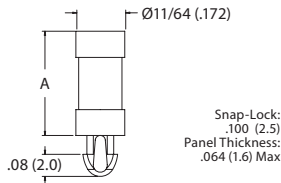


Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

| Item No.  | A     |      | Bulk Pack Qty |
|-----------|-------|------|---------------|
|           | in    | mm   |               |
| PSM-2-01  | 0.125 | 3.2  | 1000          |
| PSM-3-01  | 0.188 | 4.8  | 1000          |
| PSM-4-01  | 0.250 | 6.4  | 1000          |
| PSM-5-01  | 0.313 | 7.9  | 1000          |
| PSM-6-01  | 0.375 | 9.5  | 1000          |
| PSM-7-01  | 0.438 | 11.1 | 1000          |
| PSM-8-01  | 0.500 | 12.7 | 1000          |
| PSM-9-01  | 0.563 | 14.3 | 1000          |
| PSM-10-01 | 0.625 | 15.9 | 1000          |

## PST Series Teardrop Push Spacer

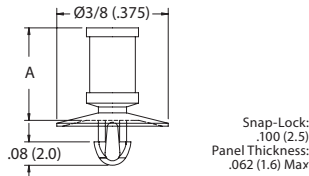


Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

| Item No.  | A     |      | Bulk Pack Qty |
|-----------|-------|------|---------------|
|           | in    | mm   |               |
| PST-1-01  | 0.063 | 1.6  | 1000          |
| PST-2-01  | 0.125 | 3.2  | 1000          |
| PST-3-01  | 0.188 | 4.8  | 1000          |
| PST-4-01  | 0.250 | 6.4  | 1000          |
| PST-5-01  | 0.313 | 7.9  | 1000          |
| PST-6-01  | 0.375 | 9.5  | 1000          |
| PST-7-01  | 0.438 | 11.1 | 1000          |
| PST-8-01  | 0.500 | 12.7 | 1000          |
| PST-9-01  | 0.563 | 14.3 | 1000          |
| PST-10-01 | 0.625 | 15.9 | 1000          |

## CPST Series Cupped Teardrop Push Spacer



Specifications:

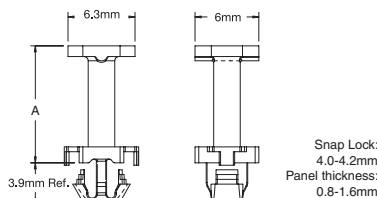
- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

Features:

- Cupped base provides a tight fit to the board and completely covers the hole

| Item No.   | A     |      | Bulk Pack Qty |
|------------|-------|------|---------------|
|            | in    | mm   |               |
| CPST-2-01  | 0.125 | 3.2  | 1000          |
| CPST-3-01  | 0.188 | 4.8  | 1000          |
| CPST-4-01  | 0.250 | 6.4  | 1000          |
| CPST-5-01  | 0.313 | 7.9  | 1000          |
| CPST-6-01  | 0.375 | 9.5  | 1000          |
| CPST-7-01  | 0.438 | 11.1 | 1000          |
| CPST-8-01  | 0.500 | 12.7 | 1000          |
| CPST-9-01  | 0.563 | 14.3 | 1000          |
| CPST-10-01 | 0.625 | 15.9 | 1000          |

## PSE Series Metric Push Spacer



Specifications:

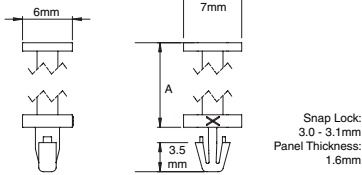
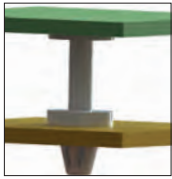
- Material: Nylon 6/6
- Flame Class: See Table
- Color: Natural

| Item No.  | A         |          | Bulk Pack Qty |      |
|-----------|-----------|----------|---------------|------|
|           | UL94 V-2  | UL94 V-0 |               | in   |
| PSE-3M-01 | PSE-3M-19 | 0.118    | 3.0           | 1000 |
| PSE-4M-01 | PSE-4M-19 | 0.157    | 4.0           | 1000 |
| PSE-5M-01 | PSE-5M-19 | 0.197    | 5.0           | 1000 |
| PSE-6M-01 | PSE-6M-19 | 0.236    | 6.0           | 1000 |
| PSE-7M-01 | PSE-7M-19 | 0.276    | 7.0           | 1000 |
| PSE-8M-01 | PSE-8M-19 | 0.315    | 8.0           | 1000 |



# PUSH SPACERS

## PSD Series Metric Push Spacer

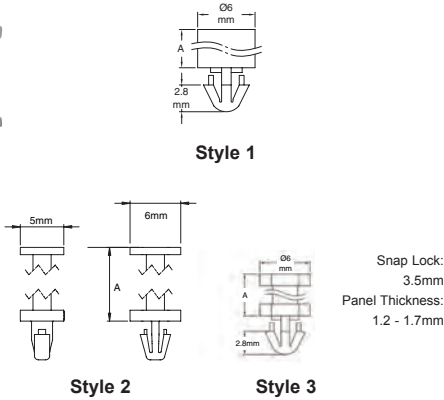


Specifications:

- Material: Nylon 6/6
- Flame Class: See table
- Color: Natural

| Item No.   | UL94 V-2   | UL94 V-0 | A     |      | Bulk Pack Qty |
|------------|------------|----------|-------|------|---------------|
|            |            |          | in    | mm   |               |
| PSD-4M-01  | PSD-4M-19  |          | 0.157 | 4.0  | 1000          |
| PSD-6M-01  | PSD-6M-19  |          | 0.236 | 6.0  | 1000          |
| PSD-7M-01  | PSD-7M-19  |          | 0.276 | 7.0  | 1000          |
| PSD-8M-01  | PSD-8M-19  |          | 0.315 | 8.0  | 1000          |
| PSD-10M-01 | PSD-10M-19 |          | 0.394 | 10.0 | 1000          |
| PSD-12M-01 | PSD-12M-19 |          | 0.472 | 12.0 | 1000          |
| PSD-14M-01 | PSD-14M-19 |          | 0.551 | 14.0 | 1000          |
| PSD-18M-01 | PSD-18M-19 |          | 0.709 | 18.0 | 1000          |

## CBPSW Series Push Spacers

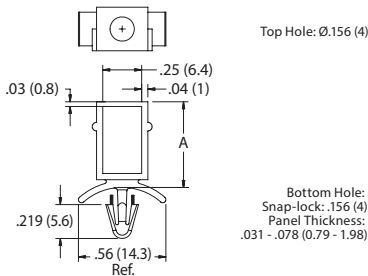


Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.  | A     |      | Style | Bulk Pack Qty |
|-----------|-------|------|-------|---------------|
|           | in    | mm   |       |               |
| CBPSW005A | 0.118 | 3.0  | 1     | 2000          |
| CBPSW010A | 0.138 | 3.5  | 1     | 2000          |
| CBPSW015A | 0.157 | 4.0  | 1     | 2000          |
| CBPSW020A | 0.177 | 4.5  | 2     | 2000          |
| CBPSW025A | 0.197 | 5.0  | 3     | 2000          |
| CBPSW030A | 0.217 | 5.5  | 2     | 2000          |
| CBPSW035A | 0.236 | 6.0  | 2     | 2000          |
| CBPSW040A | 0.256 | 6.5  | 2     | 2000          |
| CBPSW045A | 0.276 | 7.0  | 2     | 2000          |
| CBPSW050A | 0.531 | 13.5 | 2     | 2000          |
| CBPSW055A | 1.024 | 26.0 | 2     | 2000          |

## CBSS Series Circuit Board Stacking Spacer



Specifications:

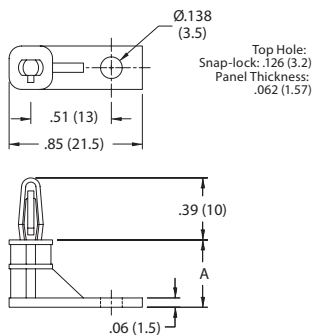
- Material: Nylon 6/6
- Flame Class: See table
- Color: Natural

Features:

- Spacers snap together to stack any number of boards
- MB-1-156 mounting button caps off the stack; see page 130

| Item No.   | UL94 V-2   | UL94 V-0 | A    |      | Bulk Pack Qty |
|------------|------------|----------|------|------|---------------|
|            |            |          | in   | mm   |               |
| CBSS-8-01  | CBSS-8-19  |          | 0.43 | 10.9 | 1000          |
| CBSS-10-01 | CBSS-10-19 |          | 0.55 | 14.0 | 1000          |
| CBSS-12-01 | CBSS-12-19 |          | 0.68 | 17.3 | 1000          |
| CBSS-14-01 | CBSS-14-19 |          | 0.80 | 20.3 | 1000          |

## LCBS-L Series Screw Mount Locking Circuit Board Support



Specifications:

- Material: UL94 V-2 Nylon 6/6
- UL94 V-0 Available by special order
- Color: Natural

Features:

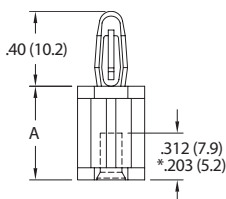
- Installs with #4 or M3 screw or rivet
- Offset style allows dense packaging

| Item No.     | A     |      | Bulk Pack Qty |
|--------------|-------|------|---------------|
|              | in    | mm   |               |
| LCBS-L-5-01  | 0.313 | 7.6  | 1000          |
| LCBS-L-6-01  | 0.375 | 9.5  | 1000          |
| LCBS-L-7-01  | 0.438 | 11.1 | 1000          |
| LCBS-L-8-01  | 0.500 | 12.7 | 1000          |
| LCBS-L-9-01  | 0.563 | 14.3 | 1000          |
| LCBS-L-10-01 | 0.625 | 15.9 | 1000          |



# SCREW MOUNT CIRCUIT BOARD SUPPORTS

## TCBS Series Self-Tapping Locking PCB Support



Snap-Lock: .156 (4.0)  
Panel Thickness: .062 (1.6)

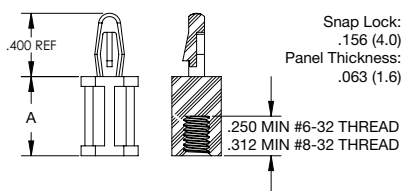
Specifications:

- Material: Nylon 6/6
- Flame Class: See table
- Color: Natural

### #6 or M3.5 Self Tapping Screw

| Item No.     | UL94 V-2     | UL94 V-0 | A     |      | Bulk Pack Qty |
|--------------|--------------|----------|-------|------|---------------|
|              |              |          | in    | mm   |               |
| TCBS-4-01*   | TCBS-4-19*   |          | 0.250 | 6.4  | 1000          |
| TCBS-6-01    | TCBS-6-19    |          | 0.375 | 9.5  | 1000          |
| TCBS-8-01    | TCBS-8-19    |          | 0.500 | 12.7 | 1000          |
| TCBS-10-01   | TCBS-10-19   |          | 0.625 | 15.9 | 1000          |
| TCBS-12-01   | TCBS-12-19   |          | 0.750 | 19.1 | 1000          |
| TCBS-14-01   | TCBS-14-19   |          | 0.875 | 22.2 | 1000          |
| TCBS-16-01   | TCBS-16-19   |          | 1.000 | 25.4 | 1000          |
| TCBS-18-01   | TCBS-18-19   |          | 1.125 | 28.6 | 1000          |
| TCBS-20-01   | TCBS-20-19   |          | 1.250 | 31.8 | 1000          |
| TCBS-22.5-01 | TCBS-22.5-19 |          | 1.416 | 35.7 | 1000          |

## 27FTP Series Female Threaded Locking PCB Support



Snap Lock: .156 (4.0)  
Panel Thickness: .063 (1.6)

Specifications:

- Material: UL94 V-2 Nylon 6/6
- UL94 V-0 Available by special order
- Color: Natural



### #6-32 Screw Size

| Item No.    | A     |       | Bulk Pack Qty |
|-------------|-------|-------|---------------|
|             | in    | mm    |               |
| 27FTP00375A | 0.375 | 9.53  | 1000          |
| 27FTP00500A | 0.500 | 12.7  | 1000          |
| 27FTP00625A | 0.625 | 15.88 | 500           |
| 27FTP00750A | 0.750 | 19.05 | 1000          |
| 27FTP00875A | 0.875 | 22.23 | 500           |

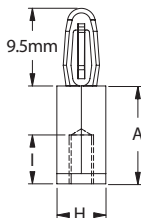
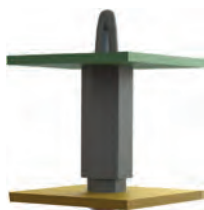
| Item No.    | A     |       | Bulk Pack Qty |
|-------------|-------|-------|---------------|
|             | in    | mm    |               |
| 27FTP01000A | 1.000 | 25.4  | 500           |
| 27FTP01125A | 1.125 | 28.58 | 1000          |
| 27FTP01250A | 1.250 | 31.75 | 1000          |
| 27FTP01406A | 1.406 | 35.71 | 1000          |

### #8-32 Screw Size

| Item No.   | A     |       | Bulk Pack Qty |
|------------|-------|-------|---------------|
|            | in    | mm    |               |
| 27FTP00250 | 0.250 | 6.35  | 1000          |
| 27FTP00375 | 0.375 | 9.53  | 1000          |
| 27FTP00500 | 0.500 | 12.7  | 1000          |
| 27FTP00625 | 0.625 | 15.88 | 500           |
| 27FTP00750 | 0.750 | 19.05 | 1000          |

| Item No.   | A     |       | Bulk Pack Qty |
|------------|-------|-------|---------------|
|            | in    | mm    |               |
| 27FTP00875 | 0.875 | 22.23 | 500           |
| 27FTP01000 | 1.000 | 25.4  | 500           |
| 27FTP01125 | 1.125 | 28.58 | 1000          |
| 27FTP01250 | 1.250 | 31.75 | 1000          |
| 27FTP01406 | 1.406 | 35.71 | 1000          |

## TCBN Series Metric Female Threaded Locking PCB Support



Snap-lock: 4mm  
Panel Thickness: 1.6mm

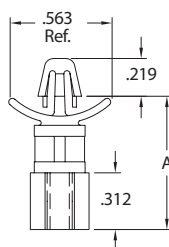
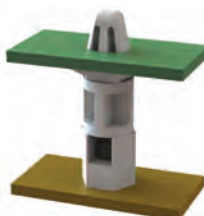
Specifications:

- Material: UL94 HB Nylon 6/6
- Color: Black

### #M3 or M4 Screw Size

| Item No.       | Thread | A   | H   | I   | Bulk Pack Qty |
|----------------|--------|-----|-----|-----|---------------|
|                |        | mm  | mm  | mm  |               |
| TCBN-T1-M3-6-5 | M3     | 5.0 | 6.0 | 3.0 | 500           |
| TCBN-T1-M3-6-6 | M3     | 6.0 | 6.0 | 4.0 | 500           |
| TCBN-T1-M3-6-8 | M3     | 8.0 | 6.0 | 6.0 | 500           |
| TCBN-T1-M4-8-5 | M4     | 5.0 | 8.0 | 3.0 | 500           |
| TCBN-T1-M4-8-6 | M4     | 6.0 | 8.0 | 4.0 | 500           |
| TCBN-T1-M4-8-8 | M4     | 8.0 | 8.0 | 6.0 | 500           |

## LCCBS-TF Series Female Threaded Locking PCB Support



Snap-lock: .187 (4.75)  
Panel Thickness: .062 (1.57)

Specifications:

- Material: Nylon 6/6
- Flame Class: See table
- Color: Natural

### #6 - 32 Screw Size

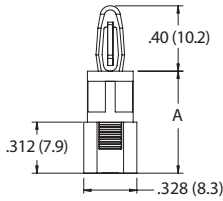
| Item No.       | UL94 V-2       | UL94 V-0 | A     |      | Bulk Pack Qty |
|----------------|----------------|----------|-------|------|---------------|
|                |                |          | in    | mm   |               |
| LCCBS-TF-9-01  | LCCBS-TF-9-19  |          | 0.534 | 13.6 | 1000          |
| LCCBS-TF-10-01 | LCCBS-TF-10-19 |          | 0.672 | 17.1 | 1000          |
| LCCBS-TF-12-01 | LCCBS-TF-12-19 |          | 0.797 | 20.2 | 1000          |
| LCCBS-TF-14-01 | LCCBS-TF-14-19 |          | 0.922 | 23.4 | 1000          |
| LCCBS-TF-16-01 | LCCBS-TF-16-19 |          | 1.047 | 25.4 | 1000          |



## SCREW MOUNT CIRCUIT BOARD SUPPORTS

## LCBS-TF Series

## Female Threaded Locking PCB Support



Snap-Lock:  
.156 (4.0)  
Panel Thickness:  
.062 (1.6)

#6-32 Female Thread

## Specifications:

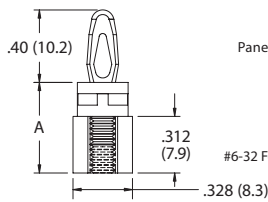
- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

## #6 - 32 Screw Size

| Item No.      | A     |      | Bulk Pack Qty |
|---------------|-------|------|---------------|
|               | in    | mm   |               |
| LCBS-TF-6-01  | 0.375 | 9.5  | 1000          |
| LCBS-TF-8-01  | 0.500 | 12.7 | 1000          |
| LCBS-TF-10-01 | 0.625 | 15.9 | 1000          |
| LCBS-TF-12-01 | 0.750 | 19.1 | 1000          |
| LCBS-TF-14-01 | 0.875 | 22.2 | 1000          |
| LCBS-TF-16-01 | 1.000 | 25.4 | 1000          |

## CBS-TF Series

## Female Threaded Non-Locking PCB Support



Snap Fit:  
.156 (4.0)  
Panel Thickness:  
.062 (1.6)

#6-32 Female Thread

## Specifications:

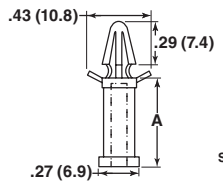
- Material: Nylon 6/6
- Flame Class: See table
- Color: Natural

## #6 - 32 Screw Size

| Item No.     | A     |      | Bulk Pack Qty |
|--------------|-------|------|---------------|
|              | in    | mm   |               |
| UL94 V-2     |       |      |               |
| CBS-TF-6-01  | 0.375 | 9.5  | 1000          |
| CBS-TF-8-01  | 0.500 | 12.7 | 1000          |
| CBS-TF-10-01 | 0.625 | 15.9 | 1000          |
| CBS-TF-12-01 | 0.750 | 19.1 | 1000          |
| CBS-TF-14-01 | 0.875 | 22.2 | 1000          |
| CBS-TF-16-01 | 1.000 | 25.4 | 1000          |

## CBTFS Series

## Metric Self-Tapping Locking PCB Support



Snap Lock:  
.157 (4.0)  
Panel Thickness:  
.047-.067 (1.2-1.7)

For M3 Self-Tapped Screw

## Specifications:

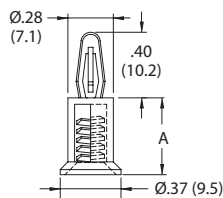
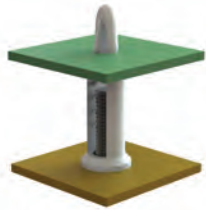
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

## M3 Self Tapping Screw

| Item No.  | A     |      | Bulk Pack Qty |
|-----------|-------|------|---------------|
|           | in    | mm   |               |
| CBTFS005A | 0.197 | 5.0  | 1000          |
| CBTFS010A | 0.250 | 6.4  | 1000          |
| CBTFS015A | 0.276 | 7.0  | 1000          |
| CBTFS020A | 0.394 | 10.0 | 1000          |
| CBTFS025A | 0.591 | 15.0 | 1000          |
| CBTFS030A | 0.787 | 20.0 | 1000          |
| CBTFS035A | 0.984 | 25.0 | 1000          |
| CBTFS040A | 1.181 | 30.0 | 1000          |
| CBTFS045A | 1.378 | 35.0 | 1000          |

## SFCBS Series

## Stud Fitting Locking PCB Support



Snap-Lock:  
.156 (4.0)  
Panel Thickness:  
.062 (1.6)

To fit a #8 (M4) Screw or Stud

## Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

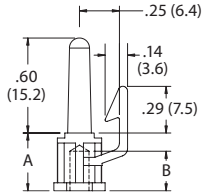
## #8 or M4 Screw Size

| Item No.        | A     |      | Bulk Pack Qty |
|-----------------|-------|------|---------------|
|                 | in    | mm   |               |
| SFCBS-M4-10M-01 | 0.390 | 9.9  | 1000          |
| SFCBS-M4-12M-01 | 0.470 | 11.9 | 1000          |
| SFCBS-M4-14M-01 | 0.550 | 14.0 | 1000          |
| SFCBS-M4-16M-01 | 0.630 | 16.0 | 1000          |
| SFCBS-M4-18M-01 | 0.710 | 18.0 | 1000          |
| SFCBS-M4-20M-01 | 0.790 | 20.1 | 1000          |



# SCREW MOUNT & THREADED CIRCUIT BOARD SUPPORTS

## TEHCBS Series Edge Holding Self-Tapping Locking PCB Support



Snap Fit: .156 (4.0)  
Panel Thickness: .062 (1.6)

For #6 (M3.5) Self-Tapping Screw

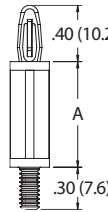
**Specifications:**

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

**#6 or M3.5 Self Tapping Screw**

| Item No.     | A     |      | B    |     | Bulk Pack Qty |
|--------------|-------|------|------|-----|---------------|
|              | in    | mm   | in   | mm  |               |
| TEHCBS-4-01  | 0.250 | 6.4  | 0.25 | 6.4 | 1000          |
| TEHCBS-5-01  | 0.313 | 7.9  | 0.20 | 5.1 | 1000          |
| TEHCBS-6-01  | 0.375 | 9.5  | 0.25 | 6.4 | 1000          |
| TEHCBS-8-01  | 0.500 | 12.7 | 0.25 | 6.4 | 1000          |
| TEHCBS-10-01 | 0.625 | 15.9 | 0.25 | 6.4 | 1000          |
| TEHCBS-12-01 | 0.750 | 19.1 | 0.25 | 6.4 | 1000          |
| TEHCBS-14-01 | 0.875 | 22.2 | 0.25 | 6.4 | 1000          |
| TEHCBS-16-01 | 1.000 | 25.4 | 0.25 | 6.4 | 1000          |

## LCBS-TM Series Male Threaded Locking PCB Support



Snap-Lock: .156 (4.0)  
Panel Thickness: .062 (1.6)

#6-32 Thread

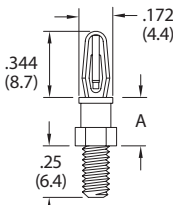
**Specifications:**

- Material: Nylon 6/6
- Flame Class: See Table
- Color: Natural

**#6-32 Thread Size**

| Item No.      | UL94 V-2      | UL94 V-0 | A     |      | Bulk Pack Qty |
|---------------|---------------|----------|-------|------|---------------|
|               |               |          | in    | mm   |               |
| LCBS-TM-4-01  | LCBS-TM-4-19  |          | 0.250 | 6.4  | 1000          |
| LCBS-TM-6-01  | LCBS-TM-6-19  |          | 0.375 | 9.5  | 1000          |
| LCBS-TM-8-01  | LCBS-TM-8-19  |          | 0.500 | 12.7 | 1000          |
| LCBS-TM-10-01 | LCBS-TM-10-19 |          | 0.625 | 15.9 | 1000          |
| LCBS-TM-12-01 | LCBS-TM-12-19 |          | 0.750 | 19.1 | 1000          |
| LCBS-TM-14-01 | LCBS-TM-14-19 |          | 0.875 | 22.2 | 1000          |
| LCBS-TM-16-01 | LCBS-TM-16-19 |          | 1.000 | 25.4 | 1000          |

## SCBSM Series Mini Male Threaded Locking PCB Support



Snap-Lock: .125 (3.2)  
Panel Thickness: .062 (1.6)

#6-32 Thread

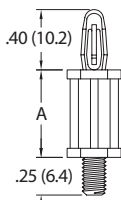
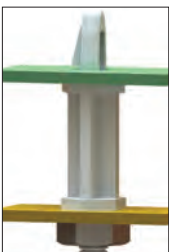
**Specifications:**

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

**#6-32 Thread Size**

| Item No.        | A     |      | Bulk Pack Qty |
|-----------------|-------|------|---------------|
|                 | in    | mm   |               |
| SCBSM-632-2-01  | 0.125 | 3.2  | 1000          |
| SCBSM-632-3-01  | 0.188 | 4.8  | 1000          |
| SCBSM-632-4-01  | 0.250 | 6.4  | 1000          |
| SCBSM-632-5-01  | 0.313 | 7.9  | 1000          |
| SCBSM-632-6-01  | 0.375 | 9.5  | 1000          |
| SCBSM-632-7-01  | 0.438 | 11.1 | 1000          |
| SCBSM-632-8-01  | 0.500 | 12.7 | 1000          |
| SCBSM-632-9-01  | 0.563 | 14.3 | 1000          |
| SCBSM-632-10-01 | 0.625 | 15.9 | 1000          |

## SCBS/27LMTP Series Male Threaded Locking PCB Support



Snap-Lock: .156 (4.0)  
Panel Thickness: .062 (1.6)  
27LMTP: .070 (1.8)

#8-32 Thread

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

**#8-32 Thread Size**

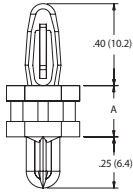
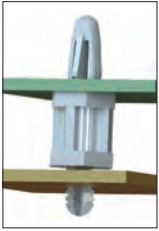
| Item No.     | A     |      | Bulk Pack Qty |
|--------------|-------|------|---------------|
|              | in    | mm   |               |
| SCBS-4-01    | 0.250 | 6.4  | 1000          |
| SCBS-6-01    | 0.375 | 9.5  | 1000          |
| SCBS-8-01    | 0.500 | 12.7 | 1000          |
| SCBS-10-01   | 0.625 | 15.9 | 1000          |
| SCBS-12-01   | 0.750 | 19.1 | 1000          |
| SCBS-14-01   | 0.875 | 22.2 | 1000          |
| SCBS-16-01   | 1.000 | 25.4 | 1000          |
| SCBS-18-01   | 1.125 | 28.6 | 1000          |
| SCBS-22.5-01 | 1.406 | 35.7 | 1000          |
| 27LMTP01500  | 1.500 | 38.1 | 1000          |





# THREADED CIRCUIT BOARD SUPPORTS

## SCBSST Series Male Self-Threading Locking PCB Support



Snap-lock:  
.156 (4)  
Panel Thickness:  
.062 (1.57)

Self-Thread into a #8 or M4  
Threaded Hole or Nut  
Panel Thickness: .063 (1.6)  
Minimum Engagement

### Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

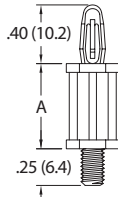
### Features:

- The threaded hole acts as a die and threads the bottom end when screwed in
- Can be used in either a #8 or M4 threaded hole
- Easily installed by hand with minimal force

### #8 or M4 Thread

| Item No.       | A     |      | Bulk Pack Qty |
|----------------|-------|------|---------------|
|                | in    | mm   |               |
| SCBSST-4-01    | 0.250 | 6.4  | 1000          |
| SCBSST-6-01    | 0.375 | 9.5  | 1000          |
| SCBSST-8-01    | 0.500 | 12.7 | 1000          |
| SCBSST-10-01   | 0.625 | 15.9 | 1000          |
| SCBSST-12-01   | 0.750 | 19.1 | 1000          |
| SCBSST-14-01   | 0.875 | 22.2 | 1000          |
| SCBSST-16-01   | 1.000 | 25.4 | 1000          |
| SCBSST-18-01   | 1.125 | 28.6 | 1000          |
| SCBSST-22.5-01 | 1.406 | 35.7 | 1000          |

## MSCBS/CBTMS/27MLMTP Series Male Threaded Locking PCB Support



Snap-Lock:  
.156 (4.0)  
Panel Thickness:  
.062 (1.6)

M4 Thread

### Specifications:

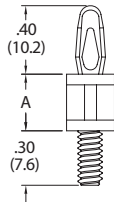
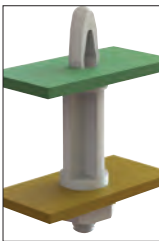
- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural



### M4 Thread Size

| Item No.      | A     |      | Bulk Pack Qty |
|---------------|-------|------|---------------|
|               | in    | mm   |               |
| MSCBS-4-01    | 0.250 | 6.4  | 1000          |
| MSCBS-6-01    | 0.375 | 9.5  | 1000          |
| 27MLMTP12     | 0.472 | 12.0 | 1000          |
| MSCBS-8-01    | 0.500 | 12.7 | 1000          |
| MSCBS-10-01   | 0.625 | 15.9 | 1000          |
| MSCBS-12-01   | 0.750 | 19.1 | 1000          |
| MSCBS-14-01   | 0.875 | 22.2 | 1000          |
| CBTMS030A     | 0.937 | 23.8 | 1000          |
| MSCBS-16-01   | 1.000 | 25.4 | 1000          |
| MSCBS-18-01   | 1.125 | 28.6 | 1000          |
| MSCBS-22.5-01 | 1.406 | 35.7 | 1000          |
| 27MLMTP45     | 1.772 | 45.0 | 1000          |
| 27MLMTP50     | 1.969 | 50.0 | 1000          |

## CBS-TM Series Male Threaded Non-Locking PCB Support



Snap-fit:  
.156 (4)  
Panel Thickness:  
.062 (1.57)

#6-32 Thread

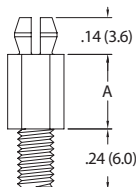
### Specifications:

- Material: Nylon 6/6
- Flame Class: See table
- Color: Natural

### #6-32 Thread Size

| Item No.     | A            |          | Bulk Pack Qty |      |
|--------------|--------------|----------|---------------|------|
|              | UL94 V-2     | UL94 V-0 |               |      |
| CBS-TM-4-01  | CBS-TM-4-19  | 0.250    | 6.4           | 1000 |
| CBS-TM-6-01  | CBS-TM-6-19  | 0.375    | 9.5           | 1000 |
| CBS-TM-8-01  | CBS-TM-8-19  | 0.500    | 12.7          | 1000 |
| CBS-TM-10-01 | CBS-TM-10-19 | 0.625    | 15.9          | 1000 |
| CBS-TM-12-01 | CBS-TM-12-19 | 0.750    | 19.1          | 1000 |
| CBS-TM-14-01 | CBS-TM-14-19 | 0.875    | 22.2          | 1000 |
| CBS-TM-16-01 | CBS-TM-16-19 | 1.000    | 25.4          | 1000 |
| CBS-TM-18-01 | CBS-TM-18-19 | 1.125    | 28.6          | 1000 |
| CBS-TM-20-01 | CBS-TM-20-19 | 1.250    | 31.8          | 1000 |
| CBS-TM-22-01 | CBS-TM-22-19 | 1.375    | 34.9          | 1000 |
| CBS-TM-24-01 | CBS-TM-24-19 | 1.500    | 38.1          | 1000 |

## 27MTP/HMSP-TM Series Male Threaded Non-Locking PCB Support



Snap-Fit:  
.152 (3.9)  
Panel Thickness:  
.062 (1.6)

#6-32 Thread

### Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural



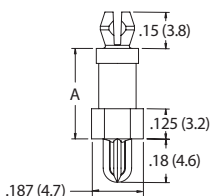
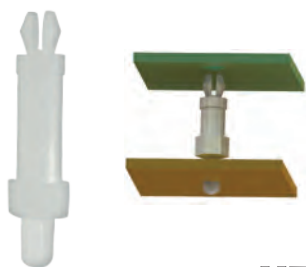
### #6-32 Thread Size

| Item No.      | A     |      | Bulk Pack Qty |
|---------------|-------|------|---------------|
|               | in    | mm   |               |
| HMSP-TM-2-01  | 0.125 | 3.1  | 1000          |
| HMSP-TM-3-01  | 0.188 | 4.8  | 1000          |
| HMSP-TM-4-01  | 0.250 | 6.4  | 1000          |
| HMSP-TM-6-01  | 0.375 | 9.5  | 1000          |
| 27MTP00395    | 0.395 | 10.0 | 1000          |
| HMSP-TM-8-01  | 0.500 | 12.7 | 1000          |
| HMSP-TM-10-01 | 0.625 | 15.9 | 1000          |
| HMSP-TM-12-01 | 0.750 | 19.1 | 1000          |
| HMSP-TM-14-01 | 0.875 | 22.2 | 1000          |



# THREADED CIRCUIT BOARD SUPPORTS

## MSPMST Series Micro Self-Threading Non-Locking PCB Support



Snap-Fit: .125 (3.2)  
Panel Thickness: .062 (1.6)

Self-Thread into a #4 or M3 Threaded Hole or Nut  
Panel Thickness: .063 (1.6) Minimum Engagement

### Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

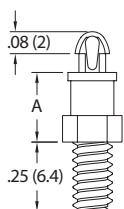
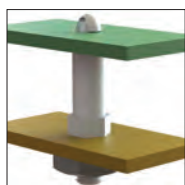
### Features:

- The threaded hole acts as a die and threads the bottom end when screwed in
- Can be used in either a #4 or M3 threaded hole
- Easily Installed by hand with minimal force

### #4 or M3 Thread

| Item No.     | A     |      | Bulk Pack Qty |
|--------------|-------|------|---------------|
|              | in    | mm   |               |
| MSPMST-2-01  | 0.125 | 3.2  | 1000          |
| MSPMST-3-01  | 0.188 | 4.8  | 1000          |
| MSPMST-4-01  | 0.250 | 6.4  | 1000          |
| MSPMST-5-01  | 0.313 | 7.9  | 1000          |
| MSPMST-6-01  | 0.375 | 9.5  | 1000          |
| MSPMST-7-01  | 0.438 | 11.1 | 1000          |
| MSPMST-8-01  | 0.500 | 12.7 | 1000          |
| MSPMST-9-01  | 0.563 | 14.3 | 1000          |
| MSPMST-10-01 | 0.625 | 15.9 | 1000          |

## SCBST Series Male Threaded Locking PCB Support



Snap-lock: .100 (2.54)  
Panel Thickness: .064 (1.63)

#6-32 Thread

### Specifications:

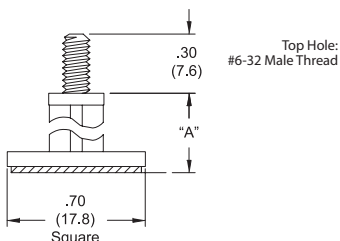
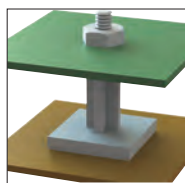
- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

### #6-32 Thread Size

| Item No.   | A     |     | Bulk Pack Qty |
|------------|-------|-----|---------------|
|            | in    | mm  |               |
| SCBST-2-01 | 0.125 | 3.2 | 1000          |
| SCBST-3-01 | 0.188 | 4.8 | 1000          |
| SCBST-4-01 | 0.250 | 6.4 | 1000          |
| SCBST-5-01 | 0.313 | 7.9 | 1000          |
| SCBST-6-01 | 0.375 | 9.5 | 1000          |

| Item No.    | A     |      | Bulk Pack Qty |
|-------------|-------|------|---------------|
|             | in    | mm   |               |
| SCBST-7-01  | 0.438 | 11.1 | 1000          |
| SCBST-8-01  | 0.500 | 12.7 | 1000          |
| SCBST-9-01  | 0.563 | 14.3 | 1000          |
| SCBST-10-01 | 0.625 | 15.9 | 1000          |

## SCBSB Series Adhesive Mount Male Threaded PCB Support



Top Hole: #6-32 Male Thread

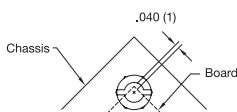
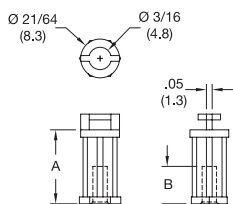
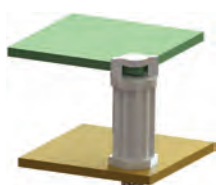
### Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

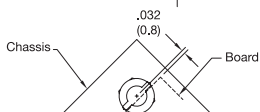
### #6-32 Thread Size

| Item No.        | A     |      | Bulk Pack Qty |
|-----------------|-------|------|---------------|
|                 | in    | mm   |               |
| SCBSB-4-01A-RT  | 0.250 | 6.4  | 1000          |
| SCBSB-6-01A-RT  | 0.375 | 9.5  | 1000          |
| SCBSB-8-01A-RT  | 0.500 | 12.7 | 1000          |
| SCBSB-10-01A-RT | 0.625 | 15.9 | 1000          |
| SCBSB-12-01A-RT | 0.750 | 19.1 | 1000          |
| SCBSB-14-01A-RT | 0.875 | 22.2 | 1000          |
| SCBSB-16-01A-RT | 1.000 | 25.4 | 1000          |
| SCBSB-18-01A-RT | 1.125 | 28.6 | 1000          |

## TCEHCBS Series Screw Mount Corner Edge Holding PCB Support



Corner Mount



Edge Mount

### Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

### Features:

- Requires no slots or holes on board for maximum packaging density
- Can be mounted to the corner or the edge of the board
- Mounts with a metal #6 self-tapping screw
- Top panel thickness: 0.062 (1.6)

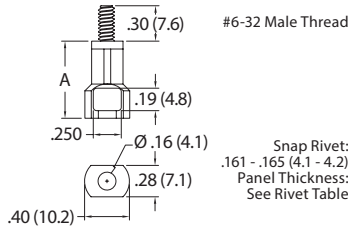
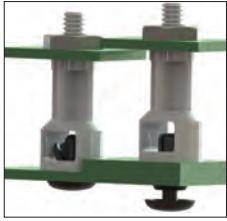
### #6 or M3.5 Self Tapping Screw

| Item No.      | A     |      | B     |     | Bulk Pack Qty |
|---------------|-------|------|-------|-----|---------------|
|               | in    | mm   | in    | mm  |               |
| TCEHCBS-4-01  | 0.250 | 6.4  | 13/64 | 5.2 | 1000          |
| TCEHCBS-6-01  | 0.375 | 9.5  | 5/16  | 7.9 | 1000          |
| TCEHCBS-8-01  | 0.500 | 12.7 | 5/16  | 7.9 | 1000          |
| TCEHCBS-10-01 | 0.625 | 15.9 | 5/16  | 7.9 | 1000          |
| TCEHCBS-12-01 | 0.750 | 19.1 | 5/16  | 7.9 | 1000          |
| TCEHCBS-14-01 | 0.875 | 22.2 | 5/16  | 7.9 | 1000          |



# THREADED CIRCUIT BOARD SUPPORTS

## SRSCBS Series Snap Rivet Mount Threaded Male PCB Support



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by special order
- Color: Natural

**Features:**

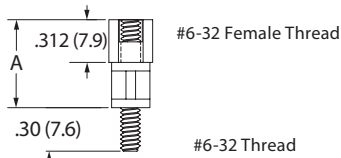
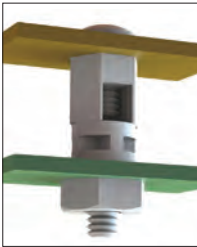
- Designed to mount easily on chassis with plastic SR rivet sold separately. See Rivet Table
- Allows mounting to a range of panel thicknesses; up to 0.341 thick
- Button head on rivet for minimal protrusion on chassis underside

**#6-32 Thread Size**

| Item No.     | A     |      | Bulk Pack Qty |
|--------------|-------|------|---------------|
|              | in    | mm   |               |
| SRSCBS-6-01  | 0.375 | 9.5  | 1000          |
| SRSCBS-7-01  | 0.438 | 11.1 | 1000          |
| SRSCBS-8-01  | 0.500 | 12.7 | 1000          |
| SRSCBS-10-01 | 0.625 | 15.9 | 1000          |
| SRSCBS-12-01 | 0.750 | 19.1 | 1000          |
| SRSCBS-14-01 | 0.875 | 22.2 | 1000          |
| SRSCBS-16-01 | 1.000 | 25.4 | 1000          |

| Use Rivet Item No. | Rivet Table For Chassis Thickness |           |
|--------------------|-----------------------------------|-----------|
|                    | in                                | mm        |
| SR-4050            | 0.026 - 0.062                     | 0.7 - 1.6 |
| SR-4060            | 0.062 - 0.105                     | 1.5 - 2.7 |
| SR-4070            | 0.105 - 0.145                     | 2.7 - 3.7 |
| SR-4080            | 0.145 - 0.184                     | 3.7 - 4.7 |
| SR-4090            | 0.184 - 0.223                     | 4.7 - 5.7 |
| SR-4100            | 0.223 - 0.263                     | 5.7 - 6.7 |
| SR-4120            | 0.282 - 0.341                     | 7.2 - 8.7 |

## CBS-TFM Series Threaded Female and Male PCB Support



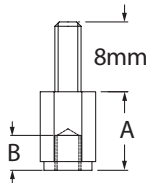
**Specifications:**

- Material: Nylon 6/6
- Flame Class: See table
- Color: Natural

**#6-32 Thread Size**

| Item No.      |               | A     |      | Bulk Pack Qty |
|---------------|---------------|-------|------|---------------|
| UL94 V-2      | UL94 V-0      | in    | mm   |               |
| CBS-TFM-6-01  | CBS-TFM-6-19  | 0.375 | 9.5  | 1000          |
| CBS-TFM-8-01  | CBS-TFM-8-19  | 0.500 | 12.7 | 1000          |
| CBS-TFM-10-01 | CBS-TFM-10-19 | 0.625 | 15.9 | 1000          |
| CBS-TFM-12-01 | CBS-TFM-12-19 | 0.750 | 19.1 | 1000          |
| CBS-TFM-14-01 | CBS-TFM-14-19 | 0.875 | 22.2 | 1000          |
| CBS-TFM-16-01 | CBS-TFM-16-19 | 1.000 | 25.4 | 1000          |

## HTSN-2 Series Metric Male Threaded Standoff



**Specifications:**

- Material: UL94 HB Heat Stabilized Nylon 6/6
- Color: Black

**#M3 or M4 Thread Size**

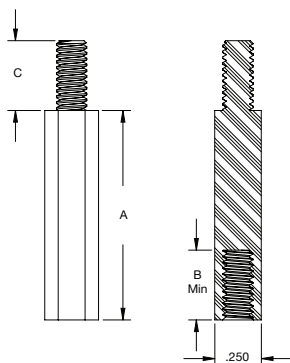
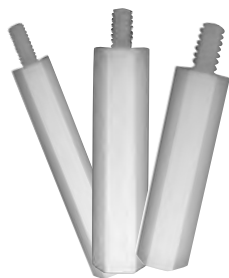
| Item No.       | Thread | A     |      | B     |     | Across Flats |     | Bulk Pack Qty |
|----------------|--------|-------|------|-------|-----|--------------|-----|---------------|
|                |        | in    | mm   | in    | mm  | in           | mm  |               |
| HTSN-M3-6-6-2  | M3     | 0.236 | 6.0  | 0.138 | 3.5 | 0.236        | 6.0 | 500           |
| HTSN-M3-8-6-2  | M3     | 0.315 | 8.0  | 0.197 | 5.0 | 0.236        | 6.0 | 500           |
| HTSN-M3-10-6-2 | M3     | 0.394 | 10.0 | 0.315 | 8.0 | 0.236        | 6.0 | 500           |
| HTSN-M4-6-8-2  | M4     | 0.236 | 6.0  | 0.138 | 3.5 | 0.315        | 8.0 | 500           |
| HTSN-M4-8-8-2  | M4     | 0.315 | 8.0  | 0.197 | 5.0 | 0.315        | 8.0 | 500           |
| HTSN-M4-10-8-2 | M4     | 0.394 | 10.0 | 0.315 | 8.0 | 0.315        | 8.0 | 500           |





# MALE FEMALE THREADED STANDOFFS

## 36MF/MFTS/CBMFTS Series Male Female Threaded Standoff

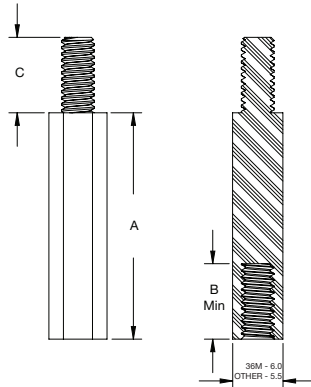
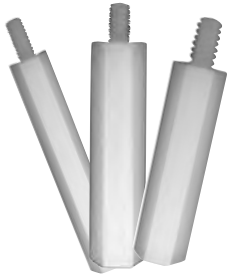


- Specifications:
- Material: UL94 V-2 Nylon 6/6
  - Color: Natural

| Item No.     | Thread | A     |      | B     |     | C     |     | Bulk Pack Qty |
|--------------|--------|-------|------|-------|-----|-------|-----|---------------|
|              |        | in    | mm   | in    | mm  | in    | mm  |               |
| • 36440MF025 | #4-40  | 0.250 | 6.4  | 0.188 | 4.8 | 0.188 | 4.8 | 1000          |
| CBMFTS010A   | #4-40  | 0.276 | 7.0  | 0.190 | 4.8 | 0.190 | 4.8 | 1000          |
| • 36440MF031 | #4-40  | 0.313 | 7.9  | 0.188 | 4.8 | 0.188 | 4.8 | 1000          |
| • 36440MF037 | #4-40  | 0.375 | 9.5  | 0.188 | 4.8 | 0.188 | 4.8 | 1000          |
| • 36440MF050 | #4-40  | 0.500 | 12.7 | 0.188 | 4.8 | 0.188 | 4.8 | 1000          |
| • 36440MF060 | #4-40  | 0.600 | 15.2 | 0.188 | 4.8 | 0.188 | 4.8 | 1000          |
| • 36440MF062 | #4-40  | 0.625 | 15.9 | 0.188 | 4.8 | 0.188 | 4.8 | 1000          |
| • 36440MF075 | #4-40  | 0.750 | 19.1 | 0.188 | 4.8 | 0.188 | 4.8 | 1000          |
| • 36440MF087 | #4-40  | 0.875 | 22.2 | 0.188 | 4.8 | 0.188 | 4.8 | 500           |
| • 36440MF100 | #4-40  | 1.000 | 25.4 | 0.188 | 4.8 | 0.188 | 4.8 | 500           |
| • 36440MF112 | #4-40  | 1.125 | 28.6 | 0.188 | 4.8 | 0.188 | 4.8 | 1000          |
| • 36440MF125 | #4-40  | 1.250 | 31.8 | 0.188 | 4.8 | 0.188 | 4.8 | 500           |
| • 36440MF137 | #4-40  | 1.375 | 34.9 | 0.188 | 4.8 | 0.188 | 4.8 | 1000          |
| • 36440MF150 | #4-40  | 1.500 | 38.1 | 0.188 | 4.8 | 0.188 | 4.8 | 1000          |
| • 36440MF162 | #4-40  | 1.625 | 41.3 | 0.188 | 4.8 | 0.188 | 4.8 | 1000          |
| • 36440MF175 | #4-40  | 1.750 | 44.5 | 0.188 | 4.8 | 0.188 | 4.8 | 500           |
| • 36440MF200 | #4-40  | 2.000 | 50.8 | 0.188 | 4.8 | 0.188 | 4.8 | 1000          |
| CBMFTS105A   | #6-32  | 0.197 | 5.0  | 0.118 | 3.0 | 0.236 | 6.0 | 1000          |
| CBMFTS110A   | #6-32  | 0.217 | 5.5  | 0.138 | 3.5 | 0.236 | 6.0 | 1000          |
| CBMFTS115A   | #6-32  | 0.236 | 6.0  | 0.157 | 4.0 | 0.236 | 6.0 | 1000          |
| • 36632MF025 | #6-32  | 0.250 | 6.4  | 0.188 | 4.8 | 0.250 | 6.4 | 1000          |
| • 36632MF026 | #6-32  | 0.266 | 6.8  | 0.203 | 5.2 | 0.250 | 6.4 | 1000          |
| MFTS6-5-48   | #6-32  | 0.313 | 7.9  | 0.220 | 5.6 | 0.250 | 6.4 | 1000          |
| CBMFTS125A   | #6-32  | 0.315 | 8.0  | 0.236 | 6.0 | 0.236 | 6.0 | 1000          |
| CBMFTS130A   | #6-32  | 0.354 | 9.0  | 0.236 | 6.0 | 0.236 | 6.0 | 1000          |
| • 36632MF037 | #6-32  | 0.375 | 9.5  | 0.250 | 6.4 | 0.250 | 6.4 | 1000          |
| CBMFTS135A   | #6-32  | 0.394 | 10.0 | 0.236 | 6.0 | 0.236 | 6.0 | 1000          |
| CBMFTS140A   | #6-32  | 0.433 | 11.0 | 0.236 | 6.0 | 0.236 | 6.0 | 1000          |
| MFTS6-7-48   | #6-32  | 0.438 | 11.1 | 0.250 | 6.4 | 0.250 | 6.4 | 1000          |
| • 36632MF050 | #6-32  | 0.500 | 12.7 | 0.250 | 6.4 | 0.250 | 6.4 | 500           |
| • 36632MF056 | #6-32  | 0.563 | 14.3 | 0.250 | 6.4 | 0.250 | 6.4 | 1000          |
| • 36632MF062 | #6-32  | 0.625 | 15.9 | 0.250 | 6.4 | 0.250 | 6.4 | 500           |
| MFTS6-11-48  | #6-32  | 0.688 | 17.5 | 0.250 | 6.4 | 0.250 | 6.4 | 1000          |
| • 36632MF075 | #6-32  | 0.750 | 19.1 | 0.250 | 6.4 | 0.250 | 6.4 | 500           |
| • 36632MF087 | #6-32  | 0.875 | 22.2 | 0.250 | 6.4 | 0.250 | 6.4 | 500           |
| • 36632MF093 | #6-32  | 0.938 | 23.8 | 0.250 | 6.4 | 0.250 | 6.4 | 500           |
| • 36632MF100 | #6-32  | 1.000 | 25.4 | 0.250 | 6.4 | 0.250 | 6.4 | 500           |
| • 36632MF112 | #6-32  | 1.125 | 28.6 | 0.250 | 6.4 | 0.250 | 6.4 | 1000          |
| • 36632MF125 | #6-32  | 1.250 | 31.8 | 0.250 | 6.4 | 0.250 | 6.4 | 500           |
| • 36632MF131 | #6-32  | 1.313 | 33.4 | 0.250 | 6.4 | 0.250 | 6.4 | 500           |
| • 36632MF137 | #6-32  | 1.375 | 34.9 | 0.250 | 6.4 | 0.250 | 6.4 | 1000          |
| • 36632MF150 | #6-32  | 1.500 | 38.1 | 0.250 | 6.4 | 0.250 | 6.4 | 1000          |
| • 36632MF162 | #6-32  | 1.625 | 41.3 | 0.250 | 6.4 | 0.250 | 6.4 | 500           |
| • 36632MF175 | #6-32  | 1.750 | 44.5 | 0.250 | 6.4 | 0.250 | 6.4 | 1000          |
| • 36632MF200 | #6-32  | 2.000 | 50.8 | 0.250 | 6.4 | 0.250 | 6.4 | 1000          |
| • 36832MF025 | #8-32  | 0.250 | 6.4  | 0.200 | 5.1 | 0.375 | 9.5 | 1000          |
| • 36832MF037 | #8-32  | 0.375 | 9.5  | 0.270 | 6.9 | 0.375 | 9.5 | 1000          |
| • 36832MF050 | #8-32  | 0.500 | 12.7 | 0.375 | 9.5 | 0.375 | 9.5 | 500           |
| • 36832MF062 | #8-32  | 0.625 | 15.9 | 0.375 | 9.5 | 0.375 | 9.5 | 1000          |
| • 36832MF075 | #8-32  | 0.750 | 19.1 | 0.375 | 9.5 | 0.375 | 9.5 | 500           |
| • 36832MF086 | #8-32  | 0.875 | 22.2 | 0.250 | 6.4 | 0.250 | 6.4 | 1000          |
| • 36832MF087 | #8-32  | 0.875 | 22.2 | 0.375 | 9.5 | 0.375 | 9.5 | 500           |
| • 36832MF100 | #8-32  | 1.000 | 25.4 | 0.375 | 9.5 | 0.375 | 9.5 | 500           |
| • 36832MF112 | #8-32  | 1.125 | 28.6 | 0.375 | 9.5 | 0.375 | 9.5 | 1000          |
| • 36832MF125 | #8-32  | 1.250 | 31.8 | 0.375 | 9.5 | 0.375 | 9.5 | 1000          |
| • 36832MF137 | #8-32  | 1.375 | 34.9 | 0.375 | 9.5 | 0.375 | 9.5 | 1000          |
| • 36832MF150 | #8-32  | 1.500 | 38.1 | 0.375 | 9.5 | 0.375 | 9.5 | 1000          |
| • 36832MF162 | #8-32  | 1.625 | 41.3 | 0.375 | 9.5 | 0.375 | 9.5 | 1000          |
| • 36832MF175 | #8-32  | 1.750 | 44.5 | 0.375 | 9.5 | 0.375 | 9.5 | 1000          |
| • 36832MF200 | #8-32  | 2.000 | 50.8 | 0.375 | 9.5 | 0.375 | 9.5 | 1000          |



## MALE FEMALE THREADED STANDOFFS

36MF/NTS/CBMFTS Series  
Metric Male Female Threaded Standoff

## Specifications:

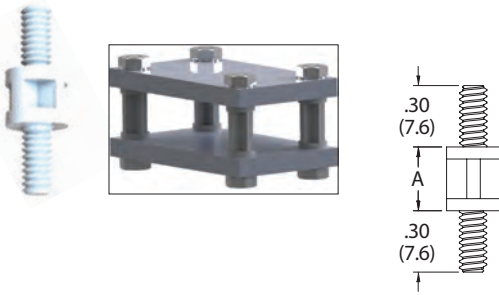
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.     | Thread     | A     |      | B     |     | C     |     | Bulk Pack Qty |
|--------------|------------|-------|------|-------|-----|-------|-----|---------------|
|              |            | in    | mm   | in    | mm  | in    | mm  |               |
| CBMFTS205A   | M3 x 0.5   | 0.197 | 5.0  | 0.118 | 3.0 | 0.236 | 6.0 | 1000          |
| • 36M30MF006 | M3 x 0.5   | 0.236 | 6.0  | 0.157 | 4.0 | 0.187 | 4.8 | 1000          |
| NTS-7        | M3 x 0.5   | 0.276 | 7.0  | 0.240 | 6.0 | 0.250 | 6.4 | 1000          |
| CBMFTS220A   | M3 x 0.5   | 0.295 | 7.5  | 0.197 | 5.0 | 0.236 | 6.0 | 1000          |
| • 36M30MF008 | M3 x 0.5   | 0.315 | 8.0  | 0.187 | 4.8 | 0.187 | 4.8 | 1000          |
| CBMFTS230A   | M3 x 0.5   | 0.354 | 9.0  | 0.236 | 6.0 | 0.236 | 6.0 | 1000          |
| • 36M30MF010 | M3 x 0.5   | 0.394 | 10.0 | 0.187 | 4.8 | 0.187 | 4.8 | 1000          |
| CBMFTS240A   | M3 x 0.5   | 0.413 | 10.5 | 0.236 | 6.0 | 0.236 | 6.0 | 1000          |
| • 36M30MF011 | M3 x 0.5   | 0.433 | 11.0 | 0.187 | 4.8 | 0.187 | 4.8 | 1000          |
| • 36M30MF012 | M3 x 0.5   | 0.472 | 12.0 | 0.187 | 4.8 | 0.187 | 4.8 | 1000          |
| NTS-12       | M3 x 0.5   | 0.500 | 12.7 | 0.390 | 9.9 | 0.250 | 6.4 | 1000          |
| • 36M30MF013 | M3 x 0.5   | 0.512 | 13.0 | 0.187 | 4.8 | 0.187 | 4.8 | 1000          |
| • 36M30MF014 | M3 x 0.5   | 0.551 | 14.0 | 0.187 | 4.8 | 0.187 | 4.8 | 1000          |
| CBMFTS270A   | M3 x 0.5   | 0.590 | 15.0 | 0.236 | 6.0 | 0.236 | 6.0 | 1000          |
| • 36M30MF016 | M3 x 0.5   | 0.630 | 16.0 | 0.187 | 4.8 | 0.187 | 4.8 | 1000          |
| CBMFTS280A   | M3 x 0.5   | 0.650 | 16.5 | 0.236 | 6.0 | 0.236 | 6.0 | 1000          |
| CBMFTS285A   | M3 x 0.5   | 0.669 | 17.0 | 0.236 | 6.0 | 0.236 | 6.0 | 1000          |
| NTS-17.5     | M3 x 0.5   | 0.690 | 17.5 | 0.390 | 9.9 | 0.236 | 6.0 | 1000          |
| CBMFTS290A   | M3 x 0.5   | 0.709 | 18.0 | 0.236 | 6.0 | 0.236 | 6.0 | 1000          |
| CBMFTS295A   | M3 x 0.5   | 0.728 | 18.5 | 0.236 | 6.0 | 0.236 | 6.0 | 1000          |
| • 36M30MF019 | M3 x 0.5   | 0.748 | 19.0 | 0.187 | 4.8 | 0.187 | 4.8 | 500           |
| • 36M30MF020 | M3 x 0.5   | 0.787 | 20.0 | 0.187 | 4.8 | 0.187 | 4.8 | 500           |
| CBFTS310A    | M3 x 0.5   | 0.827 | 21.0 | 0.236 | 6.0 | 0.236 | 6.0 | 1000          |
| • 36M30MF022 | M3 x 0.5   | 0.866 | 22.0 | 0.187 | 4.8 | 0.187 | 4.8 | 1000          |
| CBMFTS320A   | M3 x 0.5   | 0.965 | 24.5 | 0.236 | 6.0 | 0.236 | 6.0 | 1000          |
| • 36M30MF025 | M3 x 0.5   | 0.984 | 25.0 | 0.187 | 4.8 | 0.187 | 4.8 | 500           |
| CBMFTS330A   | M3 x 0.5   | 1.063 | 27.0 | 0.236 | 6.0 | 0.236 | 6.0 | 500           |
| CBMFTS335A   | M3 x 0.5   | 1.181 | 30.0 | 0.236 | 6.0 | 0.236 | 6.0 | 1000          |
| CBMFTS340A   | M3 x 0.5   | 1.299 | 33.0 | 0.236 | 6.0 | 0.236 | 6.0 | 1000          |
| CBMFTS345A   | M3 x 0.5   | 1.378 | 35.0 | 0.236 | 6.0 | 0.236 | 6.0 | 1000          |
| • 36M35MF008 | M3.5 x 0.6 | 0.315 | 8.0  | 0.236 | 6.0 | 0.250 | 6.4 | 1000          |
| • 36M35MF010 | M3.5 x 0.6 | 0.394 | 10.0 | 0.250 | 6.4 | 0.250 | 6.4 | 1000          |
| • 36M35MF011 | M3.5 x 0.6 | 0.433 | 11.0 | 0.250 | 6.4 | 0.250 | 6.4 | 1000          |
| • 36M35MF012 | M3.5 x 0.6 | 0.472 | 12.0 | 0.250 | 6.4 | 0.250 | 6.4 | 1000          |
| • 36M35MF013 | M3.5 x 0.6 | 0.512 | 13.0 | 0.250 | 6.4 | 0.250 | 6.4 | 1000          |
| • 36M35MF014 | M3.5 x 0.6 | 0.551 | 14.0 | 0.250 | 6.4 | 0.250 | 6.4 | 1000          |
| • 36M35MF016 | M3.5 x 0.6 | 0.630 | 16.0 | 0.250 | 6.4 | 0.250 | 6.4 | 1000          |
| • 36M35MF019 | M3.5 x 0.6 | 0.748 | 19.0 | 0.250 | 6.4 | 0.250 | 6.4 | 1000          |
| • 36M35MF020 | M3.5 x 0.6 | 0.787 | 20.0 | 0.250 | 6.4 | 0.250 | 6.4 | 1000          |
| • 36M35MF022 | M3.5 x 0.6 | 0.866 | 22.0 | 0.250 | 6.4 | 0.250 | 6.4 | 1000          |
| • 36M35MF025 | M3.5 x 0.6 | 0.984 | 25.0 | 0.250 | 6.4 | 0.250 | 6.4 | 1000          |
| • 36M40MF010 | M4 x 0.7   | 0.394 | 10.0 | 0.250 | 6.4 | 0.315 | 8.0 | 1000          |
| • 36M40MF011 | M4 x 0.7   | 0.433 | 11.0 | 0.375 | 9.5 | 0.354 | 9.0 | 1000          |
| • 36M40MF012 | M4 x 0.7   | 0.472 | 12.0 | 0.375 | 9.5 | 0.375 | 9.5 | 1000          |
| • 36M40MF013 | M4 x 0.7   | 0.512 | 13.0 | 0.375 | 9.5 | 0.375 | 9.5 | 1000          |
| • 36M40MF014 | M4 x 0.7   | 0.551 | 14.0 | 0.375 | 9.5 | 0.375 | 9.5 | 1000          |
| • 36M40MF015 | M4 x 0.7   | 0.590 | 15.0 | 0.375 | 9.5 | 0.375 | 9.5 | 1000          |
| • 36M40MF016 | M4 x 0.7   | 0.630 | 16.0 | 0.375 | 9.5 | 0.375 | 9.5 | 1000          |
| • 36M40MF018 | M4 x 0.7   | 0.709 | 18.0 | 0.375 | 9.5 | 0.375 | 9.5 | 1000          |
| • 36M40MF019 | M4 X 0.7   | 0.748 | 19.0 | 0.375 | 9.5 | 0.375 | 9.5 | 500           |
| • 36M40MF020 | M4 X 0.7   | 0.787 | 20.0 | 0.375 | 9.5 | 0.375 | 9.5 | 1000          |
| • 36M40MF022 | M4 X 0.7   | 0.866 | 22.0 | 0.375 | 9.5 | 0.375 | 9.5 | 500           |
| • 36M40MF025 | M4 X 0.7   | 0.984 | 25.0 | 0.375 | 9.5 | 0.375 | 9.5 | 1000          |
| NTS-37       | M4 X 0.7   | 1.180 | 37.7 | 0.345 | 8.0 | 0.220 | 5.6 | 200           |



# MALE AND FEMALE THREADED STANDOFFS

## CBS-TMM Series Male/Male Threaded Standoff



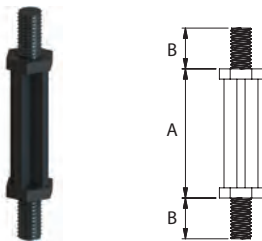
**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- UL94 V-0 Available by special order
- Color: Natural

**#6-32 Thread Size**

| Item No.      | A     |      | Bulk Pack Qty |
|---------------|-------|------|---------------|
|               | in    | mm   |               |
| CBS-TMM-2-01  | 0.125 | 3.2  | 1000          |
| CBS-TMM-4-01  | 0.250 | 6.4  | 1000          |
| CBS-TMM-6-01  | 0.375 | 9.5  | 1000          |
| CBS-TMM-8-01  | 0.500 | 12.7 | 1000          |
| CBS-TMM-10-01 | 0.625 | 15.9 | 1000          |
| CBS-TMM-12-01 | 0.750 | 19.1 | 1000          |
| CBS-TMM-14-01 | 0.875 | 22.2 | 1000          |
| CBS-TMM-16-01 | 1.000 | 25.4 | 1000          |

## HTSN-3 Series Metric Male/Male Threaded Standoff



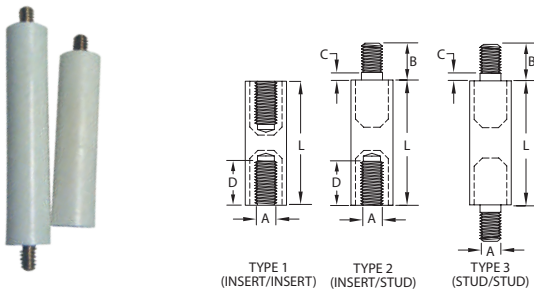
**Specifications:**

- Material: UL94 HB Heat Stabilized Nylon 6/6
- Flame Class:
- Color: Black

**M3 or M4 Thread Size**

| Item No.     | Thread | A     |      | B     |     | Across Flats |     | Bulk Pack Qty |
|--------------|--------|-------|------|-------|-----|--------------|-----|---------------|
|              |        | in    | mm   | in    | mm  | in           | mm  |               |
| HTSN-M3-6-3  | M3     | 0.236 | 6.0  | 0.236 | 6.0 | 0.236        | 6.0 | 500           |
| HTSN-M3-8-3  | M3     | 0.315 | 8.0  | 0.236 | 6.0 | 0.236        | 6.0 | 500           |
| HTSN-M3-10-3 | M3     | 0.394 | 10.0 | 0.236 | 6.0 | 0.236        | 6.0 | 500           |
| HTSN-M4-6-3  | M4     | 0.236 | 6.0  | 0.252 | 6.4 | 0.236        | 6.0 | 500           |
| HTSN-M4-8-3  | M4     | 0.315 | 8.0  | 0.252 | 6.4 | 0.240        | 6.1 | 500           |
| HTSN-M4-10-3 | M4     | 0.394 | 10.0 | 0.236 | 6.4 | 0.236        | 6.0 | 500           |

## TN Series Low Voltage Insulating Standoffs



| Thread Size | A     | B     | C     | D     |
|-------------|-------|-------|-------|-------|
| #6-32       | 0.250 | 0.250 | 0.063 | 0.172 |
| #8-32       | 0.375 | 0.250 | 0.063 | 0.188 |
| #10-24      | 0.500 | 0.281 | 0.094 | 0.188 |
| 1/4-20      | 0.625 | 0.875 | 0.125 | 0.328 |

**Specifications:**

- Spacer Material: UL94 V-2 Nylon 6/6
- Insert Material: Brass
- Color: Natural

**Features:**

- Voltage breakdown: >45,000 volts (>360 Volts/Mil) per ASTM-D-149-97A
- Lightweight insulation of nylon combined with the strength of the brass inserts

**#6-32 Thread Size**

| Item No.     |              |              | L     |      | Bulk Pack Qty |
|--------------|--------------|--------------|-------|------|---------------|
| Type 1       | Type 2       | Type 3       | in    | mm   |               |
| TN4-12-632-1 | TN4-12-632-2 | TN4-12-632-3 | 0.750 | 19.1 | 100           |
| TN4-16-632-1 | TN4-16-632-2 | TN4-16-632-3 | 1.000 | 25.4 | 100           |
| TN4-20-632-1 | TN4-20-632-2 | TN4-20-632-3 | 1.250 | 31.8 | 100           |

| Item No.     |              |              | L     |      | Bulk Pack Qty |
|--------------|--------------|--------------|-------|------|---------------|
| Type 1       | Type 2       | Type 3       | in    | mm   |               |
| TN4-24-632-1 | TN4-24-632-2 | TN4-24-632-3 | 1.500 | 38.1 | 100           |
| TN4-28-632-1 | TN4-28-632-2 | TN4-28-632-3 | 1.750 | 44.5 | 100           |
| TN4-32-632-1 | TN4-32-632-2 | TN4-32-632-3 | 2.000 | 50.8 | 100           |

**#8-32 Thread Size**

| Item No.     |              |              | L     |      | Bulk Pack Qty |
|--------------|--------------|--------------|-------|------|---------------|
| Type 1       | Type 2       | Type 3       | in    | mm   |               |
| TN6-16-832-1 | TN6-16-832-2 | TN6-16-832-3 | 1.000 | 25.4 | 100           |
| TN6-20-832-1 | TN6-20-832-2 | TN6-20-832-3 | 1.250 | 31.8 | 100           |
| TN6-24-832-1 | TN6-24-832-2 | TN6-24-832-3 | 1.500 | 38.1 | 100           |
| TN6-40-832-1 | TN6-40-832-2 | TN6-40-832-3 | 2.500 | 63.5 | 100           |

| Item No.     |              |              | L     |      | Bulk Pack Qty |
|--------------|--------------|--------------|-------|------|---------------|
| Type 1       | Type 2       | Type 3       | in    | mm   |               |
| TN6-28-832-1 | TN6-28-832-2 | TN6-28-832-3 | 1.750 | 44.5 | 100           |
| TN6-32-832-1 | TN6-32-832-2 | TN6-32-832-3 | 2.000 | 50.8 | 100           |
| TN6-36-832-1 | TN6-36-832-2 | TN6-36-832-3 | 2.250 | 57.2 | 100           |

**#10-24 Thread Size**

| Item No.      |               |               | L     |      | Bulk Pack Qty |
|---------------|---------------|---------------|-------|------|---------------|
| Type 1        | Type 2        | Type 3        | in    | mm   |               |
| TN8-14-1024-1 | TN8-14-1024-2 | TN8-14-1024-3 | 0.875 | 22.2 | 100           |
| TN8-20-1024-1 | TN8-20-1024-2 | TN8-20-1024-3 | 1.250 | 31.8 | 100           |
| TN8-24-1024-1 | TN8-24-1024-2 | TN8-24-1024-3 | 1.500 | 38.1 | 100           |
| TN8-28-1024-1 | TN8-28-1024-2 | TN8-28-1024-3 | 1.750 | 44.5 | 100           |

| Item No.      |               |               | L     |      | Bulk Pack Qty |
|---------------|---------------|---------------|-------|------|---------------|
| Type 1        | Type 2        | Type 3        | in    | mm   |               |
| TN8-32-1024-1 | TN8-32-1024-2 | TN8-32-1024-3 | 2.000 | 50.8 | 100           |
| TN8-36-1024-1 | TN8-36-1024-2 | TN8-36-1024-3 | 2.250 | 57.2 | 100           |
| TN8-40-1024-1 | TN8-40-1024-2 | TN8-40-1024-3 | 2.500 | 63.5 | 100           |

**1/4-20 Thread Size**

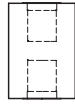
| Item No.       |                |                | L     |      | Bulk Pack Qty |
|----------------|----------------|----------------|-------|------|---------------|
| Type 1         | Type 2         | Type 3         | in    | mm   |               |
| TN10-20-1420-1 | TN10-20-1420-2 | TN10-20-1420-3 | 1.250 | 31.8 | 100           |
| TN10-24-1420-1 | TN10-24-1420-2 | TN10-24-1420-3 | 1.500 | 38.1 | 100           |
| TN10-28-1420-1 | TN10-28-1420-2 | TN10-28-1420-3 | 1.750 | 44.5 | 100           |

| Item No.       |                |                | L     |      | Bulk Pack Qty |
|----------------|----------------|----------------|-------|------|---------------|
| Type 1         | Type 2         | Type 3         | in    | mm   |               |
| TN10-32-1420-1 | TN10-32-1420-2 | TN10-32-1420-3 | 2.000 | 50.8 | 100           |
| TN10-36-1420-1 | TN10-36-1420-2 | TN10-36-1420-3 | 2.250 | 57.2 | 100           |
| TN10-40-1420-1 | TN10-40-1420-2 | TN10-40-1420-3 | 2.500 | 63.5 | 100           |

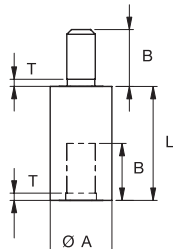


# MALE AND FEMALE THREADED STANDOFFS

## TNM Series Round Metric Low Voltage Insulating Standoffs



**Style 1**  
(Insert/Insert)



**Style 2**  
(Insert/Stud)



**Style 3**  
(Stud/Stud)

**Specifications:**

- Spacer Material: UL94 V-2 Nylon 6/6
- Insert Material: Brass
- Color: Natural

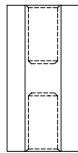
**Features:**

- Voltage Breakdown > 45,000 volts (>360 Volts/Mil) per ASTM-D-149-97A
- For use where high mechanical strength is required
- Provides sturdy, insulated spacing for high power electronic applications

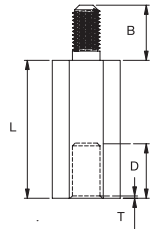
| Item No.        | Thread | Style | L mm | A mm | B mm | T mm | Bulk Pack Qty |
|-----------------|--------|-------|------|------|------|------|---------------|
| TNM2-6.5-14-1   | M2     | 1     | 14.0 | 6.5  | 6.0  | 0.06 | 100           |
| TNM2-6.5-14-2   | M2     | 2     | 14.0 | 6.5  | 6.0  | 0.06 | 100           |
| TNM2-6.5-14-3   | M2     | 3     | 14.0 | 6.5  | 6.0  | 0.06 | 100           |
| TNM2.5-6.5-10-1 | M2.5   | 1     | 10.0 | 6.5  | 6.0  | 0.68 | 100           |
| TNM2.5-6.5-10-2 | M2.5   | 2     | 10.0 | 6.5  | 6.0  | 0.68 | 100           |
| TNM2.5-6.5-10-3 | M2.5   | 3     | 10.0 | 6.5  | 6.0  | 0.68 | 100           |
| TNM3-6.5-10-1   | M3     | 1     | 10.0 | 6.5  | 6.0  | 0.75 | 100           |
| TNM3-6.5-10-2   | M3     | 2     | 10.0 | 6.5  | 6.0  | 0.75 | 100           |
| TNM3-6.5-10-3   | M3     | 3     | 10.0 | 6.5  | 6.0  | 0.75 | 100           |
| TNM3-6.5-13-1   | M3     | 1     | 13.0 | 6.5  | 6.0  | 0.75 | 100           |
| TNM3-6.5-13-2   | M3     | 2     | 13.0 | 6.5  | 6.0  | 0.75 | 100           |
| TNM3-6.5-13-3   | M3     | 3     | 13.0 | 6.5  | 6.0  | 0.75 | 100           |
| TNM3-8-14-1     | M3     | 1     | 14.0 | 8.0  | 6.0  | 0.75 | 100           |
| TNM3-8-14-2     | M3     | 2     | 14.0 | 8.0  | 6.0  | 0.75 | 100           |
| TNM3-8-14-3     | M3     | 3     | 14.0 | 8.0  | 6.0  | 0.75 | 100           |

| Item No.      | Thread | Style | L mm | A mm | B mm | T mm | Bulk Pack Qty |
|---------------|--------|-------|------|------|------|------|---------------|
| TNM3-6.5-25-1 | M3     | 1     | 25.0 | 6.5  | 6.0  | 0.75 | 100           |
| TNM3-6.5-25-2 | M3     | 2     | 25.0 | 6.5  | 6.0  | 0.75 | 100           |
| TNM3-6.5-25-3 | M3     | 3     | 25.0 | 6.5  | 6.0  | 0.75 | 100           |
| TNM3-6.5-75-1 | M3     | 1     | 75.0 | 6.5  | 6.0  | 0.75 | 100           |
| TNM3-6.5-75-2 | M3     | 2     | 75.0 | 6.5  | 6.0  | 0.75 | 100           |
| TNM3-6.5-75-3 | M3     | 3     | 75.0 | 6.5  | 6.0  | 0.75 | 100           |
| TNM4-8-12.7-1 | M4     | 1     | 12.7 | 8.0  | 6.0  | 1.05 | 100           |
| TNM4-8-12.7-2 | M4     | 2     | 12.7 | 8.0  | 6.0  | 1.05 | 100           |
| TNM4-8-12.7-3 | M4     | 3     | 12.7 | 8.0  | 6.0  | 1.05 | 100           |
| TNM4-9.5-25-1 | M4     | 1     | 25.0 | 9.5  | 10.0 | 1.05 | 100           |
| TNM4-9.5-25-2 | M4     | 2     | 25.0 | 9.5  | 10.0 | 1.05 | 100           |
| TNM4-9.5-25-3 | M4     | 3     | 25.0 | 9.5  | 10.0 | 1.05 | 100           |
| TNM4-9.5-57-1 | M4     | 1     | 57.0 | 9.5  | 10.0 | 1.05 | 100           |
| TNM4-9.5-57-2 | M4     | 2     | 57.0 | 9.5  | 10.0 | 1.05 | 100           |
| TNM4-9.5-57-3 | M4     | 3     | 57.0 | 9.5  | 10.0 | 1.05 | 100           |

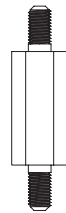
## HSM Series Hex Metric Hex Low Voltage Insulating Standoffs



**Style 1**  
(Insert/Insert)



**Style 2**  
(Insert/Stud)



**Style 3**  
(Stud/Stud)

**Specifications:**

- Spacer Material: UL94 V-2 Nylon 6/6
- Insert Material: Brass
- Color: Natural

**Features:**

- Voltage Breakdown > 45,000 volts (>360 Volts/Mil) per ASTM-D-149-97A
- For use where high mechanical strength is required
- Provides sturdy, insulated spacing for high power electronic applications

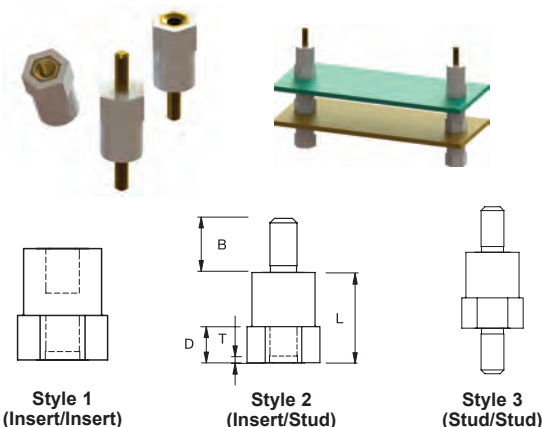
| Item No.      | Thread | Style | L mm | Across Flats mm | B mm | D mm | T mm | Bulk Pack Qty |
|---------------|--------|-------|------|-----------------|------|------|------|---------------|
| HSM3-6.4-15-1 | M3     | 1     | 15.0 | 6.4             | 6.0  | 6.0  | 0.75 | 100           |
| HSM3-6.4-15-2 | M3     | 2     | 15.0 | 6.4             | 6.0  | 6.0  | 0.75 | 100           |
| HSM3-6.4-15-3 | M3     | 3     | 15.0 | 6.4             | 6.0  | 6.0  | 0.75 | 100           |
| HSM3-6.4-20-1 | M3     | 1     | 20.0 | 6.4             | 6.0  | 6.0  | 0.75 | 100           |
| HSM3-6.4-20-2 | M3     | 2     | 20.0 | 6.4             | 6.0  | 6.0  | 0.75 | 100           |
| HSM3-6.4-20-3 | M3     | 3     | 20.0 | 6.4             | 6.0  | 6.0  | 0.75 | 100           |
| HSM3-6.4-25-1 | M3     | 1     | 25.0 | 6.4             | 6.0  | 6.0  | 0.75 | 100           |
| HSM3-6.4-25-2 | M3     | 2     | 25.0 | 6.4             | 6.0  | 6.0  | 0.75 | 100           |
| HSM3-6.4-30-1 | M3     | 1     | 30.0 | 6.4             | 6.0  | 6.0  | 0.75 | 100           |
| HSM3-6.4-30-2 | M3     | 2     | 30.0 | 6.4             | 6.0  | 6.0  | 0.75 | 100           |
| HSM3-6.4-30-3 | M3     | 3     | 30.0 | 6.4             | 6.0  | 6.0  | 0.75 | 100           |
| HSM3-6.4-32-1 | M3     | 1     | 32.0 | 6.4             | 6.0  | 6.0  | 0.75 | 100           |
| HSM3-6.4-32-2 | M3     | 2     | 32.0 | 6.4             | 6.0  | 6.0  | 0.75 | 100           |
| HSM3-6.4-32-3 | M3     | 3     | 32.0 | 6.4             | 6.0  | 6.0  | 0.75 | 100           |
| HSM4-8-15-1   | M4     | 1     | 15.0 | 8.0             | 6.0  | 6.0  | 1.05 | 100           |

| Item No.    | Thread | Style | L mm | Across Flats mm | B mm | D mm | T mm | Bulk Pack Qty |
|-------------|--------|-------|------|-----------------|------|------|------|---------------|
| HSM4-8-15-2 | M4     | 2     | 15.0 | 8.0             | 6.0  | 6.0  | 1.05 | 100           |
| HSM4-8-15-3 | M4     | 3     | 15.0 | 8.0             | 6.0  | 6.0  | 1.05 | 100           |
| HSM4-8-20-1 | M4     | 1     | 20.0 | 8.0             | 6.0  | 6.0  | 1.05 | 100           |
| HSM4-8-20-2 | M4     | 2     | 20.0 | 8.0             | 6.0  | 6.0  | 1.05 | 100           |
| HSM4-8-20-3 | M4     | 3     | 20.0 | 8.0             | 6.0  | 6.0  | 1.05 | 100           |
| HSM4-8-25-1 | M4     | 1     | 25.0 | 8.0             | 6.0  | 6.0  | 1.05 | 100           |
| HSM4-8-25-2 | M4     | 2     | 25.0 | 8.0             | 6.0  | 6.0  | 1.05 | 100           |
| HSM4-8-25-3 | M4     | 3     | 25.0 | 8.0             | 6.0  | 6.0  | 1.05 | 100           |
| HSM4-8-30-1 | M4     | 1     | 30.0 | 8.0             | 6.0  | 6.0  | 1.05 | 100           |
| HSM4-8-30-2 | M4     | 2     | 30.0 | 8.0             | 6.0  | 6.0  | 1.05 | 100           |
| HSM4-8-30-3 | M4     | 3     | 30.0 | 8.0             | 6.0  | 6.0  | 1.05 | 100           |
| HSM4-8-32-1 | M4     | 1     | 32.0 | 8.0             | 6.0  | 6.0  | 1.05 | 100           |
| HSM4-8-32-2 | M4     | 2     | 32.0 | 8.0             | 6.0  | 6.0  | 1.05 | 100           |
| HSM4-8-32-3 | M4     | 3     | 32.0 | 8.0             | 6.0  | 6.0  | 1.05 | 100           |



# MALE AND FEMALE THREADED STANDOFFS

## MTNSP Series Hex Base Metric Low Voltage Insulating Standoffs



Specifications:

- Spacer Material: UL94 HB Nylon 6
- Insert Material: Brass, Nickel Plating
- Color: Natural

Features:

- Large hex base is good for gripping during installation and removal
- Provides sturdy, insulated spacing for high power electronic applications

| Item No.      | Thread | Style | L    | Across Flats |     | B   | D    | T   | Bulk Pack Qty |
|---------------|--------|-------|------|--------------|-----|-----|------|-----|---------------|
|               |        |       |      | mm           | mm  |     |      |     |               |
| MTNSP-M3-10-1 | M3     | 1     | 10.0 | 7.0          | 6.0 | 4.0 | 0.75 | 100 |               |
| MTNSP-M3-10-2 | M3     | 2     | 10.0 | 7.0          | 6.0 | 4.0 | 0.75 | 100 |               |
| MTNSP-M3-10-3 | M3     | 3     | 10.0 | 7.0          | 6.0 | 4.0 | 0.75 | 100 |               |
| MTNSP-M3-11-1 | M3     | 1     | 11.0 | 7.0          | 6.0 | 4.0 | 0.75 | 100 |               |
| MTNSP-M3-11-2 | M3     | 2     | 11.0 | 7.0          | 6.0 | 4.0 | 0.75 | 100 |               |
| MTNSP-M3-11-3 | M3     | 3     | 11.0 | 7.0          | 6.0 | 4.0 | 0.75 | 100 |               |

## 14HTSP Series Threaded Hex Standoffs



Specifications:

- Material: UL94 V-2 Nylon
- Color: Natural



Features:

- Metric Threads are available by special order by adding M to the part number
- #4-40 available in M3 Thread
- #6-32 available in M3.5 Thread
- #8-32 available in M4 Thread

| Item No.  | Thread | A     |      | Across Flats |     | Bulk Pack Qty |
|-----------|--------|-------|------|--------------|-----|---------------|
|           |        | in    | mm   | in           | mm  |               |
| 14HTSP027 | #2-56  | 0.281 | 7.1  | 0.188        | 4.8 | 1000          |
| 14HTSP115 | #2-56  | 0.313 | 7.9  | 0.188        | 4.8 | 1000          |
| 14HTSP114 | #2-56  | 0.375 | 9.5  | 0.188        | 4.8 | 1000          |
| 14HTSP112 | #2-56  | 0.438 | 11.1 | 0.188        | 4.8 | 1000          |
| 14HTSP113 | #2-56  | 0.563 | 14.3 | 0.188        | 4.8 | 1000          |
| 14HTSP118 | #2-56  | 0.688 | 17.5 | 0.188        | 4.8 | 1000          |
| 14HTSP101 | #4-40  | 0.250 | 6.4  | 0.188        | 4.8 | 1000          |
| 14HTSP001 | #4-40  | 0.250 | 6.4  | 0.250        | 6.4 | 1000          |
| 14HTSP022 | #4-40  | 0.313 | 7.9  | 0.250        | 6.4 | 1000          |
| 14HTSP102 | #4-40  | 0.375 | 9.5  | 0.188        | 4.8 | 1000          |
| 14HTSP002 | #4-40  | 0.375 | 9.5  | 0.250        | 6.4 | 1000          |
| 14HTSP104 | #4-40  | 0.438 | 11.1 | 0.188        | 4.8 | 1000          |
| 14HTSP029 | #4-40  | 0.438 | 11.1 | 0.250        | 6.4 | 1000          |
| 14HTSP103 | #4-40  | 0.500 | 12.7 | 0.188        | 4.8 | 1000          |
| 14HTSP003 | #4-40  | 0.500 | 12.7 | 0.250        | 6.4 | 1000          |
| 14HTSP111 | #4-40  | 0.563 | 14.3 | 0.188        | 4.8 | 1000          |
| 14HTSP024 | #4-40  | 0.563 | 14.3 | 0.250        | 6.4 | 1000          |
| 14HTSP119 | #4-40  | 0.625 | 15.9 | 0.188        | 4.8 | 1000          |
| 14HTSP019 | #4-40  | 0.625 | 15.9 | 0.250        | 6.4 | 1000          |
| 14HTSP124 | #4-40  | 0.750 | 19.1 | 0.188        | 4.8 | 1000          |
| 14HTSP024 | #4-40  | 0.750 | 19.1 | 0.250        | 6.4 | 1000          |
| 14HTSP037 | #4-40  | 0.826 | 21.0 | 0.250        | 6.4 | 1000          |
| 14HTSP116 | #4-40  | 0.875 | 22.2 | 0.188        | 4.8 | 1000          |
| 14HTSP016 | #4-40  | 0.875 | 22.2 | 0.250        | 6.4 | 1000          |
| 14HTSP005 | #4-40  | 1.000 | 25.4 | 0.250        | 6.4 | 500           |
| 14HTSP039 | #4-40  | 1.375 | 34.9 | 0.250        | 6.4 | 1000          |
| 14HTSP035 | #6-32  | 0.188 | 4.8  | 0.250        | 6.4 | 1000          |
| 14HTSP106 | #6-32  | 0.250 | 6.4  | 0.188        | 4.8 | 1000          |
| 14HTSP006 | #6-32  | 0.250 | 6.4  | 0.250        | 6.4 | 1000          |
| 14HTSP209 | #6-32  | 0.250 | 6.4  | 0.313        | 7.9 | 1000          |
| 14HTSP026 | #6-32  | 0.313 | 7.9  | 0.250        | 6.4 | 1000          |
| 14HTSP107 | #6-32  | 0.375 | 9.5  | 0.188        | 4.8 | 1000          |
| 14HTSP007 | #6-32  | 0.375 | 9.5  | 0.250        | 6.4 | 1000          |

- Note: 0.750" and longer, the tap is 0.375" minimum from each end and not continuous through
- Item No. Example: 14HTSP105 in a #6-32 Thread becomes 14MHTSP106 with a M3.5 Thread

## 14MMHTSP Series Metric Threaded Hex Standoffs



Specifications:

- Material: UL94 V-2 Nylon
- Color: Natural

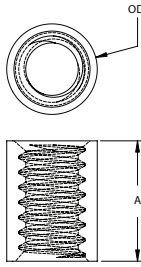


| Item No.    | Thread | A    |     | Across Flats |      | Bulk Pack Qty |
|-------------|--------|------|-----|--------------|------|---------------|
|             |        | mm   | mm  | mm           | mm   |               |
| 14MMHTSP004 | M3     | 20.0 | 6.0 | 6.0          | 1000 |               |
| 14MMHTSP006 | M4     | 6.0  | 6.0 | 1000         |      |               |
| 14MMHTSP008 | M4     | 8.0  | 6.0 | 1000         |      |               |
| 14MMHTSP010 | M4     | 10.0 | 6.0 | 1000         |      |               |
| 14MMHTSP012 | M4     | 12.0 | 6.0 | 1000         |      |               |
| 14MMHTSP015 | M4     | 15.0 | 6.0 | 1000         |      |               |
| 14MMHTSP018 | M4     | 18.0 | 6.0 | 1000         |      |               |
| 14MMHTSP020 | M4     | 20.0 | 6.0 | 1000         |      |               |
| 14MMHTSP025 | M4     | 25.0 | 6.0 | 1000         |      |               |

Note: 20mm and longer, the tap is 9.5mm minimum from each end



## THREADED AND SELF THREADING STANDOFFS

15TSP Series  
Threaded Round Standoffs

## Specifications:

- Material: UL94 V-2 Nylon
- Color: Natural

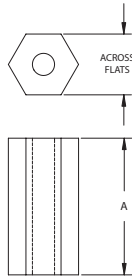
## Features:

- Metric Threads are available by special order by adding M to the part number
- #4-40 available in M3 Thread
- #6-32 available in M3.5 Thread
- #8-32 available in M4 Thread

| Item No. | Thread | A     |      | OD    |     | Bulk Pack Qty |
|----------|--------|-------|------|-------|-----|---------------|
|          |        | in    | mm   | in    | mm  |               |
| 15TSP059 | #2-56  | 0.218 | 5.5  | 0.125 | 3.2 | 1000          |
| 15TSP057 | #2-56  | 0.250 | 6.4  | 0.250 | 6.4 | 1000          |
| 15TSP058 | #2-56  | 0.375 | 9.5  | 0.188 | 4.8 | 1000          |
| 15TSP055 | #2-56  | 0.438 | 11.1 | 0.188 | 4.8 | 1000          |
| 15TSP056 | #2-56  | 0.500 | 12.7 | 0.188 | 4.8 | 1000          |
| 15TSP099 | #4-40  | 0.156 | 4.0  | 0.188 | 4.8 | 1000          |
| 15TSP100 | #4-40  | 0.188 | 4.8  | 0.188 | 4.8 | 1000          |
| 15TSP101 | #4-40  | 0.250 | 6.4  | 0.188 | 4.8 | 1000          |
| 15TSP001 | #4-40  | 0.250 | 6.4  | 0.250 | 6.4 | 1000          |
| 15TSP106 | #4-40  | 0.266 | 6.8  | 0.188 | 4.8 | 1000          |
| 15TSP102 | #4-40  | 0.313 | 8.0  | 0.188 | 4.8 | 1000          |
| 15TSP050 | #4-40  | 0.313 | 8.0  | 0.250 | 6.4 | 1000          |
| 15TSP103 | #4-40  | 0.375 | 9.5  | 0.188 | 4.8 | 1000          |
| 15TSP002 | #4-40  | 0.375 | 9.5  | 0.250 | 6.4 | 1000          |
| 15TSP104 | #4-40  | 0.438 | 11.1 | 0.188 | 4.8 | 1000          |
| 15TSP105 | #4-40  | 0.500 | 12.7 | 0.188 | 4.8 | 1000          |
| 15TSP003 | #4-40  | 0.500 | 12.7 | 0.250 | 6.4 | 1000          |
| 15TSP107 | #4-40  | 0.625 | 15.9 | 0.188 | 4.8 | 1000          |
| 15TSP036 | #4-40  | 0.625 | 15.9 | 0.250 | 6.4 | 1000          |
| 15TSP109 | #4-40  | 0.750 | 19.1 | 0.188 | 4.8 | 1000          |
| 15TSP004 | #4-40  | 0.750 | 19.1 | 0.250 | 6.4 | 1000          |
| 15TSP111 | #4-40  | 0.875 | 22.2 | 0.188 | 4.8 | 1000          |
| 15TSP037 | #4-40  | 0.875 | 22.2 | 0.250 | 6.4 | 500           |
| 15TSP115 | #4-40  | 1.000 | 25.4 | 0.188 | 4.8 | 500           |
| 15TSP005 | #4-40  | 1.000 | 25.4 | 0.250 | 6.4 | 500           |
| 15TSP140 | #6-32  | 0.188 | 4.8  | 0.188 | 4.8 | 1000          |
| 15TSP141 | #6-32  | 0.250 | 6.4  | 0.188 | 4.8 | 1000          |
| 15TSP006 | #6-32  | 0.250 | 6.4  | 0.250 | 6.4 | 1000          |
| 15TSP142 | #6-32  | 0.313 | 7.9  | 0.188 | 4.8 | 1000          |
| 15TSP054 | #6-32  | 0.313 | 7.9  | 0.250 | 6.4 | 1000          |
| 15TSP143 | #6-32  | 0.375 | 9.5  | 0.188 | 4.8 | 1000          |
| 15TSP007 | #6-32  | 0.375 | 9.5  | 0.250 | 6.4 | 1000          |
| 15TSP144 | #6-32  | 0.438 | 11.1 | 0.188 | 4.8 | 1000          |
| 15TSP145 | #6-32  | 0.500 | 12.7 | 0.188 | 4.8 | 1000          |
| 15TSP008 | #6-32  | 0.500 | 12.7 | 0.250 | 6.4 | 1000          |
| 15TSP051 | #6-32  | 0.563 | 14.3 | 0.250 | 6.4 | 500           |
| 15TSP147 | #6-32  | 0.625 | 15.9 | 0.188 | 4.8 | 1000          |
| 15TSP038 | #6-32  | 0.625 | 15.9 | 0.250 | 6.4 | 500           |
| 15TSP149 | #6-32  | 0.750 | 19.1 | 0.188 | 6.4 | 1000          |
| 15TSP009 | #6-32  | 0.750 | 19.1 | 0.250 | 6.4 | 500           |
| 15TSP151 | #6-32  | 0.875 | 22.2 | 0.188 | 4.8 | 1000          |
| 15TSP039 | #6-32  | 0.875 | 22.2 | 0.250 | 6.4 | 500           |
| 15TSP155 | #6-32  | 1.000 | 25.4 | 0.188 | 4.8 | 1000          |

## Note:

- 0.750" and longer, the tap is 0.375" minimum from each end and not continuous through
- Item No. Example: 15TSP006 in a #6-32 thread becomes 15MTSP006 with a M3.5 Thread

HS Series  
Hex Self Tapping Standoffs

## Specifications:

- Material: UL94 V-0 CPVC
- Color: Grey

## Features:

- Mounted with a metal self-tapping screw that threads the plastic

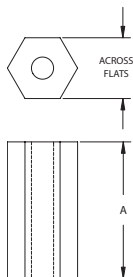
| Item No. | Self Tapping Screw | A     |      | ID    |     | Across Flats |     | Bulk Pack Qty |
|----------|--------------------|-------|------|-------|-----|--------------|-----|---------------|
|          |                    | in    | mm   | in    | mm  | in           | mm  |               |
| HS-4-3   | #4                 | 0.375 | 9.5  | 0.102 | 5.6 | 0.187        | 4.8 | 1000          |
| HS-4-4   | #4                 | 0.500 | 12.7 | 0.102 | 5.6 | 0.187        | 4.8 | 1000          |
| HS-4-6   | #4                 | 0.750 | 19.1 | 0.102 | 5.6 | 0.187        | 4.8 | 1000          |
| HS-4-7   | #4                 | 0.875 | 22.2 | 0.102 | 5.6 | 0.187        | 4.8 | 1000          |
| HS-4-8   | #4                 | 1.000 | 25.4 | 0.102 | 5.6 | 0.187        | 4.8 | 1000          |
| HS-6-4   | #6                 | 0.500 | 12.7 | 0.110 | 2.8 | 0.250        | 6.4 | 1000          |
| HS-6-5   | #6                 | 0.625 | 15.9 | 0.110 | 2.8 | 0.250        | 6.4 | 1000          |
| HS-6-6   | #6                 | 0.750 | 19.1 | 0.110 | 2.8 | 0.250        | 6.4 | 1000          |
| HS-6-7   | #6                 | 0.875 | 22.2 | 0.110 | 2.8 | 0.250        | 6.4 | 1000          |
| HS-6-8   | #6                 | 1.000 | 25.4 | 0.110 | 2.8 | 0.250        | 6.4 | 1000          |
| HS-6-10  | #6                 | 1.250 | 31.8 | 0.110 | 2.8 | 0.250        | 6.4 | 500           |
| HS-6-12  | #6                 | 1.500 | 38.1 | 0.110 | 2.8 | 0.250        | 6.4 | 500           |
| HS-6-14  | #6                 | 1.750 | 44.5 | 0.110 | 2.8 | 0.250        | 6.4 | 500           |
| HS-8-8   | #8                 | 1.000 | 25.4 | 0.141 | 3.6 | 0.375        | 9.5 | 1000          |
| HS-8-14  | #8                 | 1.750 | 44.5 | 0.141 | 3.6 | 0.375        | 9.5 | 500           |
| HS-8-16  | #8                 | 2.000 | 50.8 | 0.141 | 3.6 | 0.375        | 9.5 | 500           |
| HS-8-24  | #8                 | 3.000 | 76.2 | 0.141 | 3.6 | 0.375        | 9.5 | 500           |



# SELF THREADING STANDOFFS



## 35HSP Series Hex Self Tapping Standoffs



**Specifications:**

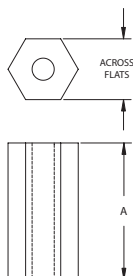
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Self-threading; use with tapping screws designed for plastics
- Will not rust, corrode or deteriorate

| Item No. | Self Tapping Screw | A     |      | ID    |     | Across Flats |      | Bulk Pack Qty |
|----------|--------------------|-------|------|-------|-----|--------------|------|---------------|
|          |                    | in    | mm   | in    | mm  | in           | mm   |               |
| 35HSP027 | #2                 | 0.281 | 7.1  | 0.072 | 1.8 | 0.189        | 4.8  | 1000          |
| 35HSP112 | #2                 | 0.438 | 11.1 | 0.072 | 1.8 | 0.188        | 4.8  | 1000          |
| 35HSP115 | #2                 | 0.313 | 8.0  | 0.072 | 1.8 | 0.188        | 4.8  | 1000          |
| 35HSP114 | #2                 | 0.375 | 9.5  | 0.072 | 1.8 | 0.188        | 4.8  | 1000          |
| 35HSP118 | #2                 | 0.688 | 17.5 | 0.072 | 1.8 | 0.188        | 4.8  | 1000          |
| 35HSP113 | #2                 | 0.563 | 14.3 | 0.075 | 1.9 | 0.188        | 4.8  | 1000          |
| 35HSP101 | #4                 | 0.250 | 6.4  | 0.091 | 2.3 | 0.188        | 4.8  | 1000          |
| 35HSP102 | #4                 | 0.375 | 9.5  | 0.091 | 2.3 | 0.188        | 4.8  | 1000          |
| 35HSP124 | #4                 | 0.750 | 19.1 | 0.091 | 2.3 | 0.188        | 4.8  | 1000          |
| 35HSP103 | #4                 | 0.500 | 12.7 | 0.091 | 2.3 | 0.188        | 4.8  | 1000          |
| 35HSP111 | #4                 | 0.563 | 14.3 | 0.091 | 2.3 | 0.188        | 4.8  | 1000          |
| 35HSP119 | #4                 | 0.625 | 15.9 | 0.091 | 2.3 | 0.188        | 4.8  | 1000          |
| 35HSP104 | #4                 | 0.438 | 11.1 | 0.091 | 2.3 | 0.188        | 4.8  | 1000          |
| 35HSP116 | #4                 | 0.875 | 22.2 | 0.091 | 2.3 | 0.188        | 4.8  | 1000          |
| 35HSP001 | #4                 | 0.250 | 6.4  | 0.091 | 2.3 | 0.250        | 6.4  | 1000          |
| 35HSP022 | #4                 | 0.313 | 8.0  | 0.091 | 2.3 | 0.250        | 6.4  | 1000          |
| 35HSP029 | #4                 | 0.438 | 11.1 | 0.091 | 2.3 | 0.250        | 6.4  | 1000          |
| 35HSP003 | #4                 | 0.500 | 12.7 | 0.091 | 2.3 | 0.250        | 6.4  | 1000          |
| 35HSP024 | #4                 | 0.563 | 14.3 | 0.091 | 2.3 | 0.250        | 6.4  | 1000          |
| 35HSP019 | #4                 | 0.625 | 15.9 | 0.091 | 2.3 | 0.250        | 6.4  | 1000          |
| 35HSP004 | #4                 | 0.750 | 19.1 | 0.091 | 2.3 | 0.250        | 6.4  | 1000          |
| 35HSP016 | #4                 | 0.875 | 22.2 | 0.091 | 2.3 | 0.250        | 6.4  | 1000          |
| 35HSP005 | #4                 | 1.000 | 25.4 | 0.091 | 2.3 | 0.250        | 6.4  | 1000          |
| 35HSP039 | #4                 | 1.375 | 34.9 | 0.091 | 2.3 | 0.250        | 6.4  | 1000          |
| 35HSP002 | #4                 | 0.375 | 9.5  | 0.093 | 2.4 | 0.250        | 6.4  | 1000          |
| 35HSP037 | #4                 | 0.826 | 21.0 | 0.094 | 2.4 | 0.250        | 6.4  | 1000          |
| 35HSP026 | #6                 | 0.313 | 8.0  | 0.110 | 2.8 | 0.250        | 6.4  | 1000          |
| 35HSP309 | #6                 | 0.750 | 19.1 | 0.110 | 2.8 | 0.375        | 9.5  | 1000          |
| 35HSP500 | #6                 | 1.625 | 41.3 | 0.110 | 2.8 | 0.500        | 12.7 | 1000          |
| 35HSP038 | #6                 | 0.563 | 14.3 | 0.111 | 2.8 | 0.250        | 6.4  | 1000          |
| 35HSP040 | #6                 | 0.438 | 11.1 | 0.111 | 2.8 | 0.250        | 6.4  | 1000          |
| 35HSP106 | #6                 | 0.250 | 6.4  | 0.115 | 2.9 | 0.188        | 4.8  | 1000          |
| 35HSP107 | #6                 | 0.375 | 9.5  | 0.115 | 2.9 | 0.188        | 4.8  | 1000          |
| 35HSP108 | #6                 | 0.500 | 12.7 | 0.115 | 2.9 | 0.188        | 4.8  | 1000          |
| 35HSP120 | #6                 | 0.625 | 15.9 | 0.115 | 2.9 | 0.188        | 4.8  | 1000          |
| 35HSP109 | #6                 | 0.750 | 19.1 | 0.115 | 2.9 | 0.188        | 4.8  | 1000          |
| 35HSP209 | #6                 | 0.250 | 6.4  | 0.115 | 2.9 | 0.313        | 8.0  | 1000          |
| 35HSP036 | #6                 | 1.500 | 38.1 | 0.115 | 2.9 | 0.250        | 6.4  | 1000          |
| 35HSP035 | #6                 | 0.188 | 4.8  | 0.115 | 2.9 | 0.250        | 6.4  | 1000          |
| 35HSP006 | #6                 | 0.250 | 6.4  | 0.115 | 2.9 | 0.250        | 6.4  | 1000          |
| 35HSP007 | #6                 | 0.375 | 9.5  | 0.115 | 2.9 | 0.250        | 6.4  | 1000          |
| 35HSP008 | #6                 | 0.500 | 12.7 | 0.115 | 2.9 | 0.250        | 6.4  | 1000          |
| 35HSP020 | #6                 | 0.625 | 15.9 | 0.115 | 2.9 | 0.250        | 6.4  | 1000          |
| 35HSP009 | #6                 | 0.750 | 19.1 | 0.115 | 2.9 | 0.250        | 6.4  | 1000          |
| 35HSP017 | #6                 | 0.875 | 22.2 | 0.115 | 2.9 | 0.250        | 6.4  | 1000          |
| 35HSP010 | #6                 | 1.000 | 25.4 | 0.115 | 2.9 | 0.250        | 6.4  | 1000          |
| 35HSP023 | #6                 | 1.250 | 31.8 | 0.115 | 2.9 | 0.250        | 6.4  | 500           |
| 35HSP208 | #6                 | 0.500 | 12.7 | 0.115 | 2.9 | 0.313        | 8.0  | 1000          |
| 35HSP220 | #6                 | 0.875 | 22.2 | 0.115 | 2.9 | 0.313        | 8.0  | 1000          |
| 35HSP225 | #6                 | 1.125 | 28.6 | 0.115 | 2.9 | 0.313        | 8.0  | 1000          |
| 35HSP041 | #8                 | 0.672 | 17.1 | 0.134 | 3.4 | 0.250        | 6.4  | 1000          |
| 35HSP011 | #8                 | 0.250 | 6.4  | 0.140 | 3.6 | 0.250        | 6.4  | 1000          |
| 35HSP012 | #8                 | 0.375 | 9.5  | 0.140 | 3.6 | 0.250        | 6.4  | 1000          |
| 35HSP013 | #8                 | 0.500 | 12.7 | 0.140 | 3.6 | 0.250        | 6.4  | 1000          |
| 35HSP021 | #8                 | 0.625 | 15.9 | 0.140 | 3.6 | 0.250        | 6.4  | 1000          |
| 35HSP014 | #8                 | 0.750 | 19.1 | 0.140 | 3.6 | 0.250        | 6.4  | 1000          |
| 35HSP018 | #8                 | 0.875 | 22.2 | 0.140 | 3.6 | 0.250        | 6.4  | 1000          |
| 35HSP015 | #8                 | 1.000 | 25.4 | 0.140 | 3.6 | 0.250        | 6.4  | 1000          |
| 35HSP042 | #8                 | 1.125 | 28.6 | 0.140 | 3.6 | 0.250        | 6.4  | 1000          |
| 35HSP401 | #10                | 0.500 | 12.7 | 0.164 | 4.2 | 0.375        | 9.5  | 1000          |
| 35HSP400 | 1/4                | 0.500 | 12.7 | 0.196 | 5.0 | 0.375        | 9.5  | 1000          |
| 35HSP207 | 1/4                | 0.219 | 5.6  | 0.225 | 5.7 | 0.313        | 8.0  | 1000          |

## 35MHSP Series Metric Hex Self Tapping Standoffs



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Self-threading; use with tapping screws designed for plastics
- Will not rust, corrode or deteriorate

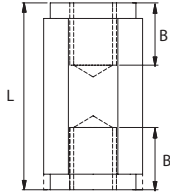


| Item No.  | Self Tapping Screw | A    | ID  | Across Flats | Bulk Pack Qty |
|-----------|--------------------|------|-----|--------------|---------------|
|           |                    | mm   | mm  | mm           |               |
| 35MHSP004 | M3                 | 2.0  | 2.6 | 6.0          | 1000          |
| 35MHSP006 | M4                 | 6.0  | 3.6 | 6.0          | 1000          |
| 35MHSP008 | M4                 | 8.0  | 3.6 | 6.0          | 1000          |
| 35MHSP010 | M4                 | 10.0 | 3.6 | 6.0          | 1000          |
| 35MHSP012 | M4                 | 12.0 | 3.6 | 6.0          | 1000          |
| 35MHSP015 | M4                 | 15.0 | 3.6 | 6.0          | 1000          |
| 35MHSP018 | M4                 | 18.0 | 3.6 | 6.0          | 1000          |
| 35MHSP020 | M4                 | 20.0 | 3.6 | 6.0          | 1000          |
| 35MHSP025 | M4                 | 25.0 | 3.6 | 6.0          | 1000          |



# FEMALE / FEMALE STANDOFFS AND THROUGH SPACERS

## HNSM-1 Series Metric Hex Threaded Standoff



**Specifications:**

- Material: 25% Glass Filled Nylon 6
- Color: Black

**Features:**

- Internal threads mounted with an M3 or M4 screw

| Item No.       | Thread | L    |     | B        | Bulk Pack Qty |
|----------------|--------|------|-----|----------|---------------|
|                |        | mm   | mm  |          |               |
| HNSM3-13-5.5-1 | M3     | 13.0 | 5.5 | 10.0 Max | 500           |
| HNSM3-20-5.5-1 | M3     | 20.0 | 5.5 | 10.0 Max | 500           |
| HNSM3-28-6-1   | M3     | 28.0 | 6.0 | 10.0 Max | 500           |
| HNSM3-30-5.5-1 | M3     | 30.0 | 5.5 | 10.0 Max | 500           |

## 186XXX70409 Series PEEK Hex Threaded Standoff



**Specifications:**

- Material: UL94 V-0 PEEK
- Color: Light Brown

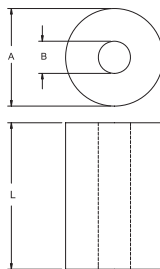
**Features:**

- Heat Resistant up to 356° F
- Excellent mechanical strength and stiffness
- Excellent Resistance to alternating tensile and bending loads
- See pages 178, 188 and 204 for additional PEEK Fasteners

| Item No.     | Thread | A    |     | B    | Pack Qty |
|--------------|--------|------|-----|------|----------|
|              |        | mm   | mm  |      |          |
| 186304070409 | M3     | 4.0  | 6.0 | 2.0  | 10       |
| 186305070409 | M3     | 5.0  | 6.0 | 2.5  | 10       |
| 186306070409 | M3     | 6.0  | 6.0 | 3.0  | 10       |
| 186308070409 | M3     | 8.0  | 6.0 | 4.0  | 10       |
| 186301070409 | M3     | 10.0 | 6.0 | 5.0  | 10       |
| 186301270409 | M3     | 12.0 | 6.0 | 6.0  | 10       |
| 186301570409 | M3     | 15.0 | 6.0 | 7.5  | 10       |
| 186301870409 | M3     | 18.0 | 6.0 | 9.0  | 10       |
| 186302070409 | M3     | 20.0 | 6.0 | 10.0 | 10       |
| 186302570409 | M3     | 25.0 | 6.0 | 10.0 | 10       |
| 186303070409 | M3     | 30.0 | 6.0 | 10.0 | 10       |
| 186405070409 | M4     | 5.0  | 7.0 | 2.5  | 10       |
| 186406070409 | M4     | 6.0  | 7.0 | 3.0  | 10       |
| 186408070409 | M4     | 8.0  | 7.0 | 4.0  | 10       |
| 186401070409 | M4     | 10.0 | 7.0 | 5.0  | 10       |
| 186401270409 | M4     | 12.0 | 7.0 | 6.0  | 10       |

| Item No.     | Thread | A    |     | B    | Pack Qty |
|--------------|--------|------|-----|------|----------|
|              |        | mm   | mm  |      |          |
| 186401570409 | M4     | 15.0 | 7.0 | 7.5  | 10       |
| 186401870409 | M4     | 18.0 | 7.0 | 9.0  | 10       |
| 186402070409 | M4     | 20.0 | 7.0 | 10.0 | 10       |
| 186402570409 | M4     | 25.0 | 7.0 | 10.0 | 10       |
| 186403070409 | M4     | 30.0 | 7.0 | 10.0 | 10       |
| 186403570409 | M4     | 35.0 | 7.0 | 10.0 | 10       |
| 186506070409 | M5     | 6.0  | 8.0 | 3.0  | 10       |
| 186508070409 | M5     | 8.0  | 8.0 | 4.0  | 10       |
| 186501070409 | M5     | 10.0 | 8.0 | 5.0  | 10       |
| 186501270409 | M5     | 12.0 | 8.0 | 6.0  | 10       |
| 186501570409 | M5     | 15.0 | 8.0 | 7.5  | 10       |
| 186501870409 | M5     | 18.0 | 8.0 | 9.0  | 10       |
| 186502070409 | M5     | 20.0 | 8.0 | 10.0 | 10       |
| 186502570409 | M5     | 25.0 | 8.0 | 10.0 | 10       |
| 186503070409 | M5     | 30.0 | 8.0 | 10.0 | 10       |
| 186503570409 | M5     | 35.0 | 8.0 | 10.0 | 10       |
| 186504070409 | M5     | 40.0 | 8.0 | 10.0 | 10       |

## NS Series NAS5527 Nylon Spacer



**Specifications:**

- Material: UL94 V-2 Heat Stabilized Nylon 6/6
- Color: Natural

**Features:**

- Meets NAS5527 specifications

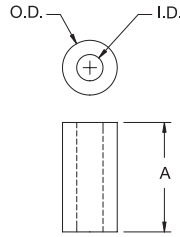
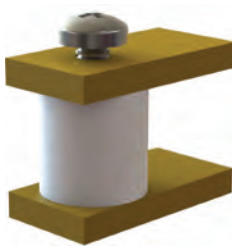
| Item No. | NAS Item No.  | L     |      | ØA    |      | ØB    |     | Bulk Pack Qty |
|----------|---------------|-------|------|-------|------|-------|-----|---------------|
|          |               | in    | mm   | in    | mm   | in    | mm  |               |
| NS-03-07 | NAS5527-03-07 | 0.142 | 3.6  | 0.472 | 12.0 | 0.197 | 5.0 | 1000          |
| NS-05-01 | NAS5527-05-01 | 0.158 | 4.0  | 0.500 | 12.7 | 0.268 | 6.8 | 1000          |
| NS-03-04 | NAS5527-03-04 | 0.190 | 4.8  | 0.472 | 12.0 | 0.197 | 5.0 | 1000          |
| NS-07-01 | NAS5527-07-01 | 0.197 | 5.0  | 0.630 | 16.0 | 0.276 | 7.0 | 1000          |
| NS-03-03 | NAS5527-03-03 | 0.250 | 6.4  | 0.472 | 12.0 | 0.197 | 5.0 | 1000          |
| NS-03-05 | NAS5527-03-05 | 0.312 | 7.9  | 0.472 | 12.0 | 0.197 | 5.0 | 1000          |
| NS-04-02 | NAS5527-04-02 | 0.312 | 7.9  | 0.472 | 12.0 | 0.260 | 6.6 | 1000          |
| NS-03-06 | NAS5527-03-06 | 0.375 | 9.5  | 0.472 | 12.0 | 0.197 | 5.0 | 1000          |
| NS-03-16 | NAS5527-03-16 | 0.453 | 11.5 | 0.472 | 12.0 | 0.197 | 5.0 | 1000          |
| NS-03-01 | NAS5527-03-01 | 0.500 | 12.7 | 0.472 | 12.0 | 0.197 | 5.0 | 1000          |
| NS-04-01 | NAS5527-04-01 | 0.500 | 12.7 | 0.472 | 12.0 | 0.260 | 6.6 | 1000          |
| NS-03-14 | NAS5527-03-14 | 0.551 | 14.0 | 0.472 | 12.0 | 0.197 | 5.0 | 1000          |
| NS-03-02 | NAS5527-03-02 | 0.598 | 15.2 | 0.472 | 12.0 | 0.197 | 5.0 | 1000          |
| NS-03-15 | NAS5527-03-15 | 0.669 | 17.0 | 0.472 | 12.0 | 0.197 | 5.0 | 1000          |
| NS-03-12 | NAS5527-03-12 | 0.748 | 19.0 | 0.472 | 12.0 | 0.197 | 5.0 | 1000          |
| NS-03-08 | NAS5527-03-08 | 0.787 | 20.0 | 0.472 | 12.0 | 0.197 | 5.0 | 1000          |
| NS-03-13 | NAS5527-03-13 | 0.827 | 21.0 | 0.472 | 12.0 | 0.197 | 5.0 | 1000          |
| NS-03-09 | NAS5527-03-09 | 0.886 | 22.5 | 0.472 | 12.0 | 0.197 | 5.0 | 1000          |
| NS-03-11 | NAS5527-03-11 | 0.925 | 23.5 | 0.472 | 12.0 | 0.197 | 5.0 | 1000          |
| NS-06-01 | NAS5527-06-01 | 0.984 | 25.0 | 0.630 | 16.0 | 0.205 | 5.2 | 1000          |
| NS-06-02 | NAS5527-06-02 | 1.180 | 30.0 | 0.630 | 16.0 | 0.205 | 5.2 | 1000          |
| NS-08-01 | NAS5527-08-01 | 1.180 | 30.0 | 0.787 | 20.0 | 0.260 | 6.6 | 1000          |
| NS-03-10 | NAS5527-03-10 | 1.830 | 46.5 | 0.472 | 12.0 | 0.197 | 5.0 | 1000          |





# THROUGH SPACERS

## SS Series Round CPVC Spacer



**Specifications:**

- Material: UL94 V-0 OCPVC
- Color: Light Grey

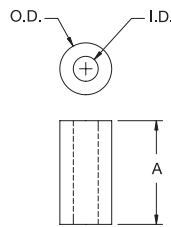
**Features:**

- Through-hole allows mounting with several different screw options
- No water absorption

| Item No. | For Screw |        | A     |      | ID    |     | OD    |     | Bulk Pack Qty |
|----------|-----------|--------|-------|------|-------|-----|-------|-----|---------------|
|          | Imperial  | Metric | in    | mm   | in    | mm  | in    | mm  |               |
| SS4-2    | #4        | M2.5   | 0.250 | 6.4  | 0.120 | 3.0 | 0.250 | 6.4 | 1000          |
| SS4-3    | #4        | M2.5   | 0.375 | 9.5  | 0.120 | 3.0 | 0.250 | 6.4 | 1000          |
| SS4-4    | #4        | M2.5   | 0.500 | 12.7 | 0.120 | 3.0 | 0.250 | 6.4 | 1000          |
| SS4-5    | #4        | M2.5   | 0.625 | 15.9 | 0.120 | 3.0 | 0.250 | 6.4 | 1000          |
| SS4-6    | #4        | M2.5   | 0.750 | 19.1 | 0.120 | 3.0 | 0.250 | 6.4 | 1000          |
| SS4-8    | #4        | M2.5   | 1.000 | 25.4 | 0.120 | 3.0 | 0.250 | 6.4 | 1000          |
| SS4-10   | #4        | M2.5   | 1.250 | 31.8 | 0.120 | 3.0 | 0.250 | 6.4 | 500           |
| SS4-12   | #4        | M2.5   | 1.500 | 38.1 | 0.120 | 3.0 | 0.250 | 6.4 | 500           |
| SS6-2    | #6        | M3     | 0.250 | 6.4  | 0.147 | 3.7 | 0.250 | 6.4 | 1000          |
| SS6-3    | #6        | M3     | 0.375 | 9.5  | 0.147 | 3.7 | 0.250 | 6.4 | 1000          |
| SS6-4    | #6        | M3     | 0.500 | 12.7 | 0.147 | 3.7 | 0.250 | 6.4 | 1000          |
| SS6-5    | #6        | M3     | 0.625 | 15.9 | 0.147 | 3.7 | 0.250 | 6.4 | 1000          |
| SS6-6    | #6        | M3     | 0.750 | 19.1 | 0.147 | 3.7 | 0.250 | 6.4 | 1000          |
| SS6-8    | #6        | M3     | 1.000 | 25.4 | 0.147 | 3.7 | 0.250 | 6.4 | 1000          |
| SS6-10   | #6        | M3     | 1.250 | 31.8 | 0.147 | 3.7 | 0.250 | 6.4 | 500           |
| SS6-12   | #6        | M3     | 1.500 | 38.1 | 0.147 | 3.7 | 0.250 | 6.4 | 500           |
| SS8-2    | #8        | M4     | 0.250 | 6.4  | 0.175 | 4.4 | 0.250 | 6.4 | 1000          |
| SS8-3    | #8        | M4     | 0.375 | 9.5  | 0.175 | 4.4 | 0.250 | 6.4 | 1000          |
| SS8-4    | #8        | M4     | 0.500 | 12.7 | 0.175 | 4.4 | 0.250 | 6.4 | 1000          |
| SS8-5    | #8        | M4     | 0.625 | 15.9 | 0.175 | 4.4 | 0.250 | 6.4 | 1000          |
| SS8-6    | #8        | M4     | 0.750 | 19.1 | 0.175 | 4.4 | 0.250 | 6.4 | 1000          |
| SS8-8    | #8        | M4     | 1.000 | 25.4 | 0.175 | 4.4 | 0.250 | 6.4 | 1000          |
| SS8-10   | #8        | M4     | 1.250 | 31.8 | 0.175 | 4.4 | 0.250 | 6.4 | 500           |
| SS8-12   | #8        | M4     | 1.500 | 38.1 | 0.175 | 4.4 | 0.250 | 6.4 | 500           |
| SS8-2L   | #8        | M4     | 0.250 | 6.4  | 0.175 | 4.4 | 0.375 | 9.5 | 1000          |
| SS8-3L   | #8        | M4     | 0.375 | 9.5  | 0.175 | 4.4 | 0.375 | 9.5 | 1000          |

| Item No. | For Screw |        | A     |      | ID    |      | OD    |      | Bulk Pack Qty |
|----------|-----------|--------|-------|------|-------|------|-------|------|---------------|
|          | Imperial  | Metric | in    | mm   | in    | mm   | in    | mm   |               |
| SS8-4L   | #8        | M4     | 0.500 | 12.7 | 0.175 | 4.4  | 0.375 | 9.5  | 1000          |
| SS8-5L   | #8        | M4     | 0.625 | 15.9 | 0.175 | 4.4  | 0.375 | 9.5  | 1000          |
| SS8-6L   | #8        | M4     | 0.750 | 19.1 | 0.175 | 4.4  | 0.375 | 9.5  | 1000          |
| SS8-8L   | #8        | M4     | 1.000 | 25.4 | 0.175 | 4.4  | 0.375 | 9.5  | 1000          |
| SS8-9L   | #8        | M4     | 1.125 | 28.6 | 0.175 | 4.4  | 0.375 | 9.5  | 1000          |
| SS8-10L  | #8        | M4     | 1.250 | 31.8 | 0.175 | 4.4  | 0.375 | 9.5  | 500           |
| SS8-12L  | #8        | M4     | 1.500 | 38.1 | 0.175 | 4.4  | 0.375 | 9.5  | 500           |
| SS10-2   | #10       | M5     | 0.250 | 6.4  | 0.200 | 5.1  | 0.375 | 9.5  | 1000          |
| SS10-3   | #10       | M5     | 0.375 | 9.5  | 0.200 | 5.1  | 0.375 | 9.5  | 1000          |
| SS10-4   | #10       | M5     | 0.500 | 12.7 | 0.200 | 5.1  | 0.375 | 9.5  | 1000          |
| SS10-5   | #10       | M5     | 0.625 | 15.9 | 0.200 | 5.1  | 0.375 | 9.5  | 1000          |
| SS1e0-6  | #10       | M5     | 0.750 | 19.1 | 0.200 | 5.1  | 0.375 | 9.5  | 1000          |
| SS10-8   | #10       | M5     | 1.000 | 25.4 | 0.200 | 5.1  | 0.375 | 9.5  | 1000          |
| SS10-10  | #10       | M5     | 1.250 | 31.8 | 0.200 | 5.1  | 0.375 | 9.5  | 500           |
| SS10-12  | #10       | M5     | 1.500 | 38.1 | 0.200 | 5.1  | 0.375 | 9.5  | 500           |
| SS1/4-2  | 1/4       | M6     | 0.250 | 6.4  | 0.266 | 6.8  | 0.500 | 12.7 | 1000          |
| SS1/4-4  | 1/4       | M6     | 0.500 | 12.7 | 0.266 | 6.8  | 0.500 | 12.7 | 1000          |
| SS1/4-6  | 1/4       | M6     | 0.750 | 19.1 | 0.266 | 6.8  | 0.500 | 12.7 | 1000          |
| SS1/4-8  | 1/4       | M6     | 1.000 | 25.4 | 0.266 | 6.8  | 0.500 | 12.7 | 1000          |
| SS1/4-10 | 1/4       | M6     | 1.250 | 31.8 | 0.266 | 6.8  | 0.500 | 12.7 | 500           |
| SS1/4-12 | 1/4       | M6     | 1.500 | 38.1 | 0.266 | 6.8  | 0.500 | 12.7 | 500           |
| SS3/8-2  | 3/8       | M9     | 0.250 | 6.4  | 0.397 | 10.1 | 0.500 | 12.7 | 1000          |
| SS3/8-4  | 3/8       | M9     | 0.500 | 12.7 | 0.397 | 10.1 | 0.500 | 12.7 | 1000          |
| SS3/8-6  | 3/8       | M9     | 0.750 | 19.1 | 0.397 | 10.1 | 0.500 | 12.7 | 1000          |
| SS3/8-8  | 3/8       | M9     | 1.000 | 25.4 | 0.397 | 10.1 | 0.500 | 12.7 | 1000          |

## 005XXXXXX05 Series Round Acetal (POM) Spacer



**Specifications:**

- Material: Acetal
- Color: See table

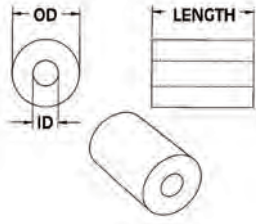
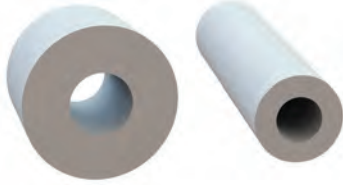
**Features:**

- High abrasion resistance
- Minimal water absorption
- High heat resistance
- Good electrical and dielectric properties

| Item No.     | Natural | Black        | For Screw |        | A     |      | ID    |     | OD    |     | Bulk Pack Qty |
|--------------|---------|--------------|-----------|--------|-------|------|-------|-----|-------|-----|---------------|
|              |         |              | Imperial  | Metric | in    | mm   | in    | mm  | in    | mm  |               |
| 005237000005 |         | 005237059905 | #2        | M2.5   | 0.079 | 2.0  | 0.102 | 2.6 | 0.197 | 5.0 | 1000          |
| 005240000005 |         | 005240059905 | #2        | M2.5   | 0.118 | 3.0  | 0.102 | 2.6 | 0.197 | 5.0 | 1000          |
| 005243000005 |         | 005243059905 | #2        | M2.5   | 0.197 | 5.0  | 0.102 | 2.6 | 0.197 | 5.0 | 1000          |
| 005246000005 |         | 005246059905 | #2        | M2.5   | 0.295 | 7.5  | 0.102 | 2.6 | 0.197 | 5.0 | 1000          |
| 005249000005 |         | 005249059905 | #2        | M2.5   | 0.394 | 10.0 | 0.102 | 2.6 | 0.197 | 5.0 | 1000          |
| 005252000005 |         | 005252059905 | #2        | M2.5   | 0.591 | 15.0 | 0.102 | 2.6 | 0.197 | 5.0 | 1000          |
| 005255000005 |         | 005255059905 | #2        | M2.5   | 0.787 | 20.0 | 0.102 | 2.6 | 0.197 | 5.0 | 1000          |
| 005258000005 |         | 005258059905 | #2        | M2.5   | 0.984 | 25.0 | 0.102 | 2.6 | 0.197 | 5.0 | 1000          |
| 005261000005 |         | 005261059905 | #2        | M2.5   | 1.181 | 30.0 | 0.102 | 2.6 | 0.197 | 5.0 | 1000          |
| 005274000005 |         | 005274059905 | #4        | M3     | 0.079 | 2.0  | 0.122 | 3.1 | 0.197 | 5.0 | 1000          |
| 005277000005 |         | 005277059905 | #4        | M3     | 0.118 | 3.0  | 0.122 | 3.1 | 0.197 | 5.0 | 1000          |
| 005280000005 |         | 005280059905 | #4        | M3     | 0.197 | 5.0  | 0.122 | 3.1 | 0.197 | 5.0 | 1000          |
| 005283000005 |         | 005283059905 | #4        | M3     | 0.295 | 7.5  | 0.122 | 3.1 | 0.197 | 5.0 | 1000          |
| 005286000005 |         | 005286059905 | #4        | M3     | 0.394 | 10.0 | 0.122 | 3.1 | 0.197 | 5.0 | 1000          |
| 005289000005 |         | 005289059905 | #4        | M3     | 0.591 | 15.0 | 0.122 | 3.1 | 0.197 | 5.0 | 1000          |
| 005292000005 |         | 005292059905 | #4        | M3     | 0.787 | 20.0 | 0.122 | 3.1 | 0.197 | 5.0 | 1000          |
| 005295000005 |         | 005295059905 | #4        | M3     | 0.984 | 25.0 | 0.122 | 3.1 | 0.197 | 5.0 | 1000          |
| 005298000005 |         | 005298059905 | #4        | M3     | 1.181 | 30.0 | 0.122 | 3.1 | 0.197 | 5.0 | 1000          |



## THROUGH SPACERS

13RS/13RSSR/13SP/13ME/MSW/SWI/SWS Series  
Round Nylon Through Spacers

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

## Features:

- Will not rust, corrode or deteriorate
- Acts as an electrical insulator by preventing metal-to-metal contact

\* Note: 13ME item #'s are made of black Heat Stabilized Nylon 6/6

| Item No.     | ID    |     | OD    |     | Length |      | Bulk Pack Qty |
|--------------|-------|-----|-------|-----|--------|------|---------------|
|              | in    | mm  | in    | mm  | in     | mm   |               |
| • 13RS014535 | 0.032 | 0.8 | 0.085 | 2.2 | 0.300  | 7.6  | 1000          |
| • 13RS014533 | 0.038 | 1.0 | 0.138 | 3.5 | 0.065  | 1.7  | 1000          |
| • 13RS014531 | 0.038 | 1.0 | 0.138 | 3.5 | 0.125  | 3.2  | 1000          |
| • 13RS014529 | 0.047 | 1.2 | 0.125 | 3.2 | 0.187  | 4.7  | 1000          |
| • 13RS012504 | 0.047 | 1.2 | 0.125 | 3.2 | 0.375  | 9.5  | 1000          |
| • 13RS018723 | 0.062 | 1.6 | 0.187 | 4.7 | 0.310  | 7.9  | 1000          |
| • 13SP000    | 0.063 | 1.6 | 0.125 | 3.2 | 0.188  | 4.8  | 1000          |
| • 13RS014532 | 0.063 | 1.6 | 0.156 | 4.0 | 0.120  | 3.0  | 1000          |
| • 13RS018721 | 0.063 | 1.6 | 0.187 | 4.7 | 0.200  | 5.1  | 1000          |
| • 13RS018711 | 0.063 | 1.6 | 0.187 | 4.7 | 0.400  | 10.2 | 1000          |
| • 13RSSR0001 | 0.064 | 1.6 | 0.125 | 3.2 | 0.125  | 3.2  | 1000          |
| • 13RSSR0003 | 0.064 | 1.6 | 0.125 | 3.2 | 0.188  | 4.8  | 1000          |
| • 13RSSR0005 | 0.064 | 1.6 | 0.125 | 3.2 | 0.250  | 6.4  | 1000          |
| • 13RSSR0007 | 0.064 | 1.6 | 0.125 | 3.2 | 0.312  | 7.9  | 1000          |
| • 13RSSR0009 | 0.064 | 1.6 | 0.125 | 3.2 | 0.375  | 9.5  | 1000          |
| • 13RS018716 | 0.064 | 1.6 | 0.187 | 4.7 | 0.187  | 4.7  | 1000          |
| • 13RS012505 | 0.067 | 1.7 | 0.125 | 3.2 | 0.375  | 9.5  | 1000          |
| • 13RS018715 | 0.067 | 1.7 | 0.187 | 4.7 | 0.141  | 3.6  | 1000          |
| • 13RS014534 | 0.069 | 1.8 | 0.125 | 3.2 | 0.203  | 5.2  | 1000          |
| • 13RS014536 | 0.078 | 2.0 | 0.144 | 3.7 | 0.145  | 3.7  | 1000          |
| • 13RS014530 | 0.078 | 2.0 | 0.150 | 3.8 | 0.313  | 8.0  | 1000          |
| • 13RS014528 | 0.085 | 2.2 | 0.148 | 3.8 | 0.280  | 7.1  | 1000          |
| • 13RSSR0002 | 0.090 | 2.3 | 0.125 | 3.2 | 0.125  | 3.2  | 1000          |
| • 13RSSR0004 | 0.090 | 2.3 | 0.125 | 3.2 | 0.188  | 4.8  | 1000          |
| • 13RSSR0006 | 0.090 | 2.3 | 0.125 | 3.2 | 0.250  | 6.4  | 1000          |
| • 13RSSR0008 | 0.090 | 2.3 | 0.125 | 3.2 | 0.312  | 7.9  | 500           |
| • 13RSSR0010 | 0.090 | 2.3 | 0.125 | 3.2 | 0.375  | 9.5  | 1000          |
| • 13RSSR0012 | 0.090 | 2.3 | 0.188 | 4.8 | 0.219  | 5.6  | 1000          |
| • 13RSSR0014 | 0.090 | 2.3 | 0.188 | 4.8 | 0.281  | 7.1  | 1000          |
| • 13RSSR0015 | 0.090 | 2.3 | 0.188 | 4.8 | 0.344  | 8.7  | 1000          |
| • 13RSSR0016 | 0.090 | 2.3 | 0.188 | 4.8 | 0.406  | 10.3 | 1000          |
| • 13RSSR0018 | 0.090 | 2.3 | 0.188 | 4.8 | 0.469  | 11.9 | 1000          |
| • 13RS018714 | 0.090 | 2.3 | 0.188 | 4.8 | 0.520  | 13.2 | 1000          |
| • 13RSSR0020 | 0.090 | 2.3 | 0.250 | 6.4 | 0.156  | 4.0  | 1000          |
| • 13RSSR0024 | 0.090 | 2.3 | 0.250 | 6.4 | 0.219  | 5.6  | 1000          |
| • 13RSSR0028 | 0.090 | 2.3 | 0.250 | 6.4 | 0.281  | 7.1  | 1000          |
| • 13RSSR0032 | 0.090 | 2.3 | 0.250 | 6.4 | 0.344  | 8.7  | 1000          |
| • 13RSSR0036 | 0.090 | 2.3 | 0.250 | 6.4 | 0.406  | 10.3 | 1000          |
| • 13RSSR0040 | 0.090 | 2.3 | 0.250 | 6.4 | 0.469  | 11.9 | 1000          |
| • 13RS018790 | 0.091 | 2.3 | 0.187 | 4.7 | 0.203  | 5.2  | 1000          |
| • 13RS018712 | 0.091 | 2.3 | 0.187 | 4.7 | 0.423  | 10.7 | 1000          |
| • 13RS018785 | 0.091 | 2.3 | 0.187 | 4.7 | 0.844  | 21.4 | 1000          |
| • 13SP001    | 0.091 | 2.3 | 0.188 | 4.8 | 0.125  | 3.2  | 1000          |
| • 13SP003    | 0.091 | 2.3 | 0.188 | 4.8 | 0.188  | 4.8  | 1000          |
| • 13SP005    | 0.091 | 2.3 | 0.188 | 4.8 | 0.250  | 6.4  | 1000          |
| • 13RS018713 | 0.091 | 2.3 | 0.188 | 4.8 | 0.275  | 7.0  | 1000          |
| • 13SP007    | 0.091 | 2.3 | 0.188 | 4.8 | 0.313  | 8.0  | 1000          |
| • 13SP009    | 0.091 | 2.3 | 0.188 | 4.8 | 0.375  | 9.5  | 1000          |
| • 13SP011    | 0.091 | 2.3 | 0.188 | 4.8 | 0.438  | 11.1 | 1000          |
| • 13SP013    | 0.091 | 2.3 | 0.188 | 4.8 | 0.500  | 12.7 | 1000          |
| • 13SP015    | 0.091 | 2.3 | 0.188 | 4.8 | 0.563  | 14.3 | 1000          |
| • 13SP017    | 0.091 | 2.3 | 0.188 | 4.8 | 0.625  | 15.9 | 1000          |
| • 13SP019    | 0.091 | 2.3 | 0.188 | 4.8 | 0.688  | 17.5 | 1000          |
| • 13SP021    | 0.091 | 2.3 | 0.188 | 4.8 | 0.750  | 19.1 | 500           |
| • 13SP023    | 0.091 | 2.3 | 0.188 | 4.8 | 0.813  | 20.7 | 500           |
| • 13SP025    | 0.091 | 2.3 | 0.188 | 4.8 | 0.875  | 22.2 | 500           |
| • 13SP027    | 0.091 | 2.3 | 0.188 | 4.8 | 0.938  | 23.8 | 500           |
| • 13SP029    | 0.091 | 2.3 | 0.188 | 4.8 | 1.000  | 25.4 | 500           |
| • 13SP031    | 0.091 | 2.3 | 0.250 | 6.4 | 0.125  | 3.2  | 1000          |

| Item No.     | ID    |     | OD    |     | Length |      | Bulk Pack Qty |
|--------------|-------|-----|-------|-----|--------|------|---------------|
|              | in    | mm  | in    | mm  | in     | mm   |               |
| • 13SP035    | 0.091 | 2.3 | 0.250 | 6.4 | 0.188  | 4.8  | 1000          |
| • 13SP039    | 0.091 | 2.3 | 0.250 | 6.4 | 0.250  | 6.4  | 1000          |
| • 13SP043    | 0.091 | 2.3 | 0.250 | 6.4 | 0.313  | 8.0  | 1000          |
| • 13SP047    | 0.091 | 2.3 | 0.250 | 6.4 | 0.375  | 9.5  | 1000          |
| • 13SP051    | 0.091 | 2.3 | 0.250 | 6.4 | 0.438  | 11.1 | 500           |
| • 13SP055    | 0.091 | 2.3 | 0.250 | 6.4 | 0.500  | 12.7 | 500           |
| • 13SP059    | 0.091 | 2.3 | 0.250 | 6.4 | 0.563  | 14.3 | 500           |
| • 13SP063    | 0.091 | 2.3 | 0.250 | 6.4 | 0.625  | 15.9 | 500           |
| • 13SP067    | 0.091 | 2.3 | 0.250 | 6.4 | 0.688  | 17.5 | 500           |
| • 13SP071    | 0.091 | 2.3 | 0.250 | 6.4 | 0.750  | 19.1 | 500           |
| • 13SP075    | 0.091 | 2.3 | 0.250 | 6.4 | 0.813  | 20.7 | 500           |
| • 13SP079    | 0.091 | 2.3 | 0.250 | 6.4 | 0.875  | 22.2 | 500           |
| • 13SP083    | 0.091 | 2.3 | 0.250 | 6.4 | 0.938  | 23.8 | 500           |
| • 13SP087    | 0.091 | 2.3 | 0.250 | 6.4 | 1.000  | 25.4 | 500           |
| • 13RS018020 | 0.093 | 2.4 | 0.192 | 4.9 | 0.203  | 5.2  | 1000          |
| • 13RS018729 | 0.094 | 2.4 | 0.156 | 4.0 | 0.140  | 3.6  | 1000          |
| • 13RS037546 | 0.094 | 2.4 | 0.375 | 9.5 | 0.281  | 7.1  | 1000          |
| • 13RS031210 | 0.095 | 2.4 | 0.312 | 7.9 | 0.250  | 6.4  | 1000          |
| • 13RS018720 | 0.096 | 2.4 | 0.187 | 4.7 | 0.156  | 4.0  | 1000          |
| • 13RS025044 | 0.098 | 2.5 | 0.250 | 6.4 | 0.250  | 6.4  | 1000          |
| • 13RS016040 | 0.100 | 2.5 | 0.160 | 4.1 | 0.406  | 10.3 | 1000          |
| • 13RS015721 | 0.102 | 2.6 | 0.157 | 4.0 | 0.217  | 5.5  | 1000          |
| • 13ME001*   | 0.102 | 2.6 | 0.157 | 4.0 | 0.079  | 2.0  | 1000          |
| • 13ME002*   | 0.102 | 2.6 | 0.157 | 4.0 | 0.118  | 3.0  | 1000          |
| • 13ME003*   | 0.102 | 2.6 | 0.157 | 4.0 | 0.197  | 5.0  | 1000          |
| • 13ME004*   | 0.102 | 2.6 | 0.157 | 4.0 | 0.295  | 7.5  | 1000          |
| • 13ME005*   | 0.102 | 2.6 | 0.157 | 4.0 | 0.394  | 10.0 | 1000          |
| • 13ME006*   | 0.102 | 2.6 | 0.157 | 4.0 | 0.591  | 15.0 | 1000          |
| • 13ME007*   | 0.102 | 2.6 | 0.157 | 4.0 | 0.787  | 20.0 | 1000          |
| • 13ME010*   | 0.102 | 2.6 | 0.197 | 5.0 | 0.079  | 2.0  | 1000          |
| • 13ME011*   | 0.102 | 2.6 | 0.197 | 5.0 | 0.118  | 3.0  | 1000          |
| • 13ME012*   | 0.102 | 2.6 | 0.197 | 5.0 | 0.197  | 5.0  | 1000          |
| • 13ME013*   | 0.102 | 2.6 | 0.197 | 5.0 | 0.295  | 7.5  | 1000          |
| • 13ME014*   | 0.102 | 2.6 | 0.197 | 5.0 | 0.394  | 10.0 | 1000          |
| • 13ME015*   | 0.102 | 2.6 | 0.197 | 5.0 | 0.591  | 15.0 | 1000          |
| • 13ME016*   | 0.102 | 2.6 | 0.197 | 5.0 | 0.787  | 20.0 | 1000          |
| • 13RS018784 | 0.104 | 2.6 | 0.187 | 4.7 | 0.421  | 10.7 | 1000          |
| • 13RS020032 | 0.109 | 2.8 | 0.198 | 5.0 | 0.345  | 8.8  | 1000          |
| • 13SP002    | 0.115 | 2.9 | 0.188 | 4.8 | 0.125  | 3.2  | 1000          |
| • 13RSSR0011 | 0.115 | 2.9 | 0.188 | 4.8 | 0.156  | 4.0  | 1000          |
| • 13SP004    | 0.115 | 2.9 | 0.188 | 4.8 | 0.188  | 4.8  | 1000          |
| • 13RS018728 | 0.115 | 2.9 | 0.188 | 4.8 | 0.216  | 5.5  | 1000          |
| • 13RSSR0013 | 0.115 | 2.9 | 0.188 | 4.8 | 0.219  | 5.6  | 1000          |
| • 13SP006    | 0.115 | 2.9 | 0.188 | 4.8 | 0.250  | 6.4  | 1000          |
| • 13RS018722 | 0.115 | 2.9 | 0.188 | 4.8 | 0.281  | 7.1  | 1000          |
| • 13SP008    | 0.115 | 2.9 | 0.188 | 4.8 | 0.313  | 8.0  | 1000          |
| • 13SP010    | 0.115 | 2.9 | 0.188 | 4.8 | 0.375  | 9.5  | 1000          |
| • 13RSSR0017 | 0.115 | 2.9 | 0.188 | 4.8 | 0.406  | 10.3 | 1000          |
| • 13SP012    | 0.115 | 2.9 | 0.188 | 4.8 | 0.438  | 11.1 | 1000          |
| • 13RSSR0019 | 0.115 | 2.9 | 0.188 | 4.8 | 0.469  | 11.9 | 1000          |
| • 13SP014    | 0.115 | 2.9 | 0.188 | 4.8 | 0.500  | 12.7 | 1000          |
| • 13SP016    | 0.115 | 2.9 | 0.188 | 4.8 | 0.563  | 14.3 | 1000          |
| • 13SP018    | 0.115 | 2.9 | 0.188 | 4.8 | 0.625  | 15.9 | 1000          |
| • 13SP020    | 0.115 | 2.9 | 0.188 | 4.8 | 0.688  | 17.5 | 1000          |
| • 13SP022    | 0.115 | 2.9 | 0.188 | 4.8 | 0.750  | 19.1 | 1000          |
| • 13SP024    | 0.115 | 2.9 | 0.188 | 4.8 | 0.813  | 20.7 | 500           |
| • 13SP026    | 0.115 | 2.9 | 0.188 | 4.8 | 0.875  | 22.2 | 500           |
| • 13SP028    | 0.115 | 2.9 | 0.188 | 4.8 | 0.938  | 23.8 | 500           |
| • 13SP030    | 0.115 | 2.9 | 0.188 | 4.8 | 1.000  | 25.4 | 1000          |

(Continued on next page &gt; )


**13RS/13RSSR/13SP/13ME/MSW/SWI/SWS Series (continued)**  
**Round Nylon Through Spacers**
**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Will not rust, corrode or deteriorate
- Acts as an electrical insulator by preventing metal-to-metal contact



\* Note: 13ME item #'s are made of black Heat Stabilized Nylon 6/6

| Item No.     | ID    |     | OD    |     | Length |      | Bulk Pack Qty |
|--------------|-------|-----|-------|-----|--------|------|---------------|
|              | in    | mm  | in    | mm  | in     | mm   |               |
| • 13SP032    | 0.115 | 2.9 | 0.250 | 6.4 | 0.125  | 3.2  | 1000          |
| • 13RSSR0021 | 0.115 | 2.9 | 0.250 | 6.4 | 0.156  | 4.0  | 1000          |
| • 13SP036    | 0.115 | 2.9 | 0.250 | 6.4 | 0.188  | 4.8  | 1000          |
| • 13RS025075 | 0.115 | 2.9 | 0.250 | 6.4 | 0.207  | 5.3  | 1000          |
| • 13RS025048 | 0.115 | 2.9 | 0.250 | 6.4 | 0.219  | 5.6  | 1000          |
| • 13RSSR0025 | 0.115 | 2.9 | 0.250 | 6.4 | 0.219  | 5.6  | 1000          |
| • 13SP040    | 0.115 | 2.9 | 0.250 | 6.4 | 0.250  | 6.4  | 1000          |
| • 13RSSR0029 | 0.115 | 2.9 | 0.250 | 6.4 | 0.281  | 7.1  | 1000          |
| • 13SP044    | 0.115 | 2.9 | 0.250 | 6.4 | 0.313  | 8.0  | 1000          |
| • 13RSSR0033 | 0.115 | 2.9 | 0.250 | 6.4 | 0.344  | 8.7  | 1000          |
| • 13SP048    | 0.115 | 2.9 | 0.250 | 6.4 | 0.375  | 9.5  | 1000          |
| • 13RSSR0037 | 0.115 | 2.9 | 0.250 | 6.4 | 0.406  | 10.3 | 1000          |
| • 13SP052    | 0.115 | 2.9 | 0.250 | 6.4 | 0.438  | 11.1 | 1000          |
| • 13RSSR0041 | 0.115 | 2.9 | 0.250 | 6.4 | 0.469  | 11.9 | 1000          |
| • 13SP056    | 0.115 | 2.9 | 0.250 | 6.4 | 0.500  | 12.7 | 500           |
| • 13SP060    | 0.115 | 2.9 | 0.250 | 6.4 | 0.563  | 14.3 | 500           |
| • 13SP064    | 0.115 | 2.9 | 0.250 | 6.4 | 0.625  | 15.9 | 500           |
| • 13SP068    | 0.115 | 2.9 | 0.250 | 6.4 | 0.688  | 17.5 | 500           |
| • 13SP072    | 0.115 | 2.9 | 0.250 | 6.4 | 0.750  | 19.1 | 500           |
| • 13SP076    | 0.115 | 2.9 | 0.250 | 6.4 | 0.813  | 20.7 | 500           |
| • 13SP080    | 0.115 | 2.9 | 0.250 | 6.4 | 0.875  | 22.2 | 500           |
| • 13SP084    | 0.115 | 2.9 | 0.250 | 6.4 | 0.938  | 23.8 | 500           |
| • 13SP088    | 0.115 | 2.9 | 0.250 | 6.4 | 1.000  | 25.4 | 500           |
| • 13SP300    | 0.115 | 2.9 | 0.250 | 6.4 | 1.063  | 27.0 | 500           |
| • 13SP304    | 0.115 | 2.9 | 0.250 | 6.4 | 1.125  | 28.6 | 1000          |
| • 13SP308    | 0.115 | 2.9 | 0.250 | 6.4 | 1.188  | 30.2 | 1000          |
| • 13SP312    | 0.115 | 2.9 | 0.250 | 6.4 | 1.250  | 31.8 | 1000          |
| • 13SP316    | 0.115 | 2.9 | 0.250 | 6.4 | 1.313  | 33.4 | 1000          |
| • 13RS025090 | 0.115 | 2.9 | 0.250 | 6.4 | 1.313  | 33.4 | 1000          |
| • 13SP320    | 0.115 | 2.9 | 0.250 | 6.4 | 1.375  | 34.9 | 1000          |
| • 13SP324    | 0.115 | 2.9 | 0.250 | 6.4 | 1.438  | 36.5 | 1000          |
| • 13SP328    | 0.115 | 2.9 | 0.250 | 6.4 | 1.500  | 38.1 | 1000          |
| • 13RS025095 | 0.115 | 2.9 | 0.251 | 6.4 | 0.531  | 13.5 | 1000          |
| • 13SP091    | 0.115 | 2.9 | 0.313 | 8.0 | 0.125  | 3.2  | 1000          |
| • 13SP095    | 0.115 | 2.9 | 0.313 | 8.0 | 0.188  | 4.8  | 1000          |
| • 13SP099    | 0.115 | 2.9 | 0.313 | 8.0 | 0.250  | 6.4  | 500           |
| • 13SP103    | 0.115 | 2.9 | 0.313 | 8.0 | 0.313  | 8.0  | 1000          |
| • 13SP107    | 0.115 | 2.9 | 0.313 | 8.0 | 0.375  | 9.5  | 500           |
| • 13SP111    | 0.115 | 2.9 | 0.313 | 8.0 | 0.438  | 11.1 | 500           |
| • 13SP115    | 0.115 | 2.9 | 0.313 | 8.0 | 0.500  | 12.7 | 500           |
| • 13SP119    | 0.115 | 2.9 | 0.313 | 8.0 | 0.563  | 14.3 | 500           |
| • 13SP123    | 0.115 | 2.9 | 0.313 | 8.0 | 0.625  | 15.9 | 500           |
| • 13SP127    | 0.115 | 2.9 | 0.313 | 8.0 | 0.688  | 17.5 | 500           |
| • 13SP131    | 0.115 | 2.9 | 0.313 | 8.0 | 0.750  | 19.1 | 500           |
| • 13SP135    | 0.115 | 2.9 | 0.313 | 8.0 | 0.813  | 20.7 | 500           |
| • 13SP139    | 0.115 | 2.9 | 0.313 | 8.0 | 0.875  | 22.2 | 500           |
| • 13SP143    | 0.115 | 2.9 | 0.313 | 8.0 | 0.938  | 23.8 | 1000          |
| • 13SP147    | 0.115 | 2.9 | 0.313 | 8.0 | 1.000  | 25.4 | 1000          |
| • 13SP335    | 0.115 | 2.9 | 0.313 | 8.0 | 1.063  | 27.0 | 1000          |
| • 13SP339    | 0.115 | 2.9 | 0.313 | 8.0 | 1.125  | 28.6 | 1000          |
| • 13SP343    | 0.115 | 2.9 | 0.313 | 8.0 | 1.188  | 30.2 | 1000          |
| • 13SP347    | 0.115 | 2.9 | 0.313 | 8.0 | 1.250  | 31.8 | 1000          |
| • 13SP351    | 0.115 | 2.9 | 0.313 | 8.0 | 1.313  | 33.4 | 1000          |
| • 13SP355    | 0.115 | 2.9 | 0.313 | 8.0 | 1.375  | 34.9 | 1000          |
| • 13SP359    | 0.115 | 2.9 | 0.313 | 8.0 | 1.438  | 36.5 | 1000          |
| • 13SP363    | 0.115 | 2.9 | 0.313 | 8.0 | 1.500  | 38.1 | 1000          |
| • 13RS037598 | 0.115 | 2.9 | 0.375 | 9.5 | 1.063  | 27.0 | 500           |
| • 13RS018727 | 0.118 | 3.0 | 0.197 | 5.0 | 0.108  | 2.7  | 1000          |
| • 13RS018724 | 0.118 | 3.0 | 0.200 | 5.1 | 0.203  | 5.2  | 1000          |
| • 13RS023631 | 0.118 | 3.0 | 0.236 | 6.0 | 0.315  | 8.0  | 1000          |
| • 13RS031223 | 0.118 | 3.0 | 0.315 | 8.0 | 0.236  | 6.0  | 1000          |
| • 13RS018725 | 0.120 | 3.0 | 0.187 | 4.7 | 0.313  | 8.0  | 1000          |
| • 13RS018730 | 0.120 | 3.0 | 0.187 | 4.7 | 0.344  | 8.7  | 1000          |
| • 13RS031641 | 0.120 | 3.0 | 0.250 | 6.4 | 0.200  | 5.1  | 1000          |

| Item No.     | ID    |     | OD    |      | Length |      | Bulk Pack Qty |
|--------------|-------|-----|-------|------|--------|------|---------------|
|              | in    | mm  | in    | mm   | in     | mm   |               |
| • 13RS025041 | 0.120 | 3.0 | 0.250 | 6.4  | 0.389  | 9.9  | 1000          |
| • 13RS048012 | 0.120 | 3.0 | 0.470 | 11.9 | 0.359  | 9.1  | 1000          |
| • 13RS018735 | 0.122 | 3.1 | 0.187 | 4.7  | 0.438  | 11.1 | 1000          |
| • MSW1000A   | 0.122 | 3.1 | 0.236 | 6.0  | 0.295  | 7.5  | 1000          |
| • 13RS019330 | 0.125 | 3.2 | 0.193 | 4.9  | 0.250  | 6.4  | 1000          |
| • 13RS021337 | 0.125 | 3.2 | 0.218 | 5.5  | 0.385  | 9.8  | 1000          |
| • 13RS025021 | 0.125 | 3.2 | 0.250 | 6.4  | 0.375  | 9.5  | 1000          |
| • 13RS025042 | 0.125 | 3.2 | 0.250 | 6.4  | 0.420  | 10.7 | 1000          |
| • 13RS025014 | 0.125 | 3.2 | 0.250 | 6.4  | 0.823  | 20.9 | 1000          |
| • 13RS028038 | 0.125 | 3.2 | 0.280 | 7.1  | 0.297  | 7.5  | 1000          |
| • 13RS029618 | 0.125 | 3.2 | 0.296 | 7.5  | 0.094  | 2.4  | 1000          |
| • SWI1240A   | 0.125 | 3.2 | 0.305 | 7.7  | 0.500  | 12.7 | 2000          |
| • 13RS031256 | 0.125 | 3.2 | 0.325 | 8.3  | 0.360  | 9.1  | 1000          |
| • 13RS025012 | 0.126 | 3.2 | 0.250 | 6.4  | 0.797  | 20.2 | 1000          |
| • 13ME019*   | 0.126 | 3.2 | 0.197 | 5.0  | 0.079  | 2.0  | 1000          |
| • 13ME020*   | 0.126 | 3.2 | 0.197 | 5.0  | 0.118  | 3.0  | 1000          |
| • 13ME021*   | 0.126 | 3.2 | 0.197 | 5.0  | 0.197  | 5.0  | 1000          |
| • 13ME022*   | 0.126 | 3.2 | 0.197 | 5.0  | 0.295  | 7.5  | 1000          |
| • 13ME023*   | 0.126 | 3.2 | 0.197 | 5.0  | 0.394  | 10.0 | 1000          |
| • 13ME024*   | 0.126 | 3.2 | 0.197 | 5.0  | 0.591  | 15.0 | 1000          |
| • 13ME025*   | 0.126 | 3.2 | 0.197 | 5.0  | 0.787  | 20.0 | 1000          |
| • 13ME028*   | 0.126 | 3.2 | 0.236 | 6.0  | 0.118  | 3.0  | 1000          |
| • 13ME029*   | 0.126 | 3.2 | 0.236 | 6.0  | 0.197  | 5.0  | 1000          |
| • 13ME030*   | 0.126 | 3.2 | 0.236 | 6.0  | 0.295  | 7.5  | 1000          |
| • 13ME031*   | 0.126 | 3.2 | 0.236 | 6.0  | 0.394  | 10.0 | 1000          |
| • 13ME032*   | 0.126 | 3.2 | 0.236 | 6.0  | 0.591  | 15.0 | 1000          |
| • 13ME033*   | 0.126 | 3.2 | 0.236 | 6.0  | 0.787  | 20.0 | 1000          |
| • 13ME036*   | 0.126 | 3.2 | 0.315 | 8.0  | 0.118  | 3.0  | 1000          |
| • 13ME037*   | 0.126 | 3.2 | 0.315 | 8.0  | 0.197  | 5.0  | 1000          |
| • 13ME038*   | 0.126 | 3.2 | 0.315 | 8.0  | 0.295  | 7.5  | 1000          |
| • 13ME039*   | 0.126 | 3.2 | 0.315 | 8.0  | 0.394  | 10.0 | 1000          |
| • 13ME040*   | 0.126 | 3.2 | 0.315 | 8.0  | 0.591  | 15.0 | 1000          |
| • 13ME041*   | 0.126 | 3.2 | 0.315 | 8.0  | 0.787  | 20.0 | 500           |
| • 13RS020313 | 0.130 | 3.3 | 0.203 | 5.2  | 0.281  | 7.1  | 1000          |
| • 13RS028039 | 0.130 | 3.3 | 0.280 | 7.1  | 0.296  | 7.5  | 1000          |
| • 13RS025024 | 0.131 | 3.3 | 0.250 | 6.4  | 0.347  | 8.8  | 1000          |
| • 13RS025022 | 0.132 | 3.4 | 0.252 | 6.4  | 0.532  | 13.5 | 1000          |
| • 13RS025023 | 0.134 | 3.4 | 0.250 | 6.4  | 0.296  | 7.5  | 1000          |
| • 13RS018726 | 0.135 | 3.4 | 0.187 | 4.7  | 0.250  | 6.4  | 1000          |
| • 13RS022013 | 0.138 | 3.5 | 0.220 | 5.6  | 0.656  | 16.7 | 1000          |
| • 13RS021830 | 0.140 | 3.6 | 0.218 | 5.5  | 0.156  | 4.0  | 1000          |
| • 13SP033    | 0.140 | 3.6 | 0.250 | 6.4  | 0.125  | 3.2  | 1000          |
| • 13RSSR0022 | 0.140 | 3.6 | 0.250 | 6.4  | 0.156  | 4.0  | 1000          |
| • 13SP037    | 0.140 | 3.6 | 0.250 | 6.4  | 0.188  | 4.8  | 1000          |
| • 13RS025059 | 0.140 | 3.6 | 0.250 | 6.4  | 0.210  | 5.3  | 1000          |
| • 13RSSR0026 | 0.140 | 3.6 | 0.250 | 6.4  | 0.219  | 5.6  | 1000          |
| • 13RS025058 | 0.140 | 3.6 | 0.250 | 6.4  | 0.220  | 5.6  | 1000          |
| • 13SP041    | 0.140 | 3.6 | 0.250 | 6.4  | 0.250  | 6.4  | 1000          |
| • 13RSSR0030 | 0.140 | 3.6 | 0.250 | 6.4  | 0.281  | 7.1  | 1000          |
| • 13SP045    | 0.140 | 3.6 | 0.250 | 6.4  | 0.313  | 8.0  | 1000          |
| • 13RSSR0034 | 0.140 | 3.6 | 0.250 | 6.4  | 0.344  | 8.7  | 1000          |
| • 13SP049    | 0.140 | 3.6 | 0.250 | 6.4  | 0.375  | 9.5  | 1000          |
| • 13RSSR0038 | 0.140 | 3.6 | 0.250 | 6.4  | 0.406  | 10.3 | 1000          |
| • 13SP053    | 0.140 | 3.6 | 0.250 | 6.4  | 0.438  | 11.1 | 1000          |
| • 13RSSR0042 | 0.140 | 3.6 | 0.250 | 6.4  | 0.469  | 11.9 | 1000          |
| • 13SP057    | 0.140 | 3.6 | 0.250 | 6.4  | 0.500  | 12.7 | 1000          |
| • 13RS025053 | 0.140 | 3.6 | 0.250 | 6.4  | 0.531  | 13.5 | 1000          |
| • 13RS025055 | 0.140 | 3.6 | 0.250 | 6.4  | 0.547  | 13.9 | 1000          |
| • 13SP061    | 0.140 | 3.6 | 0.250 | 6.4  | 0.563  | 14.3 | 500           |
| • 13SP065    | 0.140 | 3.6 | 0.250 | 6.4  | 0.625  | 15.9 | 500           |
| • 13RS025056 | 0.140 | 3.6 | 0.250 | 6.4  | 0.640  | 16.3 | 1000          |
| • 13SP069    | 0.140 | 3.6 | 0.250 | 6.4  | 0.688  | 17.5 | 500           |
| • 13SP073    | 0.140 | 3.6 | 0.250 | 6.4  | 0.750  | 19.1 | 500           |
| • 13SP077    | 0.140 | 3.6 | 0.250 | 6.4  | 0.813  | 20.7 | 500           |

(Continued on next page &gt; )



# THROUGH SPACERS

## 13RS/13RSSR/13SP/13ME/MSW/SWI/SWS Series (continued) Round Nylon Through Spacers



### Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

### Features:

- Will not rust, corrode or deteriorate
- Acts as an electrical insulator by preventing metal-to-metal contact



\* Note: 13ME item #'s are made of black Heat Stabilized Nylon 6/6

| Item No.     | ID    |     | OD    |     | Length |      | Bulk Pack Qty |
|--------------|-------|-----|-------|-----|--------|------|---------------|
|              | in    | mm  | in    | mm  | in     | mm   |               |
| • 13SP081    | 0.140 | 3.6 | 0.250 | 6.4 | 0.875  | 22.2 | 500           |
| • 13SP085    | 0.140 | 3.6 | 0.250 | 6.4 | 0.938  | 23.8 | 500           |
| • 13SP089    | 0.140 | 3.6 | 0.250 | 6.4 | 1.000  | 25.4 | 500           |
| • 13SP301    | 0.140 | 3.6 | 0.250 | 6.4 | 1.063  | 27.0 | 500           |
| • 13SP305    | 0.140 | 3.6 | 0.250 | 6.4 | 1.125  | 28.6 | 500           |
| • 13SP309    | 0.140 | 3.6 | 0.250 | 6.4 | 1.188  | 30.2 | 1000          |
| • 13SP313    | 0.140 | 3.6 | 0.250 | 6.4 | 1.250  | 31.8 | 500           |
| • 13SP317    | 0.140 | 3.6 | 0.250 | 6.4 | 1.313  | 33.4 | 1000          |
| • 13SP321    | 0.140 | 3.6 | 0.250 | 6.4 | 1.375  | 34.9 | 1000          |
| • 13SP325    | 0.140 | 3.6 | 0.250 | 6.4 | 1.438  | 36.5 | 1000          |
| • 13SP329    | 0.140 | 3.6 | 0.250 | 6.4 | 1.500  | 38.1 | 1000          |
| • 13RSSR0044 | 0.140 | 3.6 | 0.312 | 7.9 | 0.156  | 4.0  | 1000          |
| • 13RS031246 | 0.140 | 3.6 | 0.312 | 7.9 | 0.200  | 5.1  | 1000          |
| • 13RSSR0047 | 0.140 | 3.6 | 0.312 | 7.9 | 0.219  | 5.6  | 1000          |
| • 13RS031214 | 0.140 | 3.6 | 0.312 | 7.9 | 0.281  | 7.1  | 1000          |
| • 13RSSR0052 | 0.140 | 3.6 | 0.312 | 7.9 | 0.344  | 8.7  | 1000          |
| • 13RSSR0055 | 0.140 | 3.6 | 0.312 | 7.9 | 0.406  | 10.3 | 1000          |
| • 13RSSR0058 | 0.140 | 3.6 | 0.312 | 7.9 | 0.469  | 11.9 | 1000          |
| • 13SP092    | 0.140 | 3.6 | 0.313 | 8.0 | 0.125  | 3.2  | 1000          |
| • 13SP096    | 0.140 | 3.6 | 0.313 | 8.0 | 0.188  | 4.8  | 1000          |
| • 13SP100    | 0.140 | 3.6 | 0.313 | 8.0 | 0.250  | 6.4  | 1000          |
| • 13SP104    | 0.140 | 3.6 | 0.313 | 8.0 | 0.313  | 8.0  | 1000          |
| • 13SP108    | 0.140 | 3.6 | 0.313 | 8.0 | 0.375  | 9.5  | 500           |
| • 13SP112    | 0.140 | 3.6 | 0.313 | 8.0 | 0.438  | 11.1 | 500           |
| • 13SP116    | 0.140 | 3.6 | 0.313 | 8.0 | 0.500  | 12.7 | 500           |
| • 13SP120    | 0.140 | 3.6 | 0.313 | 8.0 | 0.563  | 14.3 | 500           |
| • 13SP124    | 0.140 | 3.6 | 0.313 | 8.0 | 0.625  | 15.9 | 500           |
| • 13SP128    | 0.140 | 3.6 | 0.313 | 8.0 | 0.688  | 17.5 | 500           |
| • 13SP132    | 0.140 | 3.6 | 0.313 | 8.0 | 0.750  | 19.1 | 500           |
| • 13SP136    | 0.140 | 3.6 | 0.313 | 8.0 | 0.813  | 20.7 | 500           |
| • 13SP140    | 0.140 | 3.6 | 0.313 | 8.0 | 0.875  | 22.2 | 500           |
| • 13SP144    | 0.140 | 3.6 | 0.313 | 8.0 | 0.938  | 23.8 | 1000          |
| • 13SP148    | 0.140 | 3.6 | 0.313 | 8.0 | 1.000  | 25.4 | 1000          |
| • 13SP336    | 0.140 | 3.6 | 0.313 | 8.0 | 1.063  | 27.0 | 1000          |
| • 13SP340    | 0.140 | 3.6 | 0.313 | 8.0 | 1.125  | 28.6 | 1000          |
| • 13SP344    | 0.140 | 3.6 | 0.313 | 8.0 | 1.188  | 30.2 | 1000          |
| • 13SP348    | 0.140 | 3.6 | 0.313 | 8.0 | 1.250  | 31.8 | 500           |
| • 13SP352    | 0.140 | 3.6 | 0.313 | 8.0 | 1.313  | 33.4 | 1000          |
| • 13SP356    | 0.140 | 3.6 | 0.313 | 8.0 | 1.375  | 34.9 | 1000          |
| • 13SP360    | 0.140 | 3.6 | 0.313 | 8.0 | 1.438  | 36.5 | 1000          |
| • 13SP364    | 0.140 | 3.6 | 0.313 | 8.0 | 1.500  | 38.1 | 1000          |
| • 13SP158    | 0.140 | 3.6 | 0.375 | 9.5 | 0.125  | 3.2  | 1000          |
| • 13RSSR0061 | 0.140 | 3.6 | 0.375 | 9.5 | 0.156  | 4.0  | 1000          |
| • 13SP161    | 0.140 | 3.6 | 0.375 | 9.5 | 0.188  | 4.8  | 1000          |
| • 13RSSR0065 | 0.140 | 3.6 | 0.375 | 9.5 | 0.219  | 5.6  | 1000          |
| • 13SP164    | 0.140 | 3.6 | 0.375 | 9.5 | 0.250  | 6.4  | 1000          |
| • 13RSSR0070 | 0.140 | 3.6 | 0.375 | 9.5 | 0.281  | 7.1  | 1000          |
| • 13SP167    | 0.140 | 3.6 | 0.375 | 9.5 | 0.313  | 8.0  | 500           |
| • 13RS031246 | 0.140 | 3.6 | 0.375 | 9.5 | 0.344  | 8.7  | 1000          |
| • 13SP170    | 0.140 | 3.6 | 0.375 | 9.5 | 0.375  | 9.5  | 500           |
| • 13RSSR0079 | 0.140 | 3.6 | 0.375 | 9.5 | 0.406  | 10.3 | 1000          |
| • 13SP173    | 0.140 | 3.6 | 0.375 | 9.5 | 0.438  | 11.1 | 500           |
| • 13RSSR0084 | 0.140 | 3.6 | 0.375 | 9.5 | 0.469  | 11.9 | 1000          |
| • 13SP176    | 0.140 | 3.6 | 0.375 | 9.5 | 0.500  | 12.7 | 500           |
| • 13SP179    | 0.140 | 3.6 | 0.375 | 9.5 | 0.563  | 14.3 | 500           |
| • 13SP182    | 0.140 | 3.6 | 0.375 | 9.5 | 0.625  | 15.9 | 500           |
| • 13SP185    | 0.140 | 3.6 | 0.375 | 9.5 | 0.688  | 17.5 | 500           |
| • 13RS037570 | 0.140 | 3.6 | 0.375 | 9.5 | 0.700  | 17.8 | 1000          |
| • 13RS037591 | 0.140 | 3.6 | 0.375 | 9.5 | 0.725  | 18.4 | 500           |
| • 13SP188    | 0.140 | 3.6 | 0.375 | 9.5 | 0.750  | 19.1 | 500           |
| • 13SP191    | 0.140 | 3.6 | 0.375 | 9.5 | 0.813  | 20.7 | 500           |
| • 13SP194    | 0.140 | 3.6 | 0.375 | 9.5 | 0.875  | 22.2 | 500           |
| • 13SP197    | 0.140 | 3.6 | 0.375 | 9.5 | 0.938  | 23.8 | 1000          |
| • 13SP200    | 0.140 | 3.6 | 0.375 | 9.5 | 1.000  | 25.4 | 500           |
| • 13SP372    | 0.140 | 3.6 | 0.375 | 9.5 | 1.063  | 27.0 | 1000          |
| • 13SP375    | 0.140 | 3.6 | 0.375 | 9.5 | 1.125  | 28.6 | 1000          |
| • 13SP378    | 0.140 | 3.6 | 0.375 | 9.5 | 1.188  | 30.2 | 1000          |
| • 13SP381    | 0.140 | 3.6 | 0.375 | 9.5 | 1.250  | 31.8 | 1000          |
| • 13SP384    | 0.140 | 3.6 | 0.375 | 9.5 | 1.313  | 33.4 | 1000          |

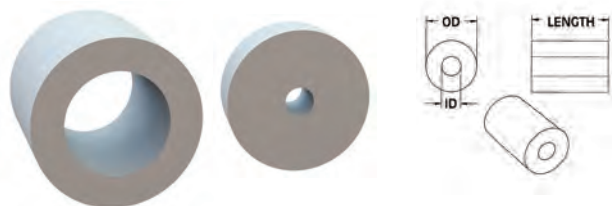
| Item No.     | ID    |     | OD    |      | Length |      | Bulk Pack Qty |
|--------------|-------|-----|-------|------|--------|------|---------------|
|              | in    | mm  | in    | mm   | in     | mm   |               |
| • 13SP387    | 0.140 | 3.6 | 0.375 | 9.5  | 1.375  | 34.9 | 1000          |
| • 13SP390    | 0.140 | 3.6 | 0.375 | 9.5  | 1.438  | 36.5 | 1000          |
| • 13SP393    | 0.140 | 3.6 | 0.375 | 9.5  | 1.500  | 38.1 | 1000          |
| • 13RS040080 | 0.140 | 3.6 | 0.400 | 10.2 | 0.719  | 18.3 | 500           |
| • 13RS040085 | 0.140 | 3.6 | 0.400 | 10.2 | 0.781  | 19.8 | 500           |
| • 13RS041501 | 0.140 | 3.6 | 0.415 | 10.5 | 0.344  | 8.7  | 500           |
| • 13RS046062 | 0.140 | 3.6 | 0.454 | 11.5 | 0.344  | 8.7  | 1000          |
| • 13SP203    | 0.140 | 3.6 | 0.500 | 12.7 | 0.125  | 3.2  | 1000          |
| • 13SP208    | 0.140 | 3.6 | 0.500 | 12.7 | 0.188  | 4.8  | 500           |
| • 13SP213    | 0.140 | 3.6 | 0.500 | 12.7 | 0.250  | 6.4  | 500           |
| • 13SP218    | 0.140 | 3.6 | 0.500 | 12.7 | 0.313  | 8.0  | 500           |
| • 13SP223    | 0.140 | 3.6 | 0.500 | 12.7 | 0.375  | 9.5  | 500           |
| • 13SP228    | 0.140 | 3.6 | 0.500 | 12.7 | 0.438  | 11.1 | 1000          |
| • 13SP233    | 0.140 | 3.6 | 0.500 | 12.7 | 0.500  | 12.7 | 500           |
| • 13SP238    | 0.140 | 3.6 | 0.500 | 12.7 | 0.563  | 14.3 | 500           |
| • 13RS050032 | 0.140 | 3.6 | 0.500 | 12.7 | 0.600  | 15.2 | 500           |
| • 13SP243    | 0.140 | 3.6 | 0.500 | 12.7 | 0.625  | 15.9 | 500           |
| • 13SP248    | 0.140 | 3.6 | 0.500 | 12.7 | 0.688  | 17.5 | 1000          |
| • 13SP253    | 0.140 | 3.6 | 0.500 | 12.7 | 0.750  | 19.1 | 1000          |
| • 13SP258    | 0.140 | 3.6 | 0.500 | 12.7 | 0.813  | 20.7 | 1000          |
| • 13SP263    | 0.140 | 3.6 | 0.500 | 12.7 | 0.813  | 20.7 | 1000          |
| • 13SP268    | 0.140 | 3.6 | 0.500 | 12.7 | 0.938  | 23.8 | 1000          |
| • 13SP273    | 0.140 | 3.6 | 0.500 | 12.7 | 1.000  | 25.4 | 500           |
| • 13RSSR0304 | 0.140 | 3.6 | 0.500 | 12.7 | 2.500  | 63.5 | 250           |
| • 13RS062521 | 0.140 | 3.6 | 0.625 | 15.9 | 0.375  | 9.5  | 500           |
| • 13RS075058 | 0.140 | 3.6 | 0.750 | 19.1 | 0.500  | 12.7 | 500           |
| • 13RS025070 | 0.141 | 3.6 | 0.250 | 6.4  | 0.281  | 7.1  | 1000          |
| • 13RS025043 | 0.142 | 3.6 | 0.250 | 6.4  | 0.410  | 10.4 | 1000          |
| • 13ME044*   | 0.142 | 3.6 | 0.236 | 6.0  | 0.118  | 3.0  | 1000          |
| • 13ME045*   | 0.142 | 3.6 | 0.236 | 6.0  | 0.197  | 5.0  | 1000          |
| • 13ME046*   | 0.142 | 3.6 | 0.236 | 6.0  | 0.295  | 7.5  | 1000          |
| • 13ME047*   | 0.142 | 3.6 | 0.236 | 6.0  | 0.394  | 10.0 | 1000          |
| • 13ME048*   | 0.142 | 3.6 | 0.236 | 6.0  | 0.591  | 15.0 | 1000          |
| • 13ME049*   | 0.142 | 3.6 | 0.236 | 6.0  | 0.787  | 20.0 | 1000          |
| • 13RS020031 | 0.145 | 3.7 | 0.200 | 5.1  | 0.110  | 2.8  | 1000          |
| • 13RS020030 | 0.145 | 3.7 | 0.200 | 5.1  | 0.172  | 4.4  | 1000          |
| • 13RS021535 | 0.145 | 3.7 | 0.215 | 5.5  | 0.328  | 8.3  | 1000          |
| • 13RS044074 | 0.145 | 3.7 | 0.437 | 11.1 | 0.875  | 22.2 | 500           |
| • 13RS075015 | 0.145 | 3.7 | 0.750 | 19.1 | 0.875  | 22.2 | 500           |
| • 13RS021026 | 0.147 | 3.7 | 0.217 | 5.5  | 0.230  | 5.8  | 1000          |
| • 13RS025050 | 0.147 | 3.7 | 0.250 | 6.4  | 0.297  | 7.5  | 1000          |
| • 13RS025052 | 0.147 | 3.7 | 0.250 | 6.4  | 0.500  | 12.7 | 1000          |
| • 13RS025092 | 0.150 | 3.8 | 0.250 | 6.4  | 0.345  | 8.8  | 1000          |
| • 13RS025026 | 0.150 | 3.8 | 0.250 | 6.4  | 0.472  | 12.0 | 1000          |
| • 13RS025017 | 0.150 | 3.8 | 0.254 | 6.5  | 0.166  | 4.2  | 1000          |
| • 13RS039315 | 0.151 | 3.8 | 0.393 | 10.0 | 0.250  | 6.4  | 1000          |
| • 13RS025091 | 0.152 | 3.9 | 0.251 | 6.4  | 0.156  | 4.0  | 1000          |
| • 13RS030502 | 0.152 | 3.9 | 0.302 | 7.7  | 0.206  | 5.2  | 1000          |
| • 13RS025010 | 0.153 | 3.9 | 0.250 | 6.4  | 0.250  | 6.4  | 1000          |
| • 13RS021025 | 0.156 | 4.0 | 0.210 | 5.3  | 0.250  | 6.4  | 1000          |
| • 13RS031225 | 0.156 | 4.0 | 0.312 | 7.9  | 0.256  | 6.5  | 1000          |
| • 13RS068712 | 0.156 | 4.0 | 0.687 | 17.4 | 0.125  | 3.2  | 500           |
| • 13RS025065 | 0.160 | 4.1 | 0.250 | 6.4  | 0.750  | 19.1 | 1000          |
| • 13RS062514 | 0.160 | 4.1 | 0.625 | 15.9 | 0.312  | 7.9  | 500           |
| • MSW1010A   | 0.165 | 4.2 | 0.315 | 8.0  | 0.394  | 10.0 | 1000          |
| • 13RS040086 | 0.165 | 4.2 | 0.315 | 8.0  | 0.984  | 25.0 | 1000          |
| • 13RS044086 | 0.165 | 4.2 | 0.315 | 8.0  | 0.984  | 25.0 | 500           |
| • 13RS037586 | 0.165 | 4.2 | 0.375 | 9.5  | 2.000  | 50.8 | 500           |
| • 13RSSR0023 | 0.166 | 4.2 | 0.250 | 6.4  | 0.156  | 4.0  | 1000          |
| • 13RSSR0027 | 0.166 | 4.2 | 0.250 | 6.4  | 0.219  | 5.6  | 1000          |
| • 13RSSR0031 | 0.166 | 4.2 | 0.250 | 6.4  | 0.281  | 7.1  | 1000          |
| • 13RSSR0035 | 0.166 | 4.2 | 0.250 | 6.4  | 0.344  | 8.7  | 1000          |
| • 13RSSR0039 | 0.166 | 4.2 | 0.250 | 6.4  | 0.406  | 10.3 | 1000          |
| • 13RSSR0043 | 0.166 | 4.2 | 0.250 | 6.4  | 0.469  | 11.9 | 1000          |
| • 13RS025015 | 0.166 | 4.2 | 0.250 | 6.4  | 0.500  | 12.7 | 1000          |
| • 13RSSR0045 | 0.166 | 4.2 | 0.312 | 7.9  | 0.156  | 4.0  | 1000          |
| • 13RSSR0048 | 0.166 | 4.2 | 0.312 | 7.9  | 0.219  | 5.6  | 1000          |
| • 13RSSR0050 | 0.166 | 4.2 | 0.312 | 7.9  | 0.281  | 7.1  | 1000          |
| • 13RSSR0053 | 0.166 | 4.2 | 0.312 | 7.9  | 0.344  | 8.7  | 1000          |

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# THROUGH SPACERS

## 13RS/13RSSR/13SP/13ME/MSW/SWI/SWS Series (continued) Round Nylon Through Spacers



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Will not rust, corrode or deteriorate
- Acts as an electrical insulator by preventing metal-to-metal contact



\* Note: 13ME item #'s are made of black Heat Stabilized Nylon 6/6

| Item No.     | ID    |     | OD    |      | Length |      | Bulk Pack Qty |
|--------------|-------|-----|-------|------|--------|------|---------------|
|              | in    | mm  | in    | mm   | in     | mm   |               |
| • 13RSSR0056 | 0.166 | 4.2 | 0.312 | 7.9  | 0.406  | 10.3 | 1000          |
| • 13RSSR0059 | 0.166 | 4.2 | 0.312 | 7.9  | 0.469  | 11.9 | 1000          |
| • 13RSSR0062 | 0.166 | 4.2 | 0.375 | 9.5  | 0.156  | 4.0  | 1000          |
| • 13RSSR0066 | 0.166 | 4.2 | 0.375 | 9.5  | 0.219  | 5.6  | 1000          |
| • 13RSSR0071 | 0.166 | 4.2 | 0.375 | 9.5  | 0.281  | 7.1  | 1000          |
| • 13RSSR0075 | 0.166 | 4.2 | 0.375 | 9.5  | 0.344  | 8.7  | 1000          |
| • 13RSSR0080 | 0.166 | 4.2 | 0.375 | 9.5  | 0.406  | 10.3 | 1000          |
| • 13RSSR0085 | 0.166 | 4.2 | 0.375 | 9.5  | 0.469  | 11.9 | 1000          |
| • 13RSSR0299 | 0.166 | 4.2 | 0.500 | 12.7 | 2.250  | 57.2 | 250           |
| • 13RSSR0305 | 0.166 | 4.2 | 0.500 | 12.7 | 2.500  | 63.5 | 250           |
| • 13RSSR0311 | 0.166 | 4.2 | 0.500 | 12.7 | 2.750  | 69.9 | 250           |
| • 13RS031263 | 0.169 | 4.3 | 0.315 | 8.0  | 0.315  | 8.0  | 1000          |
| MSW1020A     | 0.169 | 4.4 | 0.354 | 9.0  | 0.055  | 1.4  | 1000          |
| • 13RS039342 | 0.169 | 4.3 | 0.393 | 10.0 | 0.234  | 5.9  | 1000          |
| • 13RS040083 | 0.169 | 4.3 | 0.394 | 10.0 | 0.787  | 20.0 | 500           |
| • 13ME052*   | 0.169 | 4.3 | 0.315 | 8.0  | 0.118  | 3.0  | 1000          |
| • 13ME053*   | 0.169 | 4.3 | 0.315 | 8.0  | 0.197  | 5.0  | 1000          |
| • 13ME054*   | 0.169 | 4.3 | 0.315 | 8.0  | 0.295  | 7.5  | 1000          |
| • 13ME055*   | 0.169 | 4.3 | 0.315 | 8.0  | 0.394  | 10.0 | 1000          |
| • 13ME056*   | 0.169 | 4.3 | 0.315 | 8.0  | 0.591  | 15.0 | 1000          |
| • 13ME057*   | 0.169 | 4.3 | 0.315 | 8.0  | 0.787  | 20.0 | 1000          |
| • 13RS028030 | 0.170 | 4.3 | 0.280 | 7.1  | 0.300  | 7.6  | 1000          |
| • 13RS050025 | 0.170 | 4.3 | 0.500 | 12.7 | 0.255  | 6.5  | 1000          |
| • 13RS050027 | 0.170 | 4.3 | 0.500 | 12.7 | 0.270  | 6.9  | 500           |
| • 13SP034    | 0.171 | 4.3 | 0.250 | 6.4  | 0.125  | 3.2  | 1000          |
| • 13SP038    | 0.171 | 4.3 | 0.250 | 6.4  | 0.188  | 4.8  | 1000          |
| • 13SP042    | 0.171 | 4.3 | 0.250 | 6.4  | 0.250  | 6.4  | 1000          |
| • 13SP046    | 0.171 | 4.3 | 0.250 | 6.4  | 0.313  | 8.0  | 1000          |
| • 13RS025051 | 0.171 | 4.3 | 0.250 | 6.4  | 0.334  | 8.5  | 1000          |
| • 13RS025013 | 0.171 | 4.3 | 0.250 | 6.4  | 0.355  | 9.0  | 1000          |
| • 13SP050    | 0.171 | 4.3 | 0.250 | 6.4  | 0.375  | 9.5  | 1000          |
| • 13RS025057 | 0.171 | 4.3 | 0.250 | 6.4  | 0.375  | 9.5  | 1000          |
| • 13RS025011 | 0.171 | 4.3 | 0.250 | 6.4  | 0.413  | 10.5 | 1000          |
| • 13SP054    | 0.171 | 4.3 | 0.250 | 6.4  | 0.438  | 11.1 | 1000          |
| • 13RS025019 | 0.171 | 4.3 | 0.250 | 6.4  | 0.475  | 12.1 | 1000          |
| • 13SP058    | 0.171 | 4.3 | 0.250 | 6.4  | 0.500  | 12.7 | 500           |
| • 13SP062    | 0.171 | 4.3 | 0.250 | 6.4  | 0.563  | 14.3 | 500           |
| • 13RS025018 | 0.171 | 4.3 | 0.250 | 6.4  | 0.575  | 14.6 | 1000          |
| • 13SP066    | 0.171 | 4.3 | 0.250 | 6.4  | 0.625  | 15.9 | 500           |
| • 13SP070    | 0.171 | 4.3 | 0.250 | 6.4  | 0.688  | 17.5 | 500           |
| • 13SP074    | 0.171 | 4.3 | 0.250 | 6.4  | 0.750  | 19.1 | 500           |
| • 13SP078    | 0.171 | 4.3 | 0.250 | 6.4  | 0.813  | 20.7 | 500           |
| • 13SP082    | 0.171 | 4.3 | 0.250 | 6.4  | 0.875  | 22.2 | 500           |
| • 13SP086    | 0.171 | 4.3 | 0.250 | 6.4  | 0.938  | 23.8 | 500           |
| • 13SP090    | 0.171 | 4.3 | 0.250 | 6.4  | 1.000  | 25.4 | 500           |
| • 13RS031251 | 0.171 | 4.3 | 0.312 | 7.9  | 1.875  | 47.6 | 1000          |
| • 13SP093    | 0.171 | 4.3 | 0.313 | 8.0  | 0.125  | 3.2  | 1000          |
| • 13SP097    | 0.171 | 4.3 | 0.313 | 8.0  | 0.188  | 4.8  | 1000          |
| • 13SP101    | 0.171 | 4.3 | 0.313 | 8.0  | 0.250  | 6.4  | 1000          |
| • 13SP105    | 0.171 | 4.3 | 0.313 | 8.0  | 0.313  | 8.0  | 1000          |
| • 13SP109    | 0.171 | 4.3 | 0.313 | 8.0  | 0.375  | 9.5  | 500           |
| • 13SP113    | 0.171 | 4.3 | 0.313 | 8.0  | 0.438  | 11.1 | 500           |
| • 13SP117    | 0.171 | 4.3 | 0.313 | 8.0  | 0.500  | 12.7 | 500           |
| • 13SP121    | 0.171 | 4.3 | 0.313 | 8.0  | 0.563  | 14.3 | 500           |
| • 13SP125    | 0.171 | 4.3 | 0.313 | 8.0  | 0.625  | 15.9 | 1000          |
| • 13RS031254 | 0.171 | 4.3 | 0.313 | 8.0  | 0.671  | 17.0 | 1000          |
| • 13SP129    | 0.171 | 4.3 | 0.313 | 8.0  | 0.688  | 17.5 | 500           |
| • 13SP133    | 0.171 | 4.3 | 0.313 | 8.0  | 0.750  | 19.1 | 500           |
| • 13SP137    | 0.171 | 4.3 | 0.313 | 8.0  | 0.813  | 20.7 | 500           |
| • 13SP141    | 0.171 | 4.3 | 0.313 | 8.0  | 0.875  | 22.2 | 500           |
| • 13SP145    | 0.171 | 4.3 | 0.313 | 8.0  | 0.938  | 23.8 | 500           |
| • 13SP149    | 0.171 | 4.3 | 0.313 | 8.0  | 1.000  | 25.4 | 500           |
| • 13SP337    | 0.171 | 4.3 | 0.313 | 8.0  | 1.063  | 27.0 | 1000          |
| • 13SP341    | 0.171 | 4.3 | 0.313 | 8.0  | 1.125  | 28.6 | 1000          |
| • 13SP345    | 0.171 | 4.3 | 0.313 | 8.0  | 1.188  | 30.2 | 1000          |
| • 13SP349    | 0.171 | 4.3 | 0.313 | 8.0  | 1.250  | 31.8 | 1000          |
| • 13SP353    | 0.171 | 4.3 | 0.313 | 8.0  | 1.313  | 33.4 | 500           |

| Item No.     | ID    |     | OD    |      | Length |      | Bulk Pack Qty |
|--------------|-------|-----|-------|------|--------|------|---------------|
|              | in    | mm  | in    | mm   | in     | mm   |               |
| • 13SP357    | 0.171 | 4.3 | 0.313 | 8.0  | 1.375  | 34.9 | 1000          |
| • 13SP361    | 0.171 | 4.3 | 0.313 | 8.0  | 1.438  | 36.5 | 1000          |
| • 13SP365    | 0.171 | 4.3 | 0.313 | 8.0  | 1.500  | 38.1 | 1000          |
| • 13RS031243 | 0.171 | 4.3 | 0.313 | 8.0  | 2.438  | 61.9 | 1000          |
| • 13SP159    | 0.171 | 4.3 | 0.375 | 9.5  | 0.125  | 3.2  | 1000          |
| • 13SP162    | 0.171 | 4.3 | 0.375 | 9.5  | 0.188  | 4.8  | 1000          |
| • 13SP165    | 0.171 | 4.3 | 0.375 | 9.5  | 0.250  | 6.4  | 1000          |
| • 13SP168    | 0.171 | 4.3 | 0.375 | 9.5  | 0.313  | 8.0  | 500           |
| • 13SP171    | 0.171 | 4.3 | 0.375 | 9.5  | 0.375  | 9.5  | 1000          |
| • 13SP174    | 0.171 | 4.3 | 0.375 | 9.5  | 0.438  | 11.1 | 500           |
| • 13SP177    | 0.171 | 4.3 | 0.375 | 9.5  | 0.500  | 12.7 | 500           |
| • 13SP180    | 0.171 | 4.3 | 0.375 | 9.5  | 0.563  | 14.3 | 500           |
| • 13SP183    | 0.171 | 4.3 | 0.375 | 9.5  | 0.625  | 15.9 | 500           |
| • 13SP186    | 0.171 | 4.3 | 0.375 | 9.5  | 0.688  | 17.5 | 500           |
| • 13SP189    | 0.171 | 4.3 | 0.375 | 9.5  | 0.750  | 19.1 | 500           |
| • 13SP192    | 0.171 | 4.3 | 0.375 | 9.5  | 0.813  | 20.7 | 500           |
| • 13SP195    | 0.171 | 4.3 | 0.375 | 9.5  | 0.875  | 22.2 | 500           |
| • 13SP198    | 0.171 | 4.3 | 0.375 | 9.5  | 0.938  | 23.8 | 250           |
| • 13SP201    | 0.171 | 4.3 | 0.375 | 9.5  | 1.000  | 25.4 | 500           |
| • 13SP373    | 0.171 | 4.3 | 0.375 | 9.5  | 1.063  | 27.0 | 1000          |
| • 13SP376    | 0.171 | 4.3 | 0.375 | 9.5  | 1.125  | 28.6 | 1000          |
| • 13SP379    | 0.171 | 4.3 | 0.375 | 9.5  | 1.188  | 30.2 | 1000          |
| • 13SP382    | 0.171 | 4.3 | 0.375 | 9.5  | 1.250  | 31.8 | 1000          |
| • 13SP385    | 0.171 | 4.3 | 0.375 | 9.5  | 1.313  | 33.4 | 1000          |
| • 13SP388    | 0.171 | 4.3 | 0.375 | 9.5  | 1.375  | 34.9 | 1000          |
| • 13SP391    | 0.171 | 4.3 | 0.375 | 9.5  | 1.438  | 36.5 | 1000          |
| • 13SP394    | 0.171 | 4.3 | 0.375 | 9.5  | 1.500  | 38.1 | 1000          |
| • 13RS037519 | 0.171 | 4.3 | 0.380 | 9.7  | 0.275  | 7.0  | 1000          |
| • 13RS043729 | 0.171 | 4.3 | 0.438 | 11.1 | 0.655  | 16.6 | 500           |
| • 13SP204    | 0.171 | 4.3 | 0.500 | 12.7 | 0.125  | 3.2  | 1000          |
| • 13SP209    | 0.171 | 4.3 | 0.500 | 12.7 | 0.188  | 4.8  | 1000          |
| • 13SP214    | 0.171 | 4.3 | 0.500 | 12.7 | 0.250  | 6.4  | 500           |
| • 13SP219    | 0.171 | 4.3 | 0.500 | 12.7 | 0.313  | 8.0  | 500           |
| • 13SP224    | 0.171 | 4.3 | 0.500 | 12.7 | 0.375  | 9.5  | 500           |
| • 13SP229    | 0.171 | 4.3 | 0.500 | 12.7 | 0.438  | 11.1 | 1000          |
| • 13SP234    | 0.171 | 4.3 | 0.500 | 12.7 | 0.500  | 12.7 | 500           |
| • 13SP239    | 0.171 | 4.3 | 0.500 | 12.7 | 0.563  | 14.3 | 500           |
| • 13SP244    | 0.171 | 4.3 | 0.500 | 12.7 | 0.625  | 15.9 | 1000          |
| • 13SP249    | 0.171 | 4.3 | 0.500 | 12.7 | 0.688  | 17.5 | 1000          |
| • 13SP254    | 0.171 | 4.3 | 0.500 | 12.7 | 0.750  | 19.1 | 1000          |
| • 13SP259    | 0.171 | 4.3 | 0.500 | 12.7 | 0.813  | 20.7 | 1000          |
| • 13SP264    | 0.171 | 4.3 | 0.500 | 12.7 | 0.875  | 22.2 | 1000          |
| • 13SP269    | 0.171 | 4.3 | 0.500 | 12.7 | 0.938  | 23.8 | 1000          |
| • 13SP274    | 0.171 | 4.3 | 0.500 | 12.7 | 1.000  | 25.4 | 500           |
| • 13RS035453 | 0.172 | 4.4 | 0.354 | 9.0  | 0.531  | 13.5 | 1000          |
| • 13RS025054 | 0.173 | 4.4 | 0.250 | 6.4  | 0.281  | 7.1  | 1000          |
| • 13RS062551 | 0.173 | 4.4 | 0.625 | 15.9 | 0.250  | 6.4  | 500           |
| • 13RS075059 | 0.173 | 4.4 | 0.750 | 19.1 | 0.250  | 6.4  | 500           |
| • 13RS024014 | 0.175 | 4.4 | 0.245 | 6.2  | 0.156  | 4.0  | 1000          |
| • 13RS024015 | 0.175 | 4.4 | 0.245 | 6.2  | 0.166  | 4.2  | 1000          |
| • 13RS030503 | 0.175 | 4.4 | 0.300 | 7.6  | 0.197  | 5.0  | 1000          |
| • 13RS031257 | 0.175 | 4.4 | 0.313 | 8.0  | 0.154  | 3.9  | 1000          |
| • 13RS037514 | 0.175 | 4.4 | 0.376 | 9.6  | 0.150  | 3.8  | 1000          |
| • 13RS125311 | 0.177 | 4.5 | 1.250 | 31.8 | 0.563  | 14.3 | 250           |
| • 13RS125075 | 0.177 | 4.5 | 1.250 | 31.8 | 0.625  | 15.9 | 250           |
| • 13RS031242 | 0.182 | 4.6 | 0.315 | 8.0  | 0.430  | 10.9 | 1000          |
| • 13RS042700 | 0.182 | 4.6 | 0.427 | 10.8 | 0.734  | 18.6 | 500           |
| • 13RS027541 | 0.185 | 4.7 | 0.275 | 7.0  | 0.090  | 2.3  | 1000          |
| • 13RS031253 | 0.187 | 4.7 | 0.313 | 8.0  | 0.171  | 4.3  | 1000          |
| • 13RS075088 | 0.187 | 4.7 | 0.750 | 19.1 | 0.500  | 12.7 | 500           |
| • 13RS100020 | 0.187 | 4.7 | 0.990 | 25.1 | 0.250  | 6.4  | 500           |
| • 13RS025016 | 0.188 | 4.8 | 0.250 | 6.4  | 0.188  | 4.8  | 1000          |
| • 13RS031640 | 0.188 | 4.8 | 0.316 | 8.0  | 0.203  | 5.2  | 1000          |
| • 13RS031830 | 0.189 | 4.8 | 0.313 | 8.0  | 0.297  | 7.5  | 1000          |
| • 13RS046319 | 0.190 | 4.8 | 0.463 | 11.8 | 0.313  | 8.0  | 1000          |
| • 13RS031262 | 0.191 | 4.9 | 0.312 | 7.9  | 0.870  | 22.1 | 500           |
| • 13RS048015 | 0.191 | 4.9 | 0.475 | 12.1 | 0.328  | 8.3  | 500           |

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## THROUGH SPACERS

13RS/13RSSR/13SP/13ME/MSW/SWI/SWS Series (continued)  
Round Nylon Through Spacers

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

## Features:

- Will not rust, corrode or deteriorate
- Acts as an electrical insulator by preventing metal-to-metal contact



\* Note: 13ME item #'s are made of black Heat Stabilized Nylon 6/6

| Item No.     | ID    |     | OD    |      | Length |      | Bulk Pack Qty |
|--------------|-------|-----|-------|------|--------|------|---------------|
|              | in    | mm  | in    | mm   | in     | mm   |               |
| • 13RS062519 | 0.191 | 4.9 | 0.625 | 15.9 | 0.250  | 6.4  | 500           |
| • 13RSSR0046 | 0.192 | 4.9 | 0.312 | 7.9  | 0.156  | 4.0  | 1000          |
| • 13RSSR0049 | 0.192 | 4.9 | 0.312 | 7.9  | 0.219  | 5.6  | 1000          |
| • 13RSSR0051 | 0.192 | 4.9 | 0.312 | 7.9  | 0.281  | 7.1  | 1000          |
| • 13RSSR0054 | 0.192 | 4.9 | 0.312 | 7.9  | 0.344  | 8.7  | 1000          |
| • 13RSSR0057 | 0.192 | 4.9 | 0.312 | 7.9  | 0.406  | 10.3 | 1000          |
| • 13RSSR0060 | 0.192 | 4.9 | 0.312 | 7.9  | 0.469  | 11.9 | 1000          |
| • 13RSSR0063 | 0.192 | 4.9 | 0.375 | 9.5  | 0.156  | 4.0  | 1000          |
| • 13RSSR0067 | 0.192 | 4.9 | 0.375 | 9.5  | 0.219  | 5.6  | 1000          |
| • 13RSSR0072 | 0.192 | 4.9 | 0.375 | 9.5  | 0.281  | 7.1  | 1000          |
| • 13RSSR0076 | 0.192 | 4.9 | 0.375 | 9.5  | 0.344  | 8.7  | 1000          |
| • 13RSSR0081 | 0.192 | 4.9 | 0.375 | 9.5  | 0.406  | 10.3 | 1000          |
| • 13RSSR0086 | 0.192 | 4.9 | 0.375 | 9.5  | 0.469  | 11.9 | 1000          |
| • 13RSSR0300 | 0.192 | 4.9 | 0.500 | 12.7 | 2.250  | 57.2 | 250           |
| • 13RSSR0306 | 0.192 | 4.9 | 0.500 | 12.7 | 2.500  | 63.5 | 250           |
| • 13RSSR0139 | 0.192 | 4.9 | 0.625 | 15.9 | 0.250  | 6.4  | 500           |
| • 13RSSR0143 | 0.192 | 4.9 | 0.625 | 15.9 | 0.312  | 7.9  | 500           |
| • 13RSSR0147 | 0.192 | 4.9 | 0.625 | 15.9 | 0.375  | 9.5  | 500           |
| • 13RSSR0151 | 0.192 | 4.9 | 0.625 | 15.9 | 0.437  | 11.1 | 500           |
| • 13RSSR0155 | 0.192 | 4.9 | 0.625 | 15.9 | 0.500  | 12.7 | 500           |
| • 13RSSR0158 | 0.192 | 4.9 | 0.625 | 15.9 | 0.563  | 14.3 | 500           |
| • 13RSSR0162 | 0.192 | 4.9 | 0.625 | 15.9 | 0.625  | 15.9 | 500           |
| • 13RSSR0165 | 0.192 | 4.9 | 0.625 | 15.9 | 0.750  | 19.1 | 500           |
| • 13RSSR0169 | 0.192 | 4.9 | 0.625 | 15.9 | 0.875  | 22.2 | 500           |
| • 13RSSR0173 | 0.192 | 4.9 | 0.625 | 15.9 | 1.000  | 25.4 | 500           |
| • 13RSSR0177 | 0.192 | 4.9 | 0.625 | 15.9 | 1.125  | 28.6 | 500           |
| • 13RSSR0181 | 0.192 | 4.9 | 0.625 | 15.9 | 1.250  | 31.8 | 500           |
| • 13RSSR0185 | 0.192 | 4.9 | 0.625 | 15.9 | 1.375  | 34.9 | 500           |
| • 13RSSR0189 | 0.192 | 4.9 | 0.625 | 15.9 | 1.500  | 38.1 | 500           |
| • 13RSSR0193 | 0.192 | 4.9 | 0.625 | 15.9 | 1.750  | 44.5 | 500           |
| • 13RSSR0197 | 0.192 | 4.9 | 0.625 | 15.9 | 2.000  | 50.8 | 500           |
| • 13RSSR0320 | 0.192 | 4.9 | 0.625 | 15.9 | 2.250  | 57.2 | 250           |
| • 13RSSR0324 | 0.192 | 4.9 | 0.625 | 15.9 | 2.500  | 63.5 | 250           |
| • 13RSSR0328 | 0.192 | 4.9 | 0.625 | 15.9 | 2.750  | 69.9 | 250           |
| • 13RS100039 | 0.193 | 4.9 | 1.000 | 25.4 | 0.250  | 6.4  | 500           |
| • 13RS031216 | 0.194 | 4.9 | 0.312 | 7.9  | 0.228  | 5.8  | 1000          |
| • 13RS031212 | 0.194 | 4.9 | 0.312 | 7.9  | 0.530  | 13.5 | 1000          |
| • 13RS031231 | 0.194 | 4.9 | 0.312 | 7.9  | 0.590  | 15.0 | 1000          |
| • 13RS031244 | 0.194 | 4.9 | 0.312 | 7.9  | 1.155  | 29.3 | 1000          |
| • 13RS031211 | 0.194 | 4.9 | 0.312 | 7.9  | 1.405  | 35.7 | 1000          |
| • 13RS031249 | 0.194 | 4.9 | 0.312 | 7.9  | 2.000  | 50.8 | 1000          |
| • 13SP094    | 0.194 | 4.9 | 0.313 | 8.0  | 0.125  | 3.2  | 1000          |
| • 13SP098    | 0.194 | 4.9 | 0.313 | 8.0  | 0.188  | 4.8  | 1000          |
| • 13SP102    | 0.194 | 4.9 | 0.313 | 8.0  | 0.250  | 6.4  | 1000          |
| • 13SP106    | 0.194 | 4.9 | 0.313 | 8.0  | 0.313  | 8.0  | 500           |
| • 13SP110    | 0.194 | 4.9 | 0.313 | 8.0  | 0.375  | 9.5  | 500           |
| • 13SP114    | 0.194 | 4.9 | 0.313 | 8.0  | 0.438  | 11.1 | 1000          |
| • 13SP118    | 0.194 | 4.9 | 0.313 | 8.0  | 0.500  | 12.7 | 1000          |
| • 13SP122    | 0.194 | 4.9 | 0.313 | 8.0  | 0.563  | 14.3 | 500           |
| • 13SP126    | 0.194 | 4.9 | 0.313 | 8.0  | 0.625  | 15.9 | 500           |
| • 13SP130    | 0.194 | 4.9 | 0.313 | 8.0  | 0.688  | 17.5 | 500           |
| • 13SP134    | 0.194 | 4.9 | 0.313 | 8.0  | 0.750  | 19.1 | 500           |
| • 13SP138    | 0.194 | 4.9 | 0.313 | 8.0  | 0.813  | 20.7 | 500           |
| • 13SP142    | 0.194 | 4.9 | 0.313 | 8.0  | 0.875  | 22.2 | 500           |
| • 13SP146    | 0.194 | 4.9 | 0.313 | 8.0  | 0.938  | 23.8 | 1000          |
| • 13SP150    | 0.194 | 4.9 | 0.313 | 8.0  | 1.000  | 25.4 | 500           |
| • 13SP338    | 0.194 | 4.9 | 0.313 | 8.0  | 1.063  | 27.0 | 500           |
| • 13SP342    | 0.194 | 4.9 | 0.313 | 8.0  | 1.125  | 28.6 | 500           |
| • 13SP346    | 0.194 | 4.9 | 0.313 | 8.0  | 1.188  | 30.2 | 500           |
| • 13SP350    | 0.194 | 4.9 | 0.313 | 8.0  | 1.250  | 31.8 | 1000          |
| • 13SP354    | 0.194 | 4.9 | 0.313 | 8.0  | 1.313  | 33.4 | 1000          |
| • 13SP358    | 0.194 | 4.9 | 0.313 | 8.0  | 1.375  | 34.9 | 1000          |
| • 13SP362    | 0.194 | 4.9 | 0.313 | 8.0  | 1.438  | 36.5 | 1000          |
| • 13SP366    | 0.194 | 4.9 | 0.313 | 8.0  | 1.500  | 38.1 | 1000          |
| • 13RS037041 | 0.194 | 4.9 | 0.370 | 9.4  | 0.418  | 10.6 | 1000          |
| • 13SP160    | 0.194 | 4.9 | 0.375 | 9.5  | 0.125  | 3.2  | 1000          |
| • 13RS037512 | 0.194 | 4.9 | 0.375 | 9.5  | 0.184  | 4.7  | 1000          |
| • 13SP163    | 0.194 | 4.9 | 0.375 | 9.5  | 0.188  | 4.8  | 1000          |
| • 13SP166    | 0.194 | 4.9 | 0.375 | 9.5  | 0.250  | 6.4  | 1000          |
| • 13SP169    | 0.194 | 4.9 | 0.375 | 9.5  | 0.313  | 8.0  | 500           |

| Item No.     | ID    |     | OD    |      | Length |      | Bulk Pack Qty |
|--------------|-------|-----|-------|------|--------|------|---------------|
|              | in    | mm  | in    | mm   | in     | mm   |               |
| • 13RS037513 | 0.194 | 4.9 | 0.375 | 9.5  | 0.340  | 8.6  | 1000          |
| • 13SP172    | 0.194 | 4.9 | 0.375 | 9.5  | 0.375  | 9.5  | 500           |
| • 13SP175    | 0.194 | 4.9 | 0.375 | 9.5  | 0.438  | 11.1 | 500           |
| • 13SP178    | 0.194 | 4.9 | 0.375 | 9.5  | 0.500  | 12.7 | 500           |
| • 13SP181    | 0.194 | 4.9 | 0.375 | 9.5  | 0.563  | 14.3 | 500           |
| • 13SP184    | 0.194 | 4.9 | 0.375 | 9.5  | 0.625  | 15.9 | 500           |
| • 13SP187    | 0.194 | 4.9 | 0.375 | 9.5  | 0.688  | 17.5 | 500           |
| • 13SP190    | 0.194 | 4.9 | 0.375 | 9.5  | 0.750  | 19.1 | 500           |
| • 13SP193    | 0.194 | 4.9 | 0.375 | 9.5  | 0.813  | 20.7 | 500           |
| • 13SP196    | 0.194 | 4.9 | 0.375 | 9.5  | 0.875  | 22.2 | 500           |
| • 13SP199    | 0.194 | 4.9 | 0.375 | 9.5  | 0.938  | 23.8 | 500           |
| • 13SP202    | 0.194 | 4.9 | 0.375 | 9.5  | 1.000  | 25.4 | 1000          |
| • 13SP374    | 0.194 | 4.9 | 0.375 | 9.5  | 1.063  | 27.0 | 1000          |
| • 13SP377    | 0.194 | 4.9 | 0.375 | 9.5  | 1.125  | 28.6 | 1000          |
| • 13SP380    | 0.194 | 4.9 | 0.375 | 9.5  | 1.188  | 30.2 | 1000          |
| • 13SP383    | 0.194 | 4.9 | 0.375 | 9.5  | 1.250  | 31.8 | 1000          |
| • 13SP386    | 0.194 | 4.9 | 0.375 | 9.5  | 1.313  | 33.4 | 1000          |
| • 13SP389    | 0.194 | 4.9 | 0.375 | 9.5  | 1.375  | 34.9 | 1000          |
| • 13SP392    | 0.194 | 4.9 | 0.375 | 9.5  | 1.438  | 36.5 | 1000          |
| • 13SP395    | 0.194 | 4.9 | 0.375 | 9.5  | 1.500  | 38.1 | 1000          |
| • 13SP205    | 0.194 | 4.9 | 0.500 | 12.7 | 0.125  | 3.2  | 1000          |
| • 13SP210    | 0.194 | 4.9 | 0.500 | 12.7 | 0.188  | 4.8  | 500           |
| • 13SP215    | 0.194 | 4.9 | 0.500 | 12.7 | 0.250  | 6.4  | 1000          |
| • 13SP220    | 0.194 | 4.9 | 0.500 | 12.7 | 0.313  | 8.0  | 500           |
| • 13SP225    | 0.194 | 4.9 | 0.500 | 12.7 | 0.375  | 9.5  | 500           |
| • 13RS050015 | 0.194 | 4.9 | 0.500 | 12.7 | 0.406  | 10.3 | 500           |
| • 13SP230    | 0.194 | 4.9 | 0.500 | 12.7 | 0.438  | 11.1 | 500           |
| • 13SP235    | 0.194 | 4.9 | 0.500 | 12.7 | 0.500  | 12.7 | 1000          |
| • 13SP240    | 0.194 | 4.9 | 0.500 | 12.7 | 0.563  | 14.3 | 1000          |
| • 13SP245    | 0.194 | 4.9 | 0.500 | 12.7 | 0.625  | 15.9 | 500           |
| • 13SP250    | 0.194 | 4.9 | 0.500 | 12.7 | 0.688  | 17.5 | 1000          |
| • 13SP255    | 0.194 | 4.9 | 0.500 | 12.7 | 0.750  | 19.1 | 500           |
| • 13SP260    | 0.194 | 4.9 | 0.500 | 12.7 | 0.813  | 20.7 | 1000          |
| • 13SP265    | 0.194 | 4.9 | 0.500 | 12.7 | 0.875  | 22.2 | 1000          |
| • 13SP270    | 0.194 | 4.9 | 0.500 | 12.7 | 0.938  | 23.8 | 1000          |
| • 13SP275    | 0.194 | 4.9 | 0.500 | 12.7 | 1.000  | 25.4 | 500           |
| • 13RS075074 | 0.194 | 4.9 | 0.750 | 19.1 | 0.750  | 19.1 | 500           |
| • 13RS025009 | 0.195 | 5.0 | 0.250 | 6.4  | 0.195  | 5.0  | 1000          |
| • 13RS027540 | 0.195 | 5.0 | 0.275 | 7.0  | 0.400  | 10.2 | 1000          |
| • 13RS031221 | 0.195 | 5.0 | 0.312 | 7.9  | 0.214  | 5.4  | 1000          |
| • 13RS031245 | 0.195 | 5.0 | 0.312 | 7.9  | 0.355  | 9.0  | 1000          |
| • 13RS031339 | 0.195 | 5.0 | 0.313 | 8.0  | 0.385  | 9.8  | 1000          |
| • 13RS048011 | 0.195 | 5.0 | 0.472 | 12.0 | 0.377  | 9.6  | 1000          |
| • 13RS050019 | 0.195 | 5.0 | 0.500 | 12.7 | 0.451  | 11.5 | 500           |
| • 13RS034002 | 0.198 | 5.0 | 0.344 | 8.7  | 0.281  | 7.1  | 1000          |
| • 13RS043722 | 0.198 | 5.0 | 0.437 | 11.1 | 0.281  | 7.1  | 1000          |
| • 13RS025066 | 0.200 | 5.1 | 0.260 | 6.6  | 0.556  | 14.1 | 1000          |
| • 13RS025062 | 0.200 | 5.1 | 0.260 | 6.6  | 0.594  | 15.1 | 1000          |
| • 13RS025063 | 0.200 | 5.1 | 0.265 | 6.7  | 0.296  | 7.5  | 1000          |
| • 13RS031215 | 0.200 | 5.1 | 0.309 | 7.8  | 0.346  | 8.8  | 1000          |
| • 13RS036033 | 0.200 | 5.1 | 0.350 | 8.9  | 0.400  | 10.2 | 500           |
| • 13RS040084 | 0.200 | 5.1 | 0.420 | 10.7 | 0.500  | 12.7 | 500           |
| • 13RS040087 | 0.200 | 5.1 | 0.430 | 10.9 | 0.500  | 12.7 | 500           |
| • 13RS075079 | 0.200 | 5.1 | 0.750 | 19.1 | 1.000  | 25.4 | 250           |
| • 13RS100038 | 0.200 | 5.1 | 1.000 | 25.4 | 0.375  | 9.5  | 500           |
| • 13RS125385 | 0.200 | 5.1 | 1.250 | 31.8 | 0.380  | 9.7  | 250           |
| • 13RS037548 | 0.203 | 5.2 | 0.375 | 9.5  | 0.109  | 2.8  | 1000          |
| • 13RS037547 | 0.203 | 5.2 | 0.375 | 9.5  | 0.266  | 6.8  | 1000          |
| • 13RS060550 | 0.203 | 5.2 | 0.606 | 15.4 | 0.625  | 15.9 | 500           |
| • 13RS075082 | 0.203 | 5.2 | 0.750 | 19.1 | 0.100  | 2.5  | 500           |
| • 13RS081262 | 0.203 | 5.2 | 0.825 | 21.0 | 0.625  | 15.9 | 500           |
| • 13RS025020 | 0.205 | 5.2 | 0.250 | 6.4  | 0.230  | 5.8  | 1000          |
| • 13RS025025 | 0.205 | 5.2 | 0.250 | 6.4  | 0.245  | 6.2  | 1000          |
| • 13RS031213 | 0.205 | 5.2 | 0.312 | 7.9  | 0.160  | 4.1  | 1000          |
| • MSW1080A   | 0.205 | 5.2 | 0.394 | 10.0 | 0.197  | 5.0  | 1000          |
| • MSW1040A   | 0.205 | 5.2 | 0.394 | 10.0 | 0.295  | 7.5  | 1000          |
| • MSW1050A   | 0.205 | 5.2 | 0.394 | 10.0 | 0.394  | 10.0 | 1000          |
| • MSW1060A   | 0.205 | 5.2 | 0.394 | 10.0 | 0.591  | 15.0 | 1000          |
| • SWI1570A   | 0.205 | 5.2 | 0.500 | 12.7 | 0.510  | 13.0 | 1000          |
|              |       |     |       |      |        |      |               |



# THROUGH SPACERS

## 13RS/13RSSR/13SP/13ME/MSW/SWI/SWS Series (continued) Round Nylon Through Spacers



Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Will not rust, corrode or deteriorate
- Acts as an electrical insulator by preventing metal-to-metal contact



\* Note: 13ME item #'s are made of black Heat Stabilized Nylon 6/6

| Item No.     | ID    |     | OD    |      | Length |       | Bulk Pack Qty |
|--------------|-------|-----|-------|------|--------|-------|---------------|
|              | in    | mm  | in    | mm   | in     | mm    |               |
| • 13RS028035 | 0.208 | 5.3 | 0.281 | 7.1  | 0.187  | 4.7   | 1000          |
| • 13RS020033 | 0.208 | 5.3 | 0.283 | 7.2  | 0.166  | 4.2   | 1000          |
| • 13ME060*   | 0.209 | 5.3 | 0.394 | 10.0 | 0.118  | 3.0   | 1000          |
| • 13ME061*   | 0.209 | 5.3 | 0.394 | 10.0 | 0.197  | 5.0   | 1000          |
| • 13ME062*   | 0.209 | 5.3 | 0.394 | 10.0 | 0.295  | 7.5   | 1000          |
| • 13ME063*   | 0.209 | 5.3 | 0.394 | 10.0 | 0.394  | 10.0  | 1000          |
| • 13ME064*   | 0.209 | 5.3 | 0.394 | 10.0 | 0.591  | 15.0  | 500           |
| • 13ME065*   | 0.209 | 5.3 | 0.394 | 10.0 | 0.787  | 20.0  | 1000          |
| • 13RS061021 | 0.210 | 5.3 | 0.375 | 9.5  | 0.610  | 15.5  | 500           |
| • 13RS063052 | 0.210 | 5.3 | 0.656 | 16.7 | 0.538  | 13.7  | 500           |
| • 13RS050020 | 0.213 | 5.4 | 0.500 | 12.7 | 0.250  | 6.4   | 500           |
| • 13RS031255 | 0.215 | 5.5 | 0.320 | 8.1  | 0.220  | 5.6   | 1000          |
| • 13RS031248 | 0.218 | 5.5 | 0.312 | 7.9  | 0.875  | 22.2  | 1000          |
| • 13RS034006 | 0.218 | 5.5 | 0.343 | 8.7  | 0.625  | 15.9  | 1000          |
| • 13RSSR0068 | 0.218 | 5.5 | 0.375 | 9.5  | 0.219  | 5.6   | 1000          |
| • 13RSSR0073 | 0.218 | 5.5 | 0.375 | 9.5  | 0.281  | 7.1   | 1000          |
| • 13RSSR0077 | 0.218 | 5.5 | 0.375 | 9.5  | 0.344  | 8.7   | 1000          |
| • 13RSSR0082 | 0.218 | 5.5 | 0.375 | 9.5  | 0.406  | 10.3  | 1000          |
| • 13RS037521 | 0.218 | 5.5 | 0.375 | 9.5  | 0.438  | 11.1  | 500           |
| • 13RS037035 | 0.218 | 5.5 | 0.375 | 9.5  | 0.469  | 11.9  | 1000          |
| • 13RSSR0087 | 0.218 | 5.5 | 0.375 | 9.5  | 0.469  | 11.9  | 1000          |
| • 13RS031247 | 0.219 | 5.6 | 0.313 | 8.0  | 0.813  | 20.7  | 1000          |
| • 13RS037515 | 0.219 | 5.6 | 0.375 | 9.5  | 0.156  | 4.0   | 1000          |
| • 13RS037517 | 0.219 | 5.6 | 0.375 | 9.5  | 0.172  | 4.4   | 1000          |
| • 13RS037520 | 0.219 | 5.6 | 0.375 | 9.5  | 0.203  | 5.2   | 1000          |
| • 13RS043723 | 0.219 | 5.6 | 0.438 | 11.1 | 0.375  | 9.5   | 1000          |
| • 13SP206    | 0.219 | 5.6 | 0.500 | 12.7 | 0.125  | 3.2   | 1000          |
| • 13SP211    | 0.219 | 5.6 | 0.500 | 12.7 | 0.188  | 4.8   | 500           |
| • 13SP216    | 0.219 | 5.6 | 0.500 | 12.7 | 0.250  | 6.4   | 500           |
| • 13SP226    | 0.219 | 5.6 | 0.500 | 12.7 | 0.375  | 9.5   | 1000          |
| • 13SP231    | 0.219 | 5.6 | 0.500 | 12.7 | 0.438  | 11.1  | 1000          |
| • 13SP236    | 0.219 | 5.6 | 0.500 | 12.7 | 0.500  | 12.7  | 500           |
| • 13SP241    | 0.219 | 5.6 | 0.500 | 12.7 | 0.563  | 14.3  | 500           |
| • 13SP246    | 0.219 | 5.6 | 0.500 | 12.7 | 0.625  | 15.9  | 1000          |
| • 13RS050009 | 0.219 | 5.6 | 0.500 | 12.7 | 0.649  | 16.5  | 500           |
| • 13SP251    | 0.219 | 5.6 | 0.500 | 12.7 | 0.688  | 17.5  | 1000          |
| • 13SP256    | 0.219 | 5.6 | 0.500 | 12.7 | 0.750  | 19.1  | 1000          |
| • 13SP261    | 0.219 | 5.6 | 0.500 | 12.7 | 0.813  | 20.7  | 1000          |
| • 13SP266    | 0.219 | 5.6 | 0.500 | 12.7 | 0.875  | 22.2  | 1000          |
| • 13SP271    | 0.219 | 5.6 | 0.500 | 12.7 | 0.938  | 23.8  | 1000          |
| • 13SP276    | 0.219 | 5.6 | 0.500 | 12.7 | 1.000  | 25.4  | 1000          |
| • 13RS052002 | 0.219 | 5.6 | 0.533 | 13.5 | 0.360  | 9.1   | 500           |
| • 13RS037522 | 0.220 | 5.6 | 0.375 | 9.5  | 0.375  | 9.5   | 1000          |
| • 13RS044109 | 0.220 | 5.6 | 0.438 | 11.1 | 0.406  | 10.3  | 500           |
| • 13RS044128 | 0.220 | 5.6 | 0.438 | 11.1 | 0.594  | 15.1  | 500           |
| • 13RS044075 | 0.220 | 5.6 | 0.438 | 11.1 | 0.750  | 19.1  | 500           |
| • 13RS044087 | 0.220 | 5.6 | 0.438 | 11.1 | 0.875  | 22.2  | 500           |
| • 13RS044232 | 0.220 | 5.6 | 0.438 | 11.1 | 1.563  | 39.7  | 250           |
| • 13RS044150 | 0.220 | 5.6 | 0.438 | 11.1 | 5.500  | 139.7 | 500           |
| • 13RS050024 | 0.220 | 5.6 | 0.500 | 12.7 | 0.135  | 3.4   | 500           |
| • 13SP221    | 0.220 | 5.6 | 0.500 | 12.7 | 0.313  | 8.0   | 500           |
| • 13RS039344 | 0.221 | 5.6 | 0.394 | 10.0 | 0.984  | 25.0  | 500           |
| • 13RS028440 | 0.224 | 5.7 | 0.284 | 7.2  | 0.400  | 10.2  | 1000          |
| • 13RS031222 | 0.225 | 5.7 | 0.309 | 7.8  | 0.280  | 7.1   | 1000          |
| • 13RS031258 | 0.225 | 5.7 | 0.312 | 7.9  | 0.438  | 11.1  | 1000          |
| • 13RS037525 | 0.225 | 5.7 | 0.375 | 9.5  | 0.250  | 6.4   | 1000          |
| • 13RS031226 | 0.228 | 5.8 | 0.313 | 8.0  | 0.260  | 6.6   | 1000          |
| • 13RS037599 | 0.230 | 5.8 | 0.375 | 9.5  | 0.925  | 23.5  | 500           |
| • 13RS059033 | 0.236 | 6.0 | 0.590 | 15.0 | 0.310  | 7.9   | 500           |
| • 13RS050011 | 0.244 | 6.2 | 0.500 | 12.7 | 0.295  | 7.5   | 500           |
| • 13RS056256 | 0.245 | 6.2 | 0.555 | 14.1 | 0.563  | 14.3  | 500           |
| • 13RS075035 | 0.245 | 6.2 | 0.750 | 19.1 | 0.361  | 9.2   | 500           |
| • 13RS031230 | 0.246 | 6.2 | 0.312 | 7.9  | 0.250  | 6.4   | 1000          |
| • 13RS031250 | 0.246 | 6.2 | 0.312 | 7.9  | 0.495  | 12.6  | 500           |
| • 13RS037441 | 0.248 | 6.3 | 0.374 | 9.5  | 0.406  | 10.3  | 1000          |
| • 13RS039343 | 0.248 | 6.3 | 0.394 | 10.0 | 0.433  | 11.0  | 1000          |
| • MSW1090A   | 0.248 | 6.3 | 0.591 | 15.0 | 0.295  | 7.5   | 1000          |
| • MSW1100C   | 0.248 | 6.3 | 0.591 | 15.0 | 0.299  | 7.6   | 1000          |
| • MSW1110A   | 0.248 | 6.3 | 0.591 | 15.0 | 0.394  | 10.0  | 1000          |

| Item No.     | ID    |     | OD    |      | Length |      | Bulk Pack Qty |
|--------------|-------|-----|-------|------|--------|------|---------------|
|              | in    | mm  | in    | mm   | in     | mm   |               |
| • MSW1120A   | 0.248 | 6.3 | 0.591 | 15.0 | 0.591  | 15.0 | 1000          |
| • 13RS094550 | 0.248 | 6.3 | 0.946 | 24.0 | 0.500  | 12.7 | 250           |
| • 13ME068*   | 0.248 | 6.3 | 0.394 | 10.0 | 0.118  | 3.0  | 1000          |
| • 13ME069*   | 0.248 | 6.3 | 0.394 | 10.0 | 0.197  | 5.0  | 1000          |
| • 13ME070*   | 0.248 | 6.3 | 0.394 | 10.0 | 0.295  | 7.5  | 1000          |
| • 13ME071*   | 0.248 | 6.3 | 0.394 | 10.0 | 0.394  | 10.0 | 1000          |
| • 13ME072*   | 0.248 | 6.3 | 0.394 | 10.0 | 0.591  | 15.0 | 500           |
| • 13ME073*   | 0.248 | 6.3 | 0.394 | 10.0 | 0.787  | 20.0 | 500           |
| • 13ME074*   | 0.248 | 6.3 | 0.394 | 10.0 | 0.984  | 25.0 | 1000          |
| • 13ME132*   | 0.248 | 6.3 | 0.394 | 10.0 | 1.102  | 28.0 | 1000          |
| • 13ME075*   | 0.248 | 6.3 | 0.394 | 10.0 | 1.181  | 30.0 | 500           |
| • 13RS050014 | 0.249 | 6.3 | 0.501 | 12.7 | 0.390  | 9.9  | 500           |
| • 13RS030501 | 0.250 | 6.4 | 0.303 | 7.7  | 0.312  | 7.9  | 1000          |
| • 13RS031260 | 0.250 | 6.4 | 0.313 | 8.0  | 0.630  | 16.0 | 1000          |
| • 13RS037559 | 0.250 | 6.4 | 0.375 | 9.5  | 0.593  | 15.1 | 500           |
| • 13RS037558 | 0.250 | 6.4 | 0.375 | 9.5  | 0.630  | 16.0 | 1000          |
| • 13RS037574 | 0.250 | 6.4 | 0.375 | 9.5  | 0.859  | 21.8 | 500           |
| • 13RS038037 | 0.250 | 6.4 | 0.380 | 9.7  | 0.440  | 11.2 | 1000          |
| • 13RS039000 | 0.250 | 6.4 | 0.390 | 9.9  | 0.300  | 7.6  | 1000          |
| • 13RS043724 | 0.250 | 6.4 | 0.438 | 11.1 | 0.394  | 10.0 | 500           |
| • 13RS043725 | 0.250 | 6.4 | 0.438 | 11.1 | 0.591  | 15.0 | 500           |
| • 13RSSR0254 | 0.250 | 6.4 | 0.500 | 12.7 | 1.250  | 31.8 | 500           |
| • 13RS050099 | 0.250 | 6.4 | 0.500 | 12.7 | 2.125  | 54.0 | 250           |
| • 13RS050000 | 0.250 | 6.4 | 0.500 | 12.7 | 3.000  | 76.2 | 250           |
| • 13RS053546 | 0.250 | 6.4 | 0.535 | 13.6 | 0.610  | 15.5 | 500           |
| • 13RS060551 | 0.250 | 6.4 | 0.602 | 15.3 | 0.622  | 15.8 | 500           |
| • 13RS062530 | 0.250 | 6.4 | 0.610 | 15.5 | 0.375  | 9.5  | 1000          |
| • 13RS062589 | 0.250 | 6.4 | 0.625 | 15.9 | 0.500  | 12.7 | 500           |
| • 13RS062587 | 0.250 | 6.4 | 0.625 | 15.9 | 0.625  | 15.9 | 500           |
| • 13RSSR0170 | 0.250 | 6.4 | 0.625 | 15.9 | 0.875  | 22.2 | 500           |
| • 13RS062586 | 0.250 | 6.4 | 0.625 | 15.9 | 1.000  | 25.4 | 500           |
| • 13RS062585 | 0.250 | 6.4 | 0.625 | 15.9 | 1.500  | 38.1 | 500           |
| • 13RS075020 | 0.250 | 6.4 | 0.740 | 18.8 | 0.250  | 6.4  | 500           |
| • SWI1610A   | 0.250 | 6.4 | 0.740 | 18.8 | 0.250  | 6.4  | 5000          |
| • 13RS075037 | 0.250 | 6.4 | 0.745 | 18.9 | 0.375  | 9.5  | 500           |
| • 13RS075033 | 0.250 | 6.4 | 0.750 | 19.1 | 0.188  | 4.8  | 500           |
| • 13RS075048 | 0.250 | 6.4 | 0.750 | 19.1 | 0.500  | 12.7 | 500           |
| • 13RS075052 | 0.250 | 6.4 | 0.750 | 19.1 | 0.878  | 22.3 | 250           |
| • 13RS087046 | 0.250 | 6.4 | 0.866 | 22.0 | 0.394  | 10.0 | 500           |
| • 13RS100012 | 0.250 | 6.4 | 1.000 | 25.4 | 0.125  | 3.2  | 1000          |
| • 13RS100018 | 0.250 | 6.4 | 1.000 | 25.4 | 0.188  | 4.8  | 500           |
| • 13RS100030 | 0.250 | 6.4 | 1.000 | 25.4 | 0.225  | 5.7  | 500           |
| • 13RS100021 | 0.250 | 6.4 | 1.000 | 25.4 | 0.250  | 6.4  | 500           |
| • 13RS100026 | 0.250 | 6.4 | 1.000 | 25.4 | 0.438  | 11.1 | 500           |
| • 13RS162592 | 0.250 | 6.4 | 1.062 | 27.0 | 0.280  | 7.1  | 250           |
| • 13RS100057 | 0.250 | 6.4 | 1.180 | 30.0 | 0.217  | 5.5  | 500           |
| • 13RS187510 | 0.250 | 6.4 | 1.860 | 47.2 | 1.000  | 25.4 | 250           |
| • 13RS038930 | 0.251 | 6.4 | 0.389 | 9.9  | 0.125  | 3.2  | 1000          |
| • 13RS087550 | 0.251 | 6.4 | 0.875 | 22.2 | 0.625  | 15.9 | 250           |
| • 13RS036032 | 0.252 | 6.4 | 0.360 | 9.1  | 0.425  | 10.8 | 1000          |
| • 13RSSR0064 | 0.252 | 6.4 | 0.375 | 9.5  | 0.156  | 4.0  | 1000          |
| • 13RS037518 | 0.252 | 6.4 | 0.375 | 9.5  | 0.188  | 4.8  | 1000          |
| • 13RSSR0069 | 0.252 | 6.4 | 0.375 | 9.5  | 0.219  | 5.6  | 1000          |
| • 13RSSR0074 | 0.252 | 6.4 | 0.375 | 9.5  | 0.281  | 7.1  | 1000          |
| • 13RSSR0078 | 0.252 | 6.4 | 0.375 | 9.5  | 0.344  | 8.7  | 1000          |
| • 13RS037550 | 0.252 | 6.4 | 0.375 | 9.5  | 0.375  | 9.5  | 1000          |
| • 13RSSR0083 | 0.252 | 6.4 | 0.375 | 9.5  | 0.406  | 10.3 | 1000          |
| • 13RSSR0088 | 0.252 | 6.4 | 0.375 | 9.5  | 0.469  | 11.9 | 1000          |
| • 13RS037516 | 0.252 | 6.4 | 0.375 | 9.5  | 0.820  | 20.8 | 1000          |
| • 13RS046060 | 0.252 | 6.4 | 0.460 | 11.7 | 0.563  | 14.3 | 1000          |
| • MSW1150A   | 0.252 | 6.4 | 0.500 | 12.7 | 0.193  | 4.9  | 1000          |
| • MSW1160A   | 0.252 | 6.4 | 0.500 | 12.7 | 0.500  | 12.7 | 1000          |
| • 13RS050001 | 0.252 | 6.4 | 0.500 | 12.7 | 2.500  | 63.5 | 250           |
| • MSW1170A   | 0.252 | 6.4 | 0.563 | 14.3 | 0.063  | 1.6  | 1000          |
| • MSW1180A   | 0.252 | 6.4 | 0.563 | 14.3 | 0.126  | 3.2  | 1000          |
| • 13RSSR0140 | 0.252 | 6.4 | 0.625 | 15.9 | 0.250  | 6.4  | 500           |
| • 13RSSR0144 | 0.252 | 6.4 | 0.625 | 15.9 | 0.312  | 7.9  | 500           |
| • 13RSSR0148 | 0.252 | 6.4 | 0.625 | 15.9 | 0.375  |      |               |



## THROUGH SPACERS

13RS/13RSSR/13SP/13ME/MSW/SWI/SWS Series (continued)  
Round Nylon Through Spacers

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

## Features:

- Will not rust, corrode or deteriorate
- Acts as an electrical insulator by preventing metal-to-metal contact



\* Note: 13ME item #'s are made of black Heat Stabilized Nylon 6/6

| Item No.     | ID    |     | OD    |      | Length |      | Bulk Pack Qty |
|--------------|-------|-----|-------|------|--------|------|---------------|
|              | in    | mm  | in    | mm   | in     | mm   |               |
| • 13RSSR0156 | 0.252 | 6.4 | 0.625 | 15.9 | 0.500  | 12.7 | 500           |
| • 13RSSR0159 | 0.252 | 6.4 | 0.625 | 15.9 | 0.563  | 14.3 | 500           |
| • 13RSSR0163 | 0.252 | 6.4 | 0.625 | 15.9 | 0.625  | 15.9 | 500           |
| • 13RSSR0166 | 0.252 | 6.4 | 0.625 | 15.9 | 0.750  | 19.1 | 500           |
| • 13RSSR0174 | 0.252 | 6.4 | 0.625 | 15.9 | 1.000  | 25.4 | 500           |
| • 13RSSR0178 | 0.252 | 6.4 | 0.625 | 15.9 | 1.125  | 28.6 | 500           |
| • 13RSSR0182 | 0.252 | 6.4 | 0.625 | 15.9 | 1.250  | 31.8 | 500           |
| • 13RSSR0186 | 0.252 | 6.4 | 0.625 | 15.9 | 1.375  | 34.9 | 500           |
| • 13RSSR0190 | 0.252 | 6.4 | 0.625 | 15.9 | 1.500  | 38.1 | 500           |
| • 13RSSR0194 | 0.252 | 6.4 | 0.625 | 15.9 | 1.750  | 44.5 | 500           |
| • 13RSSR0198 | 0.252 | 6.4 | 0.625 | 15.9 | 2.000  | 50.8 | 500           |
| • MSW1190A   | 0.252 | 6.4 | 0.709 | 18.0 | 0.079  | 2.0  | 1000          |
| • MSW1200A   | 0.252 | 6.4 | 1.181 | 30.0 | 0.118  | 3.0  | 1000          |
| • MSW1130A   | 0.252 | 6.4 | 1.338 | 34.0 | 0.039  | 1.0  | 1000          |
| • 13RS031001 | 0.253 | 6.4 | 0.303 | 7.7  | 0.245  | 6.2  | 1000          |
| • 13RS031002 | 0.253 | 6.4 | 0.303 | 7.7  | 0.420  | 10.7 | 1000          |
| • SWI1620A   | 0.253 | 6.4 | 0.500 | 12.7 | 0.125  | 3.2  | 15000         |
| • 13RS037031 | 0.254 | 6.5 | 0.375 | 9.5  | 0.453  | 11.5 | 1000          |
| • 13RS038039 | 0.254 | 6.5 | 0.385 | 9.8  | 0.240  | 6.1  | 1000          |
| • 13RS062517 | 0.254 | 6.5 | 0.621 | 15.8 | 0.652  | 16.6 | 500           |
| • 13RS034004 | 0.255 | 6.5 | 0.355 | 9.0  | 0.130  | 3.3  | 1000          |
| • 13RS035540 | 0.255 | 6.5 | 0.355 | 9.0  | 0.725  | 18.4 | 1000          |
| • 13RS037537 | 0.255 | 6.5 | 0.374 | 9.5  | 0.511  | 13.0 | 1000          |
| • 13RS037536 | 0.255 | 6.5 | 0.375 | 9.5  | 0.330  | 8.4  | 500           |
| • 13RS037538 | 0.255 | 6.5 | 0.375 | 9.5  | 0.380  | 9.7  | 1000          |
| • 13RS037571 | 0.255 | 6.5 | 0.375 | 9.5  | 0.700  | 17.8 | 1000          |
| • 13RS038931 | 0.255 | 6.5 | 0.389 | 9.9  | 0.132  | 3.4  | 1000          |
| • 13RSSR0321 | 0.255 | 6.5 | 0.625 | 15.9 | 2.250  | 57.2 | 250           |
| • 13RSSR0325 | 0.255 | 6.5 | 0.625 | 15.9 | 2.500  | 63.5 | 250           |
| • 13RSSR0329 | 0.255 | 6.5 | 0.625 | 15.9 | 2.750  | 69.9 | 250           |
| • 13RSSR0333 | 0.255 | 6.5 | 0.625 | 15.9 | 3.000  | 76.2 | 250           |
| • 13RS075013 | 0.255 | 6.5 | 0.750 | 19.1 | 0.290  | 7.4  | 500           |
| • 13RS125082 | 0.255 | 6.5 | 1.250 | 31.8 | 0.531  | 13.5 | 250           |
| • 13RS042701 | 0.256 | 6.5 | 0.433 | 11.0 | 0.220  | 5.6  | 1000          |
| • MSW1210A   | 0.256 | 6.5 | 0.591 | 15.0 | 0.118  | 3.0  | 1000          |
| • 13RS057035 | 0.256 | 6.5 | 0.591 | 15.0 | 0.335  | 8.5  | 500           |
| • 13ME076*   | 0.256 | 6.5 | 0.591 | 15.0 | 0.118  | 3.0  | 500           |
| • 13ME077*   | 0.256 | 6.5 | 0.591 | 15.0 | 0.197  | 5.0  | 500           |
| • 13ME078*   | 0.256 | 6.5 | 0.591 | 15.0 | 0.295  | 7.5  | 500           |
| • 13ME079*   | 0.256 | 6.5 | 0.591 | 15.0 | 0.394  | 10.0 | 1000          |
| • 13ME080*   | 0.256 | 6.5 | 0.591 | 15.0 | 0.591  | 15.0 | 1000          |
| • 13ME081*   | 0.256 | 6.5 | 0.591 | 15.0 | 0.787  | 20.0 | 1000          |
| • 13ME083*   | 0.256 | 6.5 | 0.591 | 15.0 | 1.181  | 30.0 | 500           |
| • 13RS031259 | 0.257 | 6.5 | 0.320 | 8.1  | 0.505  | 12.8 | 1000          |
| • 13RS037523 | 0.257 | 6.5 | 0.375 | 9.5  | 0.250  | 6.4  | 1000          |
| • 13RS037585 | 0.257 | 6.5 | 0.375 | 9.5  | 1.250  | 31.8 | 500           |
| • 13RS048016 | 0.257 | 6.5 | 0.480 | 12.2 | 0.188  | 4.8  | 500           |
| • 13RS050018 | 0.257 | 6.5 | 0.500 | 12.7 | 0.234  | 5.9  | 500           |
| • 13SP222    | 0.257 | 6.5 | 0.500 | 12.7 | 0.313  | 8.0  | 500           |
| • 13SP227    | 0.257 | 6.5 | 0.500 | 12.7 | 0.375  | 9.5  | 500           |
| • 13RS050045 | 0.257 | 6.5 | 0.500 | 12.7 | 0.406  | 10.3 | 500           |
| • 13SP232    | 0.257 | 6.5 | 0.500 | 12.7 | 0.438  | 11.1 | 500           |
| • 13SP237    | 0.257 | 6.5 | 0.500 | 12.7 | 0.500  | 12.7 | 1000          |
| • 13SP242    | 0.257 | 6.5 | 0.500 | 12.7 | 0.563  | 14.3 | 500           |
| • 13SP247    | 0.257 | 6.5 | 0.500 | 12.7 | 0.625  | 15.9 | 1000          |
| • 13SP252    | 0.257 | 6.5 | 0.500 | 12.7 | 0.688  | 17.5 | 1000          |
| • 13SP272    | 0.257 | 6.5 | 0.500 | 12.7 | 0.938  | 23.8 | 500           |
| • 13SP277    | 0.257 | 6.5 | 0.500 | 12.7 | 1.000  | 25.4 | 500           |
| • 13RSSR0364 | 0.257 | 6.5 | 0.500 | 12.7 | 1.438  | 36.5 | 250           |
| • 13RS062580 | 0.257 | 6.5 | 0.625 | 15.9 | 0.125  | 3.2  | 500           |
| • 13RS081263 | 0.257 | 6.5 | 0.825 | 21.0 | 0.370  | 9.4  | 500           |
| • 13RS075025 | 0.258 | 6.6 | 0.750 | 19.1 | 0.438  | 11.1 | 500           |
| • 13RS030500 | 0.260 | 6.6 | 0.305 | 7.7  | 0.179  | 4.5  | 1000          |
| • 13SP207    | 0.260 | 6.6 | 0.500 | 12.7 | 0.125  | 3.2  | 1000          |
| • 13SP212    | 0.260 | 6.6 | 0.500 | 12.7 | 0.188  | 4.8  | 1000          |
| • 13SP217    | 0.260 | 6.6 | 0.500 | 12.7 | 0.250  | 6.4  | 500           |
| • 13RS050022 | 0.260 | 6.6 | 0.500 | 12.7 | 0.250  | 6.4  | 1000          |
| • 13SP257    | 0.260 | 6.6 | 0.500 | 12.7 | 0.750  | 19.1 | 1000          |
| • 13SP262    | 0.260 | 6.6 | 0.500 | 12.7 | 0.813  | 20.7 | 1000          |
| • 13SP267    | 0.260 | 6.6 | 0.500 | 12.7 | 0.875  | 22.2 | 1000          |
| • 13RS050096 | 0.260 | 6.6 | 0.500 | 12.7 | 1.375  | 34.9 | 500           |
| • 13RS050088 | 0.260 | 6.6 | 0.500 | 12.7 | 1.625  | 41.3 | 500           |

| Item No.     | ID    |     | OD    |      | Length |      | Bulk Pack Qty |
|--------------|-------|-----|-------|------|--------|------|---------------|
|              | in    | mm  | in    | mm   | in     | mm   |               |
| • 13RS062531 | 0.260 | 6.6 | 0.625 | 15.9 | 0.250  | 6.4  | 500           |
| • 13RS068711 | 0.260 | 6.6 | 0.687 | 17.4 | 0.457  | 11.6 | 500           |
| • 13RS075026 | 0.260 | 6.6 | 0.750 | 19.1 | 0.375  | 9.5  | 500           |
| • 13RS075080 | 0.260 | 6.6 | 0.750 | 19.1 | 0.500  | 12.7 | 500           |
| • 13RS075065 | 0.260 | 6.6 | 0.750 | 19.1 | 0.563  | 14.3 | 500           |
| • 13RS075016 | 0.260 | 6.6 | 0.750 | 19.1 | 0.591  | 15.0 | 500           |
| • 13RS075042 | 0.260 | 6.6 | 0.750 | 19.1 | 0.625  | 15.9 | 500           |
| • 13RS075012 | 0.260 | 6.6 | 0.750 | 19.1 | 0.758  | 19.3 | 500           |
| • 13RS075051 | 0.260 | 6.6 | 0.750 | 19.1 | 1.000  | 25.4 | 250           |
| • 13RS100014 | 0.260 | 6.6 | 1.000 | 25.4 | 0.375  | 9.5  | 500           |
| • 13RS073030 | 0.263 | 6.7 | 0.730 | 18.5 | 0.295  | 7.5  | 500           |
| • 13RS036030 | 0.265 | 6.7 | 0.358 | 9.1  | 0.236  | 6.0  | 1000          |
| • 13RS037030 | 0.265 | 6.7 | 0.370 | 9.4  | 0.156  | 4.0  | 1000          |
| • 13RS037020 | 0.265 | 6.7 | 0.370 | 9.4  | 0.225  | 5.7  | 1000          |
| • 13RS037029 | 0.265 | 6.7 | 0.370 | 9.4  | 0.360  | 9.1  | 1000          |
| • 13RS037542 | 0.265 | 6.7 | 0.375 | 9.5  | 0.250  | 6.4  | 1000          |
| • 13RS037552 | 0.265 | 6.7 | 0.375 | 9.5  | 0.375  | 9.5  | 1000          |
| • 13RS037565 | 0.265 | 6.7 | 0.375 | 9.5  | 0.500  | 12.7 | 1000          |
| • 13RS037590 | 0.265 | 6.7 | 0.375 | 9.5  | 0.750  | 19.1 | 500           |
| • 13RS037575 | 0.265 | 6.7 | 0.375 | 9.5  | 0.875  | 22.2 | 500           |
| • 13RS037580 | 0.265 | 6.7 | 0.375 | 9.5  | 1.000  | 25.4 | 1000          |
| • 13RS037511 | 0.265 | 6.7 | 0.375 | 9.5  | 1.500  | 38.1 | 1000          |
| • 13RS040636 | 0.265 | 6.7 | 0.406 | 10.3 | 0.562  | 14.3 | 500           |
| • 13RS040637 | 0.265 | 6.7 | 0.406 | 10.3 | 0.625  | 15.9 | 500           |
| • 13RS040670 | 0.265 | 6.7 | 0.406 | 10.3 | 0.750  | 19.1 | 1000          |
| • 13RS040685 | 0.265 | 6.7 | 0.406 | 10.3 | 1.000  | 25.4 | 500           |
| • 13RS050016 | 0.265 | 6.7 | 0.500 | 12.7 | 0.156  | 4.0  | 500           |
| • 13RS050017 | 0.265 | 6.7 | 0.500 | 12.7 | 0.200  | 5.1  | 1000          |
| • 13RS087551 | 0.265 | 6.7 | 0.875 | 22.2 | 0.156  | 4.0  | 1000          |
| • 13RS087542 | 0.265 | 6.7 | 0.875 | 22.2 | 0.250  | 6.4  | 500           |
| • 13RS087540 | 0.265 | 6.7 | 0.875 | 22.2 | 0.375  | 9.5  | 500           |
| • 13RS087556 | 0.265 | 6.7 | 0.875 | 22.2 | 0.750  | 19.1 | 250           |
| • 13RS100016 | 0.265 | 6.7 | 1.000 | 25.4 | 0.188  | 4.8  | 500           |
| • 13RS075028 | 0.266 | 6.8 | 0.750 | 19.1 | 0.313  | 8.0  | 1000          |
| • 13RS075085 | 0.266 | 6.8 | 0.750 | 19.1 | 0.417  | 10.6 | 1000          |
| • 13RS125750 | 0.266 | 6.8 | 1.250 | 31.8 | 0.750  | 19.1 | 250           |
| • 13RS040660 | 0.267 | 6.8 | 0.406 | 10.3 | 0.500  | 12.7 | 500           |
| • 13RS040630 | 0.269 | 6.8 | 0.406 | 10.3 | 0.250  | 6.4  | 1000          |
| • 13RS040631 | 0.269 | 6.8 | 0.406 | 10.3 | 0.305  | 7.7  | 1000          |
| • 13RS040632 | 0.269 | 6.8 | 0.406 | 10.3 | 0.424  | 10.8 | 1000          |
| • 13RS051002 | 0.271 | 6.9 | 0.510 | 13.0 | 0.232  | 5.9  | 500           |
| • 13RS031261 | 0.272 | 6.9 | 0.329 | 8.4  | 0.312  | 7.9  | 1000          |
| • 13RS037526 | 0.273 | 6.9 | 0.375 | 9.5  | 0.547  | 13.9 | 1000          |
| • 13RS062581 | 0.275 | 7.0 | 0.625 | 15.9 | 0.250  | 6.4  | 500           |
| • 13RS034005 | 0.279 | 7.1 | 0.340 | 8.6  | 0.278  | 7.1  | 1000          |
| • 13RS034001 | 0.280 | 7.1 | 0.340 | 8.6  | 0.310  | 7.9  | 1000          |
| • 13RS034003 | 0.280 | 7.1 | 0.340 | 8.6  | 0.500  | 12.7 | 1000          |
| • 13RS040675 | 0.280 | 7.1 | 0.406 | 10.3 | 0.375  | 9.5  | 1000          |
| • 13RS056033 | 0.280 | 7.1 | 0.560 | 14.2 | 0.500  | 12.7 | 1000          |
| • 13RS062528 | 0.280 | 7.1 | 0.625 | 15.9 | 0.438  | 11.1 | 1000          |
| • 13RS065830 | 0.280 | 7.1 | 0.648 | 16.5 | 0.359  | 9.1  | 500           |
| • 13RS075010 | 0.280 | 7.1 | 0.750 | 19.1 | 0.440  | 11.2 | 500           |
| • 13RS087555 | 0.280 | 7.1 | 0.875 | 22.2 | 0.500  | 12.7 | 250           |
| • 13RS034008 | 0.281 | 7.1 | 0.343 | 8.7  | 0.312  | 7.9  | 1000          |
| • 13RS050085 | 0.281 | 7.1 | 0.500 | 12.7 | 0.375  | 9.5  | 500           |
| • 13RS050023 | 0.281 | 7.1 | 0.500 | 12.7 | 0.813  | 20.7 | 500           |
| • 13RS051063 | 0.281 | 7.1 | 0.500 | 12.7 | 0.875  | 22.2 | 500           |
| • 13RS056337 | 0.281 | 7.1 | 0.563 | 14.3 | 0.375  | 9.5  | 500           |
| • 13RS062550 | 0.281 | 7.1 | 0.613 | 15.6 | 0.500  | 12.7 | 500           |
| • 13RS062560 | 0.281 | 7.1 | 0.615 | 15.6 | 0.813  | 20.7 | 500           |
| • 13RS062532 | 0.281 | 7.1 | 0.625 | 15.9 | 0.562  | 14.3 | 500           |
| • 13RS112028 | 0.281 | 7.1 | 1.120 | 28.4 | 0.438  | 11.1 | 250           |
| • 13RS125074 | 0.281 | 7.1 | 1.250 | 31.8 | 0.310  | 7.9  | 250           |
| • 13RS038035 | 0.285 | 7.2 | 0.385 | 9.8  | 0.325  | 8.3  | 1000          |
| • 13RS040088 | 0.285 | 7.2 | 0.430 | 10.9 | 0.350  | 8.9  | 1000          |
| • 13RS0      |       |     |       |      |        |      |               |



# THROUGH SPACERS



## 13RS/13RSSR/13SP/13ME/MSW/SWI/SWS Series (continued) Round Nylon Through Spacers



Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Will not rust, corrode or deteriorate
- Acts as an electrical insulator by preventing metal-to-metal contact



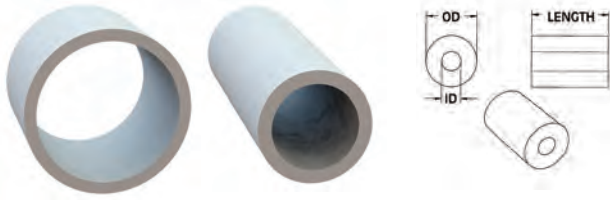
\* Note: 13ME item #'s are made of black Heat Stabilized Nylon 6/6

| Item No.     | ID    |     | OD    |      | Length |      | Bulk Pack Qty |
|--------------|-------|-----|-------|------|--------|------|---------------|
|              | in    | mm  | in    | mm   | in     | mm   |               |
| • 13RS124000 | 0.307 | 7.8 | 1.240 | 31.5 | 0.750  | 19.1 | 250           |
| • 13RS050048 | 0.310 | 7.9 | 0.500 | 12.7 | 0.463  | 11.8 | 500           |
| • 13RS075043 | 0.310 | 7.9 | 0.740 | 18.8 | 0.437  | 11.1 | 500           |
| • 13RS040671 | 0.311 | 7.9 | 0.406 | 10.3 | 0.591  | 15.0 | 500           |
| • 13RS062331 | 0.311 | 7.9 | 0.623 | 15.8 | 0.813  | 20.7 | 500           |
| • 13RS036034 | 0.312 | 7.9 | 0.363 | 9.2  | 0.312  | 7.9  | 1000          |
| • 13RS043726 | 0.312 | 7.9 | 0.437 | 11.1 | 0.350  | 8.9  | 1000          |
| • 13RS050028 | 0.312 | 7.9 | 0.500 | 12.7 | 0.156  | 4.0  | 500           |
| • 13RS050066 | 0.312 | 7.9 | 0.500 | 12.7 | 0.540  | 13.7 | 500           |
| • 13RS050046 | 0.312 | 7.9 | 0.500 | 12.7 | 1.313  | 33.4 | 500           |
| • 13RS057033 | 0.312 | 7.9 | 0.589 | 15.0 | 0.310  | 7.9  | 500           |
| • 13RS062541 | 0.312 | 7.9 | 0.625 | 15.9 | 0.500  | 12.7 | 1000          |
| • 13RS062516 | 0.312 | 7.9 | 0.625 | 15.9 | 0.750  | 19.1 | 500           |
| • 13RS075049 | 0.312 | 7.9 | 0.750 | 19.1 | 0.250  | 6.4  | 500           |
| • 13RS075036 | 0.312 | 7.9 | 0.750 | 19.1 | 0.938  | 23.8 | 500           |
| • 13RS081222 | 0.312 | 7.9 | 0.812 | 20.6 | 0.125  | 3.2  | 500           |
| • 13RS125250 | 0.312 | 7.9 | 1.240 | 31.5 | 0.250  | 6.4  | 250           |
| • 13RS061731 | 0.313 | 8.0 | 0.617 | 15.7 | 0.688  | 17.5 | 500           |
| • 13RS075027 | 0.313 | 8.0 | 0.750 | 19.1 | 0.563  | 14.3 | 500           |
| • 13RS098551 | 0.313 | 8.0 | 1.000 | 25.4 | 0.250  | 6.4  | 500           |
| • 13RS100035 | 0.313 | 8.0 | 1.000 | 25.4 | 0.500  | 12.7 | 500           |
| • 13RS037034 | 0.314 | 8.0 | 0.372 | 9.4  | 0.449  | 11.4 | 1000          |
| • 13RS046823 | 0.314 | 8.0 | 0.468 | 11.9 | 0.230  | 5.8  | 1000          |
| • 13RS059031 | 0.314 | 8.0 | 0.590 | 15.0 | 0.359  | 9.1  | 500           |
| • 13RS037033 | 0.315 | 8.0 | 0.375 | 9.5  | 0.162  | 4.1  | 1000          |
| • 13RSSR0089 | 0.315 | 8.0 | 0.500 | 12.7 | 0.125  | 3.2  | 500           |
| • 13RSSR0091 | 0.315 | 8.0 | 0.500 | 12.7 | 0.188  | 4.8  | 500           |
| • 13RSSR0093 | 0.315 | 8.0 | 0.500 | 12.7 | 0.250  | 6.4  | 500           |
| • 13RS050072 | 0.315 | 8.0 | 0.500 | 12.7 | 0.312  | 7.9  | 500           |
| • 13RSSR0095 | 0.315 | 8.0 | 0.500 | 12.7 | 0.312  | 7.9  | 500           |
| • 13RSSR0097 | 0.315 | 8.0 | 0.500 | 12.7 | 0.375  | 9.5  | 500           |
| • 13RSSR0099 | 0.315 | 8.0 | 0.500 | 12.7 | 0.437  | 11.1 | 500           |
| • 13RSSR0101 | 0.315 | 8.0 | 0.500 | 12.7 | 0.500  | 12.7 | 500           |
| • 13RSSR0103 | 0.315 | 8.0 | 0.500 | 12.7 | 0.563  | 14.3 | 500           |
| • 13RSSR0105 | 0.315 | 8.0 | 0.500 | 12.7 | 0.625  | 15.9 | 500           |
| • 13RSSR0107 | 0.315 | 8.0 | 0.500 | 12.7 | 0.688  | 17.5 | 500           |
| • 13RSSR0109 | 0.315 | 8.0 | 0.500 | 12.7 | 0.750  | 19.1 | 500           |
| • 13RSSR0111 | 0.315 | 8.0 | 0.500 | 12.7 | 0.813  | 20.7 | 500           |
| • 13RSSR0113 | 0.315 | 8.0 | 0.500 | 12.7 | 0.875  | 22.2 | 500           |
| • 13RSSR0115 | 0.315 | 8.0 | 0.500 | 12.7 | 0.938  | 23.8 | 500           |
| • 13RSSR0117 | 0.315 | 8.0 | 0.500 | 12.7 | 1.000  | 25.4 | 500           |
| • 13RSSR0119 | 0.315 | 8.0 | 0.500 | 12.7 | 1.062  | 27.0 | 500           |
| • 13RSSR0121 | 0.315 | 8.0 | 0.500 | 12.7 | 1.125  | 28.6 | 500           |
| • 13RSSR0123 | 0.315 | 8.0 | 0.500 | 12.7 | 1.188  | 30.2 | 500           |
| • 13RSSR0125 | 0.315 | 8.0 | 0.500 | 12.7 | 1.250  | 31.8 | 500           |
| • 13RSSR0127 | 0.315 | 8.0 | 0.500 | 12.7 | 1.312  | 33.3 | 500           |
| • 13RSSR0129 | 0.315 | 8.0 | 0.500 | 12.7 | 1.375  | 34.9 | 500           |
| • 13RSSR0131 | 0.315 | 8.0 | 0.500 | 12.7 | 1.437  | 36.5 | 500           |
| • 13RSSR0133 | 0.315 | 8.0 | 0.500 | 12.7 | 1.500  | 38.1 | 500           |
| • 13RSSR0135 | 0.315 | 8.0 | 0.500 | 12.7 | 1.750  | 44.5 | 500           |
| • 13RSSR0137 | 0.315 | 8.0 | 0.500 | 12.7 | 2.000  | 50.8 | 500           |
| • 13RSSR0141 | 0.315 | 8.0 | 0.625 | 15.9 | 0.250  | 6.4  | 500           |
| • 13RS062547 | 0.315 | 8.0 | 0.625 | 15.9 | 0.312  | 7.9  | 500           |
| • 13RSSR0145 | 0.315 | 8.0 | 0.625 | 15.9 | 0.312  | 7.9  | 500           |
| • 13RSSR0149 | 0.315 | 8.0 | 0.625 | 15.9 | 0.375  | 9.5  | 500           |
| • 13RSSR0153 | 0.315 | 8.0 | 0.625 | 15.9 | 0.437  | 11.1 | 500           |
| • 13RSSR0160 | 0.315 | 8.0 | 0.625 | 15.9 | 0.563  | 14.3 | 500           |
| • 13RSSR0164 | 0.315 | 8.0 | 0.625 | 15.9 | 0.625  | 15.9 | 500           |
| • 13RSSR0167 | 0.315 | 8.0 | 0.625 | 15.9 | 0.750  | 19.1 | 500           |
| • 13RSSR0171 | 0.315 | 8.0 | 0.625 | 15.9 | 0.875  | 22.2 | 500           |
| • 13RSSR0175 | 0.315 | 8.0 | 0.625 | 15.9 | 1.000  | 25.4 | 500           |
| • 13RSSR0179 | 0.315 | 8.0 | 0.625 | 15.9 | 1.125  | 28.6 | 500           |
| • 13RSSR0183 | 0.315 | 8.0 | 0.625 | 15.9 | 1.250  | 31.8 | 500           |
| • 13RSSR0187 | 0.315 | 8.0 | 0.625 | 15.9 | 1.375  | 34.9 | 500           |
| • 13RSSR0191 | 0.315 | 8.0 | 0.625 | 15.9 | 1.500  | 38.1 | 500           |
| • 13RSSR0195 | 0.315 | 8.0 | 0.625 | 15.9 | 1.750  | 44.5 | 500           |
| • 13RSSR0199 | 0.315 | 8.0 | 0.625 | 15.9 | 2.000  | 50.8 | 500           |
| • 13RSSR0322 | 0.315 | 8.0 | 0.625 | 15.9 | 2.250  | 57.2 | 250           |
| • 13RSSR0326 | 0.315 | 8.0 | 0.625 | 15.9 | 2.500  | 63.5 | 250           |
| • 13RSSR0330 | 0.315 | 8.0 | 0.625 | 15.9 | 2.750  | 69.9 | 250           |
| • 13RS075031 | 0.315 | 8.0 | 0.750 | 19.1 | 0.187  | 4.7  | 500           |
| • 13RS075024 | 0.315 | 8.0 | 0.750 | 19.1 | 0.313  | 8.0  | 1000          |

| Item No.     | ID    |     | OD    |      | Length |      | Bulk Pack Qty |
|--------------|-------|-----|-------|------|--------|------|---------------|
|              | in    | mm  | in    | mm   | in     | mm   |               |
| • 13RSSR0201 | 0.315 | 8.0 | 0.750 | 19.1 | 0.375  | 9.5  | 1000          |
| • 13RSSR0206 | 0.315 | 8.0 | 0.750 | 19.1 | 0.625  | 15.9 | 500           |
| • 13RS075008 | 0.315 | 8.0 | 0.750 | 19.1 | 0.875  | 22.2 | 500           |
| • 13RSSR0211 | 0.315 | 8.0 | 0.750 | 19.1 | 0.875  | 22.2 | 500           |
| • 13RSSR0214 | 0.315 | 8.0 | 0.750 | 19.1 | 1.000  | 25.4 | 250           |
| • 13RS075073 | 0.315 | 8.0 | 0.750 | 19.1 | 1.250  | 31.8 | 250           |
| • 13RSSR0217 | 0.315 | 8.0 | 0.750 | 19.1 | 1.250  | 31.8 | 250           |
| • 13RSSR0220 | 0.315 | 8.0 | 0.750 | 19.1 | 1.500  | 38.1 | 250           |
| • 13RSSR0223 | 0.315 | 8.0 | 0.750 | 19.1 | 1.750  | 44.5 | 250           |
| • 13RSSR0226 | 0.315 | 8.0 | 0.750 | 19.1 | 2.000  | 50.8 | 250           |
| • 13RSSR0336 | 0.315 | 8.0 | 0.750 | 19.1 | 2.250  | 57.2 | 250           |
| • 13RSSR0339 | 0.315 | 8.0 | 0.750 | 19.1 | 2.500  | 63.5 | 250           |
| • 13RSSR0342 | 0.315 | 8.0 | 0.750 | 19.1 | 2.750  | 69.9 | 250           |
| • 13RSSR0345 | 0.315 | 8.0 | 0.750 | 19.1 | 3.000  | 76.2 | 250           |
| • 13RS087532 | 0.315 | 8.0 | 0.875 | 22.2 | 0.438  | 11.1 | 500           |
| • 13RS087532 | 0.315 | 8.0 | 0.875 | 22.2 | 0.438  | 11.1 | 500           |
| • 13RS119600 | 0.315 | 8.0 | 1.190 | 30.2 | 0.600  | 15.2 | 250           |
| • 13RS036031 | 0.316 | 8.0 | 0.360 | 9.1  | 0.250  | 6.4  | 1000          |
| • 13RS050071 | 0.316 | 8.0 | 0.500 | 12.7 | 0.234  | 5.9  | 500           |
| • 13RS050070 | 0.316 | 8.0 | 0.500 | 12.7 | 0.500  | 12.7 | 500           |
| • 13RS087544 | 0.316 | 8.0 | 0.875 | 22.2 | 0.875  | 22.2 | 500           |
| • 13RS043730 | 0.318 | 8.1 | 0.437 | 11.1 | 0.150  | 3.8  | 1000          |
| • 13RS043728 | 0.318 | 8.1 | 0.437 | 11.1 | 0.281  | 7.1  | 1000          |
| • 13RS056718 | 0.318 | 8.1 | 0.567 | 14.4 | 0.547  | 13.9 | 1000          |
| • 13RS059032 | 0.319 | 8.1 | 0.590 | 15.0 | 0.655  | 16.6 | 1000          |
| • 13RS038038 | 0.320 | 8.1 | 0.380 | 9.7  | 0.382  | 9.7  | 1000          |
| • 13RS039459 | 0.320 | 8.1 | 0.395 | 10.0 | 0.591  | 15.0 | 500           |
| • 13RS041500 | 0.320 | 8.1 | 0.415 | 10.5 | 0.640  | 16.3 | 500           |
| • 13RS048018 | 0.320 | 8.1 | 0.455 | 11.6 | 0.512  | 13.0 | 500           |
| • 13RS048421 | 0.320 | 8.1 | 0.486 | 12.3 | 0.375  | 9.5  | 500           |
| • 13RS050010 | 0.320 | 8.1 | 0.500 | 12.7 | 0.270  | 6.9  | 500           |
| • 13RS050029 | 0.320 | 8.1 | 0.500 | 12.7 | 0.320  | 8.1  | 500           |
| • 13RS051062 | 0.320 | 8.1 | 0.510 | 13.0 | 0.875  | 22.2 | 1000          |
| • 13RS057032 | 0.320 | 8.1 | 0.570 | 14.5 | 0.547  | 13.9 | 500           |
| • 13RS062513 | 0.320 | 8.1 | 0.625 | 15.9 | 0.375  | 9.5  | 500           |
| • 13RS075009 | 0.320 | 8.1 | 0.750 | 19.1 | 0.500  | 12.7 | 500           |
| • 13RS075062 | 0.320 | 8.1 | 0.750 | 19.1 | 0.625  | 15.9 | 500           |
| • 13RS075075 | 0.320 | 8.1 | 0.750 | 19.1 | 0.750  | 19.1 | 250           |
| • 13RS075076 | 0.320 | 8.1 | 0.750 | 19.1 | 1.000  | 25.4 | 250           |
| • MSW1220A   | 0.323 | 8.2 | 0.472 | 12.0 | 0.394  | 10.0 | 1000          |
| • 13RS048017 | 0.323 | 8.2 | 0.472 | 12.0 | 0.492  | 12.5 | 1000          |
| • MSW1230A   | 0.323 | 8.2 | 0.472 | 12.0 | 0.984  | 25.0 | 500           |
| • 13RS062515 | 0.323 | 8.2 | 0.620 | 15.7 | 0.156  | 4.0  | 1000          |
| • 13RS062013 | 0.323 | 8.2 | 0.620 | 15.7 | 0.281  | 7.1  | 500           |
| • MSW1240A   | 0.323 | 8.2 | 0.709 | 18.0 | 0.394  | 10.0 | 1000          |
| • MSW1250A   | 0.323 | 8.2 | 0.709 | 18.0 | 0.787  | 20.0 | 1000          |
| • 13RS075040 | 0.323 | 8.2 | 0.750 | 19.1 | 0.250  | 6.4  | 500           |
| • 13RS081226 | 0.323 | 8.2 | 0.805 | 20.4 | 0.500  | 12.7 | 500           |
| • 13RS043727 | 0.325 | 8.3 | 0.438 | 11.1 | 0.422  | 10.7 | 1000          |
| • 13RS045040 | 0.325 | 8.3 | 0.450 | 11.4 | 0.422  | 10.7 | 500           |
| • 13RS050012 | 0.325 | 8.3 | 0.500 | 12.7 | 0.672  | 17.1 | 1000          |
| • 13RS053545 | 0.325 | 8.3 | 0.540 | 13.7 | 0.475  | 12.1 | 500           |
| • 13RS060552 | 0.325 | 8.3 | 0.600 | 15.2 | 0.421  | 10.7 | 500           |
| • 13RS061019 | 0.325 | 8.3 | 0.615 | 15.6 | 0.813  | 20.7 | 500           |
| • 13RS087541 | 0.325 | 8.3 | 0.875 | 22.2 | 0.250  | 6.4  | 1000          |
| • 13RS064057 | 0.327 | 8.3 | 0.640 | 16.3 | 0.560  | 14.2 | 500           |
| • 13RS075087 | 0.327 | 8.3 | 0.750 | 19.1 | 0.188  | 4.8  | 500           |
| • 13ME084*   | 0.327 | 8.3 | 0.472 | 12.0 | 0.118  | 3.0  | 500           |
| • 13ME085*   | 0.327 | 8.3 | 0.472 | 12.0 | 0.197  | 5.0  | 1000          |
| • 13ME086*   | 0.327 | 8.3 | 0.472 | 12.0 | 0.295  | 7.5  | 500           |
| • 13ME087*   | 0.327 | 8.3 | 0.472 | 12.0 | 0.394  | 10.0 | 500           |
| • 13ME088*   | 0.327 | 8.3 | 0.472 | 12.0 | 0.591  | 15.0 | 1000          |
| • 13ME089*   | 0.327 | 8.3 | 0.472 | 12.0 | 0.787  | 20.0 | 1000          |
| • 13ME091*   | 0.327 | 8.3 | 0.472 | 12.0 | 1.181  | 30.0 | 500           |
| • 13ME092    |       |     |       |      |        |      |               |



## THROUGH SPACERS

13RS/13RSSR/13SP/13ME/MSW/SWI/SWS Series (continued)  
Round Nylon Through Spacers

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

## Features:

- Will not rust, corrode or deteriorate
- Acts as an electrical insulator by preventing metal-to-metal contact

\* Note: 13ME item #'s are made of black Heat Stabilized Nylon 6/6

| Item No.     | ID    |     | OD    |      | Length |      | Bulk Pack Qty |
|--------------|-------|-----|-------|------|--------|------|---------------|
|              | in    | mm  | in    | mm   | in     | mm   |               |
| • 13ME099*   | 0.327 | 8.3 | 0.709 | 18.0 | 1.181  | 30.0 | 250           |
| • 13RS038034 | 0.328 | 8.3 | 0.384 | 9.8  | 0.250  | 6.4  | 500           |
| • 13RS038036 | 0.328 | 8.3 | 0.384 | 9.8  | 0.312  | 7.9  | 1000          |
| • 13RS050050 | 0.328 | 8.3 | 0.500 | 12.7 | 1.000  | 25.4 | 500           |
| • 13RS061020 | 0.328 | 8.3 | 0.615 | 15.6 | 0.438  | 11.1 | 1000          |
| • 13RS062527 | 0.328 | 8.3 | 0.625 | 15.9 | 0.250  | 6.4  | 500           |
| • 13RS100033 | 0.328 | 8.3 | 1.000 | 25.4 | 0.500  | 12.7 | 250           |
| • 13RS098552 | 0.328 | 8.3 | 1.000 | 25.4 | 1.000  | 25.4 | 500           |
| • 13RS056656 | 0.330 | 8.4 | 0.565 | 14.4 | 0.560  | 14.2 | 500           |
| • 13RS087537 | 0.330 | 8.4 | 0.875 | 22.2 | 0.375  | 9.5  | 500           |
| • MSW1260A   | 0.331 | 8.4 | 0.669 | 17.0 | 0.079  | 2.0  | 1000          |
| • 13RS070082 | 0.333 | 8.5 | 0.698 | 17.7 | 0.596  | 15.1 | 500           |
| • 13RS050061 | 0.335 | 8.5 | 0.500 | 12.7 | 0.209  | 5.3  | 500           |
| • 13RS051003 | 0.335 | 8.5 | 0.516 | 13.1 | 0.453  | 11.5 | 500           |
| • 13RS070086 | 0.335 | 8.5 | 0.700 | 17.8 | 0.866  | 22.0 | 500           |
| • SWI1840A   | 0.335 | 8.5 | 0.750 | 19.1 | 0.250  | 6.4  | 7400          |
| • 13RS056034 | 0.340 | 8.6 | 0.563 | 14.3 | 0.310  | 7.9  | 500           |
| • 13RS056029 | 0.340 | 8.6 | 0.563 | 14.3 | 0.590  | 15.0 | 500           |
| • 13RS062594 | 0.340 | 8.6 | 0.625 | 15.9 | 0.422  | 10.7 | 500           |
| • 13RS062537 | 0.342 | 8.7 | 0.625 | 15.9 | 0.375  | 9.5  | 500           |
| • 13RS048420 | 0.343 | 8.7 | 0.484 | 12.3 | 0.188  | 4.8  | 1000          |
| • 13RS050040 | 0.344 | 8.7 | 0.500 | 12.7 | 0.813  | 20.7 | 500           |
| • 13RS075078 | 0.344 | 8.7 | 0.750 | 19.1 | 0.250  | 6.4  | 500           |
| • 13RS075050 | 0.344 | 8.7 | 0.750 | 19.1 | 0.500  | 12.7 | 500           |
| • 13RS100013 | 0.344 | 8.7 | 0.990 | 25.1 | 0.313  | 8.0  | 500           |
| • 13RS100015 | 0.344 | 8.7 | 1.000 | 25.4 | 0.435  | 11.0 | 500           |
| • 13RS031252 | 0.345 | 8.8 | 0.480 | 12.2 | 0.188  | 4.8  | 1000          |
| • 13RS062012 | 0.350 | 8.9 | 0.620 | 15.7 | 0.188  | 4.8  | 500           |
| • 13RS062591 | 0.350 | 8.9 | 0.630 | 16.0 | 0.200  | 5.1  | 500           |
| • 13RS066851 | 0.350 | 8.9 | 0.670 | 17.0 | 0.200  | 5.1  | 500           |
| • 13RS075060 | 0.350 | 8.9 | 0.750 | 19.1 | 0.375  | 9.5  | 500           |
| • 13RS098550 | 0.352 | 8.9 | 0.980 | 24.9 | 0.500  | 12.7 | 250           |
| • 13RS075055 | 0.360 | 9.1 | 0.735 | 18.7 | 0.585  | 14.9 | 500           |
| • 13RS100058 | 0.366 | 9.3 | 0.984 | 25.0 | 0.375  | 9.5  | 500           |
| • 13RS050047 | 0.368 | 9.3 | 0.500 | 12.7 | 0.470  | 11.9 | 500           |
| • 13RS075029 | 0.370 | 9.4 | 0.750 | 19.1 | 0.344  | 8.7  | 500           |
| • 13RS087535 | 0.370 | 9.4 | 0.870 | 22.1 | 0.500  | 12.7 | 500           |
| • 13RS062542 | 0.373 | 9.5 | 0.630 | 16.0 | 0.462  | 11.7 | 500           |
| • 13RS050041 | 0.375 | 9.5 | 0.500 | 12.7 | 0.225  | 5.7  | 500           |
| • 13RS050089 | 0.375 | 9.5 | 0.500 | 12.7 | 0.380  | 9.7  | 500           |
| • 13RS050082 | 0.375 | 9.5 | 0.500 | 12.7 | 0.438  | 11.1 | 500           |
| • 13RS050090 | 0.375 | 9.5 | 0.500 | 12.7 | 0.625  | 15.9 | 1000          |
| • 13RS050091 | 0.375 | 9.5 | 0.500 | 12.7 | 0.635  | 16.1 | 500           |
| • 13RS050094 | 0.375 | 9.5 | 0.500 | 12.7 | 0.688  | 17.5 | 500           |
| • 13RS050098 | 0.375 | 9.5 | 0.500 | 12.7 | 0.938  | 23.8 | 500           |
| • 13RS056031 | 0.375 | 9.5 | 0.562 | 14.3 | 0.500  | 12.7 | 1000          |
| • 13RS062582 | 0.375 | 9.5 | 0.625 | 15.9 | 0.082  | 2.1  | 500           |
| • 13RS062540 | 0.375 | 9.5 | 0.625 | 15.9 | 0.375  | 9.5  | 1000          |
| • 13RS062546 | 0.375 | 9.5 | 0.625 | 15.9 | 0.462  | 11.7 | 1000          |
| • SWI1860A   | 0.375 | 9.5 | 0.750 | 19.1 | 0.065  | 1.7  | 10000         |
| • 13RS075038 | 0.375 | 9.5 | 0.750 | 19.1 | 0.343  | 8.7  | 500           |
| • 13RS075081 | 0.375 | 9.5 | 0.750 | 19.1 | 0.375  | 9.5  | 1000          |
| • 13RS075066 | 0.375 | 9.5 | 0.750 | 19.1 | 0.625  | 15.9 | 500           |
| • 13RS087539 | 0.375 | 9.5 | 0.875 | 22.2 | 0.312  | 7.9  | 500           |
| • SWI1880A   | 0.375 | 9.5 | 0.875 | 22.2 | 0.375  | 9.5  | 3500          |
| • 13RS100555 | 0.375 | 9.5 | 0.986 | 25.0 | 0.250  | 6.4  | 500           |
| • 13RS100024 | 0.375 | 9.5 | 1.000 | 25.4 | 0.250  | 6.4  | 500           |
| • 13RS100054 | 0.375 | 9.5 | 1.000 | 25.4 | 0.500  | 12.7 | 250           |
| • 13RS100022 | 0.375 | 9.5 | 1.000 | 25.4 | 0.800  | 20.3 | 500           |
| • SWI1910A   | 0.376 | 9.6 | 0.557 | 14.1 | 0.503  | 12.8 | 2000          |
| • 13RS063050 | 0.378 | 9.6 | 0.630 | 16.0 | 0.500  | 12.7 | 1000          |
| • 13RS056030 | 0.379 | 9.6 | 0.560 | 14.2 | 0.375  | 9.5  | 500           |
| • 13RSSR0090 | 0.380 | 9.7 | 0.500 | 12.7 | 0.125  | 3.2  | 500           |
| • 13RSSR0092 | 0.380 | 9.7 | 0.500 | 12.7 | 0.188  | 4.8  | 500           |
| • 13RSSR0094 | 0.380 | 9.7 | 0.500 | 12.7 | 0.250  | 6.4  | 500           |
| • 13RSSR0096 | 0.380 | 9.7 | 0.500 | 12.7 | 0.312  | 7.9  | 500           |
| • 13RSSR0098 | 0.380 | 9.7 | 0.500 | 12.7 | 0.375  | 9.5  | 500           |
| • 13RS050080 | 0.380 | 9.7 | 0.500 | 12.7 | 0.422  | 10.7 | 500           |

| Item No.     | ID    |     | OD    |      | Length |      | Bulk Pack Qty |
|--------------|-------|-----|-------|------|--------|------|---------------|
|              | in    | mm  | in    | mm   | in     | mm   |               |
| • 13RSSR0100 | 0.380 | 9.7 | 0.500 | 12.7 | 0.437  | 11.1 | 500           |
| • 13RSSR0102 | 0.380 | 9.7 | 0.500 | 12.7 | 0.500  | 12.7 | 500           |
| • 13RSSR0104 | 0.380 | 9.7 | 0.500 | 12.7 | 0.563  | 14.3 | 500           |
| • 13RSSR0106 | 0.380 | 9.7 | 0.500 | 12.7 | 0.625  | 15.9 | 500           |
| • 13RSSR0108 | 0.380 | 9.7 | 0.500 | 12.7 | 0.688  | 17.5 | 500           |
| • 13RSSR0110 | 0.380 | 9.7 | 0.500 | 12.7 | 0.750  | 19.1 | 500           |
| • 13RSSR0112 | 0.380 | 9.7 | 0.500 | 12.7 | 0.813  | 20.7 | 500           |
| • 13RSSR0114 | 0.380 | 9.7 | 0.500 | 12.7 | 0.875  | 22.2 | 500           |
| • 13RSSR0116 | 0.380 | 9.7 | 0.500 | 12.7 | 0.938  | 23.8 | 500           |
| • 13RSSR0118 | 0.380 | 9.7 | 0.500 | 12.7 | 1.000  | 25.4 | 500           |
| • 13RSSR0120 | 0.380 | 9.7 | 0.500 | 12.7 | 1.062  | 27.0 | 500           |
| • 13RSSR0122 | 0.380 | 9.7 | 0.500 | 12.7 | 1.125  | 28.6 | 500           |
| • 13RSSR0124 | 0.380 | 9.7 | 0.500 | 12.7 | 1.188  | 30.2 | 500           |
| • 13RSSR0126 | 0.380 | 9.7 | 0.500 | 12.7 | 1.250  | 31.8 | 500           |
| • 13RSSR0128 | 0.380 | 9.7 | 0.500 | 12.7 | 1.312  | 33.3 | 500           |
| • 13RSSR0130 | 0.380 | 9.7 | 0.500 | 12.7 | 1.375  | 34.9 | 500           |
| • 13RSSR0132 | 0.380 | 9.7 | 0.500 | 12.7 | 1.437  | 36.5 | 500           |
| • 13RSSR0134 | 0.380 | 9.7 | 0.500 | 12.7 | 1.500  | 38.1 | 500           |
| • 13RSSR0136 | 0.380 | 9.7 | 0.500 | 12.7 | 1.750  | 44.5 | 500           |
| • 13RSSR0138 | 0.380 | 9.7 | 0.500 | 12.7 | 2.000  | 50.8 | 500           |
| • SWI1930A   | 0.380 | 9.7 | 0.625 | 15.9 | 0.062  | 1.6  | 5000          |
| • 13RSSR0142 | 0.380 | 9.7 | 0.625 | 15.9 | 0.250  | 6.4  | 500           |
| • 13RSSR0146 | 0.380 | 9.7 | 0.625 | 15.9 | 0.312  | 7.9  | 500           |
| • 13RSSR0150 | 0.380 | 9.7 | 0.625 | 15.9 | 0.375  | 9.5  | 500           |
| • 13RSSR0154 | 0.380 | 9.7 | 0.625 | 15.9 | 0.437  | 11.1 | 500           |
| • 13RSSR0157 | 0.380 | 9.7 | 0.625 | 15.9 | 0.500  | 12.7 | 500           |
| • 13RSSR0161 | 0.380 | 9.7 | 0.625 | 15.9 | 0.563  | 14.3 | 500           |
| • 13RS062526 | 0.380 | 9.7 | 0.625 | 15.9 | 0.750  | 19.1 | 500           |
| • 13RSSR0168 | 0.380 | 9.7 | 0.625 | 15.9 | 0.750  | 19.1 | 500           |
| • 13RSSR0172 | 0.380 | 9.7 | 0.625 | 15.9 | 0.875  | 22.2 | 500           |
| • 13RSSR0176 | 0.380 | 9.7 | 0.625 | 15.9 | 1.000  | 25.4 | 500           |
| • 13RSSR0180 | 0.380 | 9.7 | 0.625 | 15.9 | 1.125  | 28.6 | 500           |
| • 13RSSR0184 | 0.380 | 9.7 | 0.625 | 15.9 | 1.250  | 31.8 | 500           |
| • 13RSSR0188 | 0.380 | 9.7 | 0.625 | 15.9 | 1.375  | 34.9 | 500           |
| • 13RSSR0192 | 0.380 | 9.7 | 0.625 | 15.9 | 1.500  | 38.1 | 500           |
| • 13RSSR0196 | 0.380 | 9.7 | 0.625 | 15.9 | 1.750  | 44.5 | 500           |
| • 13RSSR0200 | 0.380 | 9.7 | 0.625 | 15.9 | 2.000  | 50.8 | 500           |
| • 13RS062584 | 0.380 | 9.7 | 0.625 | 15.9 | 2.750  | 69.9 | 500           |
| • SWI1960A   | 0.380 | 9.7 | 0.750 | 19.1 | 0.187  | 4.7  | 1000          |
| • 13RSSR0202 | 0.380 | 9.7 | 0.750 | 19.1 | 0.375  | 9.5  | 1000          |
| • 13RS075047 | 0.380 | 9.7 | 0.750 | 19.1 | 0.472  | 12.0 | 1000          |
| • 13RSSR0204 | 0.380 | 9.7 | 0.750 | 19.1 | 0.500  | 12.7 | 500           |
| • 13RSSR0207 | 0.380 | 9.7 | 0.750 | 19.1 | 0.625  | 15.9 | 500           |
| • 13RSSR0209 | 0.380 | 9.7 | 0.750 | 19.1 | 0.750  | 19.1 | 500           |
| • 13RS075054 | 0.380 | 9.7 | 0.750 | 19.1 | 0.850  | 21.6 | 500           |
| • 13RSSR0212 | 0.380 | 9.7 | 0.750 | 19.1 | 0.875  | 22.2 | 500           |
| • 13RSSR0215 | 0.380 | 9.7 | 0.750 | 19.1 | 1.000  | 25.4 | 250           |
| • 13RSSR0218 | 0.380 | 9.7 | 0.750 | 19.1 | 1.250  | 31.8 | 250           |
| • 13RSSR0221 | 0.380 | 9.7 | 0.750 | 19.1 | 1.500  | 38.1 | 250           |
| • 13RSSR0224 | 0.380 | 9.7 | 0.750 | 19.1 | 1.750  | 44.5 | 250           |
| • 13RSSR0227 | 0.380 | 9.7 | 0.750 | 19.1 | 2.000  | 50.8 | 250           |
| • 13RSSR0337 | 0.380 | 9.7 | 0.750 | 19.1 | 2.250  | 57.2 | 250           |
| • 13RSSR0340 | 0.380 | 9.7 | 0.750 | 19.1 | 2.500  | 63.5 | 250           |
| • 13RSSR0343 | 0.380 | 9.7 | 0.750 | 19.1 | 2.750  | 69.9 | 250           |
| • 13RSSR0346 | 0.380 | 9.7 | 0.750 | 19.1 | 3.000  | 76.2 | 250           |
| • 13RS100007 | 0.380 | 9.7 | 1.000 | 25.4 | 0.470  | 11.9 | 500           |
| • 13RS125387 | 0.380 | 9.7 | 1.250 | 31.8 | 0.380  | 9.7  | 250           |
| • 13RS046500 | 0.382 | 9.7 | 0.465 | 11.8 | 0.282  | 7.2  | 1000          |
| • 13RS050031 | 0.382 | 9.7 | 0.500 | 12.7 | 0.312  | 7.9  | 500           |
| • 13RS050021 | 0.382 | 9.7 | 0.500 | 12.7 | 0.625  | 15.9 | 500           |
| • 13RS052001 | 0.382 | 9.7 | 0.518 | 13.2 | 0.280  | 7.1  | 1000          |
| • 13RS050055 | 0.383 | 9.7 | 0.500 | 12.7 | 0.500  | 12.7 | 500           |
| • 13RS062534 | 0.383 | 9.7 | 0.620 | 15.7 | 0.562  | 14.3 | 1000          |
| • 13RS050059 | 0.384 | 9.8 | 0.500 | 12.7 | 0.537  | 13.6 | 500           |
| • 13RS050057 | 0.384 | 9.8 | 0.500 | 12.7 | 0.665  | 16.9 | 500           |
| • 13RS125384 | 0.384 | 9.8 | 1.250 | 31.8 | 0.375  | 9.5  | 250           |
| • 13RS050095 | 0.385 | 9.8 | 0.500 | 12.7 | 1.000  | 25.4 | 1000          |
| • 13RS050062 | 0.385 | 9.8 | 0.505 | 12.8 | 0.156  | 4.0  | 1000          |

(Continued on next page &gt;)

## THROUGH SPACERS

13RS/13RSSR/13SP/13ME/MSW/SWI/SWS Series (continued)  
Round Nylon Through Spacers

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

## Features:

- Will not rust, corrode or deteriorate
- Acts as an electrical insulator by preventing metal-to-metal contact

\* Note: 13ME item #'s are made of black Heat Stabilized Nylon 6/6

| Item No.     | ID    |      | OD    |      | Length |      | Bulk Pack Qty |
|--------------|-------|------|-------|------|--------|------|---------------|
|              | in    | mm   | in    | mm   | in     | mm   |               |
| • 13RS061018 | 0.385 | 9.8  | 0.615 | 15.6 | 0.188  | 4.8  | 500           |
| • 13RS038518 | 0.385 | 9.8  | 0.625 | 15.9 | 0.187  | 4.7  | 500           |
| • 13RS062523 | 0.385 | 9.8  | 0.635 | 16.1 | 0.230  | 5.8  | 500           |
| • 13RS075045 | 0.385 | 9.8  | 0.745 | 18.9 | 0.313  | 8.0  | 1000          |
| • 13RS075032 | 0.385 | 9.8  | 0.750 | 19.1 | 0.203  | 5.2  | 500           |
| • 13RS087533 | 0.385 | 9.8  | 0.875 | 22.2 | 0.275  | 7.0  | 1000          |
| • 13RS100036 | 0.385 | 9.8  | 1.000 | 25.4 | 0.340  | 8.6  | 500           |
| • 13RS100037 | 0.385 | 9.8  | 1.000 | 25.4 | 0.375  | 9.5  | 500           |
| • 13RS131256 | 0.385 | 9.8  | 1.313 | 33.4 | 0.100  | 2.5  | 250           |
| • 13RS062561 | 0.386 | 9.8  | 0.625 | 15.9 | 0.625  | 15.9 | 500           |
| • 13RS062573 | 0.386 | 9.8  | 0.625 | 15.9 | 0.738  | 18.7 | 500           |
| • 13RS075083 | 0.386 | 9.8  | 0.754 | 19.2 | 0.376  | 9.6  | 1000          |
| • 13RS075022 | 0.387 | 9.8  | 0.745 | 18.9 | 0.187  | 4.7  | 500           |
| • 13RS050056 | 0.390 | 9.9  | 0.500 | 12.7 | 0.500  | 12.7 | 500           |
| • 13RS051001 | 0.390 | 9.9  | 0.510 | 13.0 | 0.250  | 6.4  | 500           |
| • 13RS056035 | 0.390 | 9.9  | 0.560 | 14.2 | 0.500  | 12.7 | 1000          |
| • 13RS062525 | 0.390 | 9.9  | 0.625 | 15.9 | 0.250  | 6.4  | 500           |
| • 13RS062529 | 0.390 | 9.9  | 0.625 | 15.9 | 0.437  | 11.1 | 500           |
| • 13RS069039 | 0.390 | 9.9  | 0.680 | 17.3 | 0.625  | 15.9 | 500           |
| • 13RS075041 | 0.390 | 9.9  | 0.740 | 18.8 | 1.000  | 25.4 | 250           |
| • 13RS075084 | 0.390 | 9.9  | 0.750 | 19.1 | 0.375  | 9.5  | 500           |
| • 13RS075089 | 0.390 | 9.9  | 0.750 | 19.1 | 1.500  | 38.1 | 250           |
| • 13RS097518 | 0.390 | 9.9  | 0.975 | 24.8 | 1.180  | 30.0 | 500           |
| • 13RS125751 | 0.390 | 9.9  | 1.250 | 31.8 | 0.500  | 12.7 | 250           |
| • 13RS071821 | 0.392 | 10.0 | 0.720 | 18.3 | 0.230  | 5.8  | 500           |
| • 13RS048013 | 0.394 | 10.0 | 0.472 | 12.0 | 0.787  | 20.0 | 500           |
| • 13RS075990 | 0.394 | 10.0 | 0.760 | 19.3 | 0.910  | 23.1 | 500           |
| • 13RS077533 | 0.394 | 10.0 | 0.787 | 20.0 | 0.252  | 6.4  | 500           |
| • 13RS050065 | 0.395 | 10.0 | 0.500 | 12.7 | 0.314  | 8.0  | 500           |
| • 13RS075021 | 0.397 | 10.1 | 0.744 | 18.9 | 0.371  | 9.4  | 1000          |
| • 13RS150051 | 0.397 | 10.1 | 1.500 | 38.1 | 0.500  | 12.7 | 250           |
| • 13RS046061 | 0.400 | 10.2 | 0.460 | 11.7 | 0.440  | 11.2 | 1000          |
| • 13RS075077 | 0.400 | 10.2 | 0.755 | 19.2 | 0.290  | 7.4  | 1000          |
| • 13RS125501 | 0.400 | 10.2 | 1.250 | 31.8 | 0.625  | 15.9 | 250           |
| • 13RS075086 | 0.401 | 10.2 | 0.760 | 19.3 | 0.600  | 15.2 | 500           |
| • MSW1270A   | 0.402 | 10.2 | 0.669 | 17.0 | 0.079  | 2.0  | 1000          |
| • 13RS081223 | 0.403 | 10.2 | 0.812 | 20.6 | 0.250  | 6.4  | 1000          |
| • 13RS081224 | 0.403 | 10.2 | 0.812 | 20.6 | 0.710  | 18.0 | 500           |
| • 13RS050013 | 0.406 | 10.3 | 0.500 | 12.7 | 0.449  | 11.4 | 500           |
| • MSW1280A   | 0.406 | 10.3 | 0.591 | 15.0 | 0.394  | 10.0 | 1000          |
| • MSW1290A   | 0.406 | 10.3 | 0.591 | 15.0 | 0.787  | 20.0 | 1000          |
| • 13RS075030 | 0.406 | 10.3 | 0.750 | 19.1 | 0.562  | 14.3 | 500           |
| • 13RS100043 | 0.406 | 10.3 | 1.000 | 25.4 | 0.438  | 11.1 | 500           |
| • 13ME100*   | 0.409 | 10.4 | 0.591 | 15.0 | 0.118  | 3.0  | 1000          |
| • 13ME101*   | 0.409 | 10.4 | 0.591 | 15.0 | 0.197  | 5.0  | 1000          |
| • 13ME102*   | 0.409 | 10.4 | 0.591 | 15.0 | 0.295  | 7.5  | 1000          |
| • 13ME103*   | 0.409 | 10.4 | 0.591 | 15.0 | 0.394  | 10.0 | 500           |
| • 13ME104*   | 0.409 | 10.4 | 0.591 | 15.0 | 0.591  | 15.0 | 1000          |
| • 13ME105*   | 0.409 | 10.4 | 0.591 | 15.0 | 0.787  | 20.0 | 500           |
| • 13ME108*   | 0.409 | 10.4 | 0.866 | 22.0 | 0.197  | 5.0  | 1000          |
| • 13ME109*   | 0.409 | 10.4 | 0.866 | 22.0 | 0.394  | 10.0 | 500           |
| • 13ME110*   | 0.409 | 10.4 | 0.866 | 22.0 | 0.591  | 15.0 | 1000          |
| • 13ME111*   | 0.409 | 10.4 | 0.866 | 22.0 | 0.787  | 20.0 | 250           |
| • 13RS062524 | 0.412 | 10.5 | 0.625 | 15.9 | 0.155  | 3.9  | 500           |
| • MSW1300A   | 0.413 | 10.5 | 0.827 | 21.0 | 0.098  | 2.5  | 1000          |
| • 13RS087557 | 0.422 | 10.7 | 0.875 | 22.2 | 0.375  | 9.5  | 500           |
| • 13RS062570 | 0.425 | 10.8 | 0.635 | 16.1 | 0.875  | 22.2 | 500           |
| • 13RS075056 | 0.433 | 11.0 | 0.741 | 18.8 | 0.350  | 8.9  | 500           |
| • 13RS062583 | 0.434 | 11.0 | 0.634 | 16.1 | 0.380  | 9.7  | 500           |
| • 13RS077531 | 0.434 | 11.0 | 0.770 | 19.6 | 0.377  | 9.6  | 500           |
| • 13RS062522 | 0.435 | 11.0 | 0.625 | 15.9 | 0.250  | 6.4  | 500           |
| • 13RS056740 | 0.437 | 11.1 | 0.567 | 14.4 | 0.406  | 10.3 | 500           |
| • 13RS075053 | 0.437 | 11.1 | 0.750 | 19.1 | 0.500  | 12.7 | 500           |
| • 13RS050075 | 0.438 | 11.1 | 0.500 | 12.7 | 0.750  | 19.1 | 500           |

| Item No.     | ID    |      | OD    |      | Length |      | Bulk Pack Qty |
|--------------|-------|------|-------|------|--------|------|---------------|
|              | in    | mm   | in    | mm   | in     | mm   |               |
| • 13RS089037 | 0.438 | 11.1 | 0.885 | 22.5 | 0.370  | 9.4  | 500           |
| • 13RS050092 | 0.440 | 11.2 | 0.500 | 12.7 | 0.430  | 10.9 | 500           |
| • 13RS125076 | 0.443 | 11.3 | 1.250 | 31.8 | 0.250  | 6.4  | 250           |
| • 13RS050097 | 0.445 | 11.3 | 0.515 | 13.1 | 0.380  | 9.7  | 500           |
| • 13RS062565 | 0.450 | 11.4 | 0.625 | 15.9 | 0.625  | 15.9 | 1000          |
| • 13RS062571 | 0.450 | 11.4 | 0.625 | 15.9 | 0.875  | 22.2 | 500           |
| • 13RS100008 | 0.450 | 11.4 | 1.000 | 25.4 | 0.219  | 5.6  | 500           |
| • 13RS056032 | 0.453 | 11.5 | 0.563 | 14.3 | 0.281  | 7.1  | 500           |
| • 13RS075046 | 0.460 | 11.7 | 0.750 | 19.1 | 0.250  | 6.4  | 500           |
| • 13RS100052 | 0.469 | 11.9 | 1.000 | 25.4 | 0.563  | 14.3 | 500           |
| • 13RS075023 | 0.480 | 12.2 | 0.752 | 19.1 | 0.226  | 5.7  | 1000          |
| • 13RS062538 | 0.484 | 12.3 | 0.627 | 15.9 | 0.467  | 11.9 | 500           |
| • 13RS075039 | 0.490 | 12.4 | 0.750 | 19.1 | 0.375  | 9.5  | 1000          |
| • 13RS075017 | 0.490 | 12.4 | 0.750 | 19.1 | 0.800  | 20.3 | 500           |
| • 13RS087543 | 0.494 | 12.5 | 0.865 | 22.0 | 0.373  | 9.5  | 500           |
| • 13RS062572 | 0.500 | 12.7 | 0.618 | 15.7 | 0.484  | 12.3 | 1000          |
| • 13RS062535 | 0.500 | 12.7 | 0.625 | 15.9 | 0.313  | 8.0  | 500           |
| • 13RS062536 | 0.500 | 12.7 | 0.625 | 15.9 | 0.375  | 9.5  | 500           |
| • 13RS062575 | 0.500 | 12.7 | 0.625 | 15.9 | 1.000  | 25.4 | 500           |
| • 13RS062533 | 0.500 | 12.7 | 0.625 | 15.9 | 1.625  | 41.3 | 500           |
| • 13RS062520 | 0.500 | 12.7 | 0.630 | 16.0 | 1.250  | 31.8 | 500           |
| • SWI2020A   | 0.500 | 12.7 | 0.750 | 19.1 | 0.375  | 9.5  | 1000          |
| • 13RS100060 | 0.500 | 12.7 | 0.987 | 25.1 | 0.375  | 9.5  | 500           |
| • SWI2040A   | 0.500 | 12.7 | 1.000 | 25.4 | 0.100  | 2.5  | 8000          |
| • 13RS100034 | 0.500 | 12.7 | 1.000 | 25.4 | 0.750  | 19.1 | 500           |
| • 13RSSR0255 | 0.500 | 12.7 | 1.000 | 25.4 | 2.250  | 57.2 | 250           |
| • SWI2050A   | 0.500 | 12.7 | 1.250 | 31.8 | 0.063  | 1.6  | 1000          |
| • 13RS075991 | 0.501 | 12.7 | 0.780 | 19.8 | 0.205  | 5.2  | 500           |
| • 13RS062539 | 0.503 | 12.8 | 0.625 | 15.9 | 0.207  | 5.3  | 1000          |
| • 13RS062062 | 0.504 | 12.8 | 0.620 | 15.7 | 0.625  | 15.9 | 1000          |
| • 13RS062040 | 0.504 | 12.8 | 0.620 | 15.7 | 0.813  | 20.7 | 500           |
| • MSW1320A   | 0.504 | 12.8 | 0.709 | 18.0 | 0.394  | 10.0 | 1000          |
| • 13RS050064 | 0.505 | 12.8 | 0.683 | 17.3 | 0.500  | 12.7 | 500           |
| • SWI2090A   | 0.505 | 12.8 | 0.750 | 19.1 | 0.125  | 3.2  | 1000          |
| • 13RSSR0203 | 0.505 | 12.8 | 0.750 | 19.1 | 0.375  | 9.5  | 500           |
| • 13RSSR0205 | 0.505 | 12.8 | 0.750 | 19.1 | 0.500  | 12.7 | 500           |
| • 13RSSR0208 | 0.505 | 12.8 | 0.750 | 19.1 | 0.625  | 15.9 | 500           |
| • 13RSSR0210 | 0.505 | 12.8 | 0.750 | 19.1 | 0.750  | 19.1 | 500           |
| • 13RSSR0213 | 0.505 | 12.8 | 0.750 | 19.1 | 0.875  | 22.2 | 500           |
| • 13RSSR0216 | 0.505 | 12.8 | 0.750 | 19.1 | 1.000  | 25.4 | 250           |
| • 13RSSR0219 | 0.505 | 12.8 | 0.750 | 19.1 | 1.250  | 31.8 | 250           |
| • 13RSSR0222 | 0.505 | 12.8 | 0.750 | 19.1 | 1.500  | 38.1 | 250           |
| • 13RSSR0225 | 0.505 | 12.8 | 0.750 | 19.1 | 1.750  | 44.5 | 250           |
| • 13RSSR0228 | 0.505 | 12.8 | 0.750 | 19.1 | 2.000  | 50.8 | 250           |
| • 13RS100032 | 0.505 | 12.8 | 1.000 | 25.4 | 0.250  | 6.4  | 500           |
| • 13RSSR0229 | 0.505 | 12.8 | 1.000 | 25.4 | 0.375  | 9.5  | 500           |
| • 13RSSR0231 | 0.505 | 12.8 | 1.000 | 25.4 | 0.500  | 12.7 | 250           |
| • 13RSSR0233 | 0.505 | 12.8 | 1.000 | 25.4 | 0.750  | 19.1 | 250           |
| • 13RSSR0235 | 0.505 | 12.8 | 1.000 | 25.4 | 1.000  | 25.4 | 250           |
| • 13RSSR0237 | 0.505 | 12.8 | 1.000 | 25.4 | 1.500  | 38.1 | 250           |
| • 13RSSR0239 | 0.505 | 12.8 | 1.000 | 25.4 | 2.000  | 50.8 | 250           |
| • 13RSSR0348 | 0.505 | 12.8 | 1.000 | 25.4 | 2.250  | 57.2 | 250           |
| • 13RS112030 | 0.505 | 12.8 | 1.240 | 31.5 | 0.500  | 12.7 | 250           |
| • 13RS066850 | 0.506 | 12.9 | 0.668 | 17.0 | 0.938  | 23.8 | 500           |
| • 13RS062650 | 0.507 | 12.9 | 0.620 | 15.7 | 0.500  | 12.7 | 1000          |
| • 13RS062035 | 0.507 | 12.9 | 0.620 | 15.7 | 1.688  | 42.9 | 500           |
| • 13RS077530 | 0.507 | 12.9 | 0.775 | 19.7 | 0.250  | 6.4  | 1000          |
| • 13RS094551 | 0.509 | 12.9 | 0.984 | 25.0 | 0.984  | 25.0 | 500           |
| • 13RS075071 | 0.510 | 13.0 | 0.750 | 19.1 | 0.375  | 9.5  | 1000          |
| • 13RS075070 | 0.510 | 13.0 | 0.750 | 19.1 | 0.700  | 17.8 | 500           |
| • 13RS100053 | 0.510 | 13.0 | 1.000 | 25.4 | 0.590  | 15.0 | 250           |
| • 13RS125312 | 0.510 | 13.0 | 1.250 | 31.8 | 0.313  | 8.0  | 250           |
| • 13RS063051 | 0.512 | 13.0 | 0.630 | 16.0 | 0.354  | 9.0  | 500           |

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## THROUGH SPACERS

13RS/13RSSR/13SP/13ME/MSW/SWI/SWS Series (continued)  
Round Nylon Through Spacers

## Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

## Features:

- Will not rust, corrode or deteriorate
- Acts as an electrical insulator by preventing metal-to-metal contact



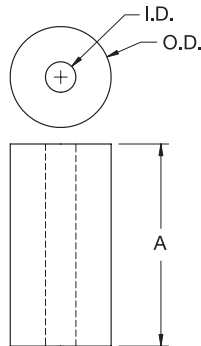
\* Note: 13ME item #'s are made of black Heat Stabilized Nylon 6/6

| Item No.     | ID    |      | OD    |      | Length |      | Bulk Pack Qty |
|--------------|-------|------|-------|------|--------|------|---------------|
|              | in    | mm   | in    | mm   | in     | mm   |               |
| SWI2100A     | 0.512 | 13.0 | 1.258 | 32.0 | 0.064  | 1.6  | 6000          |
| • 13RS063551 | 0.515 | 13.1 | 0.639 | 16.2 | 0.563  | 14.3 | 500           |
| • 13RS072050 | 0.515 | 13.1 | 0.720 | 18.3 | 0.490  | 12.4 | 1000          |
| • 13RS075034 | 0.515 | 13.1 | 0.750 | 19.1 | 0.340  | 8.6  | 1000          |
| • 13RS089036 | 0.515 | 13.1 | 0.880 | 22.4 | 0.375  | 9.5  | 500           |
| • 13RS100063 | 0.515 | 13.1 | 1.125 | 28.6 | 0.388  | 9.9  | 250           |
| • 13RS065650 | 0.516 | 13.1 | 0.656 | 16.7 | 0.500  | 12.7 | 500           |
| • 13RS100061 | 0.517 | 13.1 | 1.000 | 25.4 | 0.312  | 7.9  | 500           |
| • 13RS100031 | 0.517 | 13.1 | 1.000 | 25.4 | 0.375  | 9.5  | 500           |
| • 13RS100059 | 0.517 | 13.1 | 1.000 | 25.4 | 0.687  | 17.4 | 500           |
| • 13RS068714 | 0.519 | 13.2 | 0.691 | 17.6 | 0.750  | 19.1 | 500           |
| • 13RS062593 | 0.520 | 13.2 | 0.625 | 15.9 | 0.218  | 5.5  | 500           |
| • 13RS063550 | 0.520 | 13.2 | 0.635 | 16.1 | 0.500  | 12.7 | 1000          |
| • 13RS070087 | 0.520 | 13.2 | 0.715 | 18.2 | 0.380  | 9.7  | 500           |
| • 13RS075057 | 0.520 | 13.2 | 0.750 | 19.1 | 0.500  | 12.7 | 500           |
| • 13RS081046 | 0.520 | 13.2 | 0.803 | 20.4 | 0.375  | 9.5  | 500           |
| • 13RS081045 | 0.520 | 13.2 | 0.803 | 20.4 | 0.500  | 12.7 | 500           |
| • 13RS146050 | 0.521 | 13.2 | 1.460 | 37.1 | 0.500  | 12.7 | 250           |
| • 13RS100011 | 0.523 | 13.3 | 0.998 | 25.3 | 0.453  | 11.5 | 500           |
| • 13RS071823 | 0.524 | 13.3 | 0.709 | 18.0 | 0.295  | 7.5  | 500           |
| • 13ME118*   | 0.524 | 13.3 | 0.709 | 18.0 | 0.118  | 3.0  | 1000          |
| • 13ME119*   | 0.524 | 13.3 | 0.709 | 18.0 | 0.197  | 5.0  | 1000          |
| • 13ME120*   | 0.524 | 13.3 | 0.709 | 18.0 | 0.295  | 7.5  | 1000          |
| • 13ME121*   | 0.524 | 13.3 | 0.709 | 18.0 | 0.394  | 10.0 | 1000          |
| • 13ME122*   | 0.524 | 13.3 | 0.709 | 18.0 | 0.591  | 15.0 | 1000          |
| • 13ME123*   | 0.524 | 13.3 | 0.709 | 18.0 | 0.787  | 20.0 | 500           |
| • 13ME124*   | 0.524 | 13.3 | 0.709 | 18.0 | 0.984  | 25.0 | 500           |
| • 13ME126*   | 0.524 | 13.3 | 0.984 | 25.0 | 0.197  | 5.0  | 1000          |
| • 13ME127*   | 0.524 | 13.3 | 0.984 | 25.0 | 0.394  | 10.0 | 500           |
| • 13ME128*   | 0.524 | 13.3 | 0.984 | 25.0 | 0.591  | 15.0 | 1000          |
| • 13ME129*   | 0.524 | 13.3 | 0.984 | 25.0 | 0.787  | 20.0 | 1000          |
| • 13RS071820 | 0.526 | 13.4 | 0.718 | 18.2 | 0.219  | 5.6  | 500           |
| • 13RS071828 | 0.526 | 13.4 | 0.718 | 18.2 | 0.281  | 7.1  | 1000          |
| • 13RS084102 | 0.526 | 13.4 | 0.840 | 21.3 | 0.502  | 12.8 | 500           |
| • 13RS087536 | 0.527 | 13.4 | 0.870 | 22.1 | 0.875  | 22.2 | 250           |
| • 13RS100009 | 0.530 | 13.5 | 1.000 | 25.4 | 0.500  | 12.7 | 500           |
| • 13RSSR0253 | 0.530 | 13.5 | 1.000 | 25.4 | 2.220  | 56.4 | 250           |
| • 13RS075011 | 0.531 | 13.5 | 0.754 | 19.2 | 0.451  | 11.5 | 500           |
| • 13RS087045 | 0.531 | 13.5 | 0.870 | 22.1 | 0.391  | 9.9  | 500           |
| • 13RS112031 | 0.531 | 13.5 | 1.250 | 31.8 | 0.500  | 12.7 | 250           |
| • 13RS083531 | 0.540 | 13.7 | 0.835 | 21.2 | 0.188  | 4.8  | 500           |
| • 13RS100065 | 0.561 | 14.2 | 1.003 | 25.5 | 0.623  | 15.8 | 250           |
| • 13RS100062 | 0.562 | 14.3 | 1.000 | 25.4 | 0.910  | 23.1 | 500           |
| • 13RS100064 | 0.568 | 14.4 | 1.000 | 25.4 | 1.119  | 28.4 | 500           |
| • 13RS069038 | 0.600 | 15.2 | 0.680 | 17.3 | 0.560  | 14.2 | 500           |
| • 13RS098554 | 0.604 | 15.3 | 0.984 | 25.0 | 0.312  | 7.9  | 500           |
| • 13RS084101 | 0.605 | 15.4 | 0.841 | 21.4 | 0.600  | 15.2 | 500           |
| • 13RS087047 | 0.610 | 15.5 | 0.870 | 22.1 | 0.500  | 12.7 | 500           |
| • 13RS075044 | 0.625 | 15.9 | 1.750 | 44.5 | 0.250  | 6.4  | 250           |
| SWI2150A     | 0.629 | 16.0 | 1.125 | 28.6 | 0.128  | 3.3  | 1000          |
| • 13RSSR0230 | 0.630 | 16.0 | 1.000 | 25.4 | 0.375  | 9.5  | 500           |
| • 13RSSR0232 | 0.630 | 16.0 | 1.000 | 25.4 | 0.500  | 12.7 | 250           |
| • 13RSSR0234 | 0.630 | 16.0 | 1.000 | 25.4 | 0.750  | 19.1 | 1000          |
| • 13RSSR0236 | 0.630 | 16.0 | 1.000 | 25.4 | 1.000  | 25.4 | 250           |
| • 13RSSR0238 | 0.630 | 16.0 | 1.000 | 25.4 | 1.500  | 38.1 | 250           |
| • 13RSSR0240 | 0.630 | 16.0 | 1.000 | 25.4 | 2.000  | 50.8 | 250           |
| • 13RSSR0349 | 0.630 | 16.0 | 1.000 | 25.4 | 2.250  | 57.2 | 250           |
| • 13RS075014 | 0.631 | 16.0 | 0.750 | 19.1 | 0.440  | 11.2 | 500           |
| • 13RS063564 | 0.635 | 16.1 | 0.913 | 23.2 | 0.641  | 16.3 | 500           |
| • 13RS125080 | 0.642 | 16.3 | 1.250 | 31.8 | 0.082  | 2.1  | 250           |
| • 13RS100051 | 0.643 | 16.3 | 1.000 | 25.4 | 0.500  | 12.7 | 500           |
| • 13RS075018 | 0.645 | 16.4 | 0.750 | 19.1 | 0.437  | 11.1 | 500           |
| • 13RS087553 | 0.650 | 16.5 | 0.880 | 22.4 | 0.750  | 19.1 | 250           |
| • 13RS098553 | 0.650 | 16.5 | 0.984 | 25.0 | 0.492  | 12.5 | 500           |

| Item No.     | ID    |      | OD    |      | Length |      | Bulk Pack Qty |
|--------------|-------|------|-------|------|--------|------|---------------|
|              | in    | mm   | in    | mm   | in     | mm   |               |
| • 13RS100010 | 0.650 | 16.5 | 1.000 | 25.4 | 0.373  | 9.5  | 500           |
| • 13RS137520 | 0.656 | 16.7 | 1.375 | 34.9 | 0.125  | 3.2  | 1000          |
| • 13RS162591 | 0.680 | 17.3 | 1.063 | 27.0 | 0.200  | 5.1  | 250           |
| • 13RS081225 | 0.688 | 17.5 | 0.805 | 20.4 | 0.500  | 12.7 | 500           |
| • 13RS081228 | 0.703 | 17.9 | 0.805 | 20.4 | 0.500  | 12.7 | 500           |
| • 13RS077532 | 0.705 | 17.9 | 0.797 | 20.2 | 0.815  | 20.7 | 500           |
| • 13RS081227 | 0.718 | 18.2 | 0.805 | 20.4 | 0.500  | 12.7 | 500           |
| • 13RS099001 | 0.730 | 18.5 | 0.993 | 25.2 | 0.176  | 4.5  | 1000          |
| • 13RS099002 | 0.730 | 18.5 | 0.993 | 25.2 | 0.276  | 7.0  | 500           |
| • 13RS099000 | 0.730 | 18.5 | 0.993 | 25.2 | 0.346  | 8.8  | 500           |
| • 13RS106212 | 0.740 | 18.8 | 1.055 | 26.8 | 0.188  | 4.8  | 250           |
| • 13RSSR0249 | 0.750 | 19.1 | 1.500 | 38.1 | 1.500  | 38.1 | 250           |
| • 13RSSR0358 | 0.750 | 19.1 | 1.500 | 38.1 | 2.500  | 63.5 | 250           |
| • 13RS087554 | 0.753 | 19.1 | 0.878 | 22.3 | 0.495  | 12.6 | 500           |
| • 13RS100050 | 0.755 | 19.2 | 1.000 | 25.4 | 0.203  | 5.2  | 500           |
| • 13RS125084 | 0.755 | 19.2 | 1.250 | 31.8 | 0.250  | 6.4  | 250           |
| • 13RSSR0241 | 0.755 | 19.2 | 1.500 | 38.1 | 0.375  | 9.5  | 250           |
| • 13RSSR0243 | 0.755 | 19.2 | 1.500 | 38.1 | 0.500  | 12.7 | 250           |
| • 13RSSR0245 | 0.755 | 19.2 | 1.500 | 38.1 | 0.750  | 19.1 | 250           |
| • 13RSSR0247 | 0.755 | 19.2 | 1.500 | 38.1 | 1.000  | 25.4 | 250           |
| • 13RSSR0251 | 0.755 | 19.2 | 1.500 | 38.1 | 2.000  | 50.8 | 250           |
| • 13RS100027 | 0.760 | 19.3 | 1.000 | 25.4 | 0.343  | 8.7  | 500           |
| • 13RS125313 | 0.761 | 19.3 | 1.239 | 31.5 | 0.563  | 14.3 | 250           |
| • 13RS100056 | 0.765 | 19.4 | 1.000 | 25.4 | 0.563  | 14.3 | 500           |
| • 13RS137521 | 0.766 | 19.5 | 1.375 | 34.9 | 0.156  | 4.0  | 250           |
| • 13RS089038 | 0.780 | 19.8 | 0.907 | 23.0 | 0.315  | 8.0  | 500           |
| • 13RS091775 | 0.785 | 19.9 | 0.917 | 23.3 | 0.750  | 19.1 | 250           |
| • 13RS137522 | 0.795 | 20.2 | 1.375 | 34.9 | 0.400  | 10.2 | 250           |
| • 13RS105720 | 0.812 | 20.6 | 1.057 | 26.8 | 0.125  | 3.2  | 1000          |
| • 13RS187509 | 0.813 | 20.7 | 1.188 | 30.2 | 0.250  | 6.4  | 500           |
| MSW1340A     | 0.827 | 21.0 | 1.457 | 37.0 | 0.118  | 3.0  | 1000          |
| • 13RS100066 | 0.830 | 21.1 | 1.050 | 26.7 | 0.240  | 6.1  | 250           |
| • 13RS100067 | 0.830 | 21.1 | 1.050 | 26.7 | 0.490  | 12.4 | 250           |
| • 13RS091776 | 0.838 | 21.3 | 0.918 | 23.3 | 1.125  | 28.6 | 500           |
| MSW1350A     | 0.874 | 22.2 | 1.339 | 34.0 | 0.059  | 1.5  | 3000          |
| • 13RS125081 | 0.875 | 22.2 | 1.250 | 31.8 | 0.563  | 14.3 | 250           |
| • 13RS125083 | 0.880 | 22.4 | 1.250 | 31.8 | 0.330  | 8.4  | 250           |
| • 13RS125085 | 0.900 | 22.9 | 1.250 | 31.8 | 0.500  | 12.7 | 250           |
| • 13RS100025 | 0.915 | 23.2 | 1.000 | 25.4 | 0.250  | 6.4  | 500           |
| • 13RS175032 | 0.928 | 23.6 | 1.750 | 44.5 | 0.281  | 7.1  | 250           |
| • 13RS100055 | 0.950 | 24.1 | 1.080 | 27.4 | 0.875  | 22.2 | 500           |
| • 13RSSR0242 | 1.000 | 25.4 | 1.500 | 38.1 | 0.375  | 9.5  | 250           |
| • 13RSSR0244 | 1.000 | 25.4 | 1.500 | 38.1 | 0.500  | 12.7 | 250           |
| • 13RSSR0246 | 1.000 | 25.4 | 1.500 | 38.1 | 0.750  | 19.1 | 250           |
| • 13RSSR0248 | 1.000 | 25.4 | 1.500 | 38.1 | 1.000  | 25.4 | 250           |
| • 13RSSR0250 | 1.000 | 25.4 | 1.500 | 38.1 | 1.500  | 38.1 | 250           |
| • 13RSSR0252 | 1.000 | 25.4 | 1.500 | 38.1 | 2.000  | 50.8 | 250           |
| • 13RSSR0357 | 1.005 | 25.5 | 1.500 | 38.1 | 2.250  | 57.2 | 250           |
| • 13RSSR0359 | 1.005 | 25.5 | 1.500 | 38.1 | 2.500  | 63.5 | 250           |
| • 13RS112027 | 1.015 | 25.8 | 1.120 | 28.4 | 0.375  | 9.5  | 250           |
| • 13RS150050 | 1.020 | 25.9 | 1.500 | 38.1 | 0.500  | 12.7 | 250           |
| • 13RS132056 | 1.031 | 26.2 | 1.320 | 33.5 | 0.562  | 14.3 | 250           |
| • 13RS126210 | 1.043 | 26.5 | 1.262 | 32.1 | 0.950  | 24.1 | 250           |
| • 13RS126211 | 1.051 | 26.7 | 1.142 | 29.0 | 0.502  | 12.8 | 250           |
| • 13RS131255 | 1.078 | 27.4 | 1.312 | 33.3 | 0.750  | 19.1 | 250           |
| • 13RS175050 | 1.140 | 29.0 | 1.750 | 44.5 | 0.500  | 12.7 | 250           |
| • 13RS150011 | 1.187 | 30.1 | 1.500 | 38.1 | 0.359  | 9.1  | 250           |
| • 13RS162590 | 1.388 | 35.3 | 1.625 | 41.3 | 0.094  | 2.4  | 250           |
| • 13RS231251 | 1.420 | 36.1 | 2.031 | 51.6 | 0.350  | 8.9  | 250           |
| • 13RS213579 | 1.422 | 36.1 | 2.125 | 54.0 | 0.280  | 7.1  | 250           |
| • 13RS213581 | 1.630 | 41.4 | 2.130 | 54.1 | 0.130  | 3.3  | 250           |
| • 13RS213580 | 1.760 | 44.7 | 2.135 | 54.2 | 0.125  | 3.2  | 250           |
| • 13RS231252 | 1.945 | 49.4 | 2.750 | 69.9 | 0.400  | 10.2 | 250           |



### R9XX Series Round Nylon Through Spacers



#### Specifications:

- Material: UL94 V-2 Modified Nylon 6/6
- Color: White

#### Features:

- Universal spacers give users an extremely wide range for mounting PCB discrete devices in many lead patterns and elevations
- Makes solder filleting and board cleaning more effective

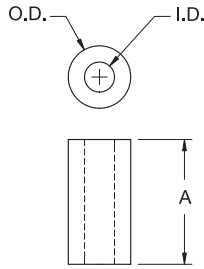
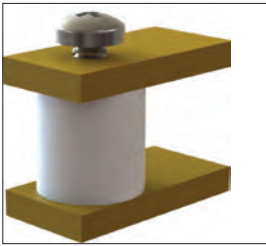
| Item No. | ID    |     | OD    |     | A     |      | Bulk Pack Qty |
|----------|-------|-----|-------|-----|-------|------|---------------|
|          | in    | mm  | in    | mm  | in    | mm   |               |
| R901-1   | 0.028 | 0.7 | 0.085 | 2.2 | 0.062 | 1.6  | 1000          |
| R901-2   | 0.028 | 0.7 | 0.085 | 2.2 | 0.125 | 3.2  | 1000          |
| R901-3   | 0.028 | 0.7 | 0.085 | 2.2 | 0.188 | 4.8  | 1000          |
| R901-4   | 0.028 | 0.7 | 0.085 | 2.2 | 0.250 | 6.4  | 1000          |
| R901-5   | 0.028 | 0.7 | 0.085 | 2.2 | 0.313 | 7.9  | 1000          |
| R901-6   | 0.028 | 0.7 | 0.085 | 2.2 | 0.375 | 9.5  | 1000          |
| R901-7   | 0.028 | 0.7 | 0.085 | 2.2 | 0.438 | 11.1 | 1000          |
| R901-8   | 0.028 | 0.7 | 0.085 | 2.2 | 0.500 | 12.7 | 1000          |
| R938-1   | 0.032 | 0.8 | 0.085 | 2.2 | 0.062 | 1.6  | 1000          |
| R938-2   | 0.032 | 0.8 | 0.085 | 2.2 | 0.125 | 3.2  | 1000          |
| R938-3   | 0.032 | 0.8 | 0.085 | 2.2 | 0.188 | 4.8  | 1000          |
| R938-4   | 0.032 | 0.8 | 0.085 | 2.2 | 0.250 | 6.4  | 1000          |
| R938-6   | 0.032 | 0.8 | 0.085 | 2.2 | 0.375 | 9.5  | 1000          |
| R938-7   | 0.032 | 0.8 | 0.085 | 2.2 | 0.438 | 11.1 | 1000          |
| R938-8   | 0.032 | 0.8 | 0.085 | 2.2 | 0.500 | 12.7 | 1000          |
| R902-1   | 0.032 | 0.8 | 0.125 | 3.2 | 0.062 | 1.6  | 1000          |
| R902-2   | 0.032 | 0.8 | 0.125 | 3.2 | 0.125 | 3.2  | 1000          |
| R902-3   | 0.032 | 0.8 | 0.125 | 3.2 | 0.188 | 4.8  | 1000          |
| R902-4   | 0.032 | 0.8 | 0.125 | 3.2 | 0.250 | 6.4  | 1000          |
| R902-5   | 0.032 | 0.8 | 0.125 | 3.2 | 0.313 | 7.9  | 1000          |
| R902-6   | 0.032 | 0.8 | 0.125 | 3.2 | 0.375 | 9.5  | 1000          |
| R902-7   | 0.032 | 0.8 | 0.125 | 3.2 | 0.438 | 11.1 | 1000          |
| R902-8   | 0.032 | 0.8 | 0.125 | 3.2 | 0.500 | 12.7 | 1000          |
| R939-1   | 0.047 | 1.2 | 0.125 | 3.2 | 0.062 | 1.6  | 1000          |
| R939-2   | 0.047 | 1.2 | 0.125 | 3.2 | 0.125 | 3.2  | 1000          |
| R939-4   | 0.047 | 1.2 | 0.125 | 3.2 | 0.250 | 6.4  | 1000          |
| R939-5   | 0.047 | 1.2 | 0.125 | 3.2 | 0.313 | 7.9  | 1000          |
| R939-7   | 0.047 | 1.2 | 0.125 | 3.2 | 0.438 | 11.1 | 1000          |
| R939-8   | 0.047 | 1.2 | 0.125 | 3.2 | 0.500 | 12.7 | 1000          |
| R903-1   | 0.047 | 1.2 | 0.156 | 4.0 | 0.062 | 1/6  | 1000          |
| R903-2   | 0.047 | 1.2 | 0.156 | 4.0 | 0.125 | 3.2  | 1000          |
| R903-3   | 0.047 | 1.2 | 0.156 | 4.0 | 0.188 | 4.8  | 1000          |
| R903-4   | 0.047 | 1.2 | 0.156 | 4.0 | 0.250 | 6.4  | 1000          |
| R903-5   | 0.047 | 1.2 | 0.156 | 4.0 | 0.313 | 7.9  | 1000          |
| R903-6   | 0.047 | 1.2 | 0.156 | 4.0 | 0.375 | 9.5  | 1000          |
| R903-7   | 0.047 | 1.2 | 0.156 | 4.0 | 0.438 | 11.1 | 1000          |
| R903-8   | 0.047 | 1.2 | 0.156 | 4.0 | 0.500 | 12.7 | 1000          |
| R904-1   | 0.063 | 1.6 | 0.187 | 4.8 | 0.062 | 1.6  | 1000          |
| R904-2   | 0.063 | 1.6 | 0.187 | 4.8 | 0.125 | 3.2  | 1000          |
| R904-4   | 0.063 | 1.6 | 0.187 | 4.8 | 0.250 | 6.4  | 1000          |
| R904-6   | 0.063 | 1.6 | 0.187 | 4.8 | 0.375 | 9.5  | 1000          |
| R904-7   | 0.063 | 1.6 | 0.187 | 4.8 | 0.438 | 11.1 | 1000          |

| Item No. | ID    |     | OD    |     | A     |      | Bulk Pack Qty |
|----------|-------|-----|-------|-----|-------|------|---------------|
|          | in    | mm  | in    | mm  | in    | mm   |               |
| R904-8   | 0.063 | 1.6 | 0.187 | 4.8 | 0.500 | 12.7 | 1000          |
| R906-1   | 0.085 | 2.2 | 0.148 | 3.6 | 0.062 | 1.6  | 1000          |
| R906-2   | 0.085 | 2.2 | 0.148 | 3.6 | 0.125 | 3.2  | 1000          |
| R906-3   | 0.085 | 2.2 | 0.148 | 3.6 | 0.188 | 4.8  | 1000          |
| R906-4   | 0.085 | 2.2 | 0.148 | 3.6 | 0.250 | 6.4  | 1000          |
| R906-6   | 0.085 | 2.2 | 0.148 | 3.6 | 0.375 | 9.5  | 1000          |
| R906-7   | 0.085 | 2.2 | 0.148 | 3.6 | 0.438 | 11.1 | 1000          |
| R906-8   | 0.085 | 2.2 | 0.148 | 3.6 | 0.500 | 12.7 | 1000          |
| R937-1   | 0.090 | 2.3 | 0.125 | 3.2 | 0.062 | 1/6  | 1000          |
| R937-7   | 0.091 | 2.3 | 0.125 | 3.2 | 0.438 | 11.1 | 1000          |
| R937-8   | 0.091 | 2.3 | 0.125 | 3.2 | 0.500 | 12.7 | 1000          |
| R913-1   | 0.091 | 2.3 | 0.187 | 4.8 | 0.062 | 1.6  | 1000          |
| R913-2   | 0.091 | 2.3 | 0.187 | 4.8 | 0.125 | 3.2  | 1000          |
| R907-1   | 0.105 | 2.7 | 0.167 | 4.2 | 0.062 | 1/6  | 1000          |
| R907-2   | 0.105 | 2.7 | 0.167 | 4.2 | 0.125 | 3.2  | 1000          |
| R907-3   | 0.105 | 2.7 | 0.167 | 4.2 | 0.188 | 4.8  | 1000          |
| R907-4   | 0.105 | 2.7 | 0.167 | 4.2 | 0.250 | 6.4  | 1000          |
| R907-5   | 0.105 | 2.7 | 0.167 | 4.2 | 0.313 | 7.9  | 1000          |
| R907-6   | 0.105 | 2.7 | 0.167 | 4.2 | 0.375 | 9.5  | 1000          |
| R907-7   | 0.105 | 2.7 | 0.167 | 4.2 | 0.438 | 11.1 | 1000          |
| R907-8   | 0.105 | 2.7 | 0.167 | 4.2 | 0.500 | 12.7 | 1000          |
| R908-1   | 0.125 | 3.2 | 0.187 | 4.8 | 0.062 | 1.6  | 1000          |
| R908-2   | 0.125 | 3.2 | 0.187 | 4.8 | 0.125 | 3.2  | 1000          |
| R908-3   | 0.125 | 3.2 | 0.187 | 4.8 | 0.188 | 4.8  | 1000          |
| R908-4   | 0.125 | 3.2 | 0.187 | 4.8 | 0.250 | 6.4  | 1000          |
| R908-5   | 0.125 | 3.2 | 0.187 | 4.8 | 0.313 | 7.9  | 1000          |
| R908-6   | 0.125 | 3.2 | 0.187 | 4.8 | 0.375 | 9.5  | 1000          |
| R908-8   | 0.125 | 3.2 | 0.187 | 4.8 | 0.500 | 12.7 | 1000          |
| R911-1   | 0.125 | 3.2 | 0.250 | 6.4 | 0.062 | 1.6  | 1000          |
| R911-2   | 0.125 | 3.2 | 0.250 | 6.4 | 0.125 | 3.2  | 1000          |
| R911-3   | 0.125 | 3.2 | 0.250 | 6.4 | 0.188 | 4.8  | 1000          |
| R911-4   | 0.125 | 3.2 | 0.250 | 6.4 | 0.250 | 6.4  | 1000          |
| R911-5   | 0.125 | 3.2 | 0.250 | 6.4 | 0.313 | 7.9  | 1000          |
| R911-8   | 0.125 | 3.2 | 0.250 | 6.4 | 0.500 | 12.7 | 1000          |
| R905-1   | 0.147 | 3.7 | 0.250 | 6.4 | 0.062 | 1.6  | 1000          |
| R905-2   | 0.147 | 3.7 | 0.250 | 6.4 | 0.125 | 3.2  | 1000          |
| R905-3   | 0.147 | 3.7 | 0.250 | 6.4 | 0.188 | 4.8  | 1000          |
| R905-4   | 0.147 | 3.7 | 0.250 | 6.4 | 0.250 | 6.4  | 1000          |
| R905-6   | 0.147 | 3.7 | 0.250 | 6.4 | 0.375 | 9.5  | 1000          |
| R905-7   | 0.147 | 3.7 | 0.250 | 6.4 | 0.438 | 11.1 | 1000          |
| R912-1   | 0.171 | 4.3 | 0.250 | 6.4 | 0.062 | 1/6  | 1000          |



# THROUGH SPACERS

## 005XXXXXX14 Series Round Polystyrene (PS) Spacer



**Specifications:**

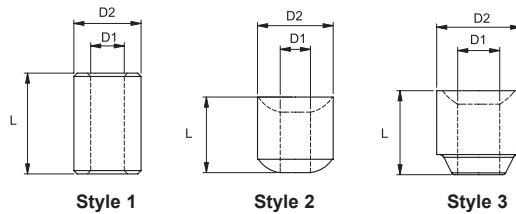
- Material: Polystyrene
- Color: See table

**Features:**

- Efficient insulator at low temperatures
- Minimal water absorption
- Lightweight

| Item No.     |              | ID    |     | OD    |      | Spacer Length A |      | For Screw |        | Bulk Pack Qty |
|--------------|--------------|-------|-----|-------|------|-----------------|------|-----------|--------|---------------|
| Natural      | Black        | in    | mm  | in    | mm   | in              | mm   | Imperial  | Metric |               |
| 005377800014 | 005377859914 | 0.134 | 3.4 | 0.236 | 6.0  | 1.378           | 35.0 | #4        | M3     | 250           |
| 005378800014 | 005378859914 | 0.134 | 3.4 | 0.236 | 6.0  | 1.575           | 40.0 | #4        | M3     | 250           |
| 005371200014 | 005371259914 | 0.134 | 3.4 | 0.236 | 6.0  | 0.079           | 2.0  | #4        | M3     | 500           |
| 005371400014 | 005371459914 | 0.134 | 3.4 | 0.236 | 6.0  | 0.118           | 3.2  | #4        | M3     | 500           |
| 005371600014 | 005371659914 | 0.134 | 3.4 | 0.236 | 6.0  | 0.157           | 4.0  | #4        | M3     | 500           |
| 005371800014 | 005371859914 | 0.134 | 3.4 | 0.236 | 6.0  | 0.197           | 5.0  | #4        | M3     | 500           |
| 005372000014 | 005372059914 | 0.134 | 3.4 | 0.236 | 6.0  | 0.236           | 6.0  | #4        | M3     | 500           |
| 005372400014 | 005372459914 | 0.134 | 3.4 | 0.236 | 6.0  | 0.315           | 8.0  | #4        | M3     | 500           |
| 005372800014 | 005372859914 | 0.134 | 3.4 | 0.236 | 6.0  | 0.394           | 10.0 | #4        | M3     | 500           |
| 005373200014 | 005373259914 | 0.134 | 3.4 | 0.236 | 6.0  | 0.472           | 12.0 | #4        | M3     | 500           |
| 005373800014 | 005373859914 | 0.134 | 3.4 | 0.236 | 6.0  | 0.591           | 15.0 | #4        | M3     | 500           |
| 005374400014 | 005374459914 | 0.134 | 3.4 | 0.236 | 6.0  | 0.709           | 18.0 | #4        | M3     | 500           |
| 005374800014 | 005374859914 | 0.134 | 3.4 | 0.236 | 6.0  | 0.787           | 20.0 | #4        | M3     | 500           |
| 005375800014 | 005375859914 | 0.134 | 3.4 | 0.236 | 6.0  | 0.984           | 25.0 | #4        | M3     | 500           |
| 005376800014 | 005376859914 | 0.134 | 3.4 | 0.236 | 6.0  | 1.181           | 30.0 | #4        | M3     | 500           |
| 005419000014 | 005419059914 | 0.165 | 4.2 | 0.315 | 8.0  | 0.118           | 3.0  | #8        | M4     | 500           |
| 005420500014 | 005420559914 | 0.165 | 4.2 | 0.315 | 8.0  | 0.157           | 4.0  | #8        | M4     | 500           |
| 005422000014 | 005422059914 | 0.165 | 4.2 | 0.315 | 8.0  | 0.197           | 5.0  | #8        | M4     | 500           |
| 005423200014 | 005423259914 | 0.165 | 4.2 | 0.315 | 8.0  | 0.236           | 6.0  | #8        | M4     | 500           |
| 005425600014 | 005425659914 | 0.165 | 4.2 | 0.315 | 8.0  | 0.315           | 8.0  | #8        | M4     | 500           |
| 005428000014 | 005428059914 | 0.165 | 4.2 | 0.315 | 8.0  | 0.394           | 10.0 | #8        | M4     | 500           |
| 005429200014 | 005429259914 | 0.165 | 4.2 | 0.315 | 8.0  | 0.472           | 12.0 | #8        | M4     | 500           |
| 005431000014 | 005431059914 | 0.165 | 4.2 | 0.315 | 8.0  | 0.591           | 15.0 | #8        | M4     | 500           |
| 005432800014 | 005432859914 | 0.165 | 4.2 | 0.315 | 8.0  | 0.709           | 18.0 | #8        | M4     | 500           |
| 005434000014 | 005434059914 | 0.165 | 4.2 | 0.315 | 8.0  | 0.787           | 20.0 | #8        | M4     | 500           |
| 005437000014 | 005437059914 | 0.165 | 4.2 | 0.315 | 8.0  | 0.984           | 25.0 | #8        | M4     | 500           |
| 005440000014 | 005440059914 | 0.165 | 4.2 | 0.315 | 8.0  | 1.181           | 30.0 | #8        | M4     | 500           |
| 005465000014 | 005465059914 | 0.205 | 5.2 | 0.394 | 10.0 | 0.591           | 15.0 | #10       | M5     | 250           |
| 005466800014 | 005466859914 | 0.205 | 5.2 | 0.394 | 10.0 | 0.709           | 18.0 | #10       | M5     | 250           |
| 005468000014 | 005468059914 | 0.205 | 5.2 | 0.394 | 10.0 | 0.787           | 20.0 | #10       | M5     | 250           |
| 005471000014 | 005471059914 | 0.205 | 5.2 | 0.394 | 10.0 | 0.984           | 25.0 | #10       | M5     | 250           |
| 005474000014 | 005474059914 | 0.205 | 5.2 | 0.394 | 10.0 | 1.181           | 30.0 | #10       | M5     | 250           |
| 005453000014 | 005453059914 | 0.205 | 5.2 | 0.394 | 10.0 | 0.118           | 3.0  | #10       | M5     | 500           |
| 005454500014 | 005454559914 | 0.205 | 5.2 | 0.394 | 10.0 | 0.157           | 4.0  | #10       | M5     | 500           |
| 005456000014 | 005456059914 | 0.205 | 5.2 | 0.394 | 10.0 | 0.197           | 5.0  | #10       | M5     | 500           |
| 005457200014 | 005457259914 | 0.205 | 5.2 | 0.394 | 10.0 | 0.236           | 6.0  | #10       | M5     | 500           |
| 005459600014 | 005459659914 | 0.205 | 5.2 | 0.394 | 10.0 | 0.315           | 8.0  | #10       | M5     | 500           |
| 005462000014 | 005462059914 | 0.205 | 5.2 | 0.394 | 10.0 | 0.394           | 10.0 | #10       | M5     | 500           |
| 005463200014 | 005463259914 | 0.205 | 5.2 | 0.394 | 10.0 | 0.472           | 12.0 | #10       | M5     | 500           |

## CER Series Ceramic Beads



**Specifications:**

- Material: Steatrite C220 Ceramic
- Color: Natural

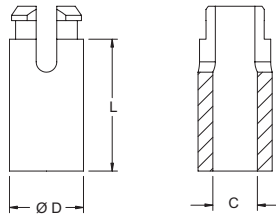
**Features:**

- Maximum operating temperature: 1832°F (1000°C)
- Parts are stackable

| Item No. | D1 ID |     | D2 OD |     | L     |      | Style | Bulk Pack Qty |
|----------|-------|-----|-------|-----|-------|------|-------|---------------|
|          | in    | mm  | in    | mm  | in    | mm   |       |               |
| CER-1    | 0.079 | 2.0 | 0.158 | 4.0 | 0.237 | 6.0  | 1     | 1000          |
| CER-2    | 0.063 | 1.6 | 0.178 | 4.5 | 0.315 | 8.0  | 1     | 1000          |
| CER-3    | 0.063 | 1.6 | 0.178 | 4.5 | 0.394 | 10.0 | 1     | 1000          |
| CER-4    | 0.040 | 1.0 | 0.119 | 3.0 | 0.119 | 3.0  | 2     | 1000          |
| CER-5    | 0.071 | 1.8 | 0.178 | 4.5 | 0.178 | 4.5  | 2     | 1000          |
| CER-6    | 0.040 | 1.0 | 0.119 | 3.0 | 0.197 | 5.0  | 2     | 1000          |
| CER-7    | 0.098 | 2.5 | 0.197 | 5.0 | 0.197 | 5.0  | 3     | 1000          |



**SRS/CBSS Series  
 Self Retaining Spacer**



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by Special Order
- Color: Natural

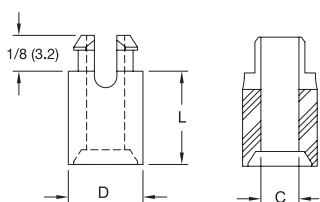
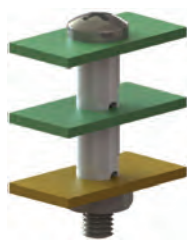
**Features:**

- Self-retaining and self-aligning
- Board mount head snaps in and maintains spacing even after the screw is removed
- Will not rust, corrode or deteriorate

| Item No.     | Screw     | Hole Ø |     | Panel Thickness |     | L     |      | D     |     | C     |     | Bulk Pack Qty |
|--------------|-----------|--------|-----|-----------------|-----|-------|------|-------|-----|-------|-----|---------------|
|              |           | in     | mm  | in              | mm  | in    | mm   | in    | mm  | in    | mm  |               |
| SRS4-2-01    | #4 (M3)   | 0.187  | 4.7 | 0.062           | 1.6 | 0.125 | 3.2  | 0.250 | 6.4 | 0.125 | 3.2 | 1000          |
| CBSS010A     | #4 (M3)   | 0.187  | 4.7 | 0.062           | 1.6 | 0.138 | 3.5  | 0.250 | 6.4 | 0.125 | 3.2 | 1000          |
| CBSS015A     | #4 (M3)   | 0.187  | 4.7 | 0.062           | 1.6 | 0.157 | 4.0  | 0.250 | 6.4 | 0.125 | 3.2 | 1000          |
| CBSS020A     | #4 (M3)   | 0.187  | 4.7 | 0.062           | 1.6 | 0.177 | 4.5  | 0.250 | 6.4 | 0.125 | 3.2 | 1000          |
| SRS4-3-01    | #4 (M3)   | 0.187  | 4.7 | 0.062           | 1.6 | 0.187 | 4.7  | 0.250 | 6.4 | 0.125 | 3.2 | 1000          |
| SRS4-4-01    | #4 (M3)   | 0.187  | 4.7 | 0.062           | 1.6 | 0.250 | 6.4  | 0.250 | 6.4 | 0.125 | 3.2 | 1000          |
| SRS4-5-01    | #4 (M3)   | 0.187  | 4.7 | 0.062           | 1.6 | 0.312 | 7.9  | 0.250 | 6.4 | 0.125 | 3.2 | 1000          |
| SRS4-6-01    | #4 (M3)   | 0.187  | 4.7 | 0.062           | 1.6 | 0.375 | 9.5  | 0.250 | 6.4 | 0.125 | 3.2 | 1000          |
| SRS4-7-01    | #4 (M3)   | 0.187  | 4.7 | 0.062           | 1.6 | 0.437 | 11.1 | 0.250 | 6.4 | 0.125 | 3.2 | 1000          |
| CBSS050A     | #4 (M3)   | 0.187  | 4.7 | 0.062           | 1.6 | 0.472 | 12.0 | 0.250 | 6.4 | 0.125 | 3.2 | 1000          |
| SRS4-8-01    | #4 (M3)   | 0.187  | 4.7 | 0.062           | 1.6 | 0.500 | 12.7 | 0.250 | 6.4 | 0.125 | 3.2 | 1000          |
| CBSS060A     | #4 (M3)   | 0.187  | 4.7 | 0.062           | 1.6 | 0.559 | 14.2 | 0.250 | 6.4 | 0.125 | 3.2 | 1000          |
| CBSS065A     | #4 (M3)   | 0.187  | 4.7 | 0.062           | 1.6 | 0.591 | 15.0 | 0.250 | 6.4 | 0.125 | 3.2 | 1000          |
| SRS4-10-01   | #4 (M3)   | 0.187  | 4.7 | 0.062           | 1.6 | 0.625 | 15.9 | 0.250 | 6.4 | 0.125 | 3.2 | 1000          |
| SRS4-12-01   | #4 (M3)   | 0.187  | 4.7 | 0.062           | 1.6 | 0.750 | 19.1 | 0.250 | 6.4 | 0.125 | 3.2 | 1000          |
| SRS4-14-01   | #4 (M3)   | 0.187  | 4.7 | 0.062           | 1.6 | 0.875 | 22.2 | 0.250 | 6.4 | 0.125 | 3.2 | 1000          |
| SRS4-16-01   | #4 (M3)   | 0.187  | 4.7 | 0.062           | 1.6 | 1.000 | 25.4 | 0.250 | 6.4 | 0.125 | 3.2 | 1000          |
| SRS6-4-01    | #6 (M3.5) | 0.234  | 5.9 | 0.062           | 1.6 | 0.250 | 6.4  | 0.281 | 7.1 | 0.153 | 3.9 | 1000          |
| SRS6-5-01    | #6 (M3.5) | 0.234  | 5.9 | 0.062           | 1.6 | 0.312 | 7.9  | 0.281 | 7.1 | 0.153 | 3.9 | 1000          |
| SRS6-6-01    | #6 (M3.5) | 0.234  | 5.9 | 0.062           | 1.6 | 0.375 | 9.5  | 0.281 | 7.1 | 0.153 | 3.9 | 1000          |
| SRS6-7-01    | #6 (M3.5) | 0.234  | 5.9 | 0.062           | 1.6 | 0.437 | 11.1 | 0.281 | 7.1 | 0.153 | 3.9 | 1000          |
| SRS6-8-01    | #6 (M3.5) | 0.234  | 5.9 | 0.062           | 1.6 | 0.500 | 12.7 | 0.281 | 7.1 | 0.153 | 3.9 | 1000          |
| SRS6-10-01   | #6 (M3.5) | 0.234  | 5.9 | 0.062           | 1.6 | 0.625 | 15.9 | 0.281 | 7.1 | 0.153 | 3.9 | 1000          |
| SRS6-12-01   | #6 (M3.5) | 0.234  | 5.9 | 0.062           | 1.6 | 0.750 | 19.1 | 0.281 | 7.1 | 0.153 | 3.9 | 1000          |
| SRS6-14-01   | #6 (M3.5) | 0.234  | 5.9 | 0.062           | 1.6 | 0.875 | 22.2 | 0.281 | 7.1 | 0.153 | 3.9 | 1000          |
| SRS6-16-01   | #6 (M3.5) | 0.234  | 5.9 | 0.062           | 1.6 | 1.000 | 25.4 | 0.281 | 7.1 | 0.153 | 3.9 | 1000          |
| CBSS105A     | #8 (M4)   | 0.234  | 5.9 | 0.062           | 1.6 | 0.118 | 3.0  | 0.281 | 7.1 | 0.169 | 4.3 | 1000          |
| CBSS110A     | #8 (M4)   | 0.234  | 5.9 | 0.062           | 1.6 | 0.157 | 4.0  | 0.281 | 7.1 | 0.169 | 4.3 | 1000          |
| CBSS115A     | #8 (M4)   | 0.234  | 5.9 | 0.062           | 1.6 | 0.181 | 4.6  | 0.281 | 7.1 | 0.169 | 4.3 | 1000          |
| CBSS120A     | #8 (M4)   | 0.234  | 5.9 | 0.062           | 1.6 | 0.197 | 5.0  | 0.281 | 7.1 | 0.169 | 4.3 | 1000          |
| SRS8-3-01    | #8 (M4)   | 0.234  | 5.9 | 0.062           | 1.6 | 0.188 | 4.8  | 0.281 | 7.1 | 0.169 | 4.3 | 1000          |
| SRS8-4-01    | #8 (M4)   | 0.234  | 5.9 | 0.062           | 1.6 | 0.250 | 6.4  | 0.281 | 7.1 | 0.169 | 4.3 | 1000          |
| SRS8-5-01    | #8 (M4)   | 0.234  | 5.9 | 0.062           | 1.6 | 0.313 | 7.9  | 0.281 | 7.1 | 0.169 | 4.3 | 1000          |
| SRS8-6-01    | #8 (M4)   | 0.234  | 5.9 | 0.062           | 1.6 | 0.375 | 9.5  | 0.281 | 7.1 | 0.169 | 4.3 | 1000          |
| SRS8-7-01    | #8 (M4)   | 0.234  | 5.9 | 0.062           | 1.6 | 0.438 | 11.1 | 0.281 | 7.1 | 0.169 | 4.3 | 1000          |
| SRS8-8-01    | #8 (M4)   | 0.234  | 5.9 | 0.062           | 1.6 | 0.500 | 12.7 | 0.281 | 7.1 | 0.169 | 4.3 | 1000          |
| SRS8-10-01   | #8 (M4)   | 0.234  | 5.9 | 0.062           | 1.6 | 0.625 | 15.9 | 0.281 | 7.1 | 0.169 | 4.3 | 1000          |
| CBSS155A     | #8 (M4)   | 0.234  | 5.9 | 0.062           | 1.6 | 0.669 | 17.0 | 0.281 | 7.1 | 0.169 | 4.3 | 1000          |
| SRS8-12-01   | #8 (M4)   | 0.234  | 5.9 | 0.062           | 1.6 | 0.750 | 19.1 | 0.281 | 7.1 | 0.169 | 4.3 | 1000          |
| SRS8-14-01   | #8 (M4)   | 0.234  | 5.9 | 0.062           | 1.6 | 0.875 | 22.2 | 0.281 | 7.1 | 0.169 | 4.3 | 1000          |
| SRS8-16-01   | #8 (M4)   | 0.234  | 5.9 | 0.062           | 1.6 | 1.000 | 25.4 | 0.281 | 7.1 | 0.169 | 4.3 | 1000          |
| CBSS175A     | #8 (M4)   | 0.234  | 5.9 | 0.062           | 1.6 | 1.181 | 30.0 | 0.281 | 7.1 | 0.169 | 4.3 | 1000          |
| SRS8-2-3-01  | #8 (M4)   | 0.234  | 5.9 | 0.087           | 2.2 | 0.188 | 4.8  | 0.281 | 7.1 | 0.169 | 4.3 | 1000          |
| SRS8-2-4-01  | #8 (M4)   | 0.234  | 5.9 | 0.087           | 2.2 | 0.250 | 6.4  | 0.281 | 7.1 | 0.169 | 4.3 | 1000          |
| SRS8-2-5-01  | #8 (M4)   | 0.234  | 5.9 | 0.087           | 2.2 | 0.313 | 7.9  | 0.281 | 7.1 | 0.169 | 4.3 | 1000          |
| SRS8-2-6-01  | #8 (M4)   | 0.234  | 5.9 | 0.087           | 2.2 | 0.375 | 9.5  | 0.281 | 7.1 | 0.169 | 4.3 | 1000          |
| SRS8-2-7-01  | #8 (M4)   | 0.234  | 5.9 | 0.087           | 2.2 | 0.438 | 11.1 | 0.281 | 7.1 | 0.169 | 4.3 | 1000          |
| SRS8-2-8-01  | #8 (M4)   | 0.234  | 5.9 | 0.087           | 2.2 | 0.500 | 12.7 | 0.281 | 7.1 | 0.169 | 4.3 | 1000          |
| SRS8-2-10-01 | #8 (M4)   | 0.234  | 5.9 | 0.087           | 2.2 | 0.625 | 15.9 | 0.281 | 7.1 | 0.169 | 4.3 | 1000          |
| SRS8-2-12-01 | #8 (M4)   | 0.234  | 5.9 | 0.087           | 2.2 | 0.750 | 19.1 | 0.281 | 7.1 | 0.169 | 4.3 | 1000          |
| SRS8-2-14-01 | #8 (M4)   | 0.234  | 5.9 | 0.087           | 2.2 | 0.875 | 22.2 | 0.281 | 7.1 | 0.169 | 4.3 | 1000          |



## SPACERS

SSRS/13STS/13SS Series  
Self Retaining Spacer

## Specifications:

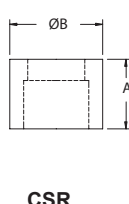
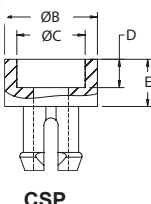
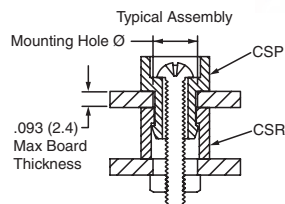
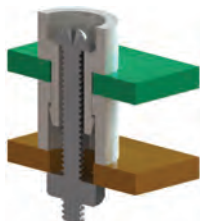
- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by Special Order
- Color: Natural



## Features:

- Spacers can be stacked for multiple level PC board applications
- Self-retaining and self-aligning
- Board mount head snaps in and maintains spacing even after the screw is removed

| Item No.    | Screw     | Hole Ø |     | Panel Thickness |     | L     |      | D     |     | C     |     | Bulk Pack Qty |
|-------------|-----------|--------|-----|-----------------|-----|-------|------|-------|-----|-------|-----|---------------|
|             |           | in     | mm  | in              | mm  | in    | mm   | in    | mm  | in    | mm  |               |
| SSRS4-2-01  | #4 (M3)   | 0.187  | 4.7 | 0.062           | 1.6 | 0.125 | 3.2  | 0.260 | 6.6 | 0.130 | 3.3 | 1000          |
| SSRS4-3-01  | #4 (M3)   | 0.187  | 4.7 | 0.062           | 1.6 | 0.187 | 4.7  | 0.260 | 6.6 | 0.130 | 3.3 | 1000          |
| SSRS4-4-01  | #4 (M3)   | 0.187  | 4.7 | 0.062           | 1.6 | 0.250 | 6.4  | 0.260 | 6.6 | 0.130 | 3.3 | 1000          |
| SSRS4-5-01  | #4 (M3)   | 0.187  | 4.7 | 0.062           | 1.6 | 0.312 | 7.9  | 0.260 | 6.6 | 0.130 | 3.3 | 1000          |
| SSRS4-6-01  | #4 (M3)   | 0.187  | 4.7 | 0.062           | 1.6 | 0.375 | 9.5  | 0.260 | 6.6 | 0.130 | 3.3 | 1000          |
| SSRS4-7-01  | #4 (M3)   | 0.187  | 4.7 | 0.062           | 1.6 | 0.437 | 11.1 | 0.260 | 6.6 | 0.130 | 3.3 | 1000          |
| SSRS4-8-01  | #4 (M3)   | 0.187  | 4.7 | 0.062           | 1.6 | 0.500 | 12.7 | 0.260 | 6.6 | 0.130 | 3.3 | 1000          |
| SSRS4-10-01 | #4 (M3)   | 0.187  | 4.7 | 0.062           | 1.6 | 0.625 | 15.9 | 0.260 | 6.6 | 0.130 | 3.3 | 1000          |
| 13STS004068 | #4 (M3)   | 0.187  | 4.7 | 0.062           | 1.6 | 0.688 | 17.5 | 0.260 | 6.6 | 0.130 | 3.3 | 1000          |
| SSRS6-4-01  | #6 (M3.5) | 0.234  | 5.9 | 0.062           | 1.6 | 0.250 | 6.4  | 0.313 | 7.9 | 0.153 | 3.9 | 1000          |
| SSRS6-5-01  | #6 (M3.5) | 0.234  | 5.9 | 0.062           | 1.6 | 0.312 | 7.9  | 0.313 | 7.9 | 0.153 | 3.9 | 1000          |
| SSRS6-6-01  | #6 (M3.5) | 0.234  | 5.9 | 0.062           | 1.6 | 0.375 | 9.5  | 0.313 | 7.9 | 0.153 | 3.9 | 1000          |
| SSRS6-7-01  | #6 (M3.5) | 0.234  | 5.9 | 0.062           | 1.6 | 0.437 | 11.1 | 0.313 | 7.9 | 0.153 | 3.9 | 1000          |
| SSRS6-8-01  | #6 (M3.5) | 0.234  | 5.9 | 0.062           | 1.6 | 0.500 | 12.7 | 0.313 | 7.9 | 0.153 | 3.9 | 1000          |
| SSRS6-10-01 | #6 (M3.5) | 0.234  | 5.9 | 0.062           | 1.6 | 0.625 | 15.9 | 0.313 | 7.9 | 0.153 | 3.9 | 1000          |
| SSRS6-12-01 | #6 (M3.5) | 0.234  | 5.9 | 0.062           | 1.6 | 0.750 | 19.1 | 0.313 | 7.9 | 0.153 | 3.9 | 1000          |
| SSRS6-14-01 | #6 (M3.5) | 0.234  | 5.9 | 0.062           | 1.6 | 0.875 | 22.2 | 0.313 | 7.9 | 0.153 | 3.9 | 1000          |
| SSRS6-16-01 | #6 (M3.5) | 0.234  | 5.9 | 0.062           | 1.6 | 1.000 | 25.4 | 0.313 | 7.9 | 0.153 | 3.9 | 1000          |
| SSRS8-4-01  | #8 (M4)   | 0.234  | 5.9 | 0.062           | 1.6 | 0.250 | 6.4  | 0.313 | 7.9 | 0.169 | 4.3 | 1000          |
| SSRS8-5-01  | #8 (M4)   | 0.234  | 5.9 | 0.062           | 1.6 | 0.313 | 7.9  | 0.313 | 7.9 | 0.169 | 4.3 | 1000          |
| SSRS8-6-01  | #8 (M4)   | 0.234  | 5.9 | 0.062           | 1.6 | 0.375 | 9.5  | 0.313 | 7.9 | 0.169 | 4.3 | 1000          |
| SSRS8-7-01  | #8 (M4)   | 0.234  | 5.9 | 0.062           | 1.6 | 0.438 | 11.1 | 0.313 | 7.9 | 0.169 | 4.3 | 1000          |
| SSRS8-8-01  | #8 (M4)   | 0.234  | 5.9 | 0.062           | 1.6 | 0.500 | 12.7 | 0.313 | 7.9 | 0.169 | 4.3 | 1000          |
| SSRS8-10-01 | #8 (M4)   | 0.234  | 5.9 | 0.062           | 1.6 | 0.625 | 15.9 | 0.313 | 7.9 | 0.169 | 4.3 | 1000          |
| SSRS8-12-01 | #8 (M4)   | 0.234  | 5.9 | 0.062           | 1.6 | 0.750 | 19.1 | 0.313 | 7.9 | 0.169 | 4.3 | 1000          |
| SSRS8-14-01 | #8 (M4)   | 0.234  | 5.9 | 0.062           | 1.6 | 0.875 | 22.2 | 0.313 | 7.9 | 0.169 | 4.3 | 1000          |
| 13STS008093 | #8 (M4)   | 0.234  | 5.9 | 0.062           | 1.6 | 0.938 | 23.8 | 0.313 | 7.9 | 0.169 | 4.3 | 1000          |
| SSRS8-16-01 | #8 (M4)   | 0.234  | 5.9 | 0.062           | 1.6 | 1.000 | 25.4 | 0.313 | 7.9 | 0.169 | 4.3 | 1000          |
| 13SS010265  | #10       | 0.265  | 6.7 | 0.062           | 1.6 | 0.265 | 6.7  | 0.316 | 8.0 | 0.190 | 4.8 | 1000          |
| 13SS010375  | #10       | 0.265  | 6.7 | 0.062           | 1.6 | 0.375 | 9.5  | 0.316 | 8.0 | 0.190 | 4.8 | 1000          |

CSR/CSP Series  
Collar Spacer

## Specifications:

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by Special Order
- Color: Natural

## Features:

- Pin (CSP) locks into bottom retainer (CSR) to capture PC board
- Combination of two mating parts forms a completely enclosed nylon spacer
- Binding head type screw is recommended

## Pin

| Item No. | ØB    |      | ØC    |     | D     |      | E    |       | Mounting Hole |      | Bulk Pack Qty |
|----------|-------|------|-------|-----|-------|------|------|-------|---------------|------|---------------|
|          | in    | mm   | in    | mm  | in    | mm   | in   | mm    | in            | mm   |               |
| CSP4-01  | 0.295 | 7.5  | —     | —   | —     | 0.10 | 2.5  | 0.195 | 5.0           | 1000 |               |
| CSP6-01  | 0.394 | 1.0  | 0.290 | 7.4 | 0.120 | 3.0  | 0.20 | 5.0   | 0.256         | 6.5  | 1000          |
| CSP8-01  | 0.436 | 11.1 | 0.330 | 8.4 | 0.140 | 3.6  | 0.22 | 5.5   | 0.272         | 6.9  | 1000          |

## Retainer

| Item No.    | A     |      | ØB    |      | Mating Pin | Screw      | Bulk Pack Qty |
|-------------|-------|------|-------|------|------------|------------|---------------|
|             | in    | mm   | in    | mm   |            |            |               |
| CSR4-224-01 | 0.224 | 5.7  | 0.295 | 7.5  | CSP4-01    | #4 or M2.5 | 1000          |
| CSR4-295-01 | 0.295 | 7.5  | 0.295 | 7.5  | CSP4-01    | #4 or M2.5 | 1000          |
| CSR4-394-01 | 0.394 | 10.0 | 0.295 | 7.5  | CSP4-01    | #4 or M2.5 | 1000          |
| CSR4-591-01 | 0.591 | 15.0 | 0.295 | 7.5  | CSP4-01    | #4 or M2.5 | 1000          |
| CSR4-787-01 | 0.787 | 20.0 | 0.295 | 7.5  | CSP4-01    | #4 or M2.5 | 1000          |
| CSR6-224-01 | 0.224 | 5.7  | 0.394 | 10.0 | CSP6-01    | #6 or M3   | 1000          |
| CSR6-295-01 | 0.295 | 7.5  | 0.394 | 10.0 | CSP6-01    | #6 or M3   | 1000          |
| CSR6-394-01 | 0.394 | 10.0 | 0.394 | 10.0 | CSP6-01    | #6 or M3   | 1000          |
| CSR6-591-01 | 0.591 | 15.0 | 0.394 | 10.0 | CSP6-01    | #6 or M3   | 1000          |
| CSR6-787-01 | 0.787 | 20.0 | 0.394 | 10.0 | CSP6-01    | #6 or M3   | 1000          |
| CSR8-224-01 | 0.224 | 5.7  | 0.436 | 11.1 | CSP8-01    | #6 or M3   | 1000          |
| CSR8-295-01 | 0.295 | 7.5  | 0.436 | 11.1 | CSP8-01    | #6 or M3   | 1000          |
| CSR8-394-01 | 0.394 | 10.0 | 0.436 | 11.1 | CSP8-01    | #6 or M3   | 1000          |
| CSR8-591-01 | 0.591 | 15.0 | 0.436 | 11.1 | CSP8-01    | #6 or M3   | 1000          |
| CSR8-787-01 | 0.787 | 20.0 | 0.436 | 11.1 | CSP8-01    | #6 or M3   | 1000          |

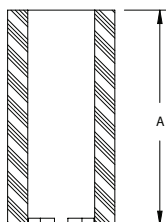
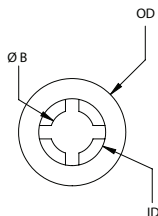




# RETAINING SPACERS



## 13SPRT Series Retaining Spacers



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by Special Order
- Color: Natural

**Features:**

- Specially configured I.D. designed to grip the screw shank
- The spacer remains attached to the screw for quick, easy assembly
- Will not rust, corrode or deteriorate

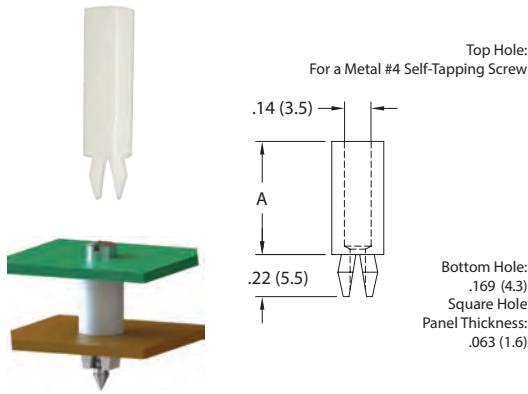
| Item No.  | ID    |     | Ø B   |     | OD    |     | A     |      | Bulk Pack Qty |
|-----------|-------|-----|-------|-----|-------|-----|-------|------|---------------|
|           | in    | mm  | in    | mm  | in    | mm  | in    | mm   |               |
| 13SPRT031 | 0.115 | 2.9 | 0.078 | 2.0 | 0.250 | 6.4 | 0.125 | 3.2  | 1000          |
| 13SPRT032 | 0.115 | 2.9 | 0.078 | 2.0 | 0.250 | 6.4 | 0.188 | 4.8  | 1000          |
| 13SPRT033 | 0.115 | 2.9 | 0.078 | 2.0 | 0.250 | 6.4 | 0.250 | 6.4  | 1000          |
| 13SPRT034 | 0.115 | 2.9 | 0.078 | 2.0 | 0.250 | 6.4 | 0.313 | 7.9  | 1000          |
| 13SPRT035 | 0.115 | 2.9 | 0.078 | 2.0 | 0.250 | 6.4 | 0.375 | 9.5  | 1000          |
| 13SPRT036 | 0.115 | 2.9 | 0.078 | 2.0 | 0.250 | 6.4 | 0.438 | 11.1 | 1000          |
| 13SPRT037 | 0.115 | 2.9 | 0.078 | 2.0 | 0.250 | 6.4 | 0.500 | 12.7 | 1000          |
| 13SPRT038 | 0.115 | 2.9 | 0.078 | 2.0 | 0.250 | 6.4 | 0.563 | 14.3 | 1000          |
| 13SPRT039 | 0.115 | 2.9 | 0.078 | 2.0 | 0.250 | 6.4 | 0.625 | 15.9 | 1000          |
| 13SPRT040 | 0.115 | 2.9 | 0.078 | 2.0 | 0.250 | 6.4 | 0.688 | 17.5 | 1000          |
| 13SPRT041 | 0.115 | 2.9 | 0.078 | 2.0 | 0.250 | 6.4 | 0.750 | 19.1 | 1000          |
| 13SPRT042 | 0.115 | 2.9 | 0.078 | 2.0 | 0.250 | 6.4 | 1.188 | 20.6 | 1000          |
| 13SPRT043 | 0.115 | 2.9 | 0.078 | 2.0 | 0.250 | 6.4 | 0.875 | 22.2 | 1000          |
| 13SPRT044 | 0.115 | 2.9 | 0.078 | 2.0 | 0.250 | 6.4 | 1.313 | 23.8 | 1000          |
| 13SPRT045 | 0.115 | 2.9 | 0.078 | 2.0 | 0.250 | 6.4 | 1.000 | 25.4 | 1000          |
| 13SPRT122 | 0.115 | 2.9 | 0.078 | 2.0 | 0.250 | 6.4 | 0.156 | 15.1 | 1000          |
| 13SPRT046 | 0.156 | 4.0 | 0.102 | 2.6 | 0.250 | 6.4 | 0.125 | 3.2  | 1000          |
| 13SPRT047 | 0.156 | 4.0 | 0.102 | 2.6 | 0.250 | 6.4 | 0.188 | 4.8  | 1000          |
| 13SPRT048 | 0.156 | 4.0 | 0.102 | 2.6 | 0.250 | 6.4 | 0.250 | 6.4  | 1000          |
| 13SPRT049 | 0.156 | 4.0 | 0.102 | 2.6 | 0.250 | 6.4 | 0.313 | 7.9  | 1000          |
| 13SPRT050 | 0.156 | 4.0 | 0.102 | 2.6 | 0.250 | 6.4 | 0.375 | 9.5  | 1000          |
| 13SPRT051 | 0.156 | 4.0 | 0.102 | 2.6 | 0.250 | 6.4 | 0.438 | 11.1 | 1000          |
| 13SPRT052 | 0.156 | 4.0 | 0.102 | 2.6 | 0.250 | 6.4 | 0.500 | 12.7 | 1000          |
| 13SPRT053 | 0.156 | 4.0 | 0.102 | 2.6 | 0.250 | 6.4 | 0.563 | 14.3 | 1000          |
| 13SPRT054 | 0.156 | 4.0 | 0.102 | 2.6 | 0.250 | 6.4 | 0.625 | 15.9 | 1000          |
| 13SPRT055 | 0.156 | 4.0 | 0.102 | 2.6 | 0.250 | 6.4 | 0.688 | 17.5 | 1000          |
| 13SPRT056 | 0.156 | 4.0 | 0.102 | 2.6 | 0.250 | 6.4 | 0.750 | 19.1 | 1000          |
| 13SPRT057 | 0.156 | 4.0 | 0.102 | 2.6 | 0.250 | 6.4 | 1.188 | 20.6 | 1000          |
| 13SPRT058 | 0.156 | 4.0 | 0.102 | 2.6 | 0.250 | 6.4 | 0.875 | 22.2 | 1000          |
| 13SPRT059 | 0.156 | 4.0 | 0.102 | 2.6 | 0.250 | 6.4 | 1.313 | 23.8 | 1000          |
| 13SPRT060 | 0.156 | 4.0 | 0.102 | 2.6 | 0.250 | 6.4 | 1.000 | 25.4 | 1000          |
| 13SPRT121 | 0.156 | 4.0 | 0.102 | 2.6 | 0.250 | 6.4 | 0.594 | 15.1 | 1000          |
| 13SPRT061 | 0.198 | 5.0 | 0.128 | 3.3 | 0.313 | 7.9 | 0.125 | 3.2  | 1000          |
| 13SPRT062 | 0.198 | 5.0 | 0.128 | 3.3 | 0.313 | 7.9 | 0.188 | 4.8  | 1000          |
| 13SPRT063 | 0.198 | 5.0 | 0.128 | 3.3 | 0.313 | 7.9 | 0.250 | 6.4  | 1000          |
| 13SPRT064 | 0.198 | 5.0 | 0.128 | 3.3 | 0.313 | 7.9 | 0.313 | 7.9  | 1000          |
| 13SPRT065 | 0.198 | 5.0 | 0.128 | 3.3 | 0.313 | 7.9 | 0.375 | 9.5  | 1000          |
| 13SPRT066 | 0.198 | 5.0 | 0.128 | 3.3 | 0.313 | 7.9 | 0.438 | 11.1 | 1000          |
| 13SPRT067 | 0.198 | 5.0 | 0.128 | 3.3 | 0.313 | 7.9 | 0.500 | 12.7 | 1000          |
| 13SPRT068 | 0.198 | 5.0 | 0.128 | 3.3 | 0.313 | 7.9 | 0.563 | 14.3 | 1000          |
| 13SPRT069 | 0.198 | 5.0 | 0.128 | 3.3 | 0.313 | 7.9 | 0.625 | 15.9 | 1000          |
| 13SPRT070 | 0.198 | 5.0 | 0.128 | 3.3 | 0.313 | 7.9 | 0.688 | 17.5 | 1000          |
| 13SPRT071 | 0.198 | 5.0 | 0.128 | 3.3 | 0.313 | 7.9 | 0.750 | 19.1 | 1000          |
| 13SPRT072 | 0.198 | 5.0 | 0.128 | 3.3 | 0.313 | 7.9 | 1.188 | 20.6 | 1000          |
| 13SPRT073 | 0.198 | 5.0 | 0.128 | 3.3 | 0.313 | 7.9 | 0.875 | 22.2 | 1000          |
| 13SPRT074 | 0.198 | 5.0 | 0.128 | 3.3 | 0.313 | 7.9 | 1.313 | 23.8 | 1000          |

| Item No.  | ID    |     | Ø B   |     | OD    |      | A     |      | Bulk Pack Qty |
|-----------|-------|-----|-------|-----|-------|------|-------|------|---------------|
|           | in    | mm  | in    | mm  | in    | mm   | in    | mm   |               |
| 13SPRT075 | 0.198 | 5.0 | 0.128 | 3.3 | 0.313 | 7.9  | 1.000 | 25.4 | 1000          |
| 13SPRT076 | 0.240 | 6.1 | 0.152 | 3.9 | 0.375 | 9.5  | 0.125 | 3.2  | 1000          |
| 13SPRT077 | 0.240 | 6.1 | 0.152 | 3.9 | 0.375 | 9.5  | 0.188 | 4.8  | 1000          |
| 13SPRT078 | 0.240 | 6.1 | 0.152 | 3.9 | 0.375 | 9.5  | 0.250 | 6.4  | 1000          |
| 13SPRT079 | 0.240 | 6.1 | 0.152 | 3.9 | 0.375 | 9.5  | 0.313 | 7.9  | 1000          |
| 13SPRT080 | 0.240 | 6.1 | 0.152 | 3.9 | 0.375 | 9.5  | 0.375 | 9.5  | 1000          |
| 13SPRT081 | 0.240 | 6.1 | 0.152 | 3.9 | 0.375 | 9.5  | 0.438 | 11.1 | 500           |
| 13SPRT082 | 0.240 | 6.1 | 0.152 | 3.9 | 0.375 | 9.5  | 0.500 | 12.7 | 500           |
| 13SPRT083 | 0.240 | 6.1 | 0.152 | 3.9 | 0.375 | 9.5  | 0.563 | 14.3 | 500           |
| 13SPRT084 | 0.240 | 6.1 | 0.152 | 3.9 | 0.375 | 9.5  | 0.625 | 15.9 | 500           |
| 13SPRT085 | 0.240 | 6.1 | 0.152 | 3.9 | 0.375 | 9.5  | 0.688 | 17.5 | 500           |
| 13SPRT086 | 0.240 | 6.1 | 0.152 | 3.9 | 0.375 | 9.5  | 0.750 | 19.1 | 500           |
| 13SPRT087 | 0.240 | 6.1 | 0.152 | 3.9 | 0.375 | 9.5  | 1.188 | 20.6 | 1000          |
| 13SPRT088 | 0.240 | 6.1 | 0.152 | 3.9 | 0.375 | 9.5  | 0.875 | 22.2 | 1000          |
| 13SPRT089 | 0.240 | 6.1 | 0.152 | 3.9 | 0.375 | 9.5  | 1.313 | 23.8 | 500           |
| 13SPRT090 | 0.240 | 6.1 | 0.152 | 3.9 | 0.375 | 9.5  | 1.000 | 25.4 | 250           |
| 13SPRT091 | 0.277 | 7.0 | 0.177 | 4.5 | 0.500 | 12.7 | 0.125 | 3.2  | 1000          |
| 13SPRT092 | 0.277 | 7.0 | 0.177 | 4.5 | 0.500 | 12.7 | 0.188 | 4.8  | 1000          |
| 13SPRT093 | 0.277 | 7.0 | 0.177 | 4.5 | 0.500 | 12.7 | 0.250 | 6.4  | 1000          |
| 13SPRT094 | 0.277 | 7.0 | 0.177 | 4.5 | 0.500 | 12.7 | 0.313 | 7.9  | 500           |
| 13SPRT095 | 0.277 | 7.0 | 0.177 | 4.5 | 0.500 | 12.7 | 0.375 | 9.5  | 500           |
| 13SPRT096 | 0.277 | 7.0 | 0.177 | 4.5 | 0.500 | 12.7 | 0.438 | 11.1 | 1000          |
| 13SPRT097 | 0.277 | 7.0 | 0.177 | 4.5 | 0.500 | 12.7 | 0.500 | 12.7 | 1000          |
| 13SPRT098 | 0.277 | 7.0 | 0.177 | 4.5 | 0.500 | 12.7 | 0.563 | 14.3 | 1000          |
| 13SPRT099 | 0.277 | 7.0 | 0.177 | 4.5 | 0.500 | 12.7 | 0.625 | 15.9 | 1000          |
| 13SPRT100 | 0.277 | 7.0 | 0.177 | 4.5 | 0.500 | 12.7 | 0.688 | 17.5 | 500           |
| 13SPRT101 | 0.277 | 7.0 | 0.177 | 4.5 | 0.500 | 12.7 | 0.750 | 19.1 | 1000          |
| 13SPRT102 | 0.277 | 7.0 | 0.177 | 4.5 | 0.500 | 12.7 | 1.188 | 20.6 | 1000          |
| 13SPRT103 | 0.277 | 7.0 | 0.177 | 4.5 | 0.500 | 12.7 | 0.875 | 22.2 | 1000          |
| 13SPRT104 | 0.277 | 7.0 | 0.177 | 4.5 | 0.500 | 12.7 | 1.313 | 23.8 | 1000          |
| 13SPRT105 | 0.277 | 7.0 | 0.177 | 4.5 | 0.500 | 12.7 | 1.000 | 25.4 | 500           |
| 13SPRT106 | 0.375 | 9.5 | 0.234 | 5.9 | 0.500 | 12.7 | 0.125 | 3.2  | 1000          |
| 13SPRT107 | 0.375 | 9.5 | 0.234 | 5.9 | 0.500 | 12.7 | 0.188 | 4.8  | 1000          |
| 13SPRT108 | 0.375 | 9.5 | 0.234 | 5.9 | 0.500 | 12.7 | 0.250 | 6.4  | 1000          |
| 13SPRT109 | 0.375 | 9.5 | 0.234 | 5.9 | 0.500 | 12.7 | 0.313 | 7.9  | 1000          |
| 13SPRT110 | 0.375 | 9.5 | 0.234 | 5.9 | 0.500 | 12.7 | 0.375 | 9.5  | 500           |
| 13SPRT111 | 0.375 | 9.5 | 0.234 | 5.9 | 0.500 | 12.7 | 0.438 | 11.1 | 1000          |
| 13SPRT112 | 0.375 | 9.5 | 0.234 | 5.9 | 0.500 | 12.7 | 0.500 | 12.7 | 1000          |
| 13SPRT113 | 0.375 | 9.5 | 0.234 | 5.9 | 0.500 | 12.7 | 0.563 | 14.3 | 1000          |
| 13SPRT114 | 0.375 | 9.5 | 0.234 | 5.9 | 0.500 | 12.7 | 0.625 | 15.9 | 1000          |
| 13SPRT115 | 0.375 | 9.5 | 0.234 | 5.9 | 0.500 | 12.7 | 0.688 | 17.5 | 1000          |
| 13SPRT116 | 0.375 | 9.5 | 0.234 | 5.9 | 0.500 | 12.7 | 0.750 | 19.1 | 1000          |
| 13SPRT117 | 0.375 | 9.5 | 0.234 | 5.9 | 0.500 | 12.7 | 1.188 | 20.6 | 1000          |
| 13SPRT118 | 0.375 | 9.5 | 0.234 | 5.9 | 0.500 | 12.7 | 0.875 | 22.2 | 1000          |
| 13SPRT119 | 0.375 | 9.5 | 0.234 | 5.9 | 0.500 | 12.7 | 1.313 | 23.8 | 1000          |
| 13SPRT120 | 0.375 | 9.5 | 0.234 | 5.9 | 0.500 | 12.7 | 1.000 | 25.4 | 1000          |



# SPACER NUTS

## MSNE Series Spacer Nut



Specifications:

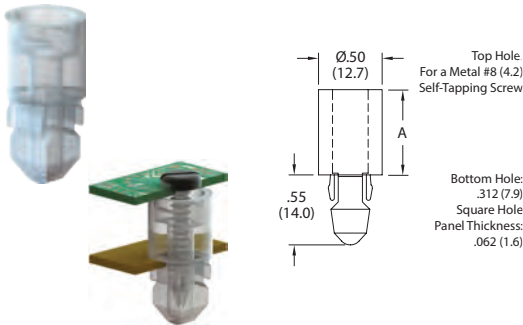
- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by Special Order
- Color: Natural

Features:

- Square hole prevents rotation
- As screw is engaged, legs spread holding the spacer in place without use of a nut

| Item No.    | A     |      | Bulk Pack Qty |
|-------------|-------|------|---------------|
|             | in    | mm   |               |
| MSNE-2-01   | 0.125 | 3.2  | 1000          |
| MSNE-4M-01  | 0.157 | 4.0  | 1000          |
| MSNE-3-01   | 0.188 | 4.8  | 1000          |
| MSNE-6M-01  | 0.240 | 6.1  | 1000          |
| MSNE-4-01   | 0.250 | 6.4  | 1000          |
| MSNE-5-01   | 0.313 | 7.9  | 1000          |
| MSNE-8M-01  | 0.313 | 8.0  | 1000          |
| MSNE-6-01   | 0.375 | 9.5  | 1000          |
| MSNE-10M-01 | 0.390 | 9.9  | 1000          |
| MSNE-12M-01 | 0.470 | 11.9 | 1000          |
| MSNE-8-01   | 0.500 | 12.7 | 1000          |
| MSNE-10-01  | 0.625 | 15.9 | 1000          |
| MSNE-12-01  | 0.750 | 19.1 | 1000          |
| MSNE-16-01  | 1.000 | 25.4 | 1000          |

## SN Series Spacer Nut



Specifications:

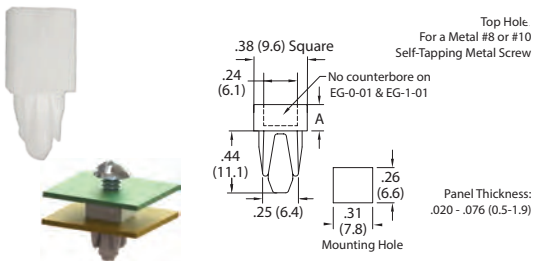
- Material: UL94 HB Polycarbonate
- Color: Clear

Features:

- Fully encapsulates the screw
- Mounts with a metal #8 Type 25 self-tapping screw
- When the screw is fully engaged, the bottom tabs break free, allowing expansion of the bottom "wings", locking it in place

| Item No. | A     |      | Bulk Pack Qty |
|----------|-------|------|---------------|
|          | in    | mm   |               |
| SN-125   | 0.125 | 3.2  | 1000          |
| SN-187   | 0.187 | 4.7  | 1000          |
| SN-250   | 0.250 | 6.4  | 1000          |
| SN-312   | 0.312 | 7.9  | 1000          |
| SN-375   | 0.375 | 9.5  | 1000          |
| SN-500   | 0.500 | 12.7 | 1000          |

## EG Series Expansion Grommet



Specifications:

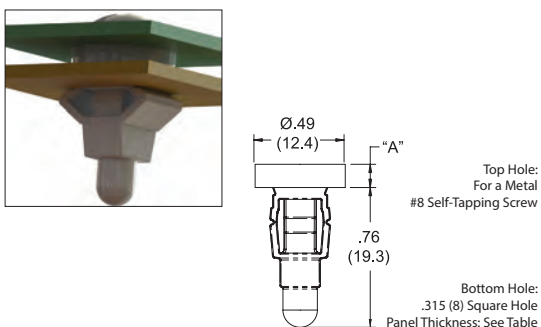
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Square hole prevents rotation
- As screw is engaged, legs spread holding the spacer in place without use of a nut
- Mounts with a #8 or #10 metal self-tapping screw

| Item No. | A     |      | Bulk Pack Qty |
|----------|-------|------|---------------|
|          | in    | mm   |               |
| EG-0-01  | 0.031 | 0.8  | 1000          |
| EG-1-01  | 0.063 | 1.6  | 1000          |
| EG-2-01  | 0.125 | 3.2  | 1000          |
| EG-3-01  | 0.188 | 4.8  | 1000          |
| EG-4-01  | 0.250 | 6.4  | 1000          |
| EG-5-01  | 0.313 | 7.9  | 1000          |
| EG-6-01  | 0.375 | 9.5  | 1000          |
| EG-7-01  | 0.438 | 11.1 | 1000          |
| EG-8-01  | 0.500 | 12.7 | 1000          |

## TFR Series Toggle Screw Grommet



Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- As self tapping screw is installed, the grommet expands and securely locks the screw and assembled parts in place
- Grommet legs are forced outward to help seal mounting hole
- Square hole prevents rotation
- Mounts with a metal #8 self-tapping screw

| Item No. | A     |     | Panel Thickness |           | Bulk Pack Qty |
|----------|-------|-----|-----------------|-----------|---------------|
|          | in    | mm  | in              | mm        |               |
| TFR-1    | 0.031 | 0.8 | 0.060 - 0.110   | 1.5 - 2.8 | 1000          |
| TFR-2    | 0.125 | 3.2 | 0.020 - 0.110   | 0.5 - 2.8 | 1000          |
| TFR-3    | 0.189 | 4.8 | 0.020 - 0.110   | 0.5 - 2.8 | 1000          |

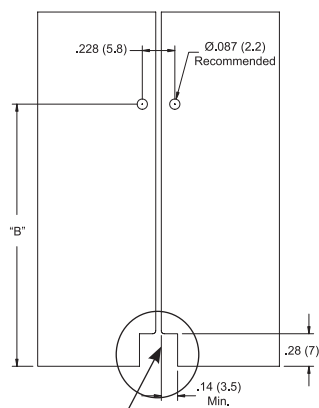


# VERTICAL MOUNT CARD GUIDES

## VMCG Series Vertical Mount Card Guides



Patent 6,547,082



Cutout Needed Only for Fig. 2

PCB Hole Locations

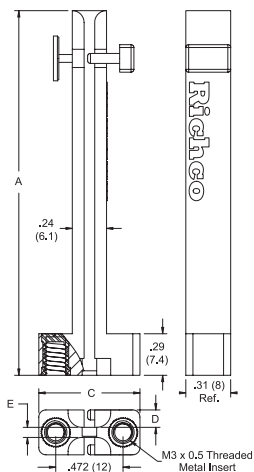


Fig. 1

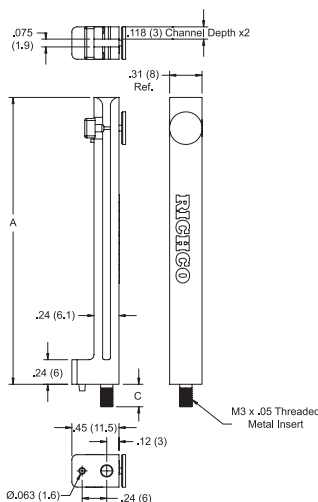


Fig. 2

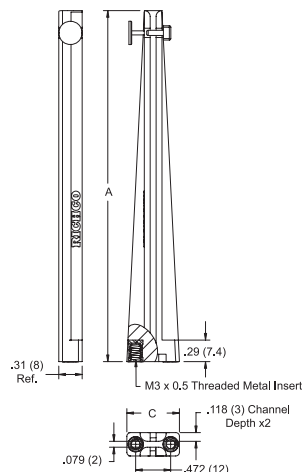


Fig. 3

**Specifications:**

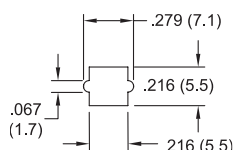
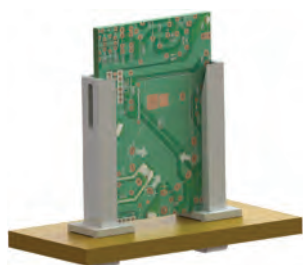
- Card Guide Material: GF Nylon 6
- Card Guide Color: Grey
- Locking Mechanism Material: HDPE
- Locking Mechanism Color: Black
- Metal Pin Material: Stainless Steel
- Screw Material: Mild Steel, Zinc Plated
- Washer Material: Stainless Steel
- Threaded Insert Material: Brass

**Features:**

- Mounting Hole Panel Thickness: Up to 0.125 (3.18) with M3 Screw (provided)
- Locking pin holds boards in place; to engage or disengage, simply press with finger
- Double channel permits side-by-side mounting
- Includes mounting hardware: screw, washer and lock washer

| Item No.        | A    |       | B    |       | C    |      | D     |     | E     |     | Fig. | Accepts PCB Thickness |     | Bulk Pack Qty |
|-----------------|------|-------|------|-------|------|------|-------|-----|-------|-----|------|-----------------------|-----|---------------|
|                 | in   | mm    | in   | mm    | in   | mm   | in    | mm  | in    | mm  |      | in                    | mm  |               |
| VMCG-50-MPBK-K  | 1.83 | 46.5  | 1.65 | 42.0  | 0.71 | 18.0 | 0.104 | 2.6 | 0.105 | 2.7 | 1    | 0.062                 | 1.6 | 100           |
| VMCG-65-MPBK-K  | 2.56 | 65.0  | 2.22 | 56.5  | 0.71 | 18.0 | 0.118 | 3.0 | 0.079 | 2.0 | 1    | 0.062                 | 1.6 | 100           |
| VMCG-70-MPBK-K  | 2.76 | 70.1  | 2.44 | 62.5  | 0.22 | 5.6  | —     | —   | —     | —   | 2    | 0.062                 | 1.6 | 100           |
| VMCG-90-MPBK-K  | 3.54 | 90.0  | 3.21 | 81.5  | 0.71 | 18.0 | 0.118 | 3.0 | 0.079 | 2.0 | 1    | 0.062                 | 1.6 | 100           |
| VMCG-100-MPBK-K | 3.94 | 100.0 | 3.62 | 92.0  | 0.35 | 8.9  | —     | —   | —     | —   | 2    | 0.062                 | 1.6 | 100           |
| VMCG-135-MPBK-K | 5.31 | 135.0 | 4.98 | 126.5 | 0.75 | 19.0 | 0.118 | 3.0 | 0.079 | 2.0 | 1    | 0.062                 | 1.6 | 100           |
| VMCG-160-MPBK-K | 6.30 | 160.0 | 4.43 | 112.5 | 0.75 | 19.0 | 0.118 | 3.0 | 0.079 | 2.0 | 1    | 0.062                 | 1.6 | 100           |
| VMCG-320-MPBK-K | 4.73 | 120.0 | 4.43 | 112.5 | 0.71 | 18.0 | —     | —   | —     | —   | 3    | 0.062                 | 1.6 | 100           |
| VMCG-330-MPBK-K | 4.73 | 120.0 | 4.43 | 112.5 | 0.71 | 18.0 | 0.118 | 3.0 | 0.079 | 2.0 | 1    | 0.062                 | 1.6 | 100           |
| VMCG-360-MPBK-K | 6.30 | 160.0 | 4.43 | 112.5 | 0.75 | 19.0 | —     | —   | —     | —   | 3    | 0.062                 | 1.6 | 100           |

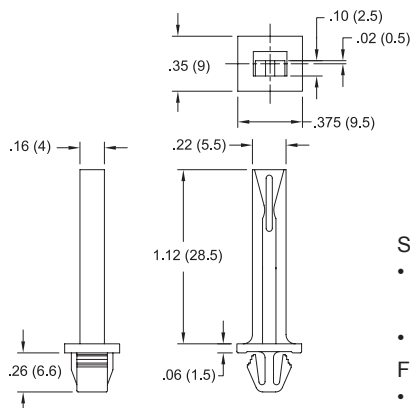
## VMCGE Series Vertical Mount Card Guide



Mounting Hole Detail

**Mounting Hole:**  
Snap-lock into dimensions

**Panel Thickness:**  
.047 - .071 (1.2 - 1.8)



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- UL94 V-0 Available by Special Order
- Color: Natural

**Features:**

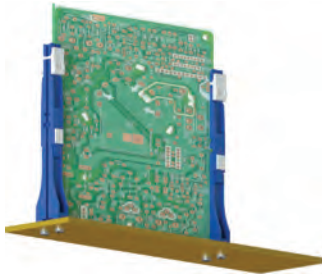
- Quick way to run a PC board to the chassis
- Rectangular hole to prevent rotation

| Item No.     | Accepts PCB Thickness |     | Bulk Pack Qty |
|--------------|-----------------------|-----|---------------|
|              | in                    | mm  |               |
| VMCGE-30M-01 | 0.062                 | 1.6 | 1000          |

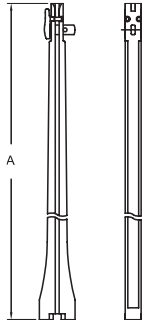


# VERTICAL MOUNT CARD GUIDES

## VMCGN Series Vertical Mount Card Guides



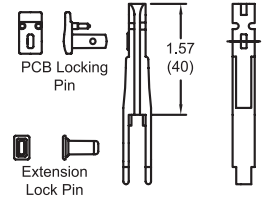
Patent 6,547,082



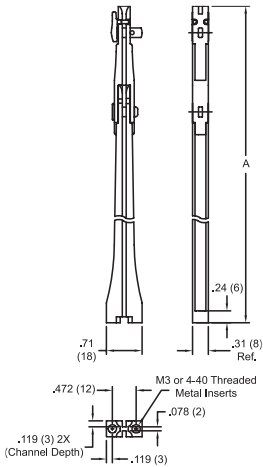
**Fig. 1**  
Base



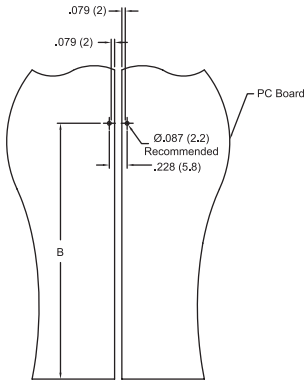
**Fig. 2**  
Base



**Fig. 3**  
Extension



**Fig 2 + Fig. 3 Assembly**



**PCB Hole Locations**

**Specifications:**

- Card Guide Material: UL94 V-0 Polystyrene
- Card Guide Color: Blue
- Locking Mechanism Material: Acetal
- Locking Mechanism Color: White
- Screw Material: Mild Steel, Zinc Plated
- Washer Material: Stainless Steel;
- Threaded Insert Material: Brass

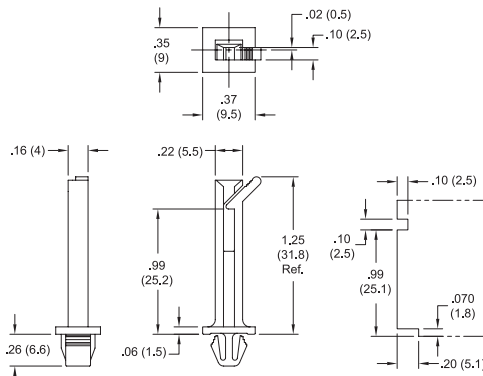
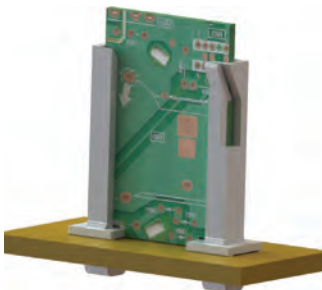
**Features:**

- Locking pin holds boards in place; to engage or disengage, simply press with finger
- Double channel permits side-by-side mounting
- Part numbers ending in -K include M3 screw, washer and lock washer mounting hardware

**Note:** Item numbers ending in 'K' include mounting hardware

| Item No.        | A    |       | B    |       | Threaded Insert | Fig.  | Accepts PCB Thickness |     | Bulk Pack Qty |
|-----------------|------|-------|------|-------|-----------------|-------|-----------------------|-----|---------------|
|                 | in   | mm    | in   | mm    |                 |       | in                    | mm  |               |
| VMCGN65-M3-L-K  | 2.56 | 65.0  | 2.24 | 57.0  | M3              | 1     | 0.079                 | 2.0 | 100           |
| VMCGN65-440-L   | 2.56 | 65.0  | 2.24 | 57.0  | 4-40            | 1     | 0.079                 | 2.0 | 100           |
| VMCGN105-M3-L-K | 4.13 | 105.0 | 3.82 | 97.0  | M3              | 2 + 3 | 0.079                 | 2.0 | 100           |
| VMCGN105-440-L  | 4.13 | 105.0 | 3.82 | 97.0  | 4-40            | 2 + 3 | 0.079                 | 2.0 | 100           |
| VMCGN120-M3-L-K | 4.72 | 120.0 | 4.41 | 112.0 | M3              | 1     | 0.079                 | 2.0 | 100           |
| VMCGN120-440-L  | 4.72 | 120.0 | 4.41 | 112.0 | 4-40            | 1     | 0.079                 | 2.0 | 100           |
| VMCGN160-M3-L-K | 6.30 | 160.0 | 5.98 | 152.0 | M3              | 2 + 3 | 0.079                 | 2.0 | 100           |
| VMCGN160-440-L  | 6.30 | 160.0 | 5.8  | 152.0 | 4-40            | 2 + 3 | 0.079                 | 2.0 | 100           |

## VMCGLE Series Vertical Mount Card Guide Latched



**PCB Cutout**

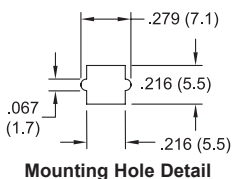
**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- UL94 V-0 Available by Special Order
- Color: Natural

**Features:**

- Board is held in place by locking tab
- Mounts into a square hole to prevent rotation
- Board is easily released

**Mounting Hole:**  
Snap-lock into above dimensions  
**Panel Thickness:**  
0.047 - 0.071 (1.2 - 1.8)



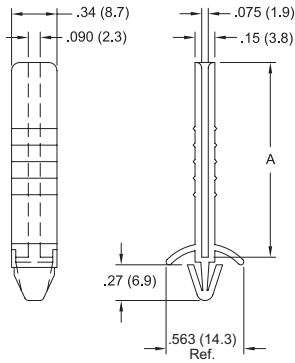
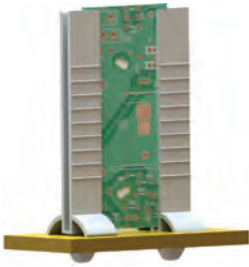
**Mounting Hole Detail**

| Item No.      | Accepts PCB Thickness |     | Bulk Pack Qty |
|---------------|-----------------------|-----|---------------|
|               | in                    | mm  |               |
| VMCGLE-31M-01 | 0.062                 | 1.6 | 1000          |



# VERTICAL MOUNT CARD GUIDES

## CBG Series Circuit Board Guide



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by Special Order
- Color: Natural

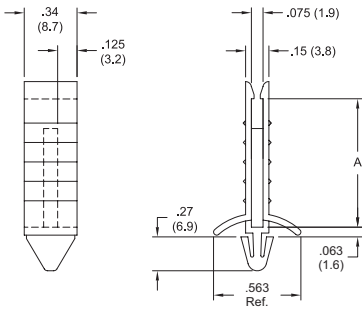
**Features:**

- Vertical mount for boards of any width
- Double channel permits side-by-side mounting
- PC board easily slides in and out

**Mounting Hole:** Snap-lock: 0.175 x 0.310 (4.45 x 7.87)  
Rectangular Hole  
**Panel Thickness:** 0.030 - 0.070 (0.8 - 1.8)

| Item No.   | A   |      | Accepts PCB Thickness |     | Bulk Pack Qty |
|------------|-----|------|-----------------------|-----|---------------|
|            | in  | mm   | in                    | mm  |               |
| CBG-1-01   | 1.0 | 25.4 | 0.062                 | 1.6 | 100           |
| CBG-1.5-01 | 1.5 | 38.1 | 0.062                 | 1.6 | 100           |
| CBG-2-01   | 2.0 | 50.8 | 0.062                 | 1.6 | 100           |
| CBG-3-01   | 3.0 | 76.5 | 0.062                 | 1.6 | 100           |

## LCBG Series Locking Circuit Board Guide



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by Special Order
- Color: Natural

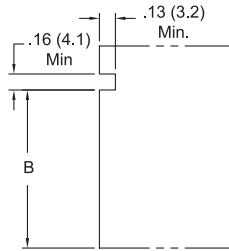
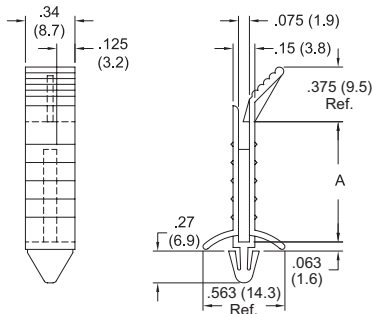
**Features:**

- Locking tabs hold board in place
- Vertical mount for boards of any width
- Double channel permits side-by-side mounting

**Mounting Hole:** Snap-lock: 0.175 x 0.310 (4.5 x 7.9)  
Rectangular Hole  
**Panel Thickness:** 0.030 - 0.070 (0.8 - 1.8)

| Item No.    | A     |      | Accepts PCB Thickness |     | Bulk Pack Qty |
|-------------|-------|------|-----------------------|-----|---------------|
|             | in    | mm   | in                    | mm  |               |
| LCBG-1-01   | 0.880 | 22.4 | 0.062                 | 1.6 | 100           |
| LCBG-1.5-01 | 1.375 | 34.9 | 0.062                 | 1.6 | 100           |
| LCBG-2-01   | 1.870 | 47.5 | 0.062                 | 1.6 | 100           |
| LCBG-3-01   | 2.875 | 73.0 | 0.062                 | 1.6 | 100           |

## LCBG-T Series Releasable Locking Circuit Board Guide



Typical Board Cutout

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by Special Order
- Color: Natural

**Features:**

- Double channel permits side-by-side mounting
- Board is held in place by locking tab
- Board is easily released

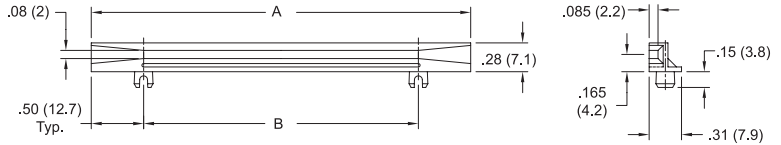
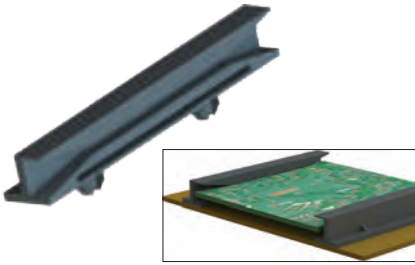
**Mounting Hole:** Snap-lock: 0.175 x 0.310 (4.5 x 7.9)  
Rectangular Hole  
**Panel Thickness:** 0.030 - 0.070 (0.8 - 1.8)

| Item No.     | A     |      | B     |      | Accepts PCB Thickness |     | Bulk Pack Qty |
|--------------|-------|------|-------|------|-----------------------|-----|---------------|
|              | in    | mm   | in    | mm   | in                    | mm  |               |
| LCBG-1T-01   | 0.880 | 22.4 | 0.865 | 22.0 | 0.062                 | 1.6 | 100           |
| LCBG-1.5T-01 | 1.375 | 34.9 | 1.360 | 34.5 | 0.062                 | 1.6 | 100           |
| LCBG-2T-01   | 1.870 | 47.5 | 1.855 | 47.1 | 0.062                 | 1.6 | 100           |
| LCBG-3T-01   | 2.875 | 73.0 | 2.860 | 72.6 | 0.062                 | 1.6 | 100           |



# HORIZONTAL CARD GUIDES

## RSSHG Series Single Sided Horizontal Card Guide

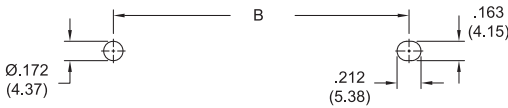


**Specifications:**

- Material: UL94 V-0 Nylon 6/6
- Color: Black

**Features:**

- Innovative mounting method for horizontal mounting
- Firm retention for any board width

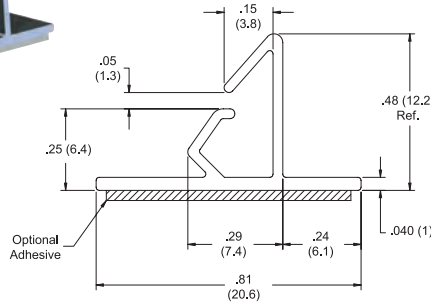
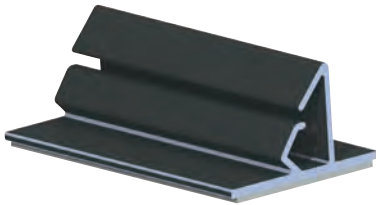


**Recommended Mounting Holes**

Mounts into Panel Thickness: 0.047 - 0.090 (1.2 - 2.3)

| Item No.      | A   |       | B   |       | Accepts PCB Thickness |     | Bulk Pack Qty |
|---------------|-----|-------|-----|-------|-----------------------|-----|---------------|
|               | in  | mm    | in  | mm    | in                    | mm  |               |
| RSSHG-201-165 | 2.0 | 50.8  | 1.0 | 25.4  | 0.062                 | 1.6 | 500           |
| RSSHG-251-165 | 2.5 | 63.5  | 1.5 | 38.1  | 0.062                 | 1.6 | 500           |
| RSSHG-301-165 | 3.0 | 76.2  | 2.0 | 50.8  | 0.062                 | 1.6 | 500           |
| RSSHG-351-165 | 3.5 | 88.9  | 2.5 | 63.5  | 0.062                 | 1.6 | 500           |
| RSSHG-401-165 | 4.0 | 101.6 | 3.0 | 76.2  | 0.062                 | 1.6 | 500           |
| RSSHG-451-165 | 4.5 | 114.3 | 3.5 | 88.9  | 0.062                 | 1.6 | 500           |
| RSSHG-501-165 | 5.0 | 127.0 | 4.0 | 101.6 | 0.062                 | 1.6 | 500           |
| RSSHG-601-165 | 6.0 | 152.4 | 5.0 | 127.0 | 0.062                 | 1.6 | 500           |

## BMS-S Series Board Mounting Strip



**Specifications:**

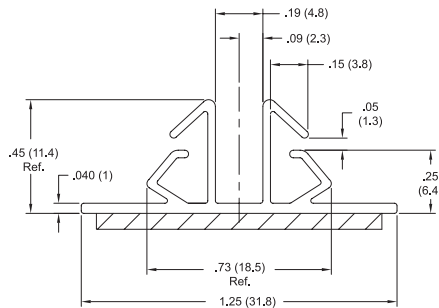
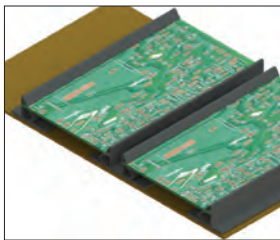
- Material: UL94 V-0 Rigid PVC
- Color: Black

**Features:**

- Horizontal mount for boards of any length or width
- Adhesive: Optional 1/16 (1.6) thick double sided adhesive
- Standard Pack: 100 feet: 25 pieces x 48" (25 pieces x 1219.2mm) lengths

| Item No.  | Adhesive | Bulk Pack Qty |
|-----------|----------|---------------|
| BMS-S-48  | No       | 100           |
| BMS-SA-48 | Yes      | 100           |

## BMS-D Series Board Mounting Strip- Double Sided



**Specifications:**

- Material: UL94 V-0 Rigid PVC
- Color: Black

**Features:**

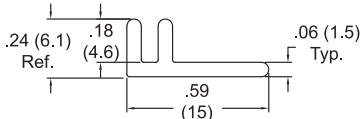
- Horizontal mount for boards of any length or width
- Adhesive: Optional 1/16 (1.6) thick double sided adhesive
- Standard Pack: 100 feet: 25 pieces x 48" (25 pieces x 1219.2mm) lengths

| Item No.  | Adhesive | Bulk Pack Qty |
|-----------|----------|---------------|
| BMS-D-48  | No       | 100           |
| BMS-DA-48 | Yes      | 100           |

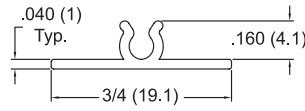


**CARD GUIDES**

**PCG Series  
Printed Circuit Guide**



**PCG-3**



**PCG-4**

**Specifications:**

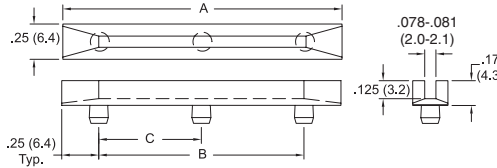
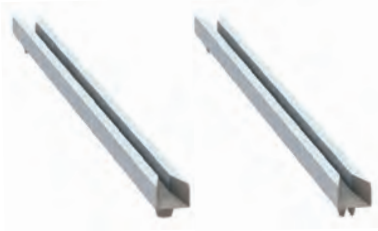
- Material: See table
- Color: Grey

**Features:**

- Provided in 4-foot lengths that can be cut to desired length
- Optional Adhesive: 1/16 (1.6) thick double sided adhesive
- Standard Pack: 100 feet: 25 pieces x 48" (25 pieces x 1219.2 mm) lengths

| Item No.  | Material     | Adhesive | Accepts PCB Thickness |     | Bulk Pack Qty |
|-----------|--------------|----------|-----------------------|-----|---------------|
|           |              |          | in                    | mm  |               |
| PCG-3-48  | UL94 HB ABS  | No       | 0.062                 | 1.6 | 1 - 100 Ft    |
| PCG-3A-48 | UL94 HB ABS  | Yes      | 0.062                 | 1.6 | 1 - 100 Ft    |
| PCG-4-48  | UL94 V-0 PVC | No       | 0.062                 | 1.6 | 1 - 100 Ft    |
| PCG-4A-48 | UL94 V-0 PVC | Yes      | 0.062                 | 1.6 | 1 - 100 Ft    |

**RN/21CGS Series  
Snap-in Narrow Card Guide**

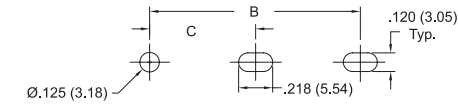


**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Flame Class:
- Color: Natural

**Features:**

- Narrow width allows for higher density or optimum air flow



**Recommended Mounting Holes**

Mounts into Panel Thickness: 0.047 - 0.085 (1.2 - 2.2)



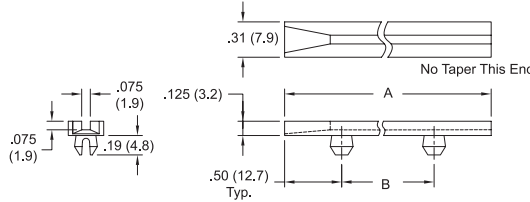
**Solid Leg**



**Slotted Leg**

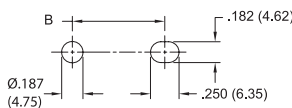
| Item No.       | A   |       | B   |       | C    |       | CB Thickness |     | Leg Design | Bulk Pack Qty |
|----------------|-----|-------|-----|-------|------|-------|--------------|-----|------------|---------------|
|                | in  | mm    | in  | mm    | in   | mm    | in           | mm  |            |               |
| • 21CGS00250WS | 2.5 | 63.5  | 2.0 | 50.8  | —    | —     | 0.062        | 1.6 | Slotted    | 500           |
| • 21CGS00250   | 2.5 | 63.5  | 2.0 | 50.8  | —    | —     | 0.062        | 1.6 | Solid      | 500           |
| • 21CGS00300WS | 3.0 | 76.2  | 2.5 | 63.5  | —    | —     | 0.062        | 1.6 | Slotted    | 500           |
| • 21CGS00300   | 3.0 | 76.2  | 2.5 | 63.5  | —    | —     | 0.062        | 1.6 | Solid      | 500           |
| • 21CGS00350   | 3.5 | 88.9  | 3.0 | 76.2  | —    | —     | 0.062        | 1.6 | Slotted    | 500           |
| • 21CGS00400WS | 4.0 | 101.6 | 3.5 | 88.9  | —    | —     | 0.062        | 1.6 | Slotted    | 500           |
| • 21CGS00400   | 4.0 | 101.6 | 3.5 | 88.9  | —    | —     | 0.062        | 1.6 | Solid      | 500           |
| • 21CGS00450WS | 4.5 | 114.3 | 4.0 | 101.6 | —    | —     | 0.062        | 1.6 | Slotted    | 500           |
| • 21CGS00450   | 4.5 | 114.3 | 4.0 | 101.6 | —    | —     | 0.062        | 1.6 | Solid      | 500           |
| • 21CGS00500WS | 5.0 | 127   | 4.5 | 114.3 | —    | —     | 0.062        | 1.6 | Slotted    | 500           |
| • 21CGS00500   | 5.0 | 127   | 4.5 | 114.3 | —    | —     | 0.062        | 1.6 | Solid      | 500           |
| • 21CGS00550WS | 5.5 | 139.7 | 5.0 | 127   | —    | —     | 0.062        | 1.6 | Slotted    | 500           |
| • 21CGS00550   | 5.5 | 139.7 | 5.0 | 127   | —    | —     | 0.062        | 1.6 | Solid      | 500           |
| • 21CGS00600WS | 6.0 | 152.4 | 5.5 | 139.7 | —    | —     | 0.062        | 1.6 | Slotted    | 500           |
| • 21CGS00600   | 6.0 | 152.4 | 5.5 | 139.7 | —    | —     | 0.062        | 1.6 | Solid      | 500           |
| RN-650-2       | 6.5 | 164.1 | 6.0 | 152.4 | —    | —     | 0.062        | 1.6 | Solid      | 500           |
| RN-700-3       | 7.0 | 177.8 | 6.5 | 164.1 | 3.25 | 82.2  | 0.062        | 1.6 | Solid      | 500           |
| RN-750-3       | 7.5 | 190.5 | 7.0 | 177.8 | 3.50 | 88.5  | 0.062        | 1.6 | Solid      | 500           |
| RN-800-3       | 8.0 | 203.2 | 7.5 | 190.5 | 3.75 | 94.9  | 0.062        | 1.6 | Solid      | 500           |
| RN-850-3       | 8.5 | 215.9 | 8.0 | 203.2 | 4.00 | 101.6 | 0.062        | 1.6 | Solid      | 500           |

**RSFS Series  
Snap-in Card Guide**



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural



**Recommended Mounting Holes**

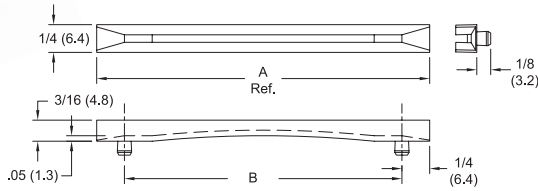
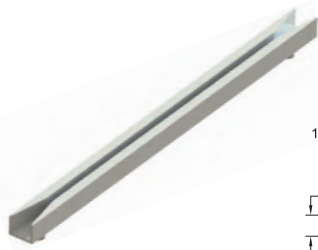
Mounts into Panel Thickness: 0.047 - 0.090 (1.2 - 2.3)

| Item No. | A Ref. |       | B   |       | Accepts PCB Thickness |     | Bulk Pack Qty |
|----------|--------|-------|-----|-------|-----------------------|-----|---------------|
|          | in     | mm    | in  | mm    | in                    | mm  |               |
| RSFS-250 | 2.5    | 63.5  | 1.5 | 38.1  | 0.062                 | 1.6 | 500           |
| RSFS-300 | 3.0    | 76.2  | 2.0 | 50.8  | 0.062                 | 1.6 | 500           |
| RSFS-350 | 3.5    | 88.9  | 2.5 | 63.5  | 0.062                 | 1.6 | 500           |
| RSFS-400 | 4.0    | 101.6 | 3.0 | 76.2  | 0.062                 | 1.6 | 500           |
| RSFS-450 | 4.5    | 114.3 | 3.0 | 76.2  | 0.062                 | 1.6 | 500           |
| RSFS-451 | 4.5    | 114.3 | 3.5 | 88.9  | 0.062                 | 1.6 | 500           |
| RSFS-500 | 5.0    | 127.0 | 4.0 | 101.6 | 0.062                 | 1.6 | 500           |
| RSFS-550 | 5.5    | 139.7 | 4.5 | 114.3 | 0.062                 | 1.6 | 500           |
| RSFS-600 | 6.0    | 152.4 | 5.0 | 127.0 | 0.062                 | 1.6 | 500           |
| RSFS-700 | 7.0    | 177.8 | 6.0 | 152.4 | 0.062                 | 1.6 | 500           |
| RSFS-800 | 8.0    | 203.2 | 7.0 | 177.8 | 0.062                 | 1.6 | 500           |



# HORIZONTAL CARD GUIDES

## RCG Series Snap-in Rack Card Guide



**Recommended Mounting Holes**  
Mounts into Panel Thickness: 0.062 (1.6)

**Specifications:**

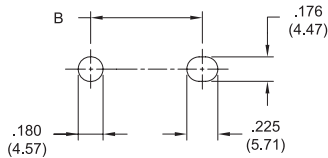
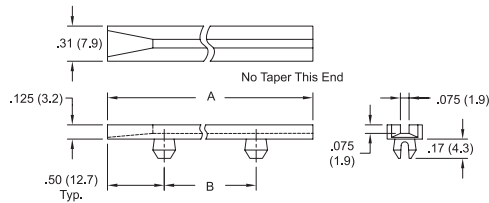
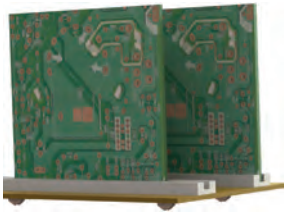
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Tapered on both ends to ease insertion of the PC board

| Item No. | A Ref. |       | B   |       | Accepts PCB Thickness |     | Bulk Pack Qty |
|----------|--------|-------|-----|-------|-----------------------|-----|---------------|
|          | in     | mm    | in  | mm    | in                    | mm  |               |
| RCG-1    | 3.0    | 76.2  | 2.5 | 63.5  | 0.062                 | 1.6 | 500           |
| RCG-2    | 4.0    | 101.6 | 3.5 | 88.9  | 0.062                 | 1.6 | 500           |
| RCG-3    | 6.0    | 152.4 | 5.5 | 139.7 | 0.062                 | 1.6 | 500           |
| RCG-4    | 8.5    | 215.9 | 8.0 | 203.2 | 0.062                 | 1.6 | 500           |

## RSSD Series Snap-in Card Guide



**Recommended Mounting Holes**  
Mounts into Panel Thickness: 0.047-0.090 (1.2-2.3)

**Specifications:**

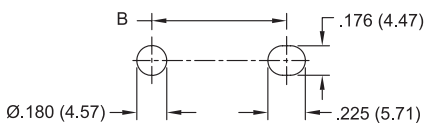
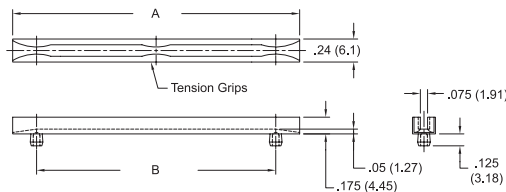
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- No tools required for assembly

| Item No.     | A Ref. |       | B   |       | Accepts PCB Thickness |     | Bulk Pack Qty |
|--------------|--------|-------|-----|-------|-----------------------|-----|---------------|
|              | in     | mm    | in  | mm    | in                    | mm  |               |
| RSSD-250     | 2.5    | 63.5  | 1.5 | 38.1  | 0.062                 | 1.6 | 500           |
| RSSD-300     | 3.0    | 76.2  | 2.0 | 50.8  | 0.062                 | 1.6 | 500           |
| RSSD-350     | 3.5    | 88.9  | 2.5 | 63.5  | 0.062                 | 1.6 | 500           |
| RSSD-400     | 4.0    | 101.6 | 3.0 | 76.2  | 0.062                 | 1.6 | 500           |
| RSSD-450     | 4.5    | 114.3 | 3.5 | 88.9  | 0.062                 | 1.6 | 500           |
| RSSD-450-300 | 4.5    | 114.3 | 3.0 | 76.2  | 0.062                 | 1.6 | 500           |
| RSSD-500     | 5.0    | 127.0 | 4.0 | 101.6 | 0.062                 | 1.6 | 500           |
| RSSD-550     | 5.5    | 139.7 | 4.5 | 114.3 | 0.062                 | 1.6 | 500           |
| RSSD-600     | 6.0    | 152.4 | 5.0 | 127.0 | 0.062                 | 1.6 | 500           |
| RSSD-650     | 6.5    | 164.1 | 5.5 | 139.7 | 0.062                 | 1.6 | 500           |
| RSSD-700     | 7.0    | 177.8 | 6.0 | 152.4 | 0.062                 | 1.6 | 500           |
| RSSD-750     | 7.5    | 190.5 | 6.5 | 165.1 | 0.062                 | 1.6 | 500           |
| RSSD-800     | 8.0    | 203.2 | 7.0 | 177.8 | 0.062                 | 1.6 | 500           |

## RCGH Series Snap-in Rack Card Guide



**Recommended Mounting Holes**  
Mounts into Panel Thickness: 0.062 (1.6)

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

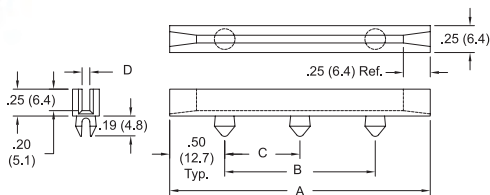
- Side grips hold board in place
- Hollow pin design eases insertion

| Item No. | A Ref. |       | B   |       | Number of Grips | Accepts PCB Thickness |     | Bulk Pack Qty |
|----------|--------|-------|-----|-------|-----------------|-----------------------|-----|---------------|
|          | in     | mm    | in  | mm    |                 | in                    | mm  |               |
| RCGH-25  | 2.5    | 63.5  | 2.0 | 50.8  | 2               | 0.062                 | 1.6 | 500           |
| RCGH-30  | 3.0    | 76.2  | 2.5 | 63.5  | 3               | 0.062                 | 1.6 | 500           |
| RCGH-35  | 3.5    | 88.9  | 3.0 | 76.2  | 3               | 0.062                 | 1.6 | 500           |
| RCGH-40  | 4.0    | 101.6 | 3.5 | 88.9  | 4               | 0.062                 | 1.6 | 500           |
| RCGH-45  | 4.5    | 114.3 | 4.0 | 101.6 | 4               | 0.062                 | 1.6 | 500           |
| RCGH-50  | 5.0    | 127.0 | 4.5 | 114.3 | 4               | 0.062                 | 1.6 | 500           |
| RCGH-55  | 5.5    | 139.7 | 5.0 | 127.0 | 5               | 0.062                 | 1.6 | 500           |
| RCGH-60  | 6.0    | 152.4 | 5.5 | 139.7 | 5               | 0.062                 | 1.6 | 500           |





**RDC Series**  
**Deep Channel Snap-in Card Guide**

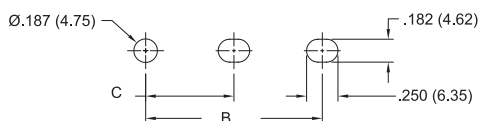


**Specifications:**

- Material: UL94 V-0 Nylon 6/6
- Color: Black

**Features:**

- Slot depth of .200 allows for maximum board retention
- Good for high vibration and shock applications

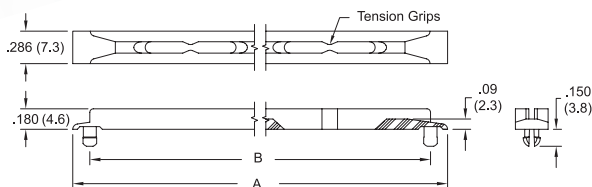


**Recommended Mounting Holes**

Mounts into Panel Thickness: 0.047 - 0.090 (1.2 - 2.3)

| Item No.    | A Ref. |       | B   |       | C   |      | D     |     | Accepts PCB Thickness |     | Bulk Pack Qty |
|-------------|--------|-------|-----|-------|-----|------|-------|-----|-----------------------|-----|---------------|
|             | in     | mm    | in  | mm    | in  | mm   | in    | mm  | in                    | mm  |               |
| RDC-250     | 2.5    | 63.5  | 1.5 | 38.1  | —   | —    | 0.080 | 2.0 | 0.062                 | 1.6 | 500           |
| RDC-450     | 4.5    | 114.3 | 3.5 | 88.9  | —   | —    | 0.080 | 2.0 | 0.062                 | 1.6 | 500           |
| RDC-600     | 6.0    | 152.4 | 5.0 | 127.0 | —   | —    | 0.080 | 2.0 | 0.062                 | 1.6 | 500           |
| RDC-800     | 8.0    | 203.2 | 7.0 | 177.8 | 3.5 | 88.9 | 0.080 | 2.0 | 0.062                 | 1.6 | 500           |
| RDC-450-102 | 4.5    | 114.3 | 3.5 | 88.9  | —   | —    | 0.102 | 2.6 | 0.094                 | 2.4 | 500           |
| RDC-600-102 | 6.0    | 152.4 | 5.0 | 127.0 | —   | —    | 0.102 | 2.6 | 0.094                 | 2.4 | 500           |
| RDC-800-102 | 8.0    | 203.2 | 7.0 | 177.8 | 3.5 | 88.9 | 0.102 | 2.6 | 0.094                 | 2.4 | 500           |
| RDC-450-130 | 4.5    | 114.3 | 3.5 | 88.9  | —   | —    | 0.132 | 3.4 | 0.125                 | 3.2 | 500           |
| RDC-600-130 | 6.0    | 152.4 | 5.0 | 127.0 | —   | —    | 0.132 | 3.4 | 0.125                 | 3.2 | 500           |
| RDC-800-130 | 8.0    | 203.2 | 7.0 | 177.8 | 3.5 | 88.9 | 0.132 | 3.4 | 0.125                 | 3.2 | 500           |

**TCG Series**  
**Tension Card Guide**

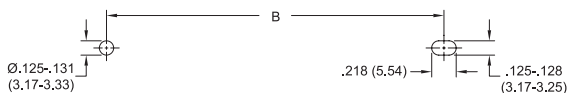


**Specifications:**

- Material: UL94 V-0 Polycarbonate
- Color: Black

**Features:**

- Tension grips apply spring pressure to hold boards
- Slotted surface improves ventilation

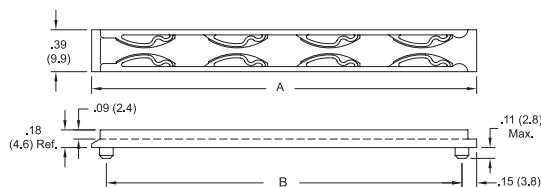
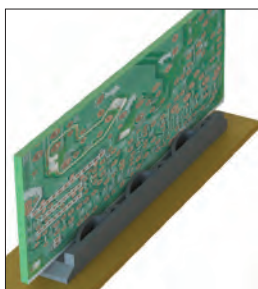


**Recommended Mounting Holes**

Mounts into Panel Thickness: 0.062 (1.6)

| Item No.      | A     |       | B     |       | Number of Tension Grips | Accepts PCB Thickness |     | Bulk Pack Qty |
|---------------|-------|-------|-------|-------|-------------------------|-----------------------|-----|---------------|
|               | in    | mm    | in    | mm    |                         | in                    | mm  |               |
| TCG1-2.500-23 | 2.500 | 63.5  | 2.200 | 55.9  | 1                       | 0.062                 | 1.6 | 500           |
| TCG1-3.300-23 | 3.300 | 83.8  | 3.000 | 76.2  | 2                       | 0.062                 | 1.6 | 500           |
| TCG1-3.925-23 | 3.925 | 99.7  | 3.625 | 92.1  | 2                       | 0.062                 | 1.6 | 500           |
| TCG1-6.675-23 | 6.675 | 169.5 | 6.375 | 161.9 | 4                       | 0.062                 | 1.6 | 500           |

**TRCG Series**  
**Tension Rack Card Guide**

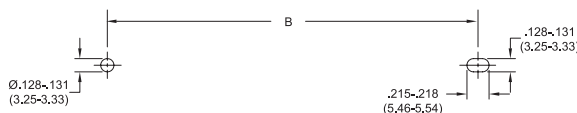


**Specifications:**

- Material: UL94 V-0 Polycarbonate
- Color: Black

**Features:**

- Tension wings provide firm retention of the PCB



**Recommended Mounting Holes**

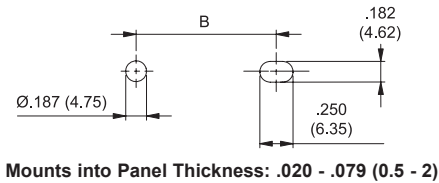
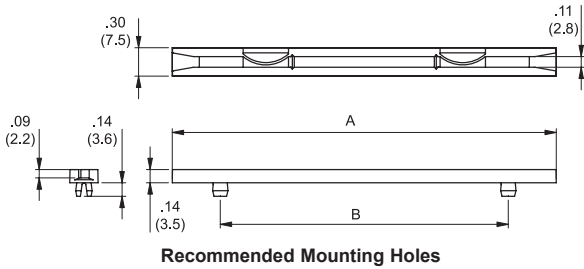
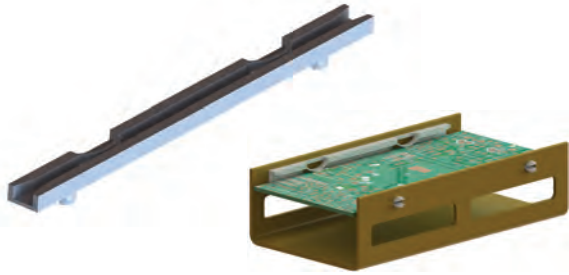
Mounts into Panel Thickness: 0.06 - 0.07 (1.5 - 1.8)

| Item No.   | A    |       | B     |       | Accepts PCB Thickness |           | Bulk Pack Qty |
|------------|------|-------|-------|-------|-----------------------|-----------|---------------|
|            | in   | mm    | in    | mm    | in                    | mm        |               |
| TRCG-2.500 | 2.50 | 63.5  | 2.200 | 55.9  | 0.050 - 0.087         | 1.3 - 2.2 | 500           |
| TRCG-3.300 | 3.30 | 83.8  | 3.000 | 76.2  | 0.050 - 0.087         | 1.3 - 2.2 | 500           |
| TRCG-3.925 | 3.93 | 99.7  | 3.625 | 92.1  | 0.050 - 0.087         | 1.3 - 2.2 | 500           |
| TRCG-6.675 | 6.68 | 169.6 | 6.375 | 161.9 | 0.050 - 0.087         | 1.3 - 2.2 | 500           |



# HORIZONTAL CARD GUIDES

## MPCG/MPCGCN Series Multi Panel Snap-in Card Guide Nylon and Conductive Nylon



**Specifications:**

- Material: UL94 V-0 Nylon 6/6
- Color: Natural

**Features:**

- Tension wings provide firm retention of the PCB
- Funnel entry for easy board insertion

| Item No. | A Ref. |       | B   |       | Accepts PCB Thickness |           | Bulk Pack Qty |
|----------|--------|-------|-----|-------|-----------------------|-----------|---------------|
|          | in     | mm    | in  | mm    | in                    | mm        |               |
| MPCG-250 | 2.5    | 63.5  | 1.5 | 38.1  | 0.032 - 0.079         | 0.8 - 2.0 | 500           |
| MPCG-300 | 3.0    | 76.2  | 2.0 | 50.8  | 0.032 - 0.079         | 0.8 - 2.0 | 500           |
| MPCG-400 | 4.0    | 101.6 | 3.0 | 76.2  | 0.032 - 0.079         | 0.8 - 2.0 | 500           |
| MPCG-550 | 5.5    | 139.7 | 4.5 | 114.4 | 0.032 - 0.079         | 0.8 - 2.0 | 500           |

**Specifications:**

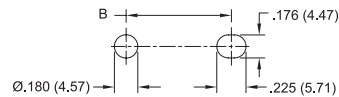
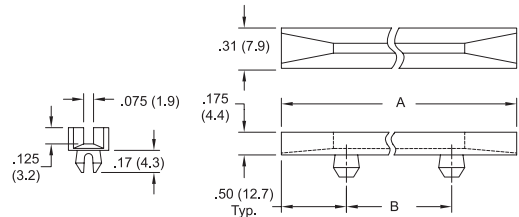
- Material: Conductive Compound Nylon 6
- Color: Black

**Features:**

- Molded from conductive material
- Helps to protect static sensitive components from electro-static discharge

| Item No.   | A Ref. |       | B   |       | Accepts PCB Thickness |           | Bulk Pack Qty |
|------------|--------|-------|-----|-------|-----------------------|-----------|---------------|
|            | in     | mm    | in  | mm    | in                    | mm        |               |
| MPCGCN-250 | 2.5    | 63.5  | 1.5 | 38.1  | 0.032 - 0.079         | 0.8 - 2.0 | 500           |
| MPCGCN-300 | 3.0    | 76.2  | 2.0 | 50.8  | 0.032 - 0.079         | 0.8 - 2.0 | 500           |
| MPCGCN-400 | 4.0    | 101.6 | 3.0 | 76.2  | 0.032 - 0.079         | 0.8 - 2.0 | 500           |
| MPCGCN-550 | 5.5    | 139.7 | 4.5 | 114.4 | 0.032 - 0.079         | 0.8 - 2.0 | 500           |

## RSDC Series Snap-in Card Guide



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Tapered on both ends to ease insertion of the PC board

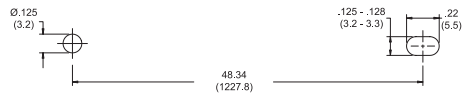
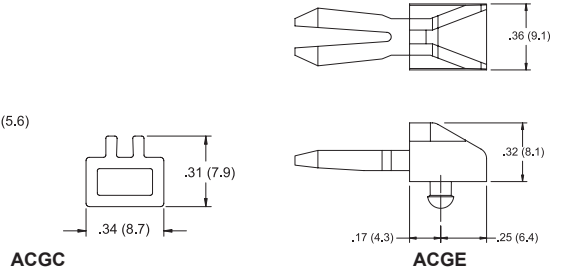
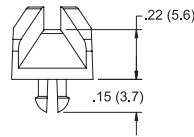
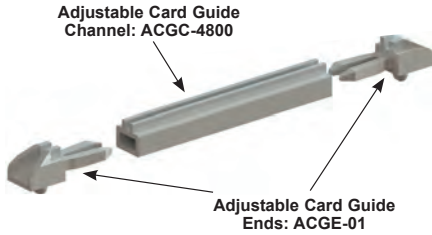
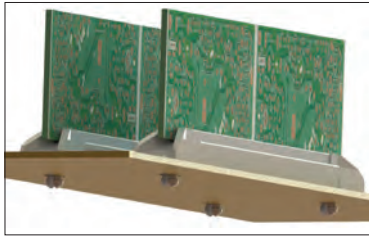
**Recommended Mounting Holes**  
**Mounts into Panel Thickness: 0.047 - 0.090 (1.2 - 2.3)**

| Item No. | A   |       | B   |       | Accepts PCB Thickness |     | Bulk Pack Qty |
|----------|-----|-------|-----|-------|-----------------------|-----|---------------|
|          | in  | mm    | in  | mm    | in                    | mm  |               |
| RSDC-250 | 2.5 | 63.5  | 1.5 | 38.1  | 0.062                 | 1.6 | 500           |
| RSDC-300 | 3.0 | 76.2  | 2.0 | 50.8  | 0.062                 | 1.6 | 500           |
| RSDC-350 | 3.5 | 88.9  | 2.5 | 63.5  | 0.062                 | 1.6 | 500           |
| RSDC-400 | 4.0 | 101.6 | 3.0 | 76.2  | 0.062                 | 1.6 | 500           |
| RSDC-450 | 4.5 | 114.3 | 3.5 | 88.9  | 0.062                 | 1.6 | 500           |
| RSDC-500 | 5.0 | 127.0 | 4.0 | 101.6 | 0.062                 | 1.6 | 500           |
| RSDC-550 | 5.5 | 139.7 | 4.5 | 114.3 | 0.062                 | 1.6 | 500           |
| RSDC-600 | 6.0 | 152.4 | 5.0 | 127.0 | 0.062                 | 1.6 | 500           |
| RSDC-650 | 6.5 | 164.1 | 5.5 | 139.7 | 0.062                 | 1.6 | 500           |
| RSDC-700 | 7.0 | 177.8 | 6.0 | 152.4 | 0.062                 | 1.6 | 500           |
| RSDC-750 | 7.5 | 190.5 | 6.5 | 165.1 | 0.062                 | 1.6 | 500           |
| RSDC-800 | 8.0 | 203.2 | 7.0 | 177.8 | 0.062                 | 1.6 | 500           |



# CARD GUIDES

## ACGC/ACGE Series Adjustable Card Guide



**Recommended Mounting Holes**  
Mounts into Panel Thickness: 0.062 (1.6)

**Specifications:**

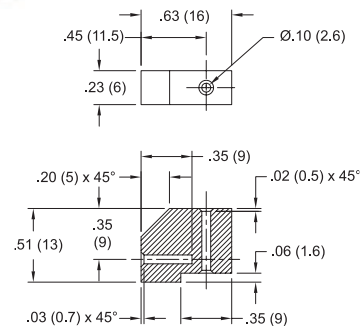
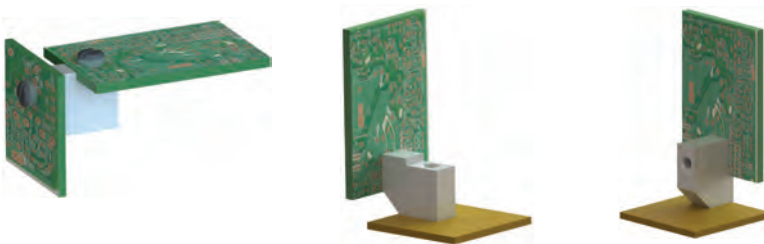
- Material: See table
- Color: Natural

**Features:**

- Adjustable design; insert ACGE-01 end pieces into ACGC channel and snap into chassis holes
- Channel is provided in 4-foot lengths that can be cut to desired length

| Item No.  | Description | Material           | Accepts PCB Thickness |     | Bulk Pack Qty                                   |
|-----------|-------------|--------------------|-----------------------|-----|-------------------------------------------------|
|           |             |                    | in                    | mm  |                                                 |
| ACGE-01   | End Pieces  | UL94 V-2 Nylon 6/6 | 0.062                 | 1.6 | 100 per bag                                     |
| ACGC-4800 | Channel     | UL94 V-0 PVC       | 0.062                 | 1.6 | 100 feet: 25 pieces x 48" (25 pieces x 1219 mm) |

## PCB-MB Series Printed Circuit Board Mounting Block



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Mounts PCBs to chassis or to other PC Boards
- Various mounting modes available to fit specific board needs

**Mounting Holes:** For Metal #4 / M3 Self-Tapping Screws

| Item No.  | Bulk Pack Qty |
|-----------|---------------|
| PCB-MB-01 | 1000          |



# CARD INSERTER, EJECTOR & PULLER

## R1107 Series PCB Inserter/Extractor

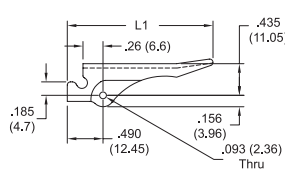
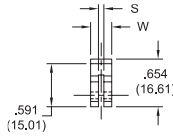
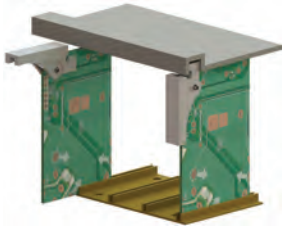


Fig. 1

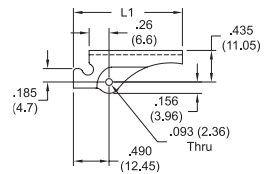
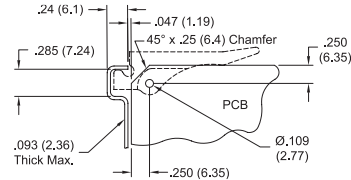


Fig. 2



Typical Application

**Specifications:**

- Material: UL94 V-0 Glass Filled Nylon 6/6
- Color: Natural

**Features:**

- Roll Pins supplied with each inserter/extractor (see page 293)
- Strong and rigid with optimum leverage to assist in both insertion and extraction

| Item No.     | S     |     | W     |     | L1  |      | PCB Thickness |     | Fig. | Roll Pin Supplied | Bulk Pack Qty |
|--------------|-------|-----|-------|-----|-----|------|---------------|-----|------|-------------------|---------------|
|              | in    | mm  | in    | mm  | in  | mm   | in            | mm  |      |                   |               |
| R1107-062    | 0.075 | 1.9 | 0.290 | 7.4 | 2.0 | 50.8 | 0.062         | 1.6 | 1    | RRP-250           | 100           |
| R11073-062   | 0.075 | 1.9 | 0.350 | 8.9 | 2.0 | 50.8 | 0.062         | 1.6 | 1    | RRP-312           | 100           |
| R11073-093   | 0.100 | 2.5 | 0.350 | 8.9 | 2.0 | 50.8 | 0.093         | 2.4 | 1    | RRP-312           | 100           |
| R110710-062  | 0.075 | 1.9 | 0.290 | 7.4 | 1.5 | 38.1 | 0.062         | 1.6 | 2    | RRP-250           | 100           |
| R1107310-093 | 0.100 | 2.5 | 0.350 | 8.9 | 1.5 | 38.1 | 0.093         | 2.4 | 2    | RRP-312           | 100           |

## R1001/R1002/R1209 Series PCB Inserter/Extractor

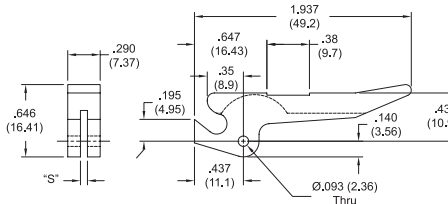
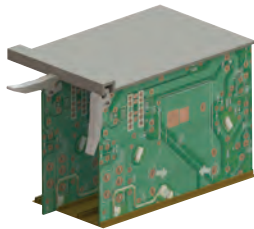


Fig. 1

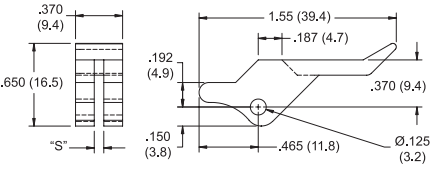
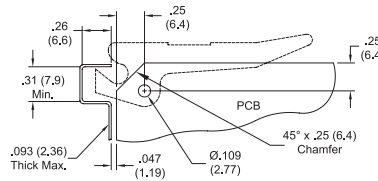
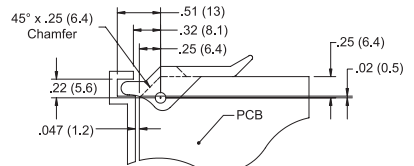


Fig. 2



Typical Application



Typical Application

**Specifications:**

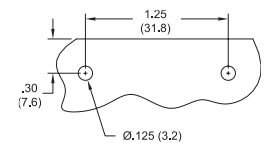
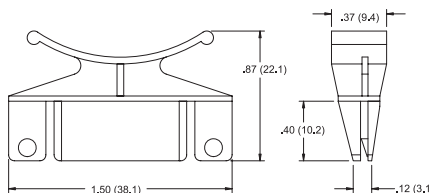
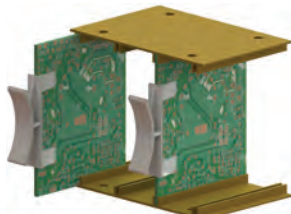
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Strong and rigid with optimum leverage to assist in both insertion and extraction
- RRP roll pin is supplied for mounting (see page 293)

| Item No.  | S     |     | PCB Thickness |     | Fig. | Roll Pin | Bulk Pack Qty |
|-----------|-------|-----|---------------|-----|------|----------|---------------|
|           | in    | mm  | in            | mm  |      |          |               |
| R1001-062 | 0.075 | 1.9 | 0.062         | 1.6 | 1    | RRP-250  | 100           |
| R1002-093 | 0.100 | 2.5 | 0.093         | 2.4 | 1    | RRP-250  | 100           |
| R1209-062 | 0.075 | 1.9 | 0.062         | 1.6 | 2    | RRP-375  | 100           |

## CCP-1-01 Series PCB Puller



Recommended Mounting Holes

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Curved tab provides fingertip grip for board insertion and extraction

| Item No. | Accepts PCB Thickness |     | Bulk Pack Qty |
|----------|-----------------------|-----|---------------|
|          | in                    | mm  |               |
| CCP-1-01 | 0.062                 | 1.6 | 500           |



RCP Series PCB Ejector

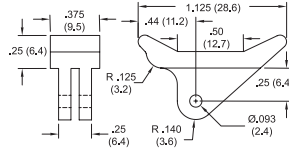
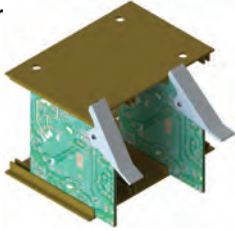


Fig. 1

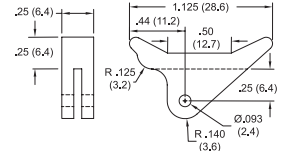


Fig. 2

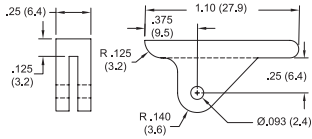


Fig. 3

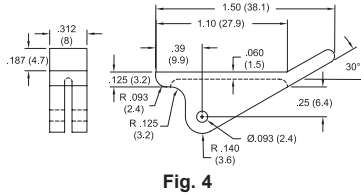


Fig. 4

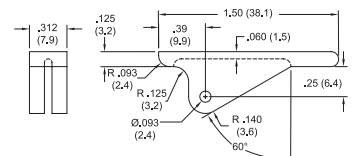


Fig. 5

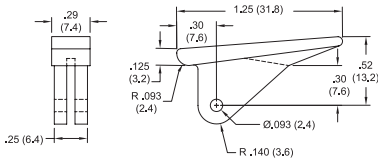


Fig. 6

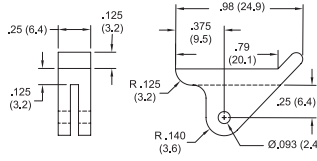
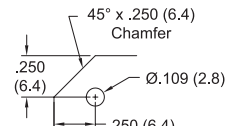


Fig. 7



Recommended Mounting Hole

Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No. | PCB Thickness |     | Fig. | Roll Pin Supplied | Bulk Pack Qty |
|----------|---------------|-----|------|-------------------|---------------|
|          | in            | mm  |      |                   |               |
| RCP-06   | 0.062         | 1.6 | 1    | RRP-250           | 500           |
| RCP-09   | 0.093         | 2.4 | 1    | RRP-250           | 500           |
| RCP-26   | 0.062         | 1.6 | 2    | RRP-250           | 500           |
| RCP-36   | 0.062         | 1.6 | 3    | RRP-250           | 500           |
| RCP-46   | 0.062         | 1.6 | 4    | RRP-312           | 500           |

Features:

- Strong and rigid with optimum leverage to assist in extraction
- RRP roll pin is supplied for mounting (see bottom of page)

| Item No. | PCB Thickness |     | Fig. | Roll Pin Supplied | Bulk Pack Qty |
|----------|---------------|-----|------|-------------------|---------------|
|          | in            | mm  |      |                   |               |
| RCP-56   | 0.062         | 1.6 | 5    | RRP-312           | 500           |
| RCP-66   | 0.062         | 1.6 | 6    | RRP-250           | 500           |
| RCP-86   | 0.062         | 1.6 | 7    | RRP-250           | 500           |
| RCP-89   | 0.093         | 2.4 | 7    | RRP-250           | 500           |

CBE Series PCB Ejector

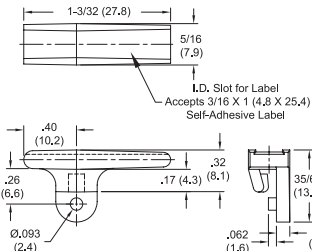


Fig. 1

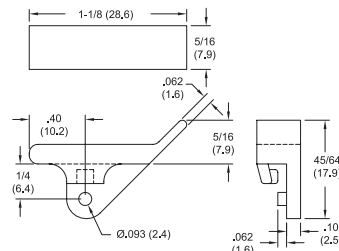
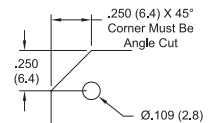


Fig. 2



Recommended Mounting Hole

Specifications:

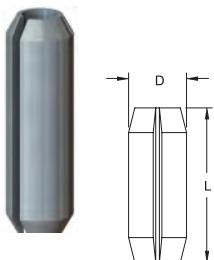
- Material: UL94 V-2 Nylon 6/6
- Color: See table

Features:

- Fit onto 0.109 (2.8mm) diameter hole in a board 1/16 (1.6mm) thick
- Leverage against guide rack or chassis to eject board

| Item No. | Color   | Fig. | Bulk Pack Qty |
|----------|---------|------|---------------|
| CBE-1    | Natural | 1    | 1000          |
| CBE-8    | Natural | 2    | 1000          |
| CBE-11   | Black   | 2    | 1000          |

RRP Series PCB Round Roll Pin



| Roll Pins for use with the following card ejectors, inserters/extractors: |              |           |
|---------------------------------------------------------------------------|--------------|-----------|
| RRP-250                                                                   | RRP-312      | RRP-375   |
| RCP-06                                                                    | RCP-46       | R1209-062 |
| RCP-09                                                                    | RCP-56       | R1209-093 |
| RCP-26                                                                    | R11073-062   |           |
| RCP-36                                                                    | R11073-093   |           |
| RCP-66                                                                    | R11073-125   |           |
| RCP-86                                                                    | R1107310-062 |           |
| RCP-89                                                                    | R1107310-093 |           |
| R1001-062                                                                 | R1107310-125 |           |
| R1007-062                                                                 |              |           |
| R110710-062                                                               |              |           |

Specifications:

- Material: 302 Stainless Steel

Features:

- Round roll pin is provided with certain inserters for installation

| Item No. | D     |     | L     |     | Bulk Pack Qty |
|----------|-------|-----|-------|-----|---------------|
|          | in    | mm  | in    | mm  |               |
| RRP-250  | 0.093 | 2.4 | 0.250 | 6.4 | 100           |
| RRP-312  | 0.093 | 2.4 | 0.312 | 8.0 | 100           |
| RRP-375  | 0.125 | 3.2 | 0.375 | 9.5 | 100           |



# FAN MOUNTS

## FM Series Fan Mounts

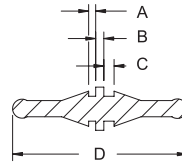
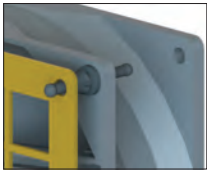


Fig. 1

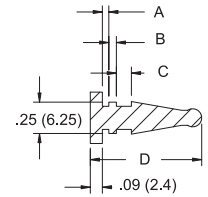


Fig. 2

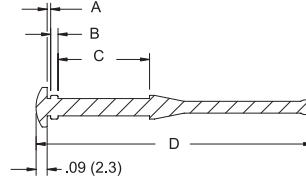


Fig. 3

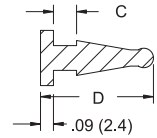


Fig. 4

**Specifications:**

- Material: See table
- Color: Black

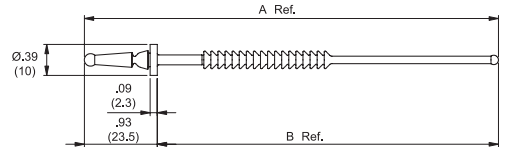
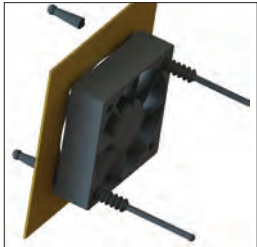
**Features:**

- Fast mounting of fans eliminating the need for screws
- May reduce noise caused by the vibration of the fan

| Item No. | Fig. | Ø Hole |     | Fan Thickness |             | Max. Panel Thickness |     | Material                    | A    |     | B    |     | C    |      | D    |      | Bulk Pack Qty |
|----------|------|--------|-----|---------------|-------------|----------------------|-----|-----------------------------|------|-----|------|-----|------|------|------|------|---------------|
|          |      | in     | mm  | in            | mm          | in                   | mm  |                             | in   | mm  | in   | mm  | in   | mm   | in   | mm   |               |
| FM-1     | 1    | 0.197  | 5.0 | 0.079         | 2.0         | 0.055                | 1.4 | EPDM Rubber, 30 Shore A     | 0.05 | 1.3 | 0.06 | 1.5 | 0.07 | 1.9  | 1.27 | 32.3 | 1000          |
| FM-2     | 1    | 0.197  | 5.0 | 0.079         | 2.0         | 0.055                | 1.4 | EPDM Rubber, 40 Shore A     | 0.05 | 1.3 | 0.06 | 1.5 | 0.07 | 1.9  | 1.27 | 32.3 | 1000          |
| FM-3     | 2    | 0.197  | 5.0 | 0.122         | 3.1         | 0.055                | 1.4 | EPDM Rubber, 30 Shore A     | 0.05 | 1.3 | 0.06 | 1.5 | 0.12 | 3.0  | 0.88 | 22.2 | 1000          |
| FM-4     | 2    | 0.197  | 5.0 | 0.122         | 3.1         | 0.055                | 1.4 | EPDM Rubber, 40 Shore A     | 0.05 | 1.3 | 0.06 | 1.5 | 0.12 | 3.0  | 0.88 | 22.2 | 1000          |
| FM-5     | 3    | 0.138  | 3.5 | 0.787         | 20.0        | 0.031                | 0.8 | Silicone Rubber, 40 Shore A | 0.03 | 0.7 | 0.06 | 1.5 | 0.73 | 18.5 | 2.20 | 56.0 | 1000          |
| FM-6     | 3    | 0.161  | 4.3 | 0.591         | 15.0        | 0.118                | 3.0 | Silicone Rubber, 40 Shore A | 0.10 | 2.5 | 0.08 | 2.0 | 0.55 | 14.0 | 2.12 | 53.8 | 1000          |
| FM-7     | 3    | 0.138  | 3.5 | 0.98 - 1.10   | 25.0 - 28.0 | 0.031                | 0.8 | Silicone Rubber, 40 Shore A | 0.03 | 0.7 | 0.06 | 1.5 | 0.94 | 24.0 | 2.87 | 73.0 | 1000          |
| FM-8     | 4    | 0.197  | 5.0 | 0.213         | 5.4*        | 0.031                | 0.8 | EPDM Rubber, 30 Shore A     | —    | —   | —    | —   | 0.17 | 4.3  | 0.83 | 21.0 | 1000          |
| FM-9     | 4    | 0.197  | 5.0 | 0.213         | 5.4*        | 0.031                | 0.8 | EPDM Rubber, 40 Shore A     | —    | —   | —    | —   | 0.17 | 4.3  | 0.83 | 21.0 | 1000          |

\* Total thickness of panel and fan combined

## FMB Series Break Away Fan Mount



**Specifications:**

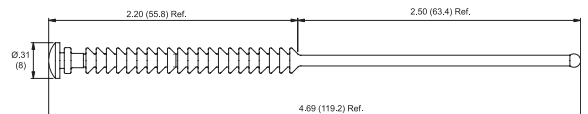
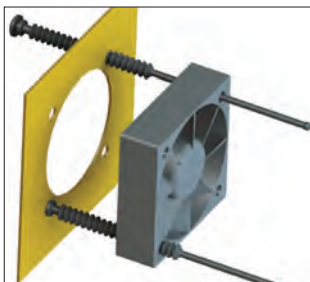
- Material: UL94 HB Silicone Rubber 40 Shore A
- Color: Black

**Features:**

- Evenly spaced flexible ribs allow mounting fans of many different heights
- Pull-through, break away installation tabs ease installation, especially in blind corners
- Pull-tab breaks away cleanly after installation for low profile panels
- Easy assembly when mounting in restricted spaces
- To save space, end can be cut off after mounting

| Item No. | A Ref. |       | B Ref. |       | Ø Fan Hole  |           | Fan Thickness |             | Ø Panel Hole |           | Panel Thickness |           | Bulk Pack Qty |
|----------|--------|-------|--------|-------|-------------|-----------|---------------|-------------|--------------|-----------|-----------------|-----------|---------------|
|          | in     | mm    | in     | mm    | in          | mm        | in            | mm          | in           | mm        | in              | mm        |               |
| FMB-1    | 5.26   | 133.5 | 4.33   | 110.0 | 0.18 - 0.20 | 4.0 - 4.5 | 0.98 - 2.01   | 25.0 - 51.0 | 0.18 - 0.20  | 4.5 - 5.0 | 0.03 - 0.06     | 0.8 - 1.6 | 1000          |
| FMB-2    | 3.29   | 83.5  | 2.36   | 60.0  | 0.13 - 0.14 | 3.2 - 3.5 | Up to 0.40    | Up to 10.0  | 0.18 - 0.20  | 4.5 - 5.0 | 0.03 - 0.06     | 0.8 - 1.6 | 1000          |

## FMM Series Multi Fan Mount



**Specifications:**

- Material: UL94 HB Silicone Rubber 40 Shore A
- Color: Black

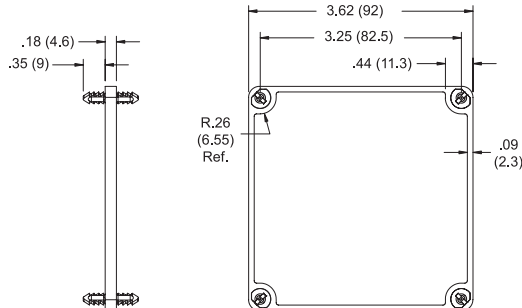
**Features:**

- One piece design fits all industry standard DC fans from 0.39 - 2.00 (10.0 - 51.0) thick
- Easy assembly when mounting in restricted spaces
- To save space, end can be cut off after mounting

| Item No. | Fan Thickness |             | Ø Fan Hole    |           | Panel Thickness |           | Ø Panel Hole  |           | Bulk Pack Qty |
|----------|---------------|-------------|---------------|-----------|-----------------|-----------|---------------|-----------|---------------|
|          | in            | mm          | in            | mm        | in              | mm        | in            | mm        |               |
| FMM-1    | 0.39 - 2.00   | 10.0 - 51.0 | 0.126 - 0.177 | 3.2 - 4.5 | 0.039 - 0.059   | 1.0 - 1.5 | 0.177 - 0.189 | 4.5 - 4.8 | 500           |



**FMPT Series  
Barbed Fan Mount**



**Specifications:**

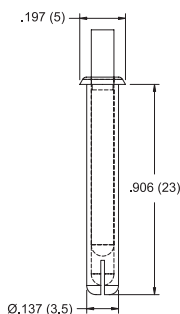
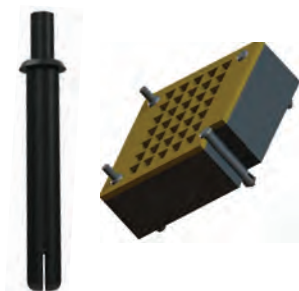
- Material: UL94 HB ABS
- Color: Black

**Features:**

- Designed to fit a 92 mm fan
- One-piece design; no mounting hardware required
- Can be used to mount a fan to a chassis
- Can also be used to mount two fans back to back

| Item No. | Ø Mounting Hole x 4 |     | Minimum Panel Thickness |     | Bulk Pack Qty |
|----------|---------------------|-----|-------------------------|-----|---------------|
|          | in                  | mm  | in                      | mm  |               |
| FMPT-92  | 0.177               | 4.5 | 0.146                   | 3.7 | 40            |

**FR Series  
Fan Mount Rivet**



**Specifications:**

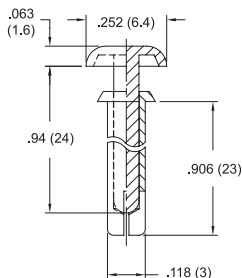
- Material: UL94 V-2 Nylon 6
- Color: Black

**Features:**

- Permanently mounts fan to chassis, or finger guards to fan
- Provides tamper resistant application
- Prongs expand to hold securely as pin is driven in
- Single-operation front mounting saves time and money

| Item No. | Ø Hole        |             | Mounting Thickness |             | Bulk Pack Qty |
|----------|---------------|-------------|--------------------|-------------|---------------|
|          | in            | mm          | in                 | mm          |               |
| FR-1     | 0.137 - 0.138 | 3.49 - 3.51 | 0.807 - 0.846      | 20.5 - 21.5 | 1000          |

**SR-3230B Series  
Fan Mount Snap Rivet**



**Specifications:**

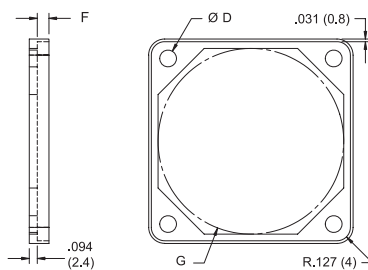
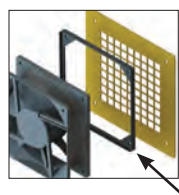
- Material: UL94 V-2 Nylon 6
- Color: Black

**Features:**

- Prongs expand to hold securely as pin is driven in
- Single-operation front mounting saves time and money

| Item No. | Ø Hole        |           | Mounting Thickness |             | Bulk Pack Qty |
|----------|---------------|-----------|--------------------|-------------|---------------|
|          | in            | mm        | in                 | mm          |               |
| SR-3230B | 0.122 - 0.126 | 3.1 - 3.2 | 0.807 - 0.846      | 20.5 - 21.5 | 1000          |

**FGA Series  
Fan Gasket**



**Specifications:**

- Material: Silicone Rubber, 40 Shore A
- Color: Black

**Features:**

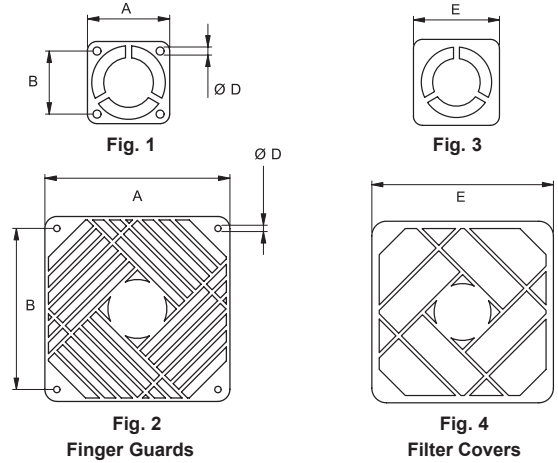
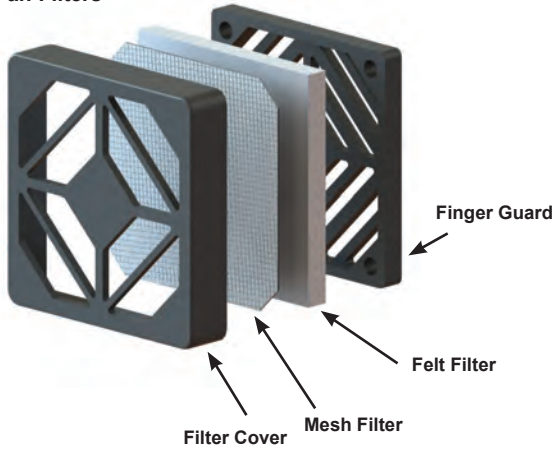
- Seals the area between the fan and chassis
- Helps to absorb the noise and vibration that otherwise would be transmitted from the fan into the chassis
- Improves the efficiency of the fan

| Item No. | For Fan Size | Fan Hole Spacing |       | D    |     | F    |     | G Ref. |       | Bulk Pack Qty |
|----------|--------------|------------------|-------|------|-----|------|-----|--------|-------|---------------|
|          |              | in               | mm    | in   | mm  | in   | mm  | in     | mm    |               |
| FGA-40   | 40 x 40      | 1.26             | 32.0  | 0.18 | 4.5 | 0.14 | 3.5 | 1.42   | 36.0  | 100           |
| FGA-50   | 50 x 50      | 1.57             | 40.0  | 0.18 | 4.5 | 0.14 | 3.5 | 1.81   | 46.0  | 100           |
| FGA-60   | 60 x 60      | 1.97             | 50.0  | 0.20 | 5.0 | 0.14 | 3.5 | 2.20   | 56.0  | 100           |
| FGA-70   | 70 x 70      | 2.42             | 61.5  | 0.20 | 5.0 | 0.16 | 4.0 | 2.60   | 66.0  | 100           |
| FGA-80   | 80 x 80      | 2.81             | 71.5  | 0.20 | 5.0 | 0.16 | 4.0 | 2.95   | 75.0  | 100           |
| FGA-92   | 92 x 92      | 3.25             | 82.5  | 0.20 | 5.0 | 0.16 | 4.0 | 3.43   | 87.0  | 100           |
| FGA-120  | 120 x 120    | 4.13             | 105.0 | 0.20 | 5.0 | 0.16 | 4.0 | 4.53   | 115.0 | 100           |



# FAN FILTERS

## RCP/RFG/RFF/RMF Series Fan Filters



### Specifications:

- Felt Filter Material: Polyester
- Felt Filter Color: White
- Mesh Filter Material: Stainless Steel AISI 304
- Finger Guard Material: UL94 V-0 Glass Filled Nylon 6/6
- Finger Guard Color: Black

### Features:

- Filter set (RCP) provides IP30 protection
- Filter Set includes one each of Finger Guard, Filter Cover, Mesh Filter and Felt Filter

### Filter Set

| Item No.  | Fan Size  | Bulk Pack Qty |
|-----------|-----------|---------------|
| RCP-040-T | 40 x 40   | 50            |
| RCP-060-T | 60 x 60   | 20            |
| RCP-080-T | 80 x 80   | 10            |
| RCP-092-T | 92 x 92   | 10            |
| RCP-120-T | 120 x 120 | 10            |

### Felt Filter

| Item No.  | Fan Size  | Bulk Pack Qty |
|-----------|-----------|---------------|
| RFF-040-T | 40 x 40   | 300           |
| RFF-060-T | 60 x 60   | 100           |
| RFF-080-T | 80 x 80   | 100           |
| RFF-092-T | 92 x 92   | 100           |
| RFF-120-T | 120 x 120 | 500           |

### Mesh Filter

| Item No.  | Fan Size  | Bulk Pack Qty |
|-----------|-----------|---------------|
| RMF-040-T | 40 x 40   | 300           |
| RMF-060-T | 60 x 60   | 500           |
| RMF-080-T | 80 x 80   | 400           |
| RMF-092-T | 92 x 92   | 400           |
| RMF-120-T | 120 x 120 | 250           |

### Finger Guard

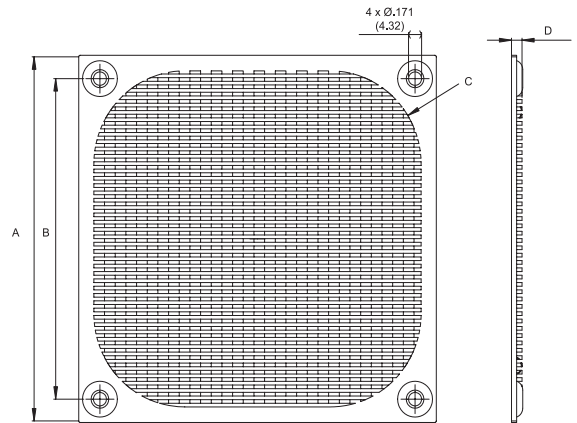
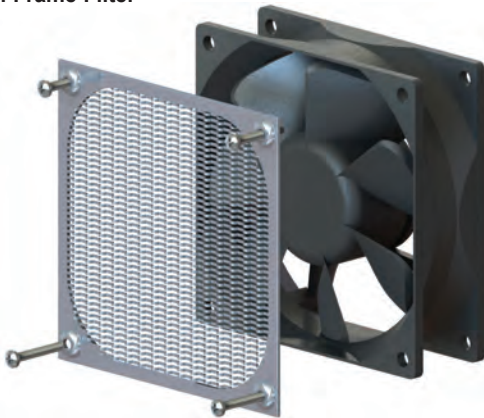
| Item No.  | A    |       | B    |       | Depth |     | D Hole Ø Min |     |   | Fig | Bulk Pack Qty |
|-----------|------|-------|------|-------|-------|-----|--------------|-----|---|-----|---------------|
|           | in   | mm    | in   | mm    | in    | mm  | in           | mm  |   |     |               |
| RFG-040-T | 1.69 | 43.0  | 1.27 | 32.2  | 0.17  | 4.3 | 0.16         | 4.1 | 1 | 160 |               |
| RFG-060-T | 2.38 | 60.5  | 1.97 | 50.1  | 0.24  | 6.0 | 0.16         | 4.1 | 2 | 60  |               |
| RFG-080-T | 3.17 | 80.6  | 2.83 | 71.8  | 0.24  | 6.0 | 0.16         | 4.1 | 2 | 30  |               |
| RFG-092-T | 3.63 | 92.3  | 3.24 | 82.4  | 0.24  | 6.0 | 0.16         | 4.1 | 2 | 20  |               |
| RFG-120-T | 4.75 | 120.6 | 4.15 | 105.5 | 0.24  | 6.2 | 0.16         | 4.1 | 2 | 30  |               |

### Filter Cover

| Fan Size  | E    |       | Depth |      | Fig. |
|-----------|------|-------|-------|------|------|
|           | in   | mm    | in    | mm   |      |
| 40 x 40   | 1.83 | 46.5  | 0.33  | 8.4  | 3    |
| 60 x 60   | 2.56 | 64.9  | 0.49  | 12.5 | 4    |
| 80 x 80   | 3.34 | 84.8  | 0.49  | 12.5 | 4    |
| 92 x 92   | 3.81 | 96.9  | 0.49  | 12.5 | 4    |
| 120 x 120 | 4.97 | 126.3 | 0.49  | 12.5 | 4    |

**Note:** Filter Cover (not sold separately, reference only)

## MFF Series Metal Frame Filter



### Specifications:

- Frame Material: Aluminum 1060
- Mesh Material: Stainless Steel 304
- Wire Ø: 0.009 (0.23)
- Mesh Size: 30 strands/in

### Features:

- Provides EMI and RFI protection

| Item No. | For Fan Size | A    |       | B    |       | C    |       | D    |     | Bulk Pack Qty |
|----------|--------------|------|-------|------|-------|------|-------|------|-----|---------------|
|          |              | in   | mm    | in   | mm    | in   | mm    | in   | mm  |               |
| MFF-60   | 60 x 60      | 2.33 | 59.2  | 1.97 | 50.0  | R.30 | R7.5  | 0.16 | 4.0 | 100           |
| MFF-80   | 80 x 80      | 3.30 | 83.8  | 2.81 | 71.4  | R.39 | R10.0 | 0.14 | 3.5 | 100           |
| MFF-92   | 92 x 92      | 3.63 | 92.0  | 3.25 | 82.5  | R.49 | R12.5 | 0.16 | 4.0 | 100           |
| MFF-120  | 120 x 120    | 4.68 | 118.9 | 4.13 | 104.8 | R.99 | R25.5 | 0.14 | 3.5 | 100           |





**RCOFM Series Fan Guards**

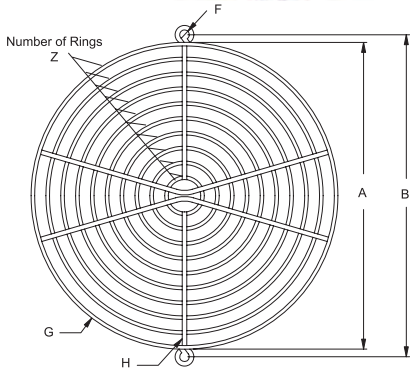


Fig. 3

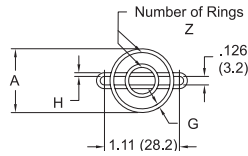


Fig. 1

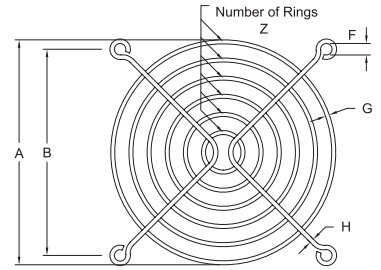


Fig. 2

**Specifications:**

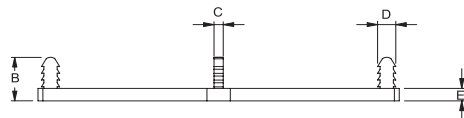
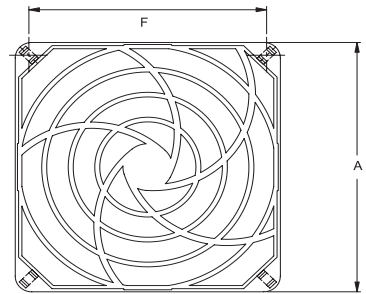
- Material: Steel Wire Electroplated
- Finish: Nickel Chrome

**Features:**

- Good corrosion resistance
- Easy to clean

| Item No.    | Fig. | A    |       | B    |       | Depth |     | F    |     | G    |     | H    |     | Z  | Bulk Pack Qty |
|-------------|------|------|-------|------|-------|-------|-----|------|-----|------|-----|------|-----|----|---------------|
|             |      | in   | mm    | in   | mm    | in    | mm  | in   | mm  | in   | mm  | in   | mm  |    |               |
| RCOFM-25    | 1    | 0.94 | 2.4   | —    | —     | 0.09  | 2.2 | —    | —   | 0.05 | 1.4 | 0.06 | 1.4 | 2  | 100           |
| RCOFM-40    | 2    | 1.15 | 29.1  | 1.26 | 32.0  | 0.19  | 4.8 | 0.16 | 4.0 | 0.06 | 1.6 | 0.06 | 1.6 | 2  | 100           |
| RCOFM-50    | 2    | 1.65 | 42.0  | 1.62 | 41.1  | 0.19  | 4.8 | 0.18 | 4.6 | 0.06 | 1.6 | 0.06 | 1.6 | 3  | 100           |
| RCOFM-60    | 2    | 2.09 | 53.2  | 1.97 | 50.0  | 0.17  | 4.4 | 0.18 | 4.6 | 0.06 | 1.6 | 0.06 | 1.6 | 4  | 100           |
| RCOFM-80    | 2    | 3.00 | 76.2  | 2.81 | 71.5  | 0.19  | 4.9 | 0.20 | 5.2 | 0.07 | 1.8 | 0.07 | 1.8 | 5  | 100           |
| RCOFM-92    | 2    | 3.54 | 90.0  | 3.25 | 82.5  | 0.22  | 5.5 | 0.18 | 4.6 | 0.06 | 1.6 | 0.07 | 1.8 | 6  | 100           |
| RCOFM-120   | 2    | 4.55 | 115.6 | 4.16 | 104.8 | 0.22  | 5.5 | 0.18 | 4.6 | 0.07 | 1.8 | 0.07 | 1.8 | 8  | 100           |
| RCOFM-150-A | 3    | 6.08 | 154.4 | 6.38 | 162.1 | 0.25  | 6.5 | 0.19 | 4.8 | 0.07 | 1.8 | 0.09 | 2.3 | 10 | 100           |

**FGPT Series Snap-in Fan Guard**



To Fit in Hole  $\varnothing$  x 4: .186 (4.7)

**Specifications:**

- Material: UL94 HB ABS
- Color: Black

**Features:**

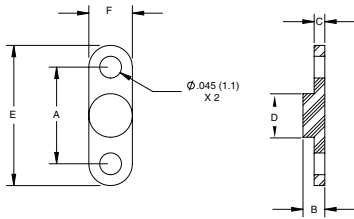
- Quickly snaps onto fan, eliminating the use of screws and nuts

| Item No. | Fan Size  | A     |       | B     |      | C     |     | D     |     | E     |     | F Ref. |       | Bulk Pack Qty |
|----------|-----------|-------|-------|-------|------|-------|-----|-------|-----|-------|-----|--------|-------|---------------|
|          |           | in    | mm    | in    | mm   | in    | mm  | in    | mm  | in    | mm  | in     | mm    |               |
| FGPT-80  | 80 x 80   | 3.150 | 80.0  | 0.571 | 14.5 | 0.111 | 2.8 | 0.217 | 5.5 | 0.158 | 4.0 | 2.795  | 71.0  | 20            |
| FGPT-92  | 92 x 92   | 3.623 | 92.0  | 0.591 | 15.0 | 0.103 | 2.6 | 0.217 | 5.5 | 0.164 | 4.2 | 3.228  | 82.0  | 20            |
| FGPT-120 | 120 x 120 | 4.69  | 119.0 | 0.650 | 16.5 | 0.119 | 3.0 | 0.217 | 5.5 | 0.178 | 4.5 | 4.094  | 104.0 | 10            |



# CAPACITOR MOUNTS / TRANSISTOR INSULATORS

## 22CM Series Capacitor Mounts



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
  - UL94 V-0 Available by Special Order
- Color: Natural

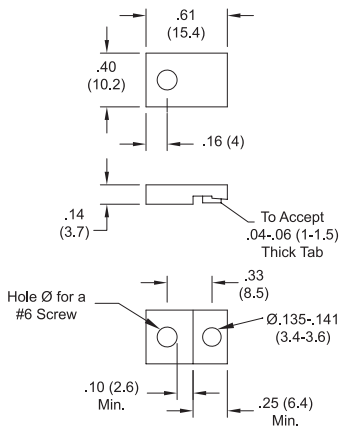
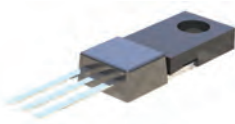
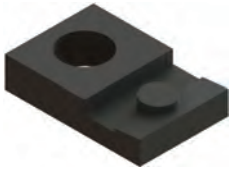
**Features:**

- Accurately positions capacitors or discrete components on PC Board

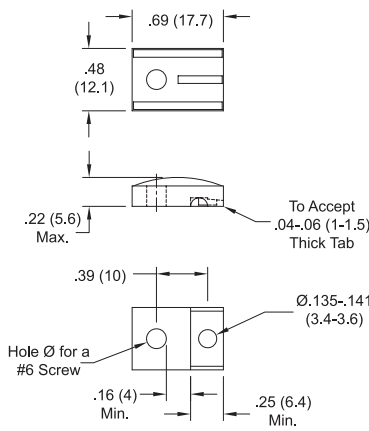


| Item No. | A     |     | B     |     | C     |     | D             |           | E     |     | F     |     | Bulk Pack Qty |
|----------|-------|-----|-------|-----|-------|-----|---------------|-----------|-------|-----|-------|-----|---------------|
|          | in    | mm  | in    | mm  | in    | mm  | in            | mm        | in    | mm  | in    | mm  |               |
| 22CM0100 | 0.100 | 2.5 | 0.045 | 1.1 | 0.022 | 0.6 | 0.050 - 0.070 | 1.3 - 1.8 | 0.180 | 4.6 | 0.090 | 2.3 | 1000          |
| 22CM0150 | 0.150 | 3.8 | 0.045 | 1.1 | 0.022 | 0.6 | 0.090 - 0.125 | 2.3 - 3.2 | 0.270 | 6.9 | 0.125 | 3.2 | 1000          |
| 22CM0200 | 0.200 | 5.1 | 0.045 | 1.1 | 0.022 | 0.6 | 0.090         | 3.3       | 0.290 | 7.4 | 0.090 | 2.3 | 2500          |

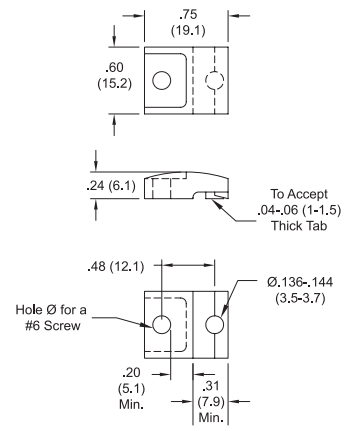
## IEC Series Transistor Insulator



IEC-TO-220-18



IEC-TO-220V-18



IEC-TO-218-18

**Specifications:**

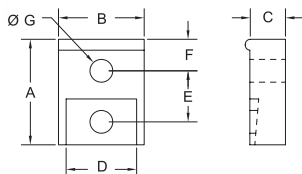
- Material: UL94 HB Glass Filled Nylon
- Color: Black

**Features:**

- Mounts the transistor to the heat sink
- Separates the mounting screw from the transistor or heat sink
- Maximum recommended operating temperature: 120°F (49°C)

| Item No.       | Bulk Pack Qty |
|----------------|---------------|
| IEC-TO-220-18  | 1000          |
| IEC-TO-220V-18 | 1000          |
| IEC-TO-218-18  | 1000          |

## HTRTC Series High Temp Transistor Insulator



**Specifications:**

- Material: UL94 V-0 PBT
- Color: White

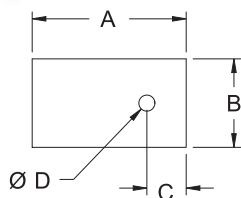
**Features:**

- Mounts the transistor to the heat sink
- Separates the mounting screw from the transistor or heat sink
- Maximum recommended operating temperature: 266°F (130°C)

| Item No. | For Case Style | A    |      | B    |      | C    |     | D    |      | E    |      | F    |     | G Ø  |     | Bulk Pack Qty |
|----------|----------------|------|------|------|------|------|-----|------|------|------|------|------|-----|------|-----|---------------|
|          |                | in   | mm   | in   | mm   | in   | mm  | in   | mm   | in   | mm   | in   | mm  | in   | mm  |               |
| HTRTC-1  | TO-220         | 0.63 | 16.0 | 0.51 | 13.0 | 0.21 | 5.4 | 0.42 | 10.7 | 0.32 | 8.0  | 0.19 | 4.7 | 0.14 | 3.5 | 1000          |
| HTRTC-1A | TO-220         | 0.46 | 19.3 | 0.51 | 13.0 | 0.21 | 5.4 | 0.42 | 10.7 | 0.39 | 10.0 | 0.24 | 6.0 | 0.14 | 3.6 | 1000          |



**TO Series**  
**Transistor Insulator Pad**



**Specifications:**

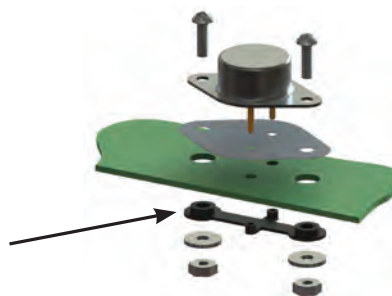
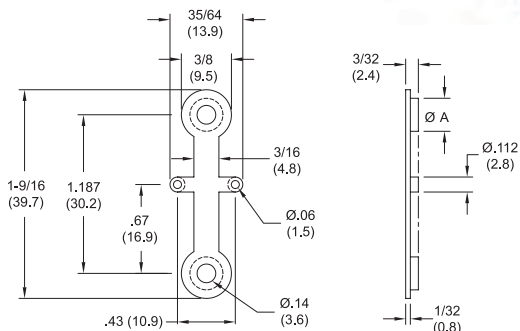
- Material: UL94 V-0 Silicone Rubber and Fiberglass Composite
- Color: Grey

**Features:**

- Offers low resistance to heat transfer while providing electrical insulation between power device and metal parts
- Non-toxic and resists damage from cleaning solvents
- No grease required for installation; resists cracking or fracture
- For use with Essentra part numbers IEC-TO-220, IEC-TO-220V-1 and IEC-TO-218

| Item No.  | A    |      | B    |      | C    |     | Ø D   |      | Bulk Pack Qty |
|-----------|------|------|------|------|------|-----|-------|------|---------------|
|           | in   | mm   | in   | mm   | in   | mm  | in    | mm   |               |
| TO-220-68 | 1.13 | 28.7 | 0.63 | 16.0 | 0.20 | 5.1 | 0.145 | 3.70 | 500           |
| TO-218-70 | 1.41 | 35.8 | 0.81 | 20.6 | 0.36 | 9.1 | 0.147 | 3.73 | 500           |

**IEC-TO3 Series**  
**Transistor Insulator Base**  
**TO-3**



**Specifications:**

- Material: UL94 HB Glass Filled Nylon
- Color: Black

**Features:**

- Insulates pins and mounting screws

| Item No.     | Ø A                                     | Bulk Pack Qty |
|--------------|-----------------------------------------|---------------|
| IEC-TO3-3-18 | 0.184 (4.7) to fit a Ø 0.187 (4.8) Hole | 1000          |

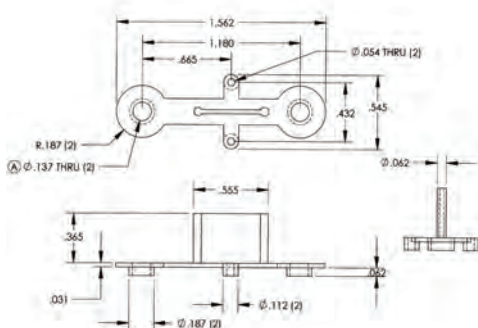
**PTI1 Series**  
**Transistor Insulator Base**  
**TO-3**



Fig. 1



Fig. 2



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Helps to improve thermal efficiency
- Replaces up to six pieces of conventional insulation required with previous mountings
- Increase the amount of interface surface between device and sink by minimizing clearance holes required for all feed-thru connectors

| Item No.  | Fig. | Description      | Bulk Pack Qty |
|-----------|------|------------------|---------------|
| 19PTI1    | 1    | PTI1             | 1000          |
| 18PTI1WOB | 2    | PTI1 w/o Barrier | 1000          |



**PTI2 Series**  
Transistor Insulator Base  
TO-66

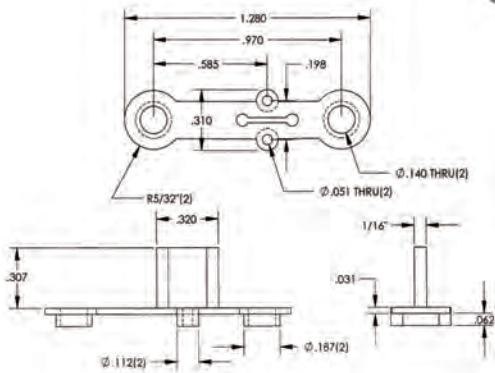


Fig. 1



Fig. 2

Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Helps to improve thermal efficiency
- Replaces up to six pieces of conventional insulation required with previous mountings
- Increase the amount of interface surface between device and sink by minimizing clearance holes required for all feed-thru connectors

| Item No.  | Fig. | Description      | Bulk Pack Qty |
|-----------|------|------------------|---------------|
| 19PTI2    | 1    | PTI2             | 1000          |
| 18PTI2WOB | 2    | PTI2 w/o Barrier | 1000          |



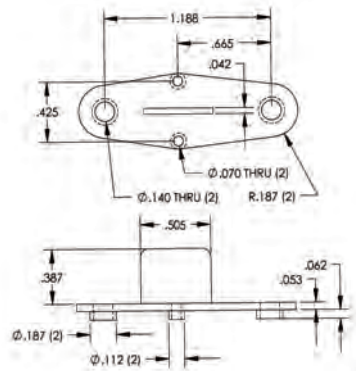
**PTI1HD Series**  
Heavy Duty Transistor Insulator Base  
TO-3



Fig. 1



Fig. 2



Specifications:

- Material: Glass Filled Polyester
- Color: Natural

| Item No.    | Fig. | Description         | Bulk Pack Qty |
|-------------|------|---------------------|---------------|
| 20PTI1HD    | 1    | PTI1 HD             | 1000          |
| 18PTI1HDWOB | 2    | PTI1 HD w/o Barrier | 1000          |



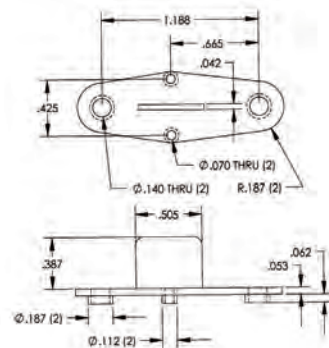
**PTI2HD Series**  
Heavy Duty Transistor Insulator Base  
TO-66



Fig. 1



Fig. 2



Specifications:

- Material: Glass Filled Polyester
- Color: Natural

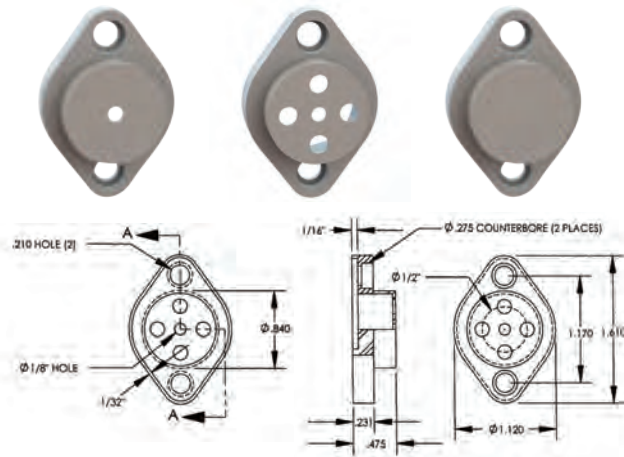
| Item No.    | Fig. | Description          | Bulk Pack Qty |
|-------------|------|----------------------|---------------|
| 20PTI2HD    | 1    | PTI-2 HD             | 500           |
| 18PTI2HDWOB | 2    | PTI-2 HD w/o Barrier | 1000          |





# TRANSISTOR INSULATORS AND LED SPACERS

## 21PTC Series Power Transistor Covers



**Specifications:**

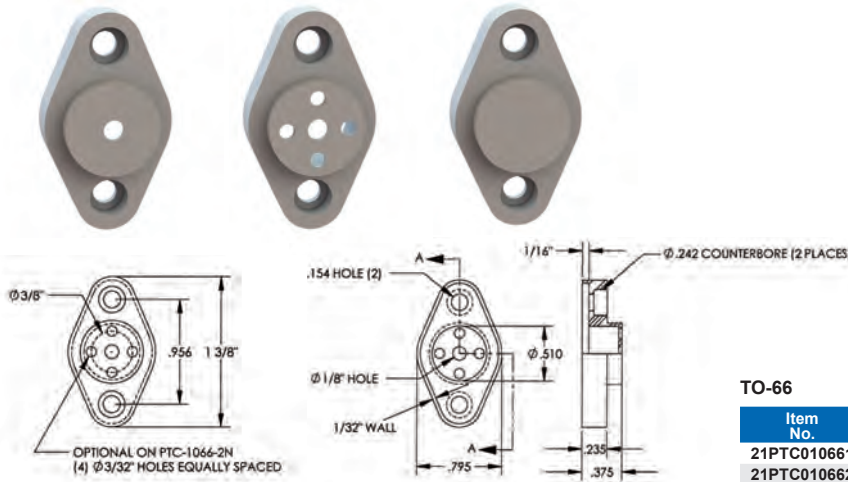
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Available in 1 hole, 5 hole and no hole styles
- Resists corrosion, vibration and abrasion
- Eliminates chance of short circuit and electrical shock

**TO-3**

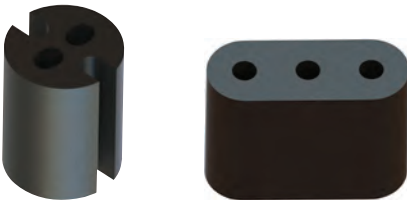
| Item No.   | Description        | Bulk Pack Qty |
|------------|--------------------|---------------|
| 21PTC01031 | PTC 103-1N 1 Hole  | 500           |
| 21PTC01032 | PTC103-2N 5 Hole   | 500           |
| 21PTC01033 | PTC 103-ON No Hole | 500           |



**TO-66**

| Item No.    | Description        | Bulk Pack Qty |
|-------------|--------------------|---------------|
| 21PTC010661 | PTC1066-1N 1 Hole  | 500           |
| 21PTC010662 | PTC1066-2N 5 Hole  | 500           |
| 21PTC010663 | PTC1066-ON No Hole | 500           |

## LEDS Series LED Spacers

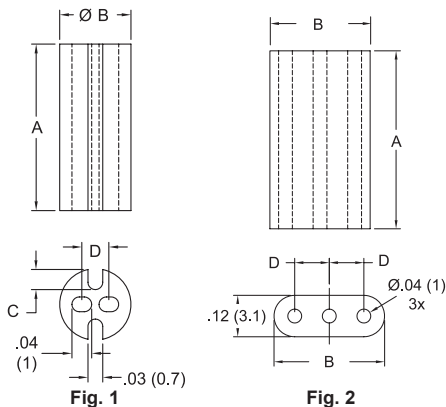


**Specifications:**

- Material: PVC
- Color: Black

**Features:**

- Provides height control, lead wire retention and stability

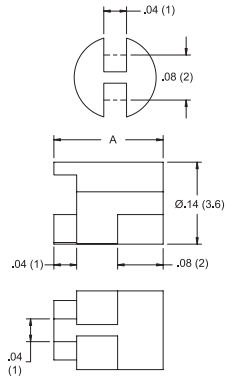


| Item No.    | LED Type      | A    |      | B     |     | C     |     | D Ref. |     | Fig | Material | Bulk Pack Qty |
|-------------|---------------|------|------|-------|-----|-------|-----|--------|-----|-----|----------|---------------|
|             |               | in   | mm   | in    | mm  | in    | mm  | in     | mm  |     |          |               |
| LEDS1-3-26  | T-1 (3mm)     | 3/16 | 4.8  | 0.156 | 4.0 | 0.047 | 1.2 | 0.06   | 1.5 | 1   | —        | 1000          |
| LEDS1-4-26  | T-1 (3mm)     | 1/4  | 6.4  | 0.156 | 4.0 | 0.047 | 1.2 | 0.06   | 1.5 | 1   | —        | 1000          |
| LEDS1-6-26  | T-1 (3mm)     | 3/8  | 9.5  | 0.156 | 4.0 | 0.047 | 1.2 | 0.06   | 1.5 | 1   | —        | 1000          |
| LEDS1-8-26  | T-1 (3mm)     | 1/2  | 12.7 | 0.156 | 4.0 | 0.047 | 1.2 | 0.06   | 1.5 | 1   | —        | 1000          |
| LEDS1-10-26 | T-1 (3mm)     | 5/8  | 15.9 | 0.156 | 4.0 | 0.047 | 1.2 | 0.06   | 1.5 | 1   | —        | 1000          |
| LEDS1-12-26 | T-1 (3mm)     | 3/4  | 19.1 | 0.156 | 4.0 | 0.047 | 1.2 | 0.06   | 1.5 | 1   | —        | 1000          |
| LEDS1-14-26 | T-1 (3mm)     | 7/8  | 22.2 | 0.156 | 4.0 | 0.047 | 1.2 | 0.06   | 1.5 | 1   | —        | 1000          |
| LEDS2-3-26  | T-1 3/4 (5mm) | 3/16 | 4.8  | 0.188 | 4.8 | 0.060 | 1.5 | 0.10   | 2.5 | 1   | —        | 1000          |
| LEDS2-4-26  | T-1 3/4 (5mm) | 1/4  | 6.4  | 0.188 | 4.8 | 0.060 | 1.5 | 0.10   | 2.5 | 1   | —        | 1000          |
| LEDS2-6-26  | T-1 3/4 (5mm) | 3/8  | 9.5  | 0.188 | 4.8 | 0.060 | 1.5 | 0.10   | 2.5 | 1   | —        | 1000          |
| LEDS2-8-26  | T-1 3/4 (5mm) | 1/2  | 12.7 | 0.188 | 4.8 | 0.060 | 1.5 | 0.10   | 2.5 | 1   | —        | 1000          |
| LEDS2-10-26 | T-1 3/4 (5mm) | 5/8  | 15.9 | 0.188 | 4.8 | 0.060 | 1.5 | 0.10   | 2.5 | 1   | —        | 1000          |
| LEDS2-12-26 | T-1 3/4 (5mm) | 3/4  | 19.1 | 0.188 | 4.8 | 0.060 | 1.5 | 0.10   | 2.5 | 1   | —        | 1000          |
| LEDS2-14-26 | T-1 3/4 (5mm) | 7/8  | 22.2 | 0.188 | 4.8 | 0.060 | 1.5 | 0.10   | 2.5 | 1   | —        | 1000          |
| LEDS3-3-26  | T-1 (3mm)     | 3/16 | 4.8  | 0.32  | 8.1 | —     | —   | 0.10   | 2.5 | 2   | UL94 V-0 | 1000          |
| LEDS3-4-26  | T-1 (3mm)     | 1/4  | 6.4  | 0.32  | 8.1 | —     | —   | 0.10   | 2.5 | 2   | UL94 V-0 | 1000          |
| LEDS3-6-26  | T-1 (3mm)     | 3/8  | 9.5  | 0.32  | 8.1 | —     | —   | 0.10   | 2.5 | 2   | UL94 V-0 | 1000          |
| LEDS3-8-26  | T-1 (3mm)     | 1/2  | 12.7 | 0.32  | 8.1 | —     | —   | 0.10   | 2.5 | 2   | UL94 V-0 | 1000          |
| LEDS3-10-26 | T-1 (3mm)     | 5/8  | 15.9 | 0.32  | 8.1 | —     | —   | 0.10   | 2.5 | 2   | UL94 V-0 | 1000          |
| LEDS3-12-26 | T-1 (3mm)     | 3/4  | 19.1 | 0.32  | 8.1 | —     | —   | 0.10   | 2.5 | 2   | UL94 V-0 | 1000          |



# LED SPACERS

## LEDS1E Series LED Spacers



**Specifications:**

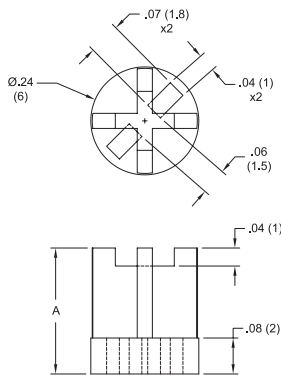
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Spaces standard T-1 LED from surface of board
- Minimizes shifting and height variation, ensuring product uniformity and production ease

| Item No.     | LED Type  | A    |      | Bulk Pack Qty |
|--------------|-----------|------|------|---------------|
|              |           | in   | mm   |               |
| LEDS1E-3-01  | T-1 (3mm) | 3/16 | 4.8  | 1000          |
| LEDS1E-4-01  | T-1 (3mm) | 1/4  | 6.4  | 1000          |
| LEDS1E-6-01  | T-1 (3mm) | 3/8  | 9.5  | 1000          |
| LEDS1E-8-01  | T-1 (3mm) | 1/2  | 12.7 | 1000          |
| LEDS1E-10-01 | T-1 (3mm) | 5/8  | 15.9 | 1000          |
| LEDS1E-12-01 | T-1 (3mm) | 3/4  | 19.1 | 1000          |
| LEDS1E-14-01 | T-1 (3mm) | 7/8  | 22.2 | 1000          |
| LEDS1E-16-01 | T-1 (3mm) | 1    | 25.4 | 1000          |

## LEDS2E Series LED Spacers



**Specifications:**

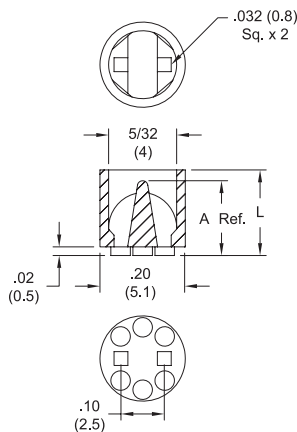
- Material: UL94 V-2 Nylon 6/6
- Color: Natural
- Flame Class:

**Features:**

- Spaces standard T-1 3/4 LEDs from surface of board
- Minimizes shifting and height variation, ensuring product uniformity and production ease

| Item No.     | LED Type      | A    |      | Bulk Pack Qty |
|--------------|---------------|------|------|---------------|
|              |               | in   | mm   |               |
| LEDS2E-3-01  | T-1 3/4 (5mm) | 3/16 | 4.8  | 1000          |
| LEDS2E-4-01  | T-1 3/4 (5mm) | 1/4  | 6.4  | 1000          |
| LEDS2E-6-01  | T-1 3/4 (5mm) | 3/8  | 9.5  | 1000          |
| LEDS2E-8-01  | T-1 3/4 (5mm) | 1/2  | 12.7 | 1000          |
| LEDS2E-10-01 | T-1 3/4 (5mm) | 5/8  | 15.9 | 1000          |
| LEDS2E-12-01 | T-1 3/4 (5mm) | 3/4  | 19.1 | 1000          |
| LEDS2E-14-01 | T-1 3/4 (5mm) | 7/8  | 22.2 | 1000          |
| LEDS2E-16-01 | T-1 3/4 (5mm) | 1    | 25.4 | 1000          |

## LEDS2M Series LED Spacer



| Item No.      | L    |      | A ref. |      | LED Type      | Bulk Pack Qty |
|---------------|------|------|--------|------|---------------|---------------|
|               | in   | mm   | in     | mm   |               |               |
| LEDS2M-120-01 | 0.12 | 3.1  | 0.08   | 2.0  | T-1 3/4 (5mm) | 1000          |
| LEDS2M-140-01 | 0.14 | 3.6  | 0.08   | 2.0  | T-1 3/4 (5mm) | 1000          |
| LEDS2M-160-01 | 0.16 | 4.1  | 0.08   | 2.0  | T-1 3/4 (5mm) | 1000          |
| LEDS2M-180-01 | 0.18 | 4.5  | 0.08   | 2.0  | T-1 3/4 (5mm) | 1000          |
| LEDS2M-200-01 | 0.20 | 5.1  | 0.08   | 2.0  | T-1 3/4 (5mm) | 1000          |
| LEDS2M-220-01 | 0.22 | 5.6  | 0.08   | 2.0  | T-1 3/4 (5mm) | 1000          |
| LEDS2M-240-01 | 0.24 | 6.1  | 0.08   | 2.0  | T-1 3/4 (5mm) | 1000          |
| LEDS2M-250-01 | 0.25 | 6.4  | 0.20   | 5.1  | T-1 3/4 (5mm) | 1000          |
| LEDS2M-260-01 | 0.26 | 6.6  | 0.20   | 5.1  | T-1 3/4 (5mm) | 1000          |
| LEDS2M-280-01 | 0.28 | 7.1  | 0.20   | 5.1  | T-1 3/4 (5mm) | 1000          |
| LEDS2M-300-01 | 0.30 | 7.8  | 0.20   | 5.1  | T-1 3/4 (5mm) | 1000          |
| LEDS2M-320-01 | 0.32 | 8.1  | 0.20   | 5.1  | T-1 3/4 (5mm) | 1000          |
| LEDS2M-340-01 | 0.34 | 8.6  | 0.20   | 5.1  | T-1 3/4 (5mm) | 1000          |
| LEDS2M-360-01 | 0.36 | 9.1  | 0.20   | 5.1  | T-1 3/4 (5mm) | 1000          |
| LEDS2M-380-01 | 0.38 | 9.7  | 0.33   | 8.4  | T-1 3/4 (5mm) | 1000          |
| LEDS2M-400-01 | 0.40 | 10.2 | 0.33   | 8.4  | T-1 3/4 (5mm) | 1000          |
| LEDS2M-420-01 | 0.42 | 10.7 | 0.33   | 8.4  | T-1 3/4 (5mm) | 1000          |
| LEDS2M-440-01 | 0.44 | 11.2 | 0.33   | 8.4  | T-1 3/4 (5mm) | 1000          |
| LEDS2M-450-01 | 0.45 | 11.4 | 0.33   | 8.4  | T-1 3/4 (5mm) | 1000          |
| LEDS2M-460-01 | 0.46 | 11.7 | 0.33   | 8.4  | T-1 3/4 (5mm) | 1000          |
| LEDS2M-500-01 | 0.50 | 12.7 | 0.45   | 11.4 | T-1 3/4 (5mm) | 1000          |
| LEDS2M-550-01 | 0.55 | 14.0 | 0.45   | 11.4 | T-1 3/4 (5mm) | 1000          |
| LEDS2M-600-01 | 0.60 | 15.2 | 0.45   | 11.4 | T-1 3/4 (5mm) | 1000          |
| LEDS2M-650-01 | 0.65 | 16.5 | 0.58   | 14.7 | T-1 3/4 (5mm) | 1000          |
| LEDS2M-750-01 | 0.75 | 19.1 | 0.70   | 17.8 | T-1 3/4 (5mm) | 1000          |
| LEDS2M-850-01 | 0.85 | 21.6 | 0.70   | 17.8 | T-1 3/4 (5mm) | 1000          |
| LEDS2M-900-01 | 0.90 | 22.9 | 0.70   | 17.8 | T-1 3/4 (5mm) | 1000          |

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

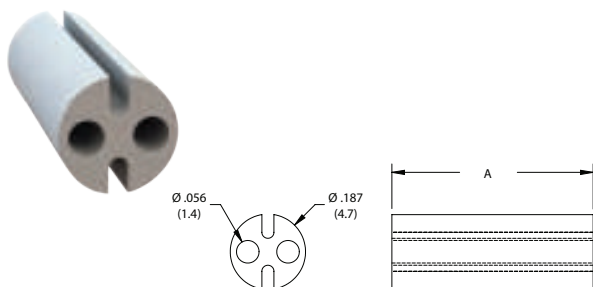
- Fits standard T-1 3/4 LEDs
- Internal tapered dividers guide the lead wires and prevent leads from shorting
- Bottom bosses serve to dissipate heat and ease post-solder cleanup



# LED SPACERS



## 27LED Series LED Spacer



**Specifications:**

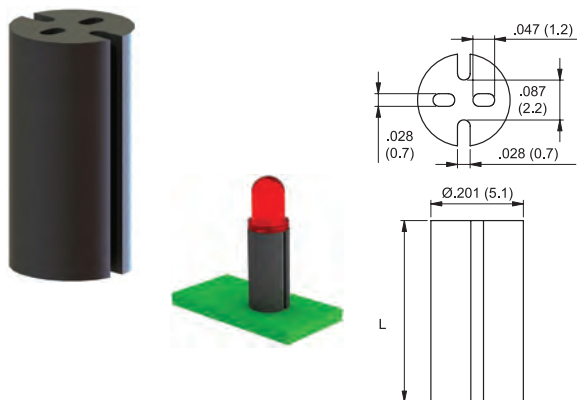
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Minimizes shifting and variation of height
- Spaces standard LED from surface of board
- Resistant to corrosion, vibration and abrasion

| Item No.     | LED Type  | A     |      | Bulk Pack Qty |
|--------------|-----------|-------|------|---------------|
|              |           | in    | mm   |               |
| 27LED2SP0250 | T-1 (3mm) | 0.250 | 6.4  | 1000          |
| 27LED2SP0375 | T-1 (3mm) | 0.375 | 9.5  | 1000          |
| 27LED2SP0500 | T-1 (3mm) | 0.500 | 12.7 | 1000          |

## LEDM-1 Series Metric LED Spacer



**Specifications:**

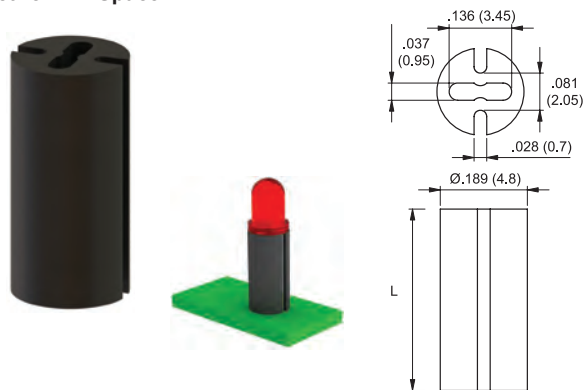
- Material: PVC
- Color: Black

**Features:**

- Fits standard T-1 3/4 LEDs
- Provides height control, lead wire retention and stability
- Self-retaining feature for auto insertion and pre-assembly

| Item No.  | L    |               | Bulk Pack Qty |
|-----------|------|---------------|---------------|
|           | mm   | LED Type      |               |
| LEDM-1-02 | 2.0  | T-1 3/4 (5mm) | 1000          |
| LEDM-1-03 | 3.0  | T-1 3/4 (5mm) | 1000          |
| LEDM-1-04 | 4.0  | T-1 3/4 (5mm) | 1000          |
| LEDM-1-06 | 5.0  | T-1 3/4 (5mm) | 1000          |
| LEDM-1-08 | 8.0  | T-1 3/4 (5mm) | 1000          |
| LEDM-1-09 | 9.0  | T-1 3/4 (5mm) | 1000          |
| LEDM-1-10 | 10.0 | T-1 3/4 (5mm) | 1000          |
| LEDM-1-13 | 13.0 | T-1 3/4 (5mm) | 1000          |
| LEDM-1-21 | 21.0 | T-1 3/4 (5mm) | 1000          |

## LEDM-2 Series Metric LED Spacer

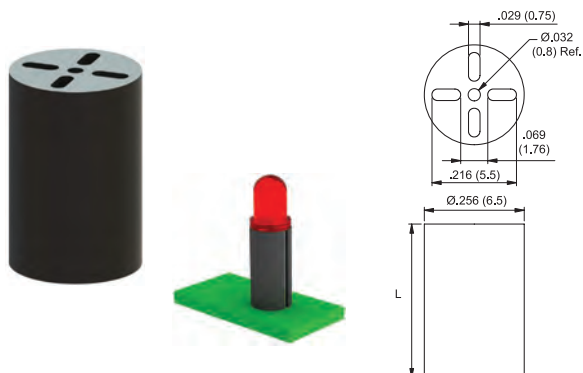


**Specifications:**

- Material: PVC
- Color: Black

| Item No.  | L    |           | Bulk Pack Qty |
|-----------|------|-----------|---------------|
|           | mm   | LED Type  |               |
| LEDM-2-02 | 2.0  | T-1 (3mm) | 1000          |
| LEDM-2-03 | 3.0  | T-1 (3mm) | 1000          |
| LEDM-2-04 | 4.0  | T-1 (3mm) | 1000          |
| LEDM-2-06 | 5.0  | T-1 (3mm) | 1000          |
| LEDM-2-08 | 8.0  | T-1 (3mm) | 1000          |
| LEDM-2-09 | 9.0  | T-1 (3mm) | 1000          |
| LEDM-2-10 | 10.0 | T-1 (3mm) | 1000          |
| LEDM-2-13 | 13.0 | T-1 (3mm) | 1000          |
| LEDM-2-21 | 21.0 | T-1 (3mm) | 1000          |

## LEDM-3 Series Metric LED Spacer



**Specifications:**

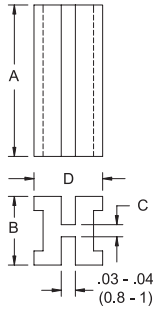
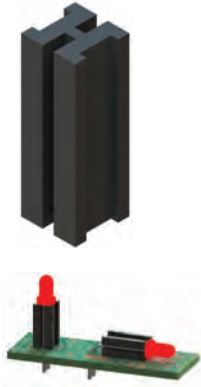
- Material: PVC
- Color: Black

| Item No.  | L    |               | Bulk Pack Qty |
|-----------|------|---------------|---------------|
|           | mm   | LED Type      |               |
| LEDM-3-02 | 2.0  | T-1 3/4 (5mm) | 1000          |
| LEDM-3-03 | 3.0  | T-1 3/4 (5mm) | 1000          |
| LEDM-3-04 | 4.0  | T-1 3/4 (5mm) | 1000          |
| LEDM-3-06 | 5.0  | T-1 3/4 (5mm) | 1000          |
| LEDM-3-08 | 8.0  | T-1 3/4 (5mm) | 1000          |
| LEDM-3-09 | 9.0  | T-1 3/4 (5mm) | 1000          |
| LEDM-3-10 | 10.0 | T-1 3/4 (5mm) | 1000          |
| LEDM-3-13 | 13.0 | T-1 3/4 (5mm) | 1000          |
| LEDM-3-21 | 21.0 | T-1 3/4 (5mm) | 1000          |



# LED SPACERS

## SQLEDS Series Square LED Spacer



**Specifications:**

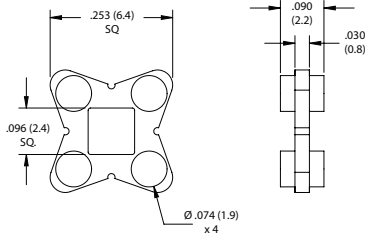
- Material: UL94 V-0 PVC
- Color: Black

**Features:**

- Provides height control, lead wire retention and stability
- Square design is good for angled applications

| Item No.      | LED Type      | A     |      | B    |     | C    |     | D Ref. |     | Bulk Pack Qty |
|---------------|---------------|-------|------|------|-----|------|-----|--------|-----|---------------|
|               |               | in    | mm   | in   | mm  | in   | mm  | in     | mm  |               |
| SQLEDS1-4-26  | T-1 (3mm)     | 0.250 | 6.4  | 0.17 | 4.3 | 0.03 | 0.8 | 0.17   | 4.3 | 1000          |
| SQLEDS1-6-26  | T-1 (3mm)     | 0.375 | 9.5  | 0.17 | 4.3 | 0.03 | 0.8 | 0.17   | 4.3 | 1000          |
| SQLEDS1-8-26  | T-1 (3mm)     | 0.500 | 12.7 | 0.17 | 4.3 | 0.03 | 0.8 | 0.17   | 4.3 | 1000          |
| SQLEDS2-4-26  | T-1-3/4 (5mm) | 0.250 | 6.4  | 0.24 | 6.1 | 0.07 | 1.8 | 0.27   | 6.9 | 1000          |
| SQLEDS2-6-26  | T-1-3/4 (5mm) | 0.375 | 9.5  | 0.24 | 6.1 | 0.07 | 1.8 | 0.27   | 6.9 | 1000          |
| SQLEDS2-8-26  | T-1-3/4 (5mm) | 0.500 | 12.7 | 0.24 | 6.1 | 0.07 | 1.8 | 0.27   | 6.9 | 1000          |
| SQLEDS2-12-26 | T-1-3/4 (5mm) | 0.750 | 19.1 | 0.24 | 6.1 | 0.07 | 1.8 | 0.27   | 6.9 | 1000          |

## 18TRM Series Square LED Mount



**Specifications:**

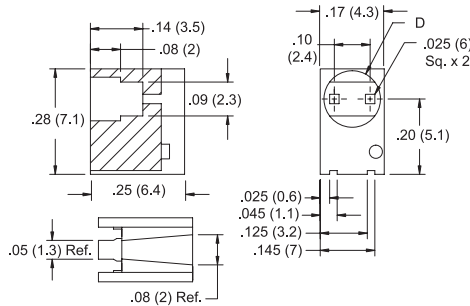
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Provides secure mounting of both two and three lead devices
- Resists corrosion, vibration, heat and abrasion
- Symmetrical design with feet on both sides, eliminates the need for specific side rotation

| Item No. | Bulk Pack Qty |
|----------|---------------|
| 18TRM001 | 1000          |

## LEDH Series 90° LED Holder



LEDH-101C

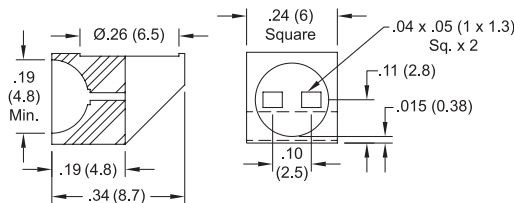
**Specifications:**

- Material: UL94 V-0 Nylon 6/6
- Color: Black

**Features:**

- Allows LEDs to be mounted at a 90° angle
- Can be easily assembled by hand; no tools required

| Item No.     | Ø D  |     | LED Type  | Bulk Pack Qty |
|--------------|------|-----|-----------|---------------|
|              | in   | mm  |           |               |
| LEDH-101C-34 | 0.13 | 3.4 | T-1 (3mm) | 1000          |
| LEDH-101C-38 | 0.15 | 3.8 | T-1 (3mm) | 1000          |



LEDH-909-235

| Item No.     | LED Type      | Bulk Pack Qty |
|--------------|---------------|---------------|
| LEDH-909-235 | T-1 3/4 (5mm) | 1000          |

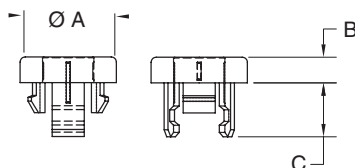
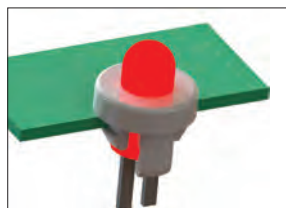




# LED HOLDERS



## LEDHPM/27LEDH Series Panel Mount LED Holder



**Specifications:**

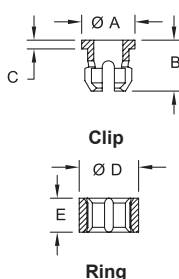
- Material: See table
- Color: See table

**Features:**

- Easily snapped into standard panel holes by hand
- Once the holder is snapped into the hole, the LED will lock into place when inserted from the rear of the panel
- Provides a secure, attractive display
- Fits standard T-1 3/4 LEDs

| Item No. | A     |      | B     |      | C     |      | Mounting Hole |             | Panel Thickness |             | Material  | Color   | Bulk Pack Qty |
|----------|-------|------|-------|------|-------|------|---------------|-------------|-----------------|-------------|-----------|---------|---------------|
|          | in    | mm   | in    | mm   | in    | mm   | in            | mm          | in              | mm          |           |         |               |
| LEDHPM-1 | 0.375 | 9.53 | 0.100 | 2.54 | 0.210 | 5.33 | 0.281 - 0.287 | 7.14 - 7.29 | 0.044 - 0.048   | 1.21 - 1.22 | Nylon 6/6 | Natural | 1000          |
| 27LEDH01 | 0.317 | 9.07 | 0.025 | 0.64 | 0.250 | 6.35 | 0.240 - 0.247 | 6.10 - 6.27 | 0.070           | 1.78        | HS Nylon  | Black   | 1000          |

## LEDCR Series LED Clips & Rings



**Specifications:**

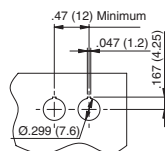
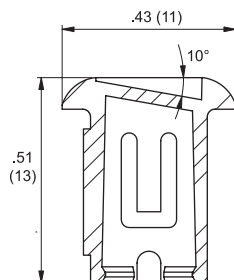
- Clip Material: UL94 V-0 Nylon 6/6
- Ring Material: See table
- Color: Black

**Features:**

- The devices go together by simply inserting the clip to the front of the panel, then assembling the LED into the clip from the rear of the panel; the ring is pressed onto the rear of the clip for a firm retention
- Parts are sold in a set with both the clip and ring
- Securely and firmly mounts LEDs
- Provides a secure, attractive display
- Fits standard T-1 3/4 LEDs

| Item No.  | Ring Material      | LED Type      | Ø Mounting Hole |           | Panel Thickness |           | Ø A  |     | B    |     | C    |      | Ø D  |     | E    |     | Bulk Pack Qty |
|-----------|--------------------|---------------|-----------------|-----------|-----------------|-----------|------|-----|------|-----|------|------|------|-----|------|-----|---------------|
|           |                    |               | in              | mm        | in              | mm        | in   | mm  | in   | mm  | in   | mm   | in   | mm  |      |     |               |
| LEDCR-104 | UL94 V-0 Nylon 6/6 | T-1 (3mm)     | 0.174 - 0.180   | 4.4 - 4.6 | 0.032 - 0.125   | 0.8 - 3.2 | 0.21 | 5.3 | 0.21 | 5.3 | 0.15 | 0.38 | 0.24 | 6.1 | 0.14 | 3.6 | 1000          |
| LEDCR-174 | UL94 V-2 Nylon 6/6 | T-1-3/4 (5mm) | 0.267 - 0.273   | 6.8 - 6.9 | 0.032 - 0.125   | 0.8 - 3.2 | 0.30 | 7.6 | 0.26 | 6.6 | 0.30 | 0.76 | 0.35 | 8.9 | 0.16 | 4.1 | 1000          |

## LEDC Series LED Lens Cover



**Specifications:**

- Cover Material: UL94 V-2 Polycarbonate
- Cover Color: Clear
- O-Ring Material: Neoprene Rubber
- O-Ring Color: Black
- Flame Class:

**Features:**

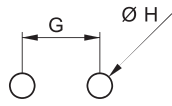
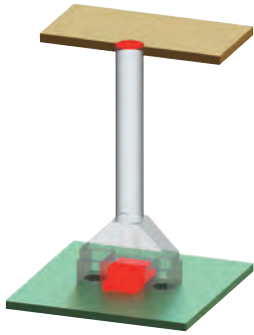
- Standard 10° lens angle to control light transmission
- Rubber O-Ring gives protection from dust and water
- Fits standard T-1 3/4 LEDs
- Snaps in by hand

| Item No. | Details           | Ø Mounting Hole |     | Panel Thickness |     | LED Type |     | Bulk Pack Qty |
|----------|-------------------|-----------------|-----|-----------------|-----|----------|-----|---------------|
|          |                   | in              | mm  | in              | mm  | in       | mm  |               |
| LEDC-1   | Cover             | 0.03            | 7.6 | 0.177           | 4.5 | T-1 3/4  | 5.0 | 1000          |
| LEDC-2   | Cover with O-Ring | 0.03            | 7.6 | 0.118           | 3.0 | T-1 3/4  | 5.0 | 1000          |



# LED LIGHT PIPES

## VLP Series Vertical Light Pipe



Mounting Hole Details

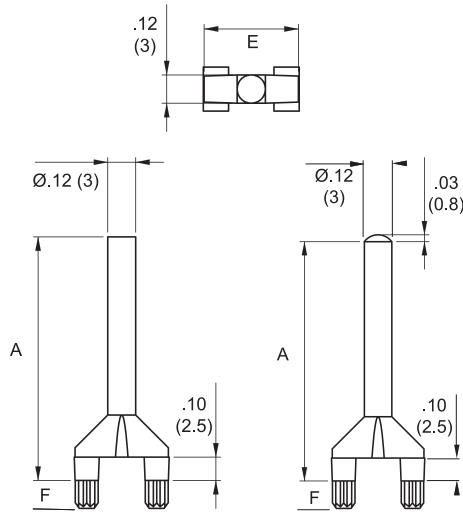


Fig. 1  
Flat

Fig. 2  
Domed

**Specifications:**

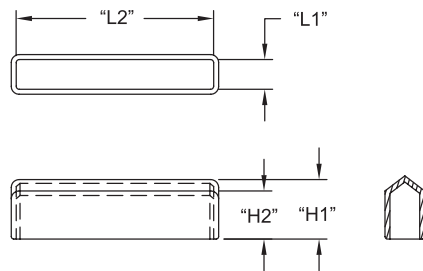
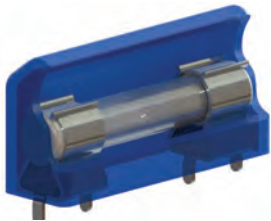
- Material: UL94 V-0 Polycarbonate
- Color: Clear

**Features:**

- Acts as a conduit to transport light from an LED to another location while minimizing the loss of light
- Domed and Flat front shapes allow for flexibility of design
- Surface mount LED compatible
- Provides ESD protection by isolating the PCB from potential contact

| Item No. | Fig. | A    |      | E    |      | F    |     | G    |     | Ø H  |     | Panel Thickness |           | Bulk Pack Qty |
|----------|------|------|------|------|------|------|-----|------|-----|------|-----|-----------------|-----------|---------------|
|          |      | in   | mm   | in   | mm   | in   | mm  | in   | mm  | in   | mm  | in              | mm        |               |
| VLP1-F-1 | 1    | 0.50 | 12.7 | 0.25 | 6.4  | 0.10 | 2.5 | 0.19 | 4.7 | 0.06 | 1.5 | 0.03 - 0.12     | 0.8 - 3.0 | 1000          |
| VLP1-F-3 | 1    | 0.65 | 16.5 | 0.25 | 6.4  | 0.10 | 2.5 | 0.19 | 4.7 | 0.06 | 1.5 | 0.03 - 0.12     | 0.8 - 3.0 | 1000          |
| VLP1-F-4 | 1    | 0.86 | 21.8 | 0.25 | 6.4  | 0.10 | 2.5 | 0.19 | 4.7 | 0.06 | 1.5 | 0.03 - 0.12     | 0.8 - 3.0 | 1000          |
| VLP1-F-5 | 1    | 1.03 | 26.1 | 0.25 | 6.4  | 0.10 | 2.5 | 0.19 | 4.7 | 0.06 | 1.5 | 0.03 - 0.12     | 0.8 - 3.0 | 1000          |
| VLP1-D-1 | 2    | 0.50 | 12.7 | 0.25 | 6.4  | 0.10 | 2.5 | 0.19 | 4.7 | 0.06 | 1.5 | 0.03 - 0.12     | 0.8 - 3.0 | 1000          |
| VLP1-D-3 | 2    | 0.65 | 16.5 | 0.25 | 6.4  | 0.10 | 2.5 | 0.19 | 4.7 | 0.06 | 1.5 | 0.03 - 0.12     | 0.8 - 3.0 | 1000          |
| VLP1-D-4 | 2    | 0.86 | 21.8 | 0.25 | 6.4  | 0.10 | 2.5 | 0.19 | 4.7 | 0.06 | 1.5 | 0.03 - 0.12     | 0.8 - 3.0 | 1000          |
| VLP1-D-5 | 2    | 1.03 | 26.1 | 0.25 | 6.4  | 0.10 | 2.5 | 0.19 | 4.7 | 0.06 | 1.5 | 0.03 - 0.12     | 0.8 - 3.0 | 1000          |
| VLP2-F-1 | 1    | 0.50 | 12.7 | 0.39 | 10.0 | 0.12 | 3.0 | 0.30 | 7.5 | 0.09 | 2.4 | 0.03 - 0.12     | 0.8 - 3.0 | 1000          |
| VLP2-F-2 | 1    | 0.59 | 15.0 | 0.39 | 10.0 | 0.12 | 3.0 | 0.30 | 7.5 | 0.09 | 2.4 | 0.03 - 0.12     | 0.8 - 3.0 | 1000          |
| VLP2-F-3 | 1    | 0.65 | 16.5 | 0.39 | 10.0 | 0.12 | 3.0 | 0.30 | 7.5 | 0.09 | 2.4 | 0.03 - 0.12     | 0.8 - 3.0 | 1000          |
| VLP2-F-4 | 1    | 0.86 | 21.8 | 0.39 | 10.0 | 0.12 | 3.0 | 0.30 | 7.5 | 0.09 | 2.4 | 0.03 - 0.12     | 0.8 - 3.0 | 1000          |
| VLP2-F-5 | 1    | 1.03 | 26.1 | 0.39 | 10.0 | 0.12 | 3.0 | 0.30 | 7.5 | 0.09 | 2.4 | 0.03 - 0.12     | 0.8 - 3.0 | 1000          |
| VLP2-F-6 | 1    | 2.17 | 55.0 | 0.39 | 10.0 | 0.12 | 3.0 | 0.30 | 7.5 | 0.09 | 2.4 | 0.03 - 0.12     | 0.8 - 3.0 | 1000          |
| VLP2-D-1 | 2    | 0.50 | 12.7 | 0.39 | 10.0 | 0.12 | 3.0 | 0.30 | 7.5 | 0.09 | 2.4 | 0.03 - 0.12     | 0.8 - 3.0 | 1000          |
| VLP2-D-3 | 2    | 0.65 | 16.5 | 0.39 | 10.0 | 0.12 | 3.0 | 0.30 | 7.5 | 0.09 | 2.4 | 0.03 - 0.12     | 0.8 - 3.0 | 1000          |
| VLP2-D-4 | 2    | 0.86 | 21.8 | 0.39 | 10.0 | 0.12 | 3.0 | 0.30 | 7.5 | 0.09 | 2.4 | 0.03 - 0.12     | 0.8 - 3.0 | 1000          |
| VLP2-D-5 | 2    | 1.03 | 26.1 | 0.39 | 10.0 | 0.12 | 3.0 | 0.30 | 7.5 | 0.09 | 2.4 | 0.03 - 0.12     | 0.8 - 3.0 | 1000          |
| VLP2-D-6 | 2    | 2.17 | 55.0 | 0.39 | 10.0 | 0.12 | 3.0 | 0.30 | 7.5 | 0.09 | 2.4 | 0.03 - 0.12     | 0.8 - 3.0 | 1000          |

## 840XXX Series Quick Fit Fuse Cover



**Specifications:**

- Material: UL94 V-0 Flexible PVC
- Color: Transparent Blue

**Features:**

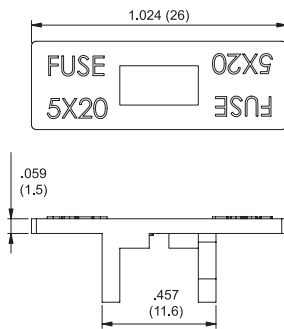
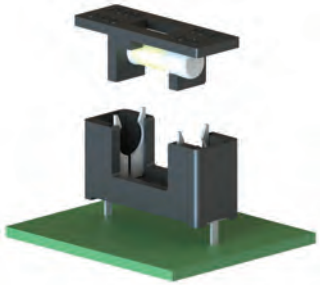
- For fuse clips and blocks mounted to PC boards
- No corrosion when exposed to copper

| Item No. | Fuse Type       | H1 Ref. |      | H2 Ref. |      | L1   |     | L2   |      | Bulk Pack Qty |
|----------|-----------------|---------|------|---------|------|------|-----|------|------|---------------|
|          |                 | in      | mm   | in      | mm   | in   | mm  | in   | mm   |               |
| 840620   | Metric          | 0.500   | 12.7 | 0.391   | 9.9  | 0.24 | 6.1 | 0.79 | 20.1 | 1000          |
| 840730   | Metric          | 0.500   | 12.7 | 0.391   | 9.9  | 0.28 | 7.1 | 1.18 | 30.0 | 1000          |
| 840832   | Metric          | 0.625   | 15.9 | 0.578   | 14.7 | 0.32 | 8.1 | 1.26 | 32.0 | 1000          |
| 840836   | Std 0.25 x 1.25 | 0.500   | 12.7 | 0.391   | 9.9  | 0.32 | 8.1 | 1.42 | 36.1 | 1000          |

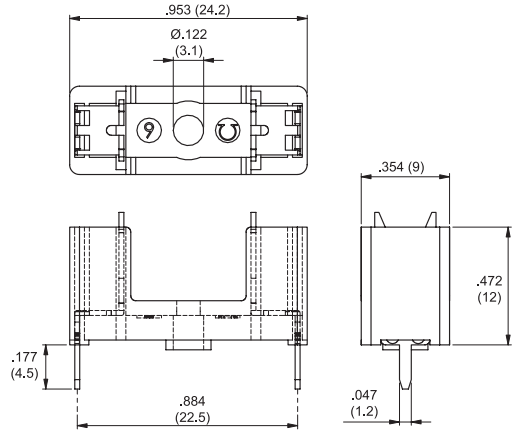


# FUSE COVERS

## FH/FC Series Fuse Holder & Cover



**FC-320-NV  
Cover**



**FH-320-NV  
Holder**

**Specifications:**

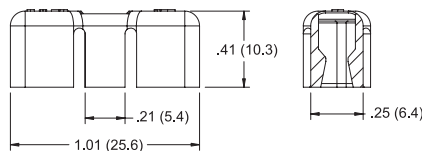
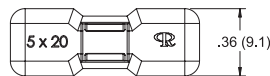
- Material: UL94 V-0 GLass Filled Nylon / Brass Inserts
- Color: Black

**Features:**

- Protects live components from damaging, unintentional contact
- Window in the top of the holder allows for visual inspection
- Two-piece assembly: simply insert the fuse into the fuse cover; lock in place with a fingertip twist and place fuse cover in fuse holder
- Cover and Holder sold separately

| Item No.  | Description | Bulk Pack Qty |
|-----------|-------------|---------------|
| FH-320-NV | Fuse Holder | 1000          |
| FC-320-NV | Fuse Cover  | 1000          |

## FCE Series Fuse Cover



**Specifications:**

- Material: UL94 V-0 Nylon 6/6
- Color: Natural

**Features:**

- Protects fuse when maintenance is performed on surrounding components
- Window in the top of the holder allows for visual inspection
- Easily snaps onto the fuse and fuse holder

| Item No. | Mounting Fuse Size                      | Bulk Pack Qty |
|----------|-----------------------------------------|---------------|
| FCE-5-19 | Snap-fit onto a .20 x .79 (5 x 20) fuse | 1000          |

# FIBER, WIRE & CABLE MANAGEMENT



|                                                                                     |                                          |                |
|-------------------------------------------------------------------------------------|------------------------------------------|----------------|
|    | CABLE CLAMPS & CLIPS .....               | 310 - 330      |
|    | TWIST TIES .....                         | 331 - 336      |
|    | CABLE CLIPS & CLEATS .....               | 336 - 338      |
|    | WIRE SADDLES .....                       | 339 - 347      |
|    | FLAT CABLE CLAMPS & CLIPS.....           | 347 - 355      |
|    | CABLE TIES, STRAPS & MOUNTS .....        | 356 - 378      |
|    | CABLE DUCT .....                         | 378 - 379      |
|    | FLEXIBLE CONDUIT, FITTINGS & WRAPS ..... | 379 - 390      |
|  | HOSE CLAMPS .....                        | 391 - 392      |
|  | HEAT SHRINK TUBING .....                 | 392 - 394      |
|  | FIBER MANAGEMENT .....                   | 394 - 401      |
|  | CAPS & PLUGS .....                       | 401 - 406      |
|  | GROMMETS & BUSHINGS.....                 | 407 - 421, 432 |
|  | CABLE GLANDS .....                       | 422 - 423      |
|  | GROMMET EDGING .....                     | 424 - 428      |
|  | INSULATORS & CONNECTORS.....             | 429 - 431      |

# FIBER, WIRE & CABLE MANAGEMENT



# CABLE CLAMPS

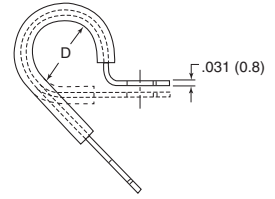
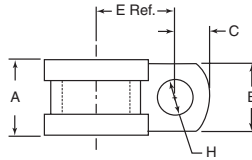
## SPN/SPNW Series Steel Clamps with Rubber Cushion

**Specifications:**

- Material: Cold Rolled Steel, Zinc Electroplated, Elastomer Cushion
- Color: Steel with Black Cushion

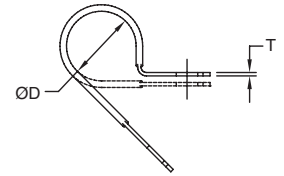
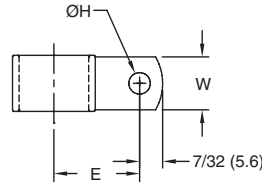
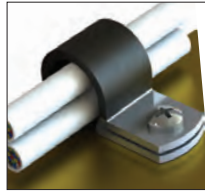
**Features:**

- Provides electrical insulation and vibration absorption
- Ideal for long-life applications



| Item No. | Ø D Holding |      | Ø H Hole |      | B     |      | A     |      | E Ref. |      | C     |     | Bulk Pack Qty |
|----------|-------------|------|----------|------|-------|------|-------|------|--------|------|-------|-----|---------------|
|          | in          | mm   | in       | mm   | in    | mm   | in    | mm   | in     | mm   | in    | mm  |               |
| SPN-3    | 3/16        | 4.8  | 0.266    | 6.7  | 0.500 | 12.7 | 0.650 | 16.5 | 0.500  | 12.7 | 0.260 | 6.6 | 500           |
| SPN-4    | 1/4         | 6.4  | 0.266    | 6.7  | 0.500 | 12.7 | 0.650 | 16.5 | 0.530  | 13.5 | 0.260 | 6.6 | 500           |
| SPNW-4   | 1/4         | 6.4  | 0.406    | 10.3 | 0.625 | 15.9 | 0.750 | 19.1 | 0.530  | 13.5 | 0.313 | 7.9 | 100           |
| SPN-5    | 5/16        | 7.9  | 0.266    | 6.7  | 0.500 | 12.7 | 0.650 | 16.5 | 0.560  | 14.2 | 0.260 | 6.6 | 500           |
| SPNW-5   | 5/16        | 7.9  | 0.406    | 10.3 | 0.625 | 15.9 | 0.750 | 19.1 | 0.560  | 14.2 | 0.313 | 7.9 | 100           |
| SPN-6    | 3/8         | 9.5  | 0.266    | 6.7  | 0.500 | 12.7 | 0.650 | 16.5 | 0.590  | 15   | 0.260 | 6.6 | 500           |
| SPNW-6   | 3/8         | 9.5  | 0.406    | 10.3 | 0.625 | 15.9 | 0.750 | 19.1 | 0.590  | 15   | 0.313 | 7.9 | 100           |
| SPN-7    | 7/16        | 11.1 | 0.266    | 6.7  | 0.500 | 12.7 | 0.650 | 16.5 | 0.620  | 15.7 | 0.260 | 6.6 | 500           |
| SPNW-7   | 7/16        | 11.1 | 0.406    | 10.3 | 0.625 | 15.9 | 0.750 | 19.1 | 0.620  | 15.7 | 0.313 | 7.9 | 100           |
| SPN-8    | 1/2         | 12.7 | 0.266    | 6.7  | 0.500 | 12.7 | 0.650 | 16.5 | 0.650  | 16.5 | 0.260 | 6.6 | 500           |
| SPNW-8   | 1/2         | 12.7 | 0.406    | 10.3 | 0.625 | 15.9 | 0.750 | 19.1 | 0.650  | 16.5 | 0.313 | 7.9 | 100           |
| SPN-9    | 9/16        | 14.3 | 0.266    | 6.7  | 0.500 | 12.7 | 0.650 | 16.5 | 0.750  | 19.1 | 0.260 | 6.6 | 500           |
| SPN-10   | 5/8         | 15.9 | 0.266    | 6.7  | 0.500 | 12.7 | 0.650 | 16.5 | 0.780  | 19.8 | 0.260 | 6.6 | 500           |
| SPNW-10  | 5/8         | 15.9 | 0.406    | 10.3 | 0.625 | 15.9 | 0.750 | 19.1 | 0.780  | 19.8 | 0.313 | 7.9 | 100           |
| SPN-11   | 11/16       | 17.5 | 0.266    | 6.7  | 0.500 | 12.7 | 0.650 | 16.5 | 0.810  | 20.6 | 0.260 | 6.6 | 500           |
| SPNW-11  | 11/16       | 17.5 | 0.406    | 10.3 | 0.625 | 15.9 | 0.750 | 19.1 | 0.810  | 20.6 | 0.313 | 7.9 | 100           |
| SPN-12   | 3/4         | 19.1 | 0.266    | 6.7  | 0.500 | 12.7 | 0.650 | 16.5 | 0.840  | 21.3 | 0.260 | 6.6 | 500           |
| SPN-14   | 7/8         | 22.2 | 0.266    | 6.7  | 0.500 | 12.7 | 0.650 | 16.5 | 0.900  | 22.9 | 0.260 | 6.6 | 100           |
| SPNW-14  | 7/8         | 22.2 | 0.406    | 10.3 | 0.625 | 15.9 | 0.750 | 19.1 | 0.900  | 22.9 | 0.313 | 7.9 | 100           |
| SPN-16   | 1           | 25.4 | 0.266    | 6.7  | 0.500 | 12.7 | 0.650 | 16.5 | 0.960  | 24.4 | 0.260 | 6.6 | 100           |
| SPNW-16  | 1           | 25.4 | 0.406    | 10.3 | 0.625 | 15.9 | 0.750 | 19.1 | 0.960  | 24.4 | 0.313 | 7.9 | 100           |
| SPN-18   | 1-1/8       | 28.6 | 0.266    | 6.7  | 0.500 | 12.7 | 0.650 | 16.5 | 1.050  | 26.7 | 0.260 | 6.6 | 100           |
| SPN-20   | 1-1/4       | 31.8 | 0.266    | 6.7  | 0.500 | 12.7 | 0.650 | 16.5 | 1.110  | 28.2 | 0.260 | 6.6 | 100           |
| SPNW-20  | 1-1/4       | 31.8 | 0.406    | 10.3 | 0.625 | 15.9 | 0.750 | 19.1 | 1.110  | 28.2 | 0.313 | 7.9 | 100           |

## NE Series Aluminum Clamps with Vinyl Coating



**Specifications:**

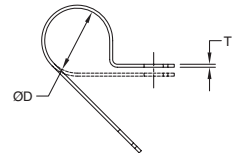
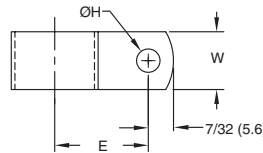
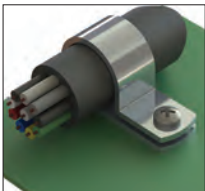
- Material: Aluminum Alloy 5052 H-32, TPV Coating
- Color: Aluminum with Black Coating

**Features:**

- Vinyl coating allows a more permanent solution for protecting cables against vibration
- Screw mount area is bare to ensure firm tightening

| Item No. | Ø D Holding |      | Ø H Hole |     | W     |      | E Ref. |      | T    |     | Bulk Pack Qty |
|----------|-------------|------|----------|-----|-------|------|--------|------|------|-----|---------------|
|          | in          | mm   | in       | mm  | in    | mm   | in     | mm   | in   | mm  |               |
| NE3      | 3/16        | 4.8  | 0.204    | 5.2 | 0.375 | 9.5  | 0.50   | 12.7 | 1/32 | 0.8 | 1000          |
| NE4      | 1/4         | 6.4  | 0.204    | 5.2 | 0.375 | 9.5  | 0.53   | 13.5 | 1/32 | 0.8 | 1000          |
| NE5      | 5/16        | 7.9  | 0.204    | 5.2 | 0.375 | 9.5  | 0.56   | 14.2 | 1/32 | 0.8 | 1000          |
| NE6      | 3/8         | 9.5  | 0.204    | 5.2 | 0.375 | 9.5  | 0.59   | 15.0 | 1/32 | 0.8 | 1000          |
| NE7      | 7/16        | 11.1 | 0.204    | 5.2 | 0.375 | 9.5  | 0.62   | 15.7 | 1/32 | 0.8 | 1000          |
| NE8      | 1/2         | 12.7 | 0.204    | 5.2 | 0.375 | 9.5  | 0.65   | 16.5 | 1/32 | 0.8 | 1000          |
| NE9      | 9/16        | 14.3 | 0.204    | 5.2 | 0.375 | 9.5  | 0.75   | 19.1 | 1/32 | 0.8 | 1000          |
| NE10     | 5/8         | 15.9 | 0.204    | 5.2 | 0.375 | 9.5  | 0.78   | 19.8 | 1/32 | 0.8 | 1000          |
| NE11     | 11/16       | 17.5 | 0.204    | 5.2 | 0.500 | 12.7 | 0.81   | 20.6 | 1/16 | 1.6 | 500           |
| NE12     | 3/4         | 19.1 | 0.204    | 5.2 | 0.500 | 12.7 | 0.84   | 21.3 | 1/16 | 1.6 | 500           |
| NE14     | 7/8         | 22.2 | 0.204    | 5.2 | 0.500 | 12.7 | 0.90   | 22.9 | 1/16 | 1.6 | 500           |
| NE16     | 1           | 25.4 | 0.204    | 5.2 | 0.500 | 12.7 | 0.96   | 24.4 | 1/16 | 1.6 | 500           |
| NE18     | 1-1/8       | 28.6 | 0.204    | 5.2 | 0.500 | 12.7 | 1.05   | 26.7 | 1/16 | 1.6 | 500           |
| NE20     | 1-1/4       | 31.8 | 0.204    | 5.2 | 0.500 | 12.7 | 1.11   | 28.2 | 1/16 | 1.6 | 500           |

## AL Series Aluminum Clamps



**Specifications:**

- Material: Aluminum Alloy 5052 H-32
- Color: Aluminum

**Features:**

- Corrosion resistant
- Protects and holds cable, wire, hoses and loom

| Item No. | Ø D Holding |      | Ø H Hole |     | W     |      | E Ref. |      | T    |     | Bulk Pack Qty |
|----------|-------------|------|----------|-----|-------|------|--------|------|------|-----|---------------|
|          | in          | mm   | in       | mm  | in    | mm   | in     | mm   | in   | mm  |               |
| AL2A     | 1/8         | 3.2  | 0.204    | 5.2 | 0.375 | 9.5  | 0.46   | 11.7 | 1/32 | 0.8 | 1000          |
| AL3A     | 3/16        | 4.8  | 0.204    | 5.2 | 0.375 | 9.5  | 0.50   | 12.7 | 1/32 | 0.8 | 1000          |
| AL4A     | 1/4         | 6.4  | 0.204    | 5.2 | 0.375 | 9.5  | 0.53   | 13.5 | 1/32 | 0.8 | 1000          |
| AL5A     | 5/16        | 7.9  | 0.204    | 5.2 | 0.375 | 9.5  | 0.56   | 14.2 | 1/32 | 0.8 | 1000          |
| AL6A     | 3/8         | 9.5  | 0.204    | 5.2 | 0.375 | 9.5  | 0.59   | 15.0 | 1/32 | 0.8 | 1000          |
| AL7A     | 7/16        | 11.1 | 0.204    | 5.2 | 0.375 | 9.5  | 0.62   | 15.7 | 1/32 | 0.8 | 1000          |
| AL8A     | 1/2         | 12.7 | 0.204    | 5.2 | 0.375 | 9.5  | 0.65   | 16.5 | 1/32 | 0.8 | 1000          |
| AL9A     | 9/16        | 14.3 | 0.204    | 5.2 | 0.375 | 9.5  | 0.75   | 19.1 | 1/32 | 0.8 | 1000          |
| AL10A    | 5/8         | 15.9 | 0.204    | 5.2 | 0.375 | 9.5  | 0.78   | 19.8 | 1/32 | 0.8 | 1000          |
| AL11     | 11/16       | 17.5 | 0.204    | 5.2 | 0.500 | 12.7 | 0.81   | 20.6 | 1/32 | 0.8 | 500           |
| AL12     | 3/4         | 19.1 | 0.204    | 5.2 | 0.500 | 12.7 | 0.84   | 21.3 | 1/32 | 0.8 | 500           |
| AL14     | 7/8         | 22.2 | 0.204    | 5.2 | 0.500 | 12.7 | 0.90   | 22.9 | 1/32 | 0.8 | 500           |
| AL16     | 1           | 25.4 | 0.204    | 5.2 | 0.500 | 12.7 | 0.96   | 24.4 | 1/16 | 1.6 | 500           |
| AL18     | 1-1/8       | 28.6 | 0.204    | 5.2 | 0.500 | 12.7 | 1.05   | 26.7 | 1/16 | 1.6 | 500           |
| AL20     | 1-1/4       | 31.8 | 0.204    | 5.2 | 0.500 | 12.7 | 1.11   | 28.2 | 1/16 | 1.6 | 500           |



**WHC Series**  
**Wire Harness Clamps**

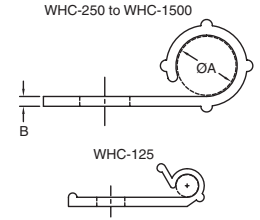
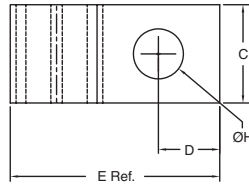


**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: See Table

**Features:**

- Can be preinstalled to chassis with cables inserted at a later time
- Cables can be removed for wiring changes or replacements



| Item No.    |               | Approval | Ø A Holding |      | Ø H Hole |     | C    |      | B    |     | D    |     | E Ref. |      | Bulk Pack Qty |
|-------------|---------------|----------|-------------|------|----------|-----|------|------|------|-----|------|-----|--------|------|---------------|
| Natural     | Black         |          | in          | mm   | in       | mm  | in   | mm   | in   | mm  | in   | mm  | in     | mm   |               |
| WHC-125-01  | WHC-125-01BK  |          | 0.125       | 3.2  | 0.156    | 4.0 | 0.33 | 8.4  | 0.05 | 1.3 | 0.23 | 5.8 | 0.750  | 19.1 | 1000          |
| WHC-250-01  | WHC-250-01BK  |          | 0.250       | 6.4  | 0.204    | 5.2 | 0.40 | 10.2 | 0.04 | 1.0 | 0.25 | 6.4 | 0.830  | 21.1 | 1000          |
| WHC-375-01  | WHC-375-01BK  |          | 0.375       | 9.5  | 0.204    | 5.2 | 0.40 | 10.2 | 0.05 | 1.3 | 0.19 | 4.8 | 0.830  | 21.1 | 1000          |
| WHC-500-01  | WHC-500-01BK  |          | 0.500       | 12.7 | 0.204    | 5.2 | 0.40 | 10.2 | 0.07 | 1.8 | 0.25 | 6.4 | 1.156  | 29.4 | 1000          |
| WHC-625-01  | WHC-625-01BK  |          | 0.625       | 15.9 | 0.204    | 5.2 | 0.50 | 12.7 | 0.08 | 2.0 | 0.19 | 4.8 | 1.125  | 28.6 | 1000          |
| WHC-750-01  | WHC-750-01BK  |          | 0.750       | 19.1 | 0.204    | 5.2 | 0.50 | 12.7 | 0.09 | 2.2 | 0.19 | 4.8 | 1.281  | 32.5 | 1000          |
| WHC-1000-01 | WHC-1000-01BK |          | 1.000       | 25.4 | 0.204    | 5.2 | 0.50 | 12.7 | 0.09 | 2.2 | 0.19 | 4.8 | 1.531  | 38.9 | 500           |
| WHC-1500-01 | WHC-1500-01BK |          | 1.500       | 38.1 | 0.204    | 5.2 | 0.50 | 12.7 | 0.10 | 2.5 | 0.19 | 4.8 | 2.125  | 53.9 | 500           |

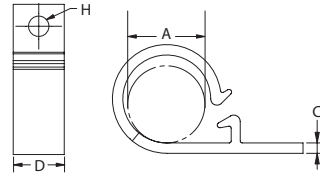
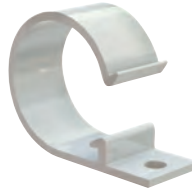
**EXWHC Series**  
**Wire Harness Clamps**

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Cables are easily inserted into clamp and locked in place
- Cables can be removed for wiring change or replacements



| Item No.       | Ø A Holding |      | Ø H Hole |     | C     |     | D Ref. |      | Bulk Pack Qty |
|----------------|-------------|------|----------|-----|-------|-----|--------|------|---------------|
|                | in          | mm   | in       | mm  | in    | mm  | in     | mm   |               |
| EXWHC2-250-01* | 0.250       | 6.4  | 0.156    | 4.0 | 0.039 | 1.0 | 0.394  | 10.0 | 1000          |
| EXWHC2-500-01  | 0.500       | 12.7 | 0.156    | 4.0 | 0.075 | 1.9 | 0.394  | 10.0 | 1000          |
| EXWHC2-750-01  | 0.708       | 18.0 | 0.156    | 4.0 | 0.075 | 1.9 | 0.500  | 12.7 | 1000          |

\* No latch feature

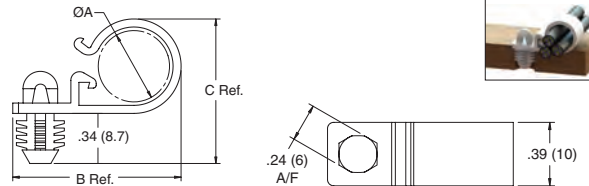
**BHLWHC Series**  
**Blind Hole Mounted Clamps**

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Easily pushed into mounting hole using a standard 6mm hexagonal socket pressed onto mounting head
- Releasable and reusable for easy wire bundling



| Item No.      | Ø A Holding |      | Ø Mounting Hole |     | B Ref. |      | C Ref. |      | Min. Panel Thickness |     | Bulk Pack Qty |
|---------------|-------------|------|-----------------|-----|--------|------|--------|------|----------------------|-----|---------------|
|               | in          | mm   | in              | mm  | in     | mm   | in     | mm   | in                   | mm  |               |
| BHLWHC-500-01 | 0.500       | 12.7 | 0.312           | 7.9 | 1.150  | 29.3 | 1.000  | 25.4 | 0.250                | 6.4 | 1000          |
| BHLWHC-750-01 | 0.750       | 19.1 | 0.312           | 7.9 | 1.440  | 36.5 | 1.340  | 34.1 | 0.250                | 6.4 | 1000          |

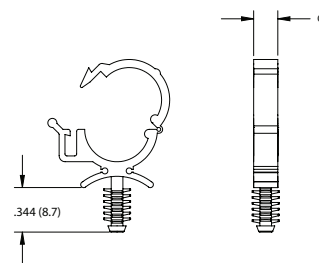
**23RCFB Series**  
**Releasable Clamps**

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: See Table

**Features:**

- Wires can easily be removed or added to the clip
- Can be used in a variety of panel thicknesses and materials
- Large contoured base assures stable mounting
- Corrosion, vibration and abrasion resistant



| Item No.    |              | Ø Bundle |      | Ø Mounting Hole |     | C     |     | Bulk Pack Qty |
|-------------|--------------|----------|------|-----------------|-----|-------|-----|---------------|
| Natural     | Black        | in       | mm   | in              | mm  | in    | mm  |               |
| 23RCFB037   | 23RCFB037B   | 0.375    | 9.5  | 0.187           | 4.8 | 0.187 | 4.8 | 1000          |
| 23RCFB050   | 23RCFB050B   | 0.500    | 12.7 | 0.187           | 4.8 | 0.187 | 4.8 | 1000          |
| 23RCFB05025 | 23RCFB05025B | 0.500    | 12.7 | 0.250           | 6.4 | 0.187 | 4.8 | 1000          |
| 23RCFB100   | 23RCFB100B   | 1.000    | 25.4 | 0.250           | 6.4 | 0.375 | 9.5 | 250           |



# CABLE CLIPS & CLAMPS

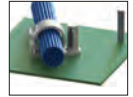
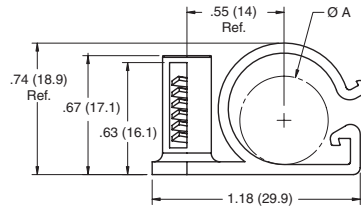
## SMWHC Series Stud Mount Wire Harness Clips

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Installed by pushing clamp onto an exposed screw or stud
- No protrusion under the chassis
- Fits several different threads; M4, M5, #8, or #10



| Item No.     | Ø A Holding |      | Mounting Method                             | Bulk Pack Qty |
|--------------|-------------|------|---------------------------------------------|---------------|
|              | in          | mm   |                                             |               |
| SMWHC-500-01 | 0.500       | 12.7 | Push onto a #8, #10, M4 or M5 Screw or Stud | 500           |

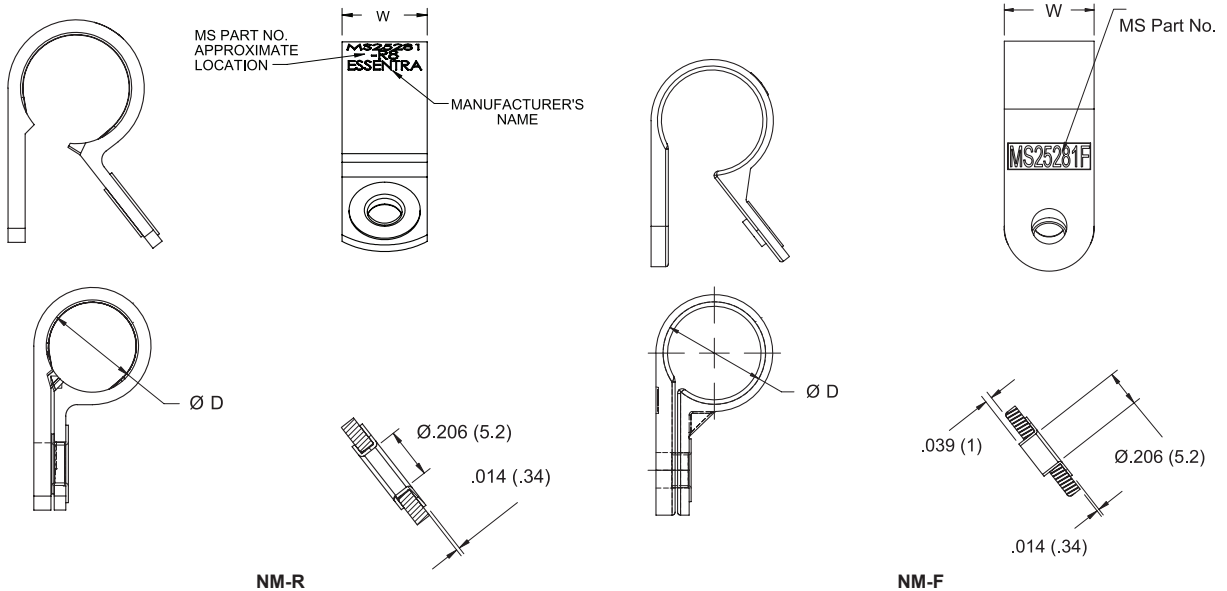
## NM-MS25281 Series Heavy Duty Support Clamps

**Specifications:**

- Material: UL94 V-2 Heat Stabilized Nylon, conforms to MIL-M-20693/ASTM D-4066 Eyelet: Aluminum, anodized in accordance with MIL-A-8625
- Color: Green

**Features:**

- Qualified to MS25281
- Strong and durable part design built for heavy duty cable applications
- NM-R series has a rib running around the inside of the clamp to grip bundle; NM-F series has no rib inside clamp
- NM-R eyelet is crimped to the top leg; the NM-F eyelet's legs protrude all the way through the bottom hole



| Item No.  | MS Part Number | Ø D Holding |      | Recommended Mounting Screw | W     |      | E     |      | Bulk Pack Qty |
|-----------|----------------|-------------|------|----------------------------|-------|------|-------|------|---------------|
|           |                | in          | mm   |                            | in    | mm   | in    | mm   |               |
| NM-3-R3   | MS25281-R3     | 3/16        | 4.8  | #10 or M5                  | 0.503 | 12.8 | 0.485 | 12.3 | 500           |
| NM-4-R4   | MS25281-R4     | 1/4         | 6.4  | #10 or M5                  | 0.503 | 12.8 | 0.510 | 13.0 | 500           |
| NM-5-R5   | MS25281-R5     | 5/16        | 7.9  | #10 or M5                  | 0.503 | 12.8 | 0.546 | 13.9 | 500           |
| NM-6-R6   | MS25281-R6     | 3/8         | 9.5  | #10 or M5                  | 0.503 | 12.8 | 0.578 | 14.7 | 500           |
| NM-7-R7   | MS25281-R7     | 7/16        | 11.1 | #10 or M5                  | 0.503 | 12.8 | 0.608 | 15.4 | 500           |
| NM-8-R8   | MS25281-R8     | 1/2         | 12.7 | #10 or M5                  | 0.503 | 12.8 | 0.639 | 16.2 | 500           |
| NM-9-R9   | MS25281-R9     | 9/16        | 14.3 | #10 or M5                  | 0.503 | 12.8 | 0.661 | 16.8 | 500           |
| NM-10-R10 | MS25281-R10    | 5/8         | 15.9 | #10 or M5                  | 0.553 | 14.1 | 0.706 | 17.9 | 500           |
| NM-11-R11 | MS25281-R11    | 11/16       | 17.5 | #10 or M5                  | 0.553 | 14.1 | 0.785 | 19.9 | 500           |
| NM-12-R12 | MS25281-R12    | 3/4         | 19.1 | #10 or M5                  | 0.553 | 14.1 | 0.816 | 20.7 | 500           |
| NM-13-R13 | MS25281-R13    | 13/16       | 20.6 | #10 or M5                  | 0.553 | 14.1 | 0.827 | 21.0 | 500           |
| NM-14-R14 | MS25281-R14    | 7/8         | 22.2 | #10 or M5                  | 0.553 | 14.1 | 0.878 | 22.3 | 500           |
| NM-16-R16 | MS25281-R16    | 1           | 25.4 | #10 or M5                  | 0.553 | 14.1 | 0.941 | 23.9 | 500           |
| NM-18-R18 | MS25281-R18    | 1-1/8       | 28.6 | #10 or M5                  | 0.553 | 14.1 | 0.983 | 25.0 | 500           |
| NM-20-R20 | MS25281-R20    | 1-1/4       | 31.8 | #10 or M5                  | 0.553 | 14.1 | 1.006 | 27.1 | 100           |
| NM-22-R22 | MS25281-R22    | 1-3/8       | 34.9 | #10 or M5                  | 0.553 | 14.1 | 1.110 | 28.2 | 100           |
| NM-24-R24 | MS25281-R24    | 1-1/2       | 38.1 | #10 or M5                  | 0.553 | 14.1 | 1.170 | 29.7 | 100           |
| NM-26-R26 | MS25281-R26    | 1-5/8       | 41.3 | #10 or M5                  | 0.553 | 14.1 | 1.250 | 31.8 | 100           |
| NM-28-R28 | MS25281-R28    | 1-3/4       | 44.5 | #10 or M5                  | 0.553 | 14.1 | 1.300 | 33.0 | 100           |
| NM-3-F3   | MS25281-F3     | 3/16        | 4.8  | #10 or M5                  | 0.500 | 12.7 | 0.498 | 12.6 | 500           |
| NM-4-F4   | MS25281-F4     | 1/4         | 6.4  | #10 or M5                  | 0.500 | 12.7 | 0.529 | 13.4 | 500           |
| NM-5-F5   | MS25281-F5     | 5/16        | 7.9  | #10 or M5                  | 0.500 | 12.7 | 0.560 | 14.2 | 500           |
| NM-6-F6   | MS25281-F6     | 3/8         | 9.5  | #10 or M5                  | 0.500 | 12.7 | 0.592 | 15.0 | 500           |
| NM-7-F7   | MS25281-F7     | 7/16        | 11.1 | #10 or M5                  | 0.500 | 12.7 | 0.623 | 15.8 | 500           |
| NM-8-F8   | MS25281-F8     | 1/2         | 12.7 | #10 or M5                  | 0.500 | 12.7 | 0.654 | 16.6 | 500           |
| NM-10-F10 | MS25281-F10    | 5/8         | 15.9 | #10 or M5                  | 0.600 | 15.2 | 0.783 | 19.9 | 500           |
| NM-13-F13 | MS25281-F13    | 13/16       | 20.6 | #10 or M5                  | 0.600 | 15.2 | 0.877 | 22.3 | 500           |





**N/22CC/CCL Series Cable Clamps**

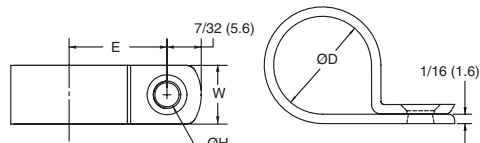


**Specifications:**

- Material: Nylon 6/6
- Color: See Table

**Features:**

- Designed to secure wires and cables in place
- Clamp down and screw clamp to chassis to secure



| Item No.         |                 |                  |           | Ø D Holding |      | Ø H Hole |     | W     |      | E     |      | Bulk Pack Qty |
|------------------|-----------------|------------------|-----------|-------------|------|----------|-----|-------|------|-------|------|---------------|
| Natural UL94 V-2 | Black UL94 V-2  | Natural UL94 V-0 | Approval  | in          | mm   | in       | mm  | in    | mm   | in    | mm   |               |
| • 22CC50C0687    | • —             | • —              | <b>VI</b> | 0.688       | 17.5 | 0.167    | 4.2 | 0.500 | 12.7 | 0.755 | 19.2 | 2000          |
| • 22CC16A0062    | • 22CC16A0062B  | • —              | <b>VI</b> | 0.063       | 0.8  | 0.096    | 2.4 | 0.156 | 4.0  | 0.187 | 4.8  | 1000          |
| N-1              | N-1-BK          | N-1-19           | —         | 0.063       | 1.6  | 0.125    | 3.2 | 0.375 | 9.5  | 0.270 | 6.9  | 1000          |
| • 22CC16A0093    | • 22CC16A0093B  | • —              | <b>VI</b> | 0.094       | 2.3  | 0.096    | 2.4 | 0.156 | 4.0  | 0.203 | 5.2  | 1000          |
| • 22CC16A0125    | • 22CC16A0125B  | • —              | <b>VI</b> | 0.125       | 3.2  | 0.096    | 2.4 | 0.156 | 4.0  | 0.217 | 5.5  | 1000          |
| • 22CC37B0125    | • 22CC37B0125B  | • —              | <b>VI</b> | 0.125       | 3.2  | 0.140    | 3.6 | 0.375 | 9.5  | 0.329 | 8.4  | 5000          |
| • 22CC37C0125    | • 22CC37C0125B  | • —              | <b>VI</b> | 0.125       | 3.2  | 0.167    | 4.2 | 0.375 | 9.5  | 0.329 | 8.4  | 5000          |
| • 22CC50C0125    | • 22CC50C0125B  | • —              | <b>VI</b> | 0.125       | 3.2  | 0.167    | 4.2 | 0.500 | 12.7 | 0.315 | 8.0  | 5000          |
| N-2              | N-2-BK          | N-2-19           | —         | 0.125       | 3.2  | 0.172    | 4.4 | 0.375 | 9.5  | 0.328 | 8.3  | 1000          |
| CCL001A          | —               | —                | —         | 0.125       | 3.2  | 0.188    | 4.8 | 0.377 | 9.6  | 0.374 | 9.5  | 100           |
| • 22CC37D0125    | • 22CC37D0125B  | • —              | <b>VI</b> | 0.125       | 3.2  | 0.203    | 5.2 | 0.375 | 9.5  | 0.329 | 8.4  | 5000          |
| • 22CC50D0125    | • 22CC50D0125B  | • —              | <b>VI</b> | 0.125       | 3.2  | 0.203    | 5.2 | 0.500 | 12.7 | 0.315 | 8.0  | 5000          |
| N-2B             | N-2B-BK         | N-2B-19          | —         | 0.125       | 3.2  | 0.204    | 5.2 | 0.500 | 12.7 | 0.328 | 8.3  | 1000          |
| • 22CC16A0156    | • 22CC16A0156B  | • —              | <b>VI</b> | 0.156       | 4.0  | 0.096    | 2.4 | 0.156 | 4.0  | 0.233 | 5.9  | 1000          |
| • 22CC16A0187    | • 22CC16A0187B  | • —              | <b>VI</b> | 0.156       | 4.8  | 0.096    | 2.4 | 0.156 | 4.0  | 0.250 | 6.4  | 1000          |
| • 22CC37B0187    | • 22CC37B0187B  | • —              | <b>VI</b> | 0.188       | 4.8  | 0.140    | 3.6 | 0.375 | 9.5  | 0.430 | 10.9 | 5000          |
| • 22CC37B0187E   | • 22CC37B0187EB | • —              | <b>VI</b> | 0.188       | 4.8  | 0.140    | 3.6 | 0.375 | 9.5  | 0.378 | 9.6  | 5000          |
| • 22CC37C0187    | • 22CC37C0187B  | • —              | <b>VI</b> | 0.188       | 4.8  | 0.167    | 4.2 | 0.375 | 9.5  | 0.430 | 10.9 | 5000          |
| • 22CC37C0187E   | • 22CC37C0187EB | • —              | <b>VI</b> | 0.188       | 4.8  | 0.167    | 4.2 | 0.375 | 9.5  | 0.378 | 9.6  | 5000          |
| • 22CC50C0187    | • 22CC50C0187B  | • —              | <b>VI</b> | 0.188       | 4.8  | 0.167    | 4.2 | 0.500 | 12.7 | 0.425 | 10.8 | 4000          |
| • 22CC37D0187    | • 22CC37D0187B  | • —              | <b>VI</b> | 0.188       | 4.8  | 0.203    | 5.2 | 0.375 | 9.5  | 0.430 | 10.9 | 5000          |
| • 22CC37D0187E   | • 22CC37D0187EB | • —              | <b>VI</b> | 0.188       | 4.8  | 0.203    | 5.2 | 0.375 | 9.5  | 0.378 | 9.6  | 5000          |
| • 22CC50D0187    | • 22CC50D0187B  | • —              | <b>VI</b> | 0.188       | 4.8  | 0.203    | 5.2 | 0.500 | 12.7 | 0.425 | 10.8 | 4000          |
| N-3              | N-3-BK          | N-3-19           | —         | 0.188       | 4.7  | 0.172    | 4.4 | 0.375 | 9.5  | 0.391 | 9.9  | 1000          |
| CCL002A          | —               | —                | —         | 0.188       | 4.7  | 0.188    | 4.7 | 0.377 | 9.6  | 0.413 | 10.5 | 100           |
| N-3B             | N-3B-BK         | N-3B-19          | —         | 0.188       | 4.7  | 0.204    | 5.2 | 0.500 | 12.7 | 0.391 | 9.9  | 1000          |
| • 22CC28E0250    | • 22CC28E0250B  | • —              | <b>VI</b> | 0.250       | 6.4  | 0.128    | 3.3 | 0.281 | 7.1  | 0.337 | 8.6  | 1000          |
| • 22CC37B0250    | • 22CC37B0250B  | • —              | <b>VI</b> | 0.250       | 6.4  | 0.140    | 3.6 | 0.375 | 9.5  | 0.410 | 10.4 | 4000          |
| • 22CC37C0250    | • 22CC37C0250B  | • —              | <b>VI</b> | 0.250       | 6.4  | 0.167    | 4.2 | 0.375 | 9.5  | 0.410 | 10.4 | 4000          |
| • 22CC50C0250    | • 22CC50C0250B  | • —              | <b>VI</b> | 0.250       | 6.4  | 0.167    | 4.2 | 0.500 | 12.7 | 0.410 | 10.4 | 3000          |
| N-4              | N-4-BK          | N-4-19           | —         | 0.250       | 6.4  | 0.172    | 4.4 | 0.375 | 9.5  | 0.422 | 10.7 | 1000          |
| CCL003A          | —               | —                | —         | 0.250       | 6.4  | 0.181    | 4.6 | 0.393 | 10.0 | 0.394 | 10.0 | 100           |
| • 22CC37D0250    | • 22CC37D0250B  | • —              | <b>VI</b> | 0.250       | 6.4  | 0.203    | 5.2 | 0.375 | 9.5  | 0.410 | 10.4 | 4000          |
| • 22CC50D0250    | • 22CC50D0250B  | • —              | <b>VI</b> | 0.250       | 6.4  | 0.203    | 5.2 | 0.500 | 12.7 | 0.410 | 10.4 | 3000          |
| N-4B             | N-4B-BK         | N-4B-19          | —         | 0.250       | 6.4  | 0.204    | 5.2 | 0.500 | 12.7 | 0.422 | 10.7 | 1000          |
| • 22CC28E0312    | • 22CC28E0312B  | • —              | <b>VI</b> | 0.313       | 7.9  | 0.128    | 3.3 | 0.281 | 7.1  | 0.360 | 9.1  | 1000          |
| • 22CC37B0312    | • 22CC37B0312B  | • —              | <b>VI</b> | 0.313       | 7.9  | 0.140    | 3.6 | 0.375 | 9.5  | 0.495 | 12.6 | 3000          |
| • 22CC37C0312    | • 22CC37C0312B  | • —              | <b>VI</b> | 0.313       | 7.9  | 0.167    | 4.2 | 0.375 | 9.5  | 0.495 | 12.6 | 3000          |
| • 22CC50C0312    | • 22CC50C0312B  | • —              | <b>VI</b> | 0.313       | 7.9  | 0.167    | 4.2 | 0.500 | 12.7 | 0.500 | 12.7 | 2500          |
| • 22CC37D0312    | • 22CC37D0312B  | • —              | <b>VI</b> | 0.313       | 7.9  | 0.203    | 5.2 | 0.375 | 9.5  | 0.495 | 12.6 | 3000          |
| • 22CC50D0312    | • 22CC50D0312B  | • —              | <b>VI</b> | 0.313       | 7.9  | 0.203    | 5.2 | 0.500 | 12.7 | 0.500 | 12.7 | 2500          |
| N-5              | N-5-BK          | N-5-19           | —         | 0.313       | 7.9  | 0.172    | 4.4 | 0.375 | 9.5  | 0.453 | 11.5 | 1000          |
| CCL004A          | —               | —                | —         | 0.313       | 7.9  | 0.181    | 4.6 | 0.393 | 10.0 | 0.472 | 12.0 | 100           |
| N-5B             | N-5B-BK         | N-5B-19          | —         | 0.313       | 7.9  | 0.204    | 5.2 | 0.500 | 12.7 | 0.453 | 11.5 | 1000          |
| • 22CC28E0375    | • 22CC28E0375B  | • —              | <b>VI</b> | 0.375       | 9.5  | 0.128    | 3.3 | 0.281 | 7.1  | 0.400 | 10.2 | 1000          |
| • 22CC37B0375    | • 22CC37B0375B  | • —              | <b>VI</b> | 0.375       | 9.5  | 0.140    | 3.6 | 0.375 | 9.5  | 0.595 | 15.1 | 2500          |
| • 22CC37C0375    | • 22CC37C0375B  | • —              | <b>VI</b> | 0.375       | 9.5  | 0.167    | 4.2 | 0.375 | 9.5  | 0.595 | 15.1 | 2500          |
| • 22CC50C0375    | • 22CC50C0375B  | • —              | <b>VI</b> | 0.375       | 9.5  | 0.167    | 4.2 | 0.500 | 12.7 | 0.530 | 13.5 | 2000          |
| N-6              | N-6-BK          | N-6-19           | —         | 0.375       | 9.5  | 0.172    | 4.4 | 0.375 | 9.5  | 0.484 | 12.3 | 1000          |
| CCL005A          | —               | —                | —         | 0.375       | 9.5  | 0.181    | 4.6 | 0.472 | 12.0 | 0.492 | 12.5 | 100           |
| • 22CC37D0375    | • 22CC37D0375B  | • —              | <b>VI</b> | 0.375       | 9.5  | 0.203    | 5.2 | 0.375 | 9.5  | 0.595 | 15.1 | 2500          |
| • 22CC50D0375    | • 22CC50D0375B  | • —              | <b>VI</b> | 0.375       | 9.5  | 0.203    | 5.2 | 0.500 | 12.7 | 0.530 | 13.5 | 2000          |
| N-6B             | N-6B-BK         | N-6B-19          | —         | 0.375       | 9.5  | 0.204    | 5.2 | 0.500 | 12.7 | 0.484 | 12.3 | 1000          |
| • 22CC50G0375    | • 22CC50G0375B  | • —              | <b>VI</b> | 0.375       | 9.5  | 0.250    | 6.4 | 0.500 | 12.7 | 0.585 | 14.9 | 2000          |
| • 22CC37B0437    | • 22CC37B0437B  | • —              | <b>VI</b> | 0.438       | 11.1 | 0.140    | 3.6 | 0.375 | 9.5  | 0.574 | 14.6 | 2000          |
| • 22CC37C0437    | • 22CC37C0437B  | • —              | <b>VI</b> | 0.438       | 11.1 | 0.167    | 4.2 | 0.375 | 9.5  | 0.574 | 14.6 | 2000          |
| • 22CC50C0437    | • 22CC50C0437B  | • —              | <b>VI</b> | 0.438       | 11.1 | 0.167    | 4.2 | 0.500 | 12.7 | 0.560 | 14.2 | 3000          |
| • 22CC37D0437    | • 22CC37D0437B  | • —              | <b>VI</b> | 0.438       | 11.1 | 0.203    | 5.2 | 0.375 | 9.5  | 0.574 | 14.6 | 2000          |
| • 22CC50D0437    | • 22CC50D0437B  | • —              | <b>VI</b> | 0.438       | 11.1 | 0.203    | 5.2 | 0.500 | 12.7 | 0.560 | 14.2 | 3000          |
| N-7              | N-7-BK          | N-7-19           | —         | 0.438       | 11.1 | 0.172    | 4.4 | 0.375 | 9.5  | 0.531 | 13.5 | 1000          |
| N-7B             | N-7B-BK         | N-7B-19          | —         | 0.438       | 11.1 | 0.204    | 5.2 | 0.500 | 12.7 | 0.531 | 13.5 | 1000          |
| • 22CC37B0500    | • 22CC37B0500B  | • —              | <b>VI</b> | 0.500       | 12.7 | 0.140    | 3.6 | 0.375 | 9.5  | 0.605 | 15.4 | 4000          |
| • 22CC37C0500    | • 22CC37C0500B  | • —              | <b>VI</b> | 0.500       | 12.7 | 0.167    | 4.2 | 0.375 | 9.5  | 0.605 | 15.4 | 4000          |
| • 22CC50C0500    | • 22CC50C0500B  | • —              | <b>VI</b> | 0.500       | 12.7 | 0.167    | 4.2 | 0.500 | 12.7 | 0.595 | 15.1 | 2500          |

(Continued on next page >)



# CABLE CLAMPS

## N/22CC/CCL Series (continued) Cable Clamps

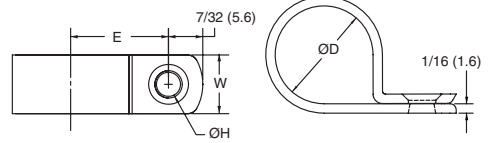


Specifications:

- Material: Nylon 6/6
- Color: See Table

Features:

- Designed to secure wires and cables in place
- Clamp down and screw clamp to chassis to secure



| Item No.         |                |                  |          | Ø D Holding |      | Ø H Hole |     | W     |      | E     |      | Bulk Pack Qty |
|------------------|----------------|------------------|----------|-------------|------|----------|-----|-------|------|-------|------|---------------|
| Natural UL94 V-2 | Black UL94 V-2 | Natural UL94 V-0 | Approval | in          | mm   | in       | mm  | in    | mm   | in    | mm   |               |
| N-8              | N-8-BK         | N-8-19           |          | 0.500       | 12.7 | 0.172    | 4.4 | 0.375 | 9.5  | 0.563 | 14.3 | 1000          |
| CCL006A          | —              | —                |          | 0.500       | 12.7 | 0.196    | 5.0 | 0.472 | 12.0 | 0.598 | 15.2 | 100           |
| • 22CC37D0500    | • 22CC37D0500B | —                | ✓        | 0.500       | 12.7 | 0.203    | 5.2 | 0.375 | 9.5  | 0.605 | 15.4 | 4000          |
| • 22CC50D0500    | • 22CC50D0500B | —                | ✓        | 0.500       | 12.7 | 0.203    | 5.2 | 0.500 | 12.7 | 0.595 | 15.1 | 2500          |
| N-8B             | N-8B-BK        | N-8B-19          |          | 0.500       | 12.7 | 0.204    | 5.2 | 0.500 | 12.7 | 0.563 | 14.3 | 1000          |
| • 22CC50C0562    | • 22CC50C0562B | —                | ✓        | 0.563       | 14.3 | 0.167    | 4.2 | 0.500 | 12.7 | 0.606 | 15.4 | 2500          |
| • 22CC37D0562    | • 22CC37D0562B | —                | ✓        | 0.563       | 14.3 | 0.203    | 5.2 | 0.375 | 9.5  | 0.606 | 15.4 | 3000          |
| • 22CC50D0562    | • 22CC50D0562B | —                | ✓        | 0.563       | 14.3 | 0.203    | 5.2 | 0.500 | 12.7 | 0.606 | 15.4 | 2500          |
| N-9B             | N-9B-BK        | N-9B-19          |          | 0.563       | 14.3 | 0.204    | 5.2 | 0.500 | 12.7 | 0.594 | 15.0 | 1000          |
| • 22CC50C0625    | • 22CC50C0625B | —                | ✓        | 0.625       | 15.9 | 0.167    | 4.2 | 0.500 | 12.7 | 0.655 | 16.6 | 2000          |
| CCL007A          | —              | —                |          | 0.625       | 15.9 | 0.181    | 4.6 | 0.472 | 12.0 | 0.717 | 18.8 | 100           |
| • 22CC37D0625    | • 22CC37D0625B | —                | ✓        | 0.625       | 15.9 | 0.203    | 5.2 | 0.375 | 9.5  | 0.678 | 17.2 | 2500          |
| • 22CC50D0625    | • 22CC50D0625B | —                | ✓        | 0.625       | 15.9 | 0.203    | 5.2 | 0.500 | 12.7 | 0.655 | 16.6 | 2000          |
| N-10B            | N-10B-BK       | N-10B-19         |          | 0.625       | 15.9 | 0.204    | 5.2 | 0.500 | 12.7 | 0.625 | 15.9 | 1000          |
| • 22CC50D0687    | • 22CC50D0687B | —                | ✓        | 0.688       | 17.5 | 0.203    | 5.2 | 0.500 | 12.7 | 0.755 | 19.2 | 2000          |
| N-11B            | N-11B-BK       | N-11B-19         |          | 0.688       | 17.5 | 0.204    | 5.2 | 0.500 | 12.7 | 0.656 | 16.7 | 1000          |
| • 22CC50C0750    | • 22CC50C0750B | —                | ✓        | 0.750       | 19.1 | 0.167    | 4.2 | 0.500 | 12.7 | 0.780 | 19.8 | 3500          |
| • 22CC50D0750    | • 22CC50D0750B | —                | ✓        | 0.750       | 19.1 | 0.203    | 5.2 | 0.500 | 12.7 | 0.780 | 19.8 | 3500          |
| N-12B            | N-12B-BK       | N-12B-19         |          | 0.750       | 19.1 | 0.204    | 5.2 | 0.500 | 12.7 | 0.766 | 19.4 | 1000          |
| • 22CC87F0750    | • 22CC87F0750B | —                | ✓        | 0.750       | 19.1 | 0.387    | 9.8 | 0.875 | 22.2 | 1.000 | 25.4 | 1500          |
| • 22CC50C0812    | • 22CC50C0812B | —                | ✓        | 0.813       | 20.6 | 0.167    | 4.2 | 0.500 | 12.7 | 0.815 | 20.7 | 3000          |
| • 22CC50D0812    | • 22CC50D0812B | —                | ✓        | 0.813       | 20.6 | 0.203    | 5.2 | 0.500 | 12.7 | 0.815 | 20.7 | 3000          |
| • 22CC50C0875    | • 22CC50C0875B | —                | ✓        | 0.875       | 22.2 | 0.167    | 4.2 | 0.500 | 12.7 | 0.845 | 21.5 | 2500          |
| • 22CC50D0875    | • 22CC50D0875B | —                | ✓        | 0.875       | 22.2 | 0.203    | 5.2 | 0.500 | 12.7 | 0.845 | 21.5 | 2500          |
| N-14B            | N-14B-BK       | N-14B-19         |          | 0.875       | 22.2 | 0.204    | 5.2 | 0.500 | 12.7 | 0.813 | 20.6 | 500           |
| CCL009A          | —              | —                |          | 1.000       | 25.4 | 0.181    | 4.6 | 0.472 | 12.0 | 0.866 | 22.0 | 100           |
| • 22CC50D1000    | • 22CC50D1000B | —                | ✓        | 1.000       | 25.4 | 0.203    | 5.2 | 0.500 | 12.7 | 0.910 | 23.1 | 2000          |
| N-16B            | N-16B-BK       | N-16B-19         |          | 1.000       | 25.4 | 0.204    | 5.2 | 0.500 | 12.7 | 0.906 | 23.0 | 500           |
| • 22CC87D1003    | • 22CC87D1003B | —                | ✓        | 1.031       | 26.2 | 0.203    | 5.2 | 0.875 | 22.2 | 1.125 | 28.6 | 1000          |
| • 22CC87F1003    | • 22CC87F1003B | —                | ✓        | 1.031       | 26.2 | 0.387    | 9.8 | 0.875 | 22.2 | 1.125 | 28.6 | 1000          |
| CCL010A          | —              | —                |          | 1.062       | 27.0 | 0.181    | 4.6 | 0.472 | 12.0 | 0.945 | 24.0 | 100           |
| • 22CC50D1125    | • 22CC50D1125B | —                | ✓        | 1.125       | 28.6 | 0.203    | 5.2 | 0.500 | 12.7 | 0.970 | 24.6 | 1500          |
| N-18B            | N-18B-BK       | N-18B-19         |          | 1.125       | 28.6 | 0.204    | 5.2 | 0.500 | 12.7 | 0.969 | 24.6 | 500           |
| • 22CC50D1187    | • 22CC50D1187B | —                | ✓        | 1.188       | 30.2 | 0.203    | 5.2 | 0.500 | 12.7 | 1.000 | 25.4 | 1500          |
| CCL011A          | —              | —                |          | 1.250       | 31.8 | 0.181    | 4.6 | 0.472 | 12.0 | 1.031 | 26.2 | 100           |
| • 22CC50D1250    | • 22CC50D1250B | —                | ✓        | 1.250       | 31.8 | 0.203    | 5.2 | 0.500 | 12.7 | 1.060 | 26.9 | 1250          |
| • 22CC50D1375    | • 22CC50D1375B | —                | ✓        | 1.375       | 34.9 | 0.203    | 5.2 | 0.500 | 12.7 | 1.125 | 28.6 | 1250          |
| CCL012A          | —              | —                |          | 1.446       | 36.7 | 0.181    | 4.6 | 0.472 | 12.0 | 1.181 | 30.0 | 100           |
| • 22CC50D1500    | • 22CC50D1500B | —                | ✓        | 1.500       | 38.1 | 0.203    | 5.2 | 0.500 | 12.7 | 1.190 | 30.2 | 1000          |

## NB-3 Series Adjustable Cable Clamps

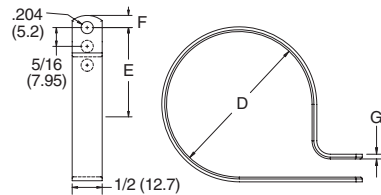


Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: See Table

Features:

- Adjustable design allows you to bundle multiple diameters of wires and cables while securing in place

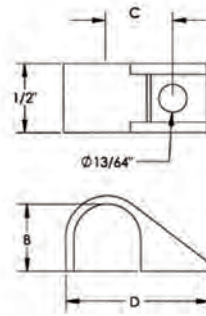


| Item No. | Ø D Holding |       |             |       |              |      |        |       |      |       |     |       |     |     | Bulk Pack Qty |
|----------|-------------|-------|-------------|-------|--------------|------|--------|-------|------|-------|-----|-------|-----|-----|---------------|
|          | Inside Hole |       | Center Hole |       | Outside Hole |      | E Ref. |       | F    |       | G   |       |     |     |               |
|          | in          | mm    | in          | mm    | in           | mm   | in     | mm    | in   | mm    | in  | mm    |     |     |               |
| N-20B    | N-20B-BK    | 1     | 25.4        | 1-1/8 | 28.6         | 1.2  | 30.2   | 0.906 | 23.0 | 0.219 | 5.6 | 0.063 | 1.6 | 500 |               |
| N-24B    | N-24B-BK    | 1-1/4 | 31.8        | 1-3/8 | 34.9         | 1.47 | 37.3   | 1.031 | 26.2 | 0.219 | 5.6 | 0.063 | 1.6 | 500 |               |
| N-32B    | N-32B-BK    | 1-3/4 | 44.5        | 1-7/8 | 47.6         | 2.0  | 50.8   | 1.453 | 36.9 | 0.203 | 5.2 | 0.065 | 1.7 | 500 |               |

**CABLE CLIPS & CLAMPS**



**22HDCC Series  
Heavy Duty Cable Clips**



Specifications:

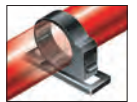
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Secure, insulate and route cable, wiring, tubing, piping and fiber optics
- Tough, durable, corrosion and chemical resistant
- Perfect for applications in electronics, automotive, aircraft and many other industries

| Item No.   | Ø Holding |      | B     |      | C     |      | D     |      | Bulk Pack Qty |
|------------|-----------|------|-------|------|-------|------|-------|------|---------------|
|            | in        | mm   | in    | mm   | in    | mm   | in    | mm   |               |
| 22HDCC1250 | 0.125     | 3.2  | 0.115 | 2.9  | 0.307 | 7.8  | 0.675 | 17.1 | 500           |
| 22HDCC1720 | 0.188     | 4.8  | 0.172 | 4.4  | 0.328 | 8.3  | 0.732 | 18.6 | 500           |
| 22HDCC2340 | 0.250     | 6.4  | 0.234 | 6.0  | 0.366 | 9.3  | 0.793 | 20.1 | 500           |
| 22HDCC2970 | 0.313     | 7.9  | 0.297 | 7.5  | 0.400 | 10.2 | 0.859 | 21.8 | 500           |
| 22HDCC3590 | 0.375     | 9.5  | 0.359 | 9.1  | 0.430 | 10.9 | 0.910 | 23.1 | 1000          |
| 22HDCC4220 | 0.438     | 11.1 | 0.422 | 10.7 | 0.460 | 11.7 | 0.980 | 24.9 | 1000          |
| 22HDCC4840 | 0.500     | 12.7 | 0.484 | 12.3 | 0.492 | 12.5 | 1.044 | 26.5 | 1000          |

**CCA Series  
Adhesive Mount Cable Clamps**

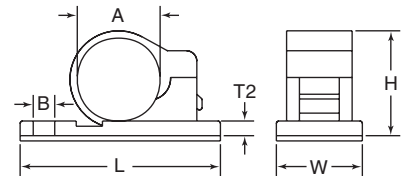


Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Black

Features:

- Fixed diameter clamp range
- Can be mounted with adhesive tape backing or via screw mounting hole



| Item No. | Ø A Holding |      | Ø B Hole |     | T2    |     | L    |      | W    |      | H    |      | Bulk Pack Qty |
|----------|-------------|------|----------|-----|-------|-----|------|------|------|------|------|------|---------------|
|          | in          | mm   | in       | mm  | in    | mm  | in   | mm   | in   | mm   | in   | mm   |               |
| CCA001A  | 0.22        | 5.5  | 0.197    | 5.0 | 0.118 | 3.0 | 1.02 | 25.8 | 0.53 | 13.4 | 0.48 | 12.2 | 100           |
| CCA002A  | 0.30        | 7.5  | 0.197    | 5.0 | 0.126 | 3.2 | 1.13 | 28.8 | 0.53 | 13.4 | 0.57 | 14.5 | 100           |
| CCA003A  | 0.47        | 12.0 | 0.209    | 5.3 | 0.118 | 3.0 | 1.37 | 34.8 | 0.65 | 16.5 | 0.73 | 18.5 | 100           |
| CCA004A  | 0.55        | 14.0 | 0.197    | 5.0 | 0.126 | 3.2 | 1.44 | 36.5 | 0.65 | 16.4 | 0.77 | 19.5 | 100           |
| CCA005A  | 0.59        | 15.0 | 0.197    | 5.0 | 0.106 | 2.7 | 1.50 | 38.2 | 0.63 | 16.0 | 0.80 | 20.3 | 100           |
| CCA006A  | 0.67        | 17.0 | 0.189    | 4.8 | 0.122 | 3.1 | 1.63 | 41.3 | 0.61 | 15.6 | 0.98 | 25.0 | 100           |

# PLASTIC FASTENERS



See pages 117 - 225

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# CABLE CLAMPS

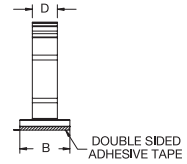
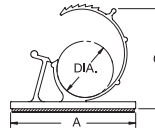
## AKKL/22AAWC Series Adhesive Mount Adjustable Clamps

**Specifications:**

- Material: Nylon 6/6
- Color: See Table

**Features:**

- Available in High Bond Rubber Adhesive
- Locks securely and easily, reopens for routing changes
- Ratcheting clip holds bundle securely in place
- Good for high vibration applications; once closed the clip will not open until tab is released



| Item No.                  |                |                           |                                    | Bundle Range  |             | A     |      | B     |      | C Ref. |      | D     |      | Bulk Pack Qty |
|---------------------------|----------------|---------------------------|------------------------------------|---------------|-------------|-------|------|-------|------|--------|------|-------|------|---------------|
| Acrylic Adhesive UL94 V-2 |                | Acrylic Adhesive UL94 V-0 | High Bond Rubber Adhesive UL94 V-2 | in            | mm          | in    | mm   | in    | mm   | in     | mm   | in    | mm   |               |
| Natural                   | Black          |                           |                                    |               |             |       |      |       |      |        |      |       |      |               |
| AKKL-2140A-RT             | —              | AKKL-2140A-19             | —                                  | 0.215 - 0.258 | 5.5 - 6.5   | 0.850 | 21.6 | 0.650 | 16.5 | 0.708  | 18.0 | 0.390 | 10.0 | 100           |
| AKKL-3140A-RT             | —              | AKKL-3140A-19             | AKKL-3140-DHB                      | 0.312 - 0.406 | 7.9 - 10.3  | 1.000 | 25.4 | 0.750 | 19.1 | 0.866  | 22.0 | 0.400 | 10.2 | 100           |
| —                         | • 22AAWC310400 | —                         | —                                  | 0.311 - 0.390 | 7.9 - 9.9   | 1.000 | 25.4 | 0.750 | 19.1 | —      | —    | 0.390 | 9.9  | 1000          |
| —                         | • 22AAWC390490 | —                         | —                                  | 0.390 - 0.485 | 9.9 - 12.3  | 1.281 | 32.5 | 0.750 | 19.1 | —      | —    | 0.406 | 10.3 | 1000          |
| AKKL-4756A-RT             | —              | AKKL-4756A-19             | AKKL-4756-DHB                      | 0.469 - 0.562 | 11.9 - 14.3 | 1.250 | 31.8 | 0.750 | 19.1 | 1.090  | 27.7 | 0.400 | 10.2 | 100           |
| —                         | • 22AAWC500600 | —                         | —                                  | 0.445 - 0.560 | 11.3 - 14.2 | 1.455 | 36.7 | 0.750 | 19.1 | —      | —    | 0.468 | 11.9 | 1500          |
| AKKL-5775A-RT             | —              | AKKL-5775A-19             | AKKL-5775-DHB                      | 0.578 - 0.750 | 14.7 - 19.1 | 1.500 | 38.1 | 0.750 | 19.1 | 1.250  | 31.8 | 0.500 | 12.7 | 100           |
| —                         | • 22AAWC650790 | —                         | —                                  | 0.620 - 0.765 | 15.8 - 19.4 | 1.660 | 42.2 | 1.000 | 25.4 | —      | —    | 0.500 | 12.7 | 1500          |
| —                         | • 22AAWC830930 | —                         | —                                  | 0.755 - 0.935 | 19.2 - 23.6 | 1.750 | 44.5 | 1.000 | 25.4 | —      | —    | 0.500 | 12.7 | 1500          |
| AKKL-8710A-RT             | —              | AKKL-8710A-19             | —                                  | 0.875 - 1.000 | 22.2 - 25.4 | 2.000 | 50.8 | 1.000 | 25.4 | 1.750  | 44.5 | 0.500 | 12.7 | 100           |
| AKKL-10112A-RT            | —              | AKKL-10112A-19            | —                                  | 1.000 - 1.250 | 25.4 - 31.7 | 2.500 | 63.5 | 1.000 | 25.4 | 2.000  | 50.8 | 0.500 | 12.7 | 100           |

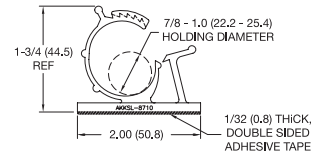
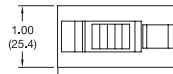
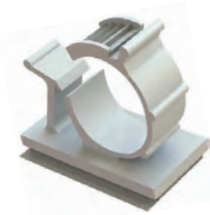
## AKKSL Series Side Lock Adhesive Mount Adjustable Clamps

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Side locks on top of clamp prevent clip from sliding open
- Ratcheting clip holds bundle securely in place



| Item No.       | Approval | Bulk Pack Qty |
|----------------|----------|---------------|
| AKKSL-8710A-RT |          | 100           |

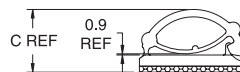
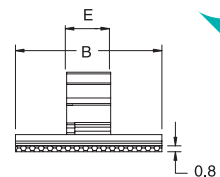
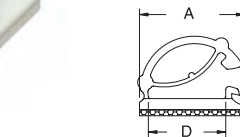
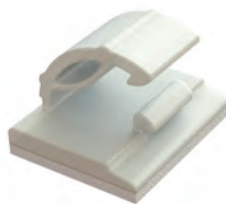
## CLC Series Stock Adhesive Mount Adjustable Clamps

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Tension bar grips the cable into place
- Can be reopened for removal or routing changes
- Easily installed with adhesive base
- Low profile where space is an issue



| Item No. | A    |      | B    |      | C    |     | D    |      | E    |     | Bulk Pack Qty |
|----------|------|------|------|------|------|-----|------|------|------|-----|---------------|
|          | in   | mm   | in   | mm   | in   | mm  | in   | mm   | in   | mm  |               |
| CLC-1A   | 0.39 | 10.0 | 0.47 | 12.0 | 0.2  | 5.1 | 0.24 | 6.0  | 0.24 | 6   | 500           |
| CLC-2A   | 0.55 | 14.1 | 0.77 | 19.6 | 0.33 | 8.4 | 0.41 | 10.4 | 0.23 | 5.9 | 500           |



**22CAW Series**  
**Releasable Contor Clips**

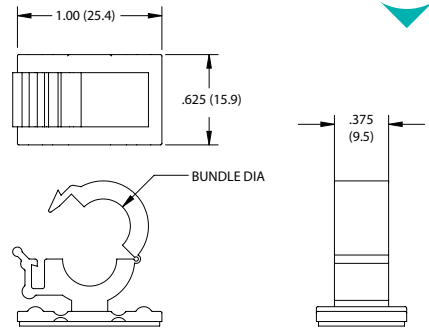


**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Available with 3M Very High Bond (VHB) tape
- Flexible base allows for clip to be used on cylindrical surfaces such as pipes or tubing
- Releasable clip design allows for easy removal of wires after assembly
- Quick, easy installation
- Resistant to corrosion, vibration and abrasion



| Item No.       | Adhesive | Ø Bundle |     | L     |      | W     |      | C     |     | Bulk Pack Qty |
|----------------|----------|----------|-----|-------|------|-------|------|-------|-----|---------------|
|                |          | in       | mm  | in    | mm   | in    | mm   | in    | mm  |               |
| 22CAWC00375    | Standard | 0.375    | 9.5 | 1.000 | 25.4 | 0.625 | 15.9 | 0.375 | 9.5 | 1000          |
| 22CAWC00375VHB | VHB      | 0.375    | 9.5 | 1.000 | 25.4 | 0.625 | 15.9 | 0.375 | 9.5 | 1000          |

**PAKKL Series**  
**Snap In Adjustable Clips**



**Specifications:**

- Material: Nylon 6/6
- Color: Natural

**Features:**

- Gathers and routes cables and wires
- Adjusts to diameter needed to bundle
- Push mount design allows for fast installation

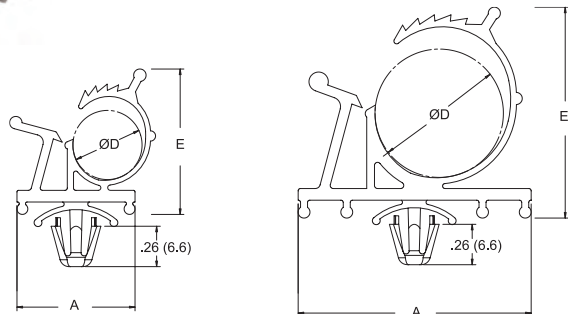
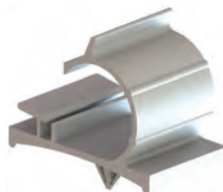


Figure 1

Figure 2

| Item No.      | UL94 V-2      | UL94 V-0 | Figure | Ø D Bundle Range |             | Ø Mounting Hole |     | Panel Thickness |           | A    |      | E Ref. |      | Depth |      | Bulk Pack Qty |
|---------------|---------------|----------|--------|------------------|-------------|-----------------|-----|-----------------|-----------|------|------|--------|------|-------|------|---------------|
|               |               |          |        | in               | mm          | in              | mm  | in              | mm        | in   | mm   | in     | mm   | in    | mm   |               |
| PAKKL-3140-01 | PAKKL-3140-19 |          | 1      | 0.310 - 0.400    | 7.9 - 10.2  | 0.250           | 6.4 | 0.030 - 0.060   | 0.8 - 1.5 | 0.75 | 19.1 | 0.94   | 23.8 | 0.350 | 8.9  | 100           |
| PAKKL-4756-01 | PAKKL-4756-19 |          | 1      | 0.469 - 0.563    | 11.9 - 14.3 | 0.250           | 6.4 | 0.030 - 0.060   | 0.8 - 1.5 | 1.24 | 31.5 | 1.17   | 29.8 | 0.620 | 15.7 | 100           |
| PAKKL-5775-01 | PAKKL-5775-19 |          | 2      | 0.578 - 0.750    | 14.7 - 19.1 | 0.250           | 6.4 | 0.030 - 0.060   | 0.8 - 1.5 | 1.50 | 38.1 | 1.36   | 34.5 | 0.750 | 19.1 | 100           |

**PKKL/22SEAPM Series**  
**Plug In Locking Clamps**

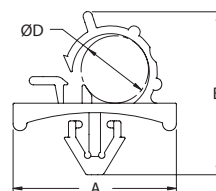


**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Part can be opened and closed multiple times for adding or removing wires
- Large contoured base assures stable mounting



| Item No.        | A     |      | B     |      | Ø D Holding |      | Ø Mounting Hole |       | Panel Thickness |           | Depth |      | Bulk Pack Qty |
|-----------------|-------|------|-------|------|-------------|------|-----------------|-------|-----------------|-----------|-------|------|---------------|
|                 | in    | mm   | in    | mm   | in          | mm   | in              | mm    | in              | mm        | in    | mm   |               |
| PKKL-3          | 1.020 | 25.9 | 0.921 | 23.4 | 0.374       | 9.5  | 0.256           | 6.5   | 0.031 - 0.062   | 0.8 - 1.6 | 0.67  | 17.0 | 200           |
| PKKL-3S         | 0.830 | 21.1 | 0.828 | 21.0 | 0.307       | 7.8  | 0.256           | 6.5   | 0.031 - 0.062   | 0.8 - 1.6 | 0.75  | 19.1 | 200           |
| PKKL-4          | 1.19  | 30.3 | 1.260 | 32.0 | 0.532       | 13.5 | 0.256           | 6.5   | 0.031 - 0.062   | 0.8 - 1.6 | 0.76  | 19.4 | 100           |
| • 22SEAPM250750 | 1.365 | 34.7 | 0.870 | 22.1 | 0.750       | 19.1 | 0.250           | 6.350 | 0.020 - 0.070   | 0.5-1.8   | 0.87  | 22.1 | 1000          |



# CABLE CLIPS & CLAMPS

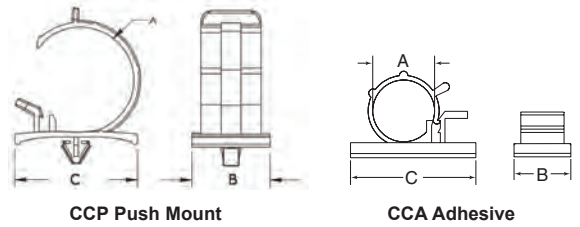
## CCP/CCA Series Push Mount & Adhesive Clamps

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Gray

**Features:**

- Two-stage lock design to accommodate different cable sizes in a single clamp
- Easy to reopen with thumb tab release
- Available in two styles: CCP for push mount into pre-drilled hole and CCA with a self adhesive backing



CCP Push Mount

CCA Adhesive

| Item No. | Adhesive | Ø A Bundle    |             | Ø Mounting Hole |     | Panel Thickness |           | B     |      | C     |      | Bulk Pack Qty |
|----------|----------|---------------|-------------|-----------------|-----|-----------------|-----------|-------|------|-------|------|---------------|
|          |          | in            | mm          | in              | mm  | in              | mm        | in    | mm   | in    | mm   |               |
| CCP001A  | CCA007A  | 0.230 - 0.280 | 6.0 - 7.0   | 0.189           | 4.8 | 0.070 - 0.110   | 1.8 - 2.8 | 0.787 | 20.0 | 0.984 | 25.0 | 100           |
| CCP002A  | CCA008A  | 0.280 - 0.310 | 7.0 - 8.0   | 0.189           | 4.8 | 0.070 - 0.111   | 1.8 - 2.8 | 0.787 | 20.0 | 0.984 | 25.0 | 100           |
| CCP003A  | CCA009A  | 0.350 - 0.390 | 9.0 - 10.0  | 0.189           | 4.8 | 0.070 - 0.112   | 1.8 - 2.8 | 0.965 | 24.5 | 1.181 | 30.0 | 100           |
| CCP004A  | CCA010A  | 0.470 - 0.550 | 12.0 - 14.0 | 0.189           | 4.8 | 0.070 - 0.113   | 1.8 - 2.8 | 0.965 | 24.5 | 1.181 | 30.0 | 100           |
| CCP005A  | CCA011A  | 0.620 - 0.710 | 16.0 - 18.0 | 0.189           | 4.8 | 0.070 - 0.114   | 1.8 - 2.8 | 0.965 | 24.5 | 1.181 | 30.0 | 100           |

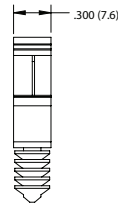
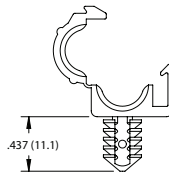
## 23RCFB035C Series Releasable Clamps on Fin Base

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Wires can easily be removed or added to the clip
- Can be used in a variety of panel thicknesses and materials
- An internal rib spanning the diameter of the clamp provides a tight grip



| Item No.   | Black       | Ø Mounting Hole |     | Panel Thickness |           | Ø Bundle |     | Bulk Pack Qty |
|------------|-------------|-----------------|-----|-----------------|-----------|----------|-----|---------------|
|            |             | in              | mm  | in              | mm        | in       | mm  |               |
| 23RCFB035C | 23RCFB035CB | 0.265           | 6.5 | 0.020 - 0.203   | 0.5 - 5.2 | 0.350    | 8.9 | 1000          |

## WAC Series Webbed Adjustable Clips

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Locks securely and easily; reopens for routing changes
- Adjustable, ratcheting clip holds bundle securely in place
- Spring in the top of the clamp adds additional tension to grip the bundle
- Finger grip eases installation
- Cupped base adds stability to the mounting and covers the hole completely

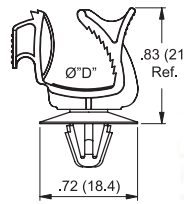


Figure 1

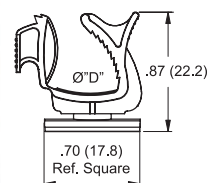


Figure 2

| Item No.     | Figure | Ø D Bundle Range |           | Ø Mounting Hole |           | Panel Thickness |           | Bulk Pack Qty |
|--------------|--------|------------------|-----------|-----------------|-----------|-----------------|-----------|---------------|
|              |        | in               | mm        | in              | mm        | in              | mm        |               |
| WAC1-01      | 1      | 0.12 - 0.34      | 3.0 - 8.5 | 0.157 - 0.189   | 4.0 - 4.8 | 0.019 - 0.063   | 0.5 - 1.6 | 1000          |
| WAC2-01      | 1      | 0.12 - 0.34      | 3.0 - 8.5 | 0.236 - 0.267   | 6.0 - 6.8 | 0.019 - 0.098   | 0.5 - 2.5 | 1000          |
| WAC3-01A4-RT | 2      | 0.12 - 0.34      | 3.0 - 8.5 | Adhesive        | Adhesive  | Adhesive        | Adhesive  | 1000          |

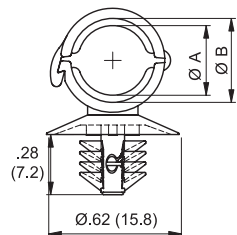
## HLCC Series Hinged Locking Clamps

**Specifications:**

- Material: UL94 V-2 Heat Stabilized Nylon 6/6
- Color: Black

**Features:**

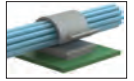
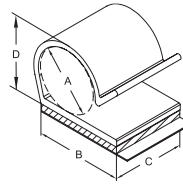
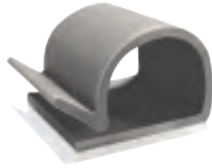
- Securely holds corrugated/convoluted tubing or other bundles
- An internal rib spanning the diameter of the clamp provides a tight grip
- Releasable latch convenient for maintenance
- Fir-tree mount accommodates a large range of panel thicknesses



| Item No. | Recommended Corrugated Tube Size |     |      |     | Ø Mounting Hole |           | Panel Thickness |           | Ø A Ref. |     | Ø B Ref. |      | Bulk Pack Qty |
|----------|----------------------------------|-----|------|-----|-----------------|-----------|-----------------|-----------|----------|-----|----------|------|---------------|
|          | in                               | mm  | in   | mm  | in              | mm        | in              | mm        | in       | mm  | in       | mm   |               |
| HLCC-1BK | 0.20                             | 5.0 | 0.28 | 7.1 | 0.26 - 0.28     | 6.5 - 7.0 | 0.03 - 0.12     | 0.8 - 3.0 | 0.23     | 5.8 | 0.28     | 7.2  | 1000          |
| HLCC-2BK | 0.27                             | 6.9 | 0.39 | 9.9 | 0.26 - 0.28     | 6.5 - 7.0 | 0.03 - 0.12     | 0.8 - 3.0 | 0.33     | 8.3 | 0.39     | 10.0 | 1000          |



**KKR Series  
Adhesive Mount Clamps**

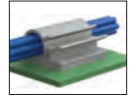
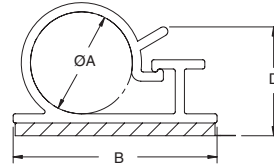


Specifications:

- Material: UL94 V-0 PVC
- Color: Gray

| Item No.   | Ø A Bundle |      | Max Capacity D |      | B     |      | C     |      | Bulk Pack Qty |
|------------|------------|------|----------------|------|-------|------|-------|------|---------------|
|            | in         | mm   | in             | mm   | in    | mm   | in    | mm   |               |
| KKR-5A1-RT | 0.521      | 13.2 | 0.680          | 17.3 | 0.750 | 19.1 | 0.625 | 15.9 | 500           |

**KKL Series  
Adhesive Mount Locking Clamps**



Specifications:

- Material: UL94 V-0 PVC
- Color: Gray

Features:

- Gathers, routes, and locks cables and wires
- Can be opened and closed multiple times for addition or removal of cables

| Item No.  | Ø A Bundle |      | B     |      | Depth |      | D at Max Bundle Ref. |      | Bulk Pack Qty |
|-----------|------------|------|-------|------|-------|------|----------------------|------|---------------|
|           | in         | mm   | in    | mm   | in    | mm   | in                   | mm   |               |
| KKL-4-RT  | 1/4        | 6.4  | 0.750 | 19.1 | 0.750 | 19.1 | 0.38                 | 9.6  | 500           |
| KKL-8-RT  | 1/2        | 12.7 | 1.000 | 25.4 | 1.000 | 25.4 | 0.69                 | 17.4 | 100           |
| KKL-12-RT | 3/4        | 19.1 | 1.000 | 25.4 | 1.000 | 25.4 | 0.92                 | 23.5 | 100           |

**KKD/KKDL Series  
Adhesive Mount Clamps**

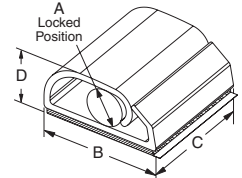
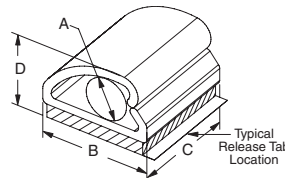
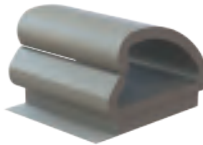


Figure 1

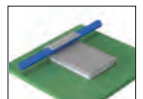
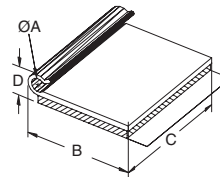
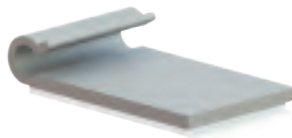
Figure 2

Specifications:

- Material: UL94 V-0 PVC
- Color: Gray

| Item No.  | Figure | Ø A Bundle |      | B    |      | C     |      | D at Max Bundle Ref. |      | Bulk Pack Qty |
|-----------|--------|------------|------|------|------|-------|------|----------------------|------|---------------|
|           |        | in         | mm   | in   | mm   | in    | mm   | in                   | mm   |               |
| KKDL-4-RT | 2      | 0.125      | 3.2  | 0.50 | 12.7 | 0.500 | 12.7 | 0.28                 | 7.1  | 500           |
| KKDL-8-RT | 2      | 0.219      | 5.6  | 0.75 | 19.1 | 0.750 | 19.1 | 0.43                 | 10.9 | 100           |
| KKD-4-RT  | 1      | 0.250      | 6.4  | 0.50 | 12.7 | 0.500 | 12.7 | 0.40                 | 10.2 | 500           |
| KKD-8-RT  | 1      | 0.500      | 12.7 | 0.75 | 19.1 | 0.750 | 19.1 | 0.73                 | 18.5 | 100           |
| KKD-12-RT | 1      | 0.750      | 19.1 | 1.13 | 28.6 | 1.000 | 25.4 | 1.02                 | 25.9 | 100           |
| KKD-16-RT | 1      | 1.000      | 25.4 | 1.50 | 38.1 | 1.250 | 31.8 | 1.30                 | 33.0 | 100           |

**KKJ Series  
Adhesive Mount Clamps**

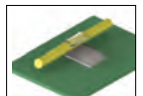
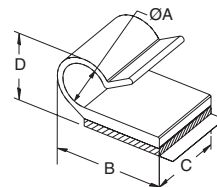


Specifications:

- Material: UL94 V-0 PVC
- Color: Gray

| Item No. | Ø A Bundle | B   |       | C    |      | D at Max Bundle Ref. |       | Bulk Pack Qty |      |
|----------|------------|-----|-------|------|------|----------------------|-------|---------------|------|
|          |            | in  | mm    | in   | mm   | in                   | mm    |               |      |
| KKJ-2-RT | 1/8        | 3.2 | 0.843 | 21.4 | 1.00 | 25.4                 | 1/4   | 6.4           | 1000 |
| KKJ-3-RT | 3/16       | 4.8 | 0.875 | 22.2 | 1.25 | 31.8                 | 5/16  | 7.9           | 1000 |
| KKJ-4-RT | 1/4        | 6.4 | 0.906 | 23.0 | 1.50 | 38.1                 | 13/32 | 10.3          | 1000 |
| KKJ-5-RT | 5/16       | 7.9 | 1.219 | 31.0 | 1.75 | 44.5                 | 7/16  | 11.1          | 1000 |
| KKJ-6-RT | 3/8        | 9.5 | 1.281 | 32.5 | 2.00 | 50.8                 | 17/32 | 13.5          | 1000 |

**MKKJ Series  
Mini Adhesive Mount Clamps**



Specifications:

- Material: UL94 V-0 PVC
- Color: Clear

Features:

- Clear color hides clamp

| Item No.  | Ø A Bundle |     | B     |      | C     |      | D at Max Bundle Ref. |      | Bulk Pack Qty |
|-----------|------------|-----|-------|------|-------|------|----------------------|------|---------------|
|           | in         | mm  | in    | mm   | in    | mm   | in                   | mm   |               |
| MKKJ-2-RT | 0.125      | 3.2 | 0.437 | 11.1 | 0.375 | 9.5  | 0.234                | 6.0  | 1000          |
| MKKJ-3-RT | 0.187      | 4.8 | 0.625 | 15.9 | 0.437 | 11.1 | 0.328                | 8.3  | 1000          |
| MKKJ-4-RT | 0.250      | 6.4 | 0.656 | 16.7 | 0.500 | 12.7 | 0.406                | 10.3 | 1000          |
| MKKJ-5-RT | 0.312      | 7.9 | 0.812 | 20.6 | 0.562 | 14.3 | 0.484                | 12.3 | 1000          |
| MKKJ-6-RT | 0.375      | 9.5 | 0.875 | 22.2 | 0.625 | 15.9 | 0.562                | 14.3 | 1000          |



# CABLE CLIPS & CLAMPS

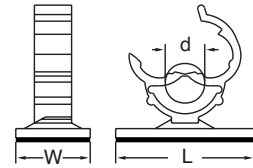
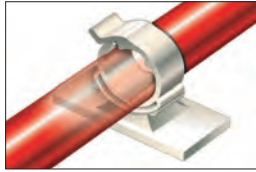
## Adhesive Mount Clamps

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Strong adhesion for quick and easy installation
- One size fits a range of cable diameters



| Item No. | Ø Holding Capacity d |      | W     |      | L     |      | Bulk Pack Qty |
|----------|----------------------|------|-------|------|-------|------|---------------|
|          | in                   | mm   | in    | mm   | in    | mm   |               |
| 460317   | 0.441                | 11.2 | 0.630 | 16.0 | 1.173 | 29.8 | 1000          |

## 22CAWC Series

### Adhesive Mount Contour Clips

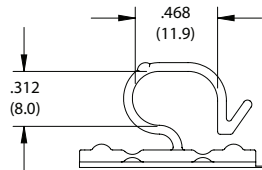
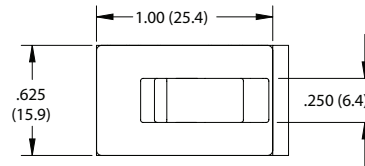


**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

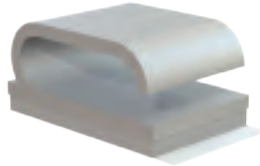
- Available with 3M Very High Bond (VHB) tape
- Flexible base allows for clip to be used on cylindrical surfaces such as pipes or tubing
- Quick, easy installation
- Resistant to corrosion, vibration and abrasion



| Item No.       | Adhesive | Bulk Pack Qty |
|----------------|----------|---------------|
| 22CAWC00440TAB | Standard | 1000          |
| 22CAWC00440VHB | VHB      | 1000          |

## KKF Series

### Adhesive Mount Clamps

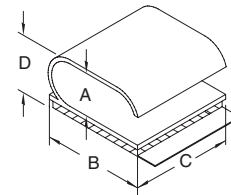


**Specifications:**

- Material: UL94 V-0 PVC
- Color: Gray

**Features:**

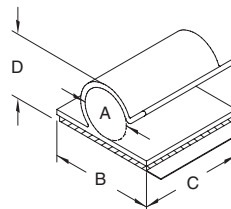
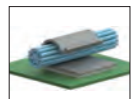
- Can hold three wire leads (such as air conditioning leads)



| Item No.    | Holding Capacity A |            | B     |      | C     |      | Max Capacity D |     | Bulk Pack Qty |
|-------------|--------------------|------------|-------|------|-------|------|----------------|-----|---------------|
|             | in                 | mm         | in    | mm   | in    | mm   | in             | mm  |               |
| KKF-10X4-RT | 0.20 x 0.56        | 5.1 x 14.3 | 0.750 | 19.1 | 0.750 | 19.1 | 0.36           | 9.1 | 100           |

## KKC Series

### Adhesive Mount Clamps



**Specifications:**

- Material: UL94 V-0 PVC
- Color: Gray

**Features:**

- For securely clamping cable or tubing

| Item No.  | Ø Holding Capacity A |      | B     |      | C     |      | D    |      | Bulk Pack Qty |
|-----------|----------------------|------|-------|------|-------|------|------|------|---------------|
|           | in                   | mm   | in    | mm   | in    | mm   | in   | mm   |               |
| KKC-2-RT  | 1/8                  | 3.2  | 0.750 | 19.1 | 0.750 | 19.1 | 0.31 | 7.9  | 500           |
| KKC-3-RT  | 3/16                 | 4.8  | 0.750 | 19.1 | 0.750 | 19.1 | 0.33 | 8.4  | 500           |
| KKC-4-RT  | 1/4                  | 6.4  | 0.750 | 19.1 | 0.750 | 19.1 | 0.42 | 10.7 | 500           |
| KKC-5-RT  | 5/16                 | 7.9  | 0.750 | 19.1 | 0.750 | 19.1 | 0.48 | 12.2 | 500           |
| KKC-6-RT  | 3/8                  | 9.5  | 0.750 | 19.1 | 0.750 | 19.1 | 0.60 | 15.2 | 500           |
| KKC-8-RT  | 1/2                  | 12.7 | 1.000 | 25.4 | 1.000 | 25.4 | 0.69 | 17.5 | 100           |
| KKC-12-RT | 3/4                  | 19.1 | 1.000 | 25.4 | 1.000 | 25.4 | 0.94 | 23.9 | 100           |



# CABLE CLIPS & CLAMPS



## UC/HUC Series Adhesive Mount U Clamps

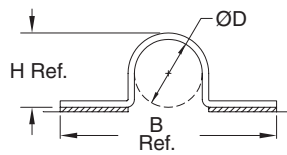


Figure 1

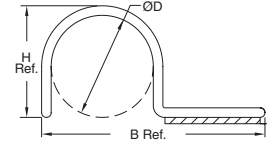
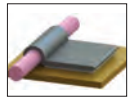
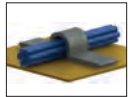


Figure 2

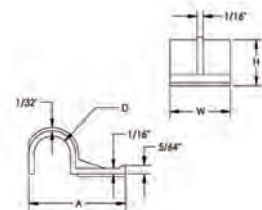


**Specifications:**

- Material: UL94 V-0 PVC
- Color: Black

| Item No. | Figure | Ø D Holding Capacity |      | B Ref. |      | H Ref. |      | Depth |      | Bulk Pack Qty |
|----------|--------|----------------------|------|--------|------|--------|------|-------|------|---------------|
|          |        | in                   | mm   | in     | mm   | in     | mm   | in    | mm   |               |
| UC-2-RT  | 1      | 1/8                  | 3.2  | 1.219  | 30.9 | 0.172  | 4.4  | 0.625 | 15.9 | 1000          |
| HUC-2-RT | 2      | 1/8                  | 3.2  | 0.718  | 18.3 | 0.172  | 4.4  | 0.625 | 15.9 | 1000          |
| UC-4-RT  | 1      | 1/4                  | 6.4  | 1.344  | 34.1 | 0.297  | 7.5  | 0.625 | 15.9 | 1000          |
| HUC-4-RT | 2      | 1/4                  | 6.4  | 1.343  | 34.1 | 0.297  | 7.5  | 0.625 | 15.9 | 1000          |
| UC-6-RT  | 1      | 3/8                  | 9.5  | 1.469  | 37.3 | 0.422  | 10.7 | 0.625 | 15.9 | 1000          |
| UC-8-RT  | 1      | 1/2                  | 12.7 | 1.594  | 40.4 | 0.547  | 13.9 | 0.625 | 15.9 | 1000          |

## 22SPC Series Adhesive Mount U Clips



**Specifications:**

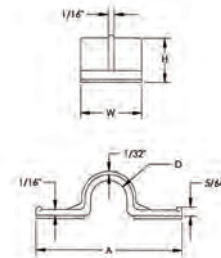
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Fast, easy, convenient way to install wires and cable to almost any surface
- Great for use in areas where space is limited
- Corrosion, vibration and abrasion resistant

| Item No.   | Ø D Bundle |      | A     |      | H     |      | W     |      | Bulk Pack Qty |
|------------|------------|------|-------|------|-------|------|-------|------|---------------|
|            | in         | mm   | in    | mm   | in    | mm   | in    | mm   |               |
| 22SPC13037 | 0.125      | 3.2  | 0.493 | 12.5 | 0.217 | 5.5  | 0.375 | 9.5  | 1000          |
| 22SPC20000 | 0.203      | 5.2  | 0.808 | 20.5 | 0.289 | 7.3  | 0.500 | 12.7 | 1000          |
| 22SPC25550 | 0.250      | 6.4  | 0.865 | 22.0 | 0.343 | 8.7  | 0.500 | 12.7 | 1000          |
| 22SPC38562 | 0.375      | 9.5  | 1.000 | 25.4 | 0.475 | 12.1 | 0.625 | 15.9 | 1000          |
| 22SPC50575 | 0.500      | 12.7 | 1.125 | 28.6 | 0.593 | 15.1 | 0.750 | 19.1 | 50            |

## 22DPC Series Double Adhesive Backed Cable Clips



**Specifications:**

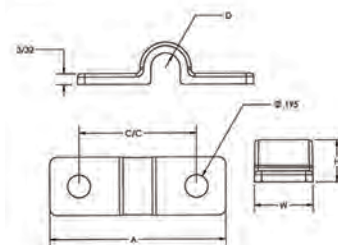
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Fast, easy, convenient way to install wires and cable to almost any surface
- Double clip design allows for greater shear loads and holding power
- Corrosion, vibration and abrasion resistant

| Item No.   | Ø D Bundle |      | A     |      | H     |      | W     |      | Bulk Pack Qty |
|------------|------------|------|-------|------|-------|------|-------|------|---------------|
|            | in         | mm   | in    | mm   | in    | mm   | in    | mm   |               |
| 22DPC13037 | 0.125      | 3.2  | 0.760 | 19.3 | 0.216 | 5.5  | 0.375 | 9.5  | 100           |
| 22DPC15637 | 0.156      | 4.0  | 1.281 | 32.5 | 0.248 | 6.3  | 0.375 | 9.5  | 100           |
| 22DPC25550 | 0.250      | 6.4  | 1.380 | 35.1 | 0.326 | 8.3  | 0.500 | 12.7 | 1000          |
| 22DPC38062 | 0.375      | 9.5  | 1.505 | 38.2 | 0.455 | 11.6 | 0.625 | 15.9 | 500           |
| 22DPC50575 | 0.500      | 12.7 | 1.600 | 40.6 | 0.580 | 14.7 | 0.750 | 19.1 | 500           |

## 22DSC Series Double Screw Clips



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

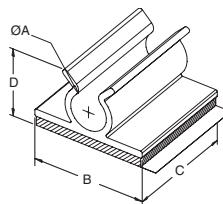
- Resistant to corrosion, vibration and abrasion
- Holds wires or cables securely in place

| Item No.    | Ø D Bundle |     | A     |      | W     |      | H     |     | C/C   |      | Bulk Pack Qty |
|-------------|------------|-----|-------|------|-------|------|-------|-----|-------|------|---------------|
|             | in         | mm  | in    | mm   | in    | mm   | in    | mm  | in    | mm   |               |
| 22DSC500250 | 0.250      | 6.4 | 1.500 | 38.1 | 0.500 | 12.7 | 0.359 | 9.1 | 1.000 | 25.4 | 1000          |



# CABLE CLIPS & CLAMPS

## KKU Series Adhesive Mount Clamps



**Specifications:**

- Material: UL94 V-0 PVC
- Color: Gray

**Features:**

- To hold wires, cords, or cables in place

| Item No.  | Ø A Bundle |      | B     |      | C     |      | D Ref. |      | Bulk Pack Qty |
|-----------|------------|------|-------|------|-------|------|--------|------|---------------|
|           | in         | mm   | in    | mm   | in    | mm   | in     | mm   |               |
| KKU-2-RT  | 1/8        | 3.2  | 0.750 | 19.1 | 0.750 | 19.1 | 0.281  | 7.1  | 500           |
| KKU-4-RT  | 1/4        | 6.4  | 0.750 | 19.1 | 0.750 | 19.1 | 0.468  | 11.9 | 500           |
| KKU-6-RT  | 3/8        | 9.5  | 0.750 | 19.1 | 0.750 | 19.1 | 0.593  | 15.1 | 500           |
| KKU-8-RT  | 1/2        | 12.7 | 1.000 | 25.4 | 1.000 | 25.4 | 0.687  | 17.5 | 100           |
| KKU-9-RT  | 9/16       | 14.3 | 1.000 | 25.4 | 1.000 | 25.4 | 0.750  | 19.1 | 100           |
| KKU-12-RT | 3/4        | 19.1 | 1.000 | 25.4 | 1.000 | 25.4 | 0.906  | 23.0 | 100           |

## 22AWC Series Releasable Adhesive Backed Wire Clips

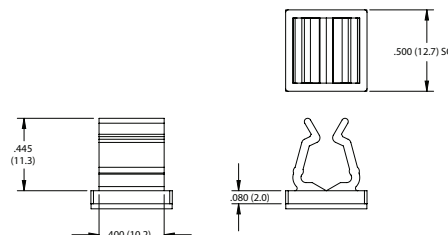


**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Quick and easy installation
- Releasable clip, wires can be removed after assembly if desired



| Item No.   | Bulk Pack Qty |
|------------|---------------|
| 22AWC00312 | 1000          |

## WCK/MWCK/22AWC Series Adhesive Mount Clips

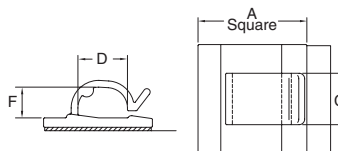
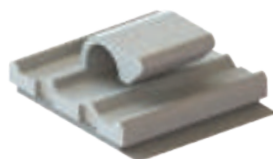


Figure 1

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- To hold wires, cords, or cables in place

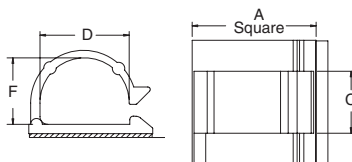


Figure 2

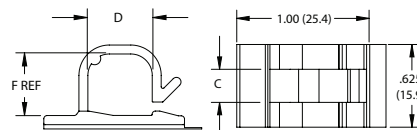


Figure 3

| Item No.        | Figure | Approval | A     |      | C     |      | D     |      | F     |      | Bulk Pack Qty |
|-----------------|--------|----------|-------|------|-------|------|-------|------|-------|------|---------------|
|                 |        |          | in    | mm   | in    | mm   | in    | mm   | in    | mm   |               |
| WCK-180-01A-RT  | 1      | RU       | 0.630 | 16.0 | 0.310 | 7.9  | 0.340 | 8.6  | 0.160 | 4.0  | 1000          |
| WCK-280-01A4-RT | 1      | —        | 0.750 | 19.0 | 0.390 | 10.0 | 0.263 | 6.7  | 0.220 | 5.7  | 1000          |
| • 22AWC00375    | 1      | —        | 0.750 | 19.0 | 0.375 | 9.5  | 0.460 | 11.7 | 0.310 | 7.9  | 1000          |
| WCK-460-01A-RT  | 1      | RU       | 0.990 | 25.1 | 0.470 | 11.9 | 0.450 | 11.4 | 0.280 | 7.1  | 1000          |
| MWCK-460-01A4   | 2      | —        | 0.750 | 19.0 | 0.470 | 11.9 | 0.450 | 11.4 | 0.280 | 7.1  | 1000          |
| • 22AWC00440    | 3      | —        | 1.000 | 25.4 | 0.250 | 6.4  | 0.460 | 11.7 | 0.440 | 11.2 | 1000          |
| • 22AWC00281    | 1      | —        | 1.000 | 25.4 | 0.500 | 12.7 | 0.460 | 11.7 | 0.280 | 7.1  | 500           |
| WCK-720-01A-RT  | 2      | —        | 1.000 | 25.4 | 0.500 | 12.7 | 0.720 | 18.3 | 0.540 | 13.6 | 1000          |
| • 22AWC00580    | 2      | —        | 1.000 | 25.4 | 0.500 | 12.7 | 0.720 | 18.3 | 0.578 | 14.7 | 250           |

# CABLE CLIPS & CLAMPS



## WCA/22AWC Series Adhesive Mount Clips

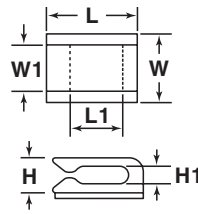


Figure 1

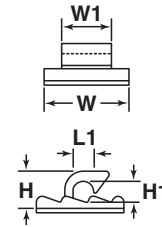


Figure 2

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Designed to support lightweight wire bundles when properly applied on any clean, smooth, grease-free surface

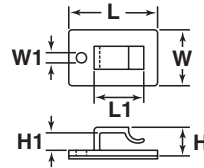


Figure 3

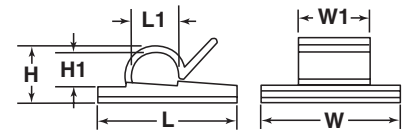


Figure 4

| Item No.       | Figure | L     |      | L1    |      | W     |      | W1    |      | H     |     | H1    |     | Bulk Pack Qty |
|----------------|--------|-------|------|-------|------|-------|------|-------|------|-------|-----|-------|-----|---------------|
|                |        | in    | mm   | in    | mm   | in    | mm   | in    | mm   | in    | mm  | in    | mm  |               |
| • 22AWCF328110 | 1      | 0.500 | 12.7 | 0.328 | 8.3  | 0.375 | 9.5  | 0.270 | 6.9  | 0.190 | 4.8 | 0.110 | 2.8 | 1000          |
| • 22AWC00125   | 4      | 0.516 | 13.1 | 0.125 | 3.2  | 0.469 | 11.9 | 0.200 | 5.1  | 0.200 | 5.1 | 0.125 | 3.2 | 1000          |
| • 22AWC00187   | 2      | 0.656 | 16.7 | 0.188 | 4.8  | 0.656 | 16.7 | 0.375 | 9.5  | 0.266 | 6.7 | 0.188 | 4.8 | 500           |
| WCA004A        | 3      | 1.060 | 27.0 | 0.580 | 14.8 | 0.670 | 17.0 | 0.120 | 3.1  | 0.340 | 8.7 | 0.220 | 5.5 | 100           |
| WCA005A        | 4      | 0.750 | 19.0 | 0.230 | 5.9  | 0.750 | 19.0 | 0.390 | 10.0 | 0.280 | 7.2 | 0.190 | 4.9 | 100           |

## UMB Series

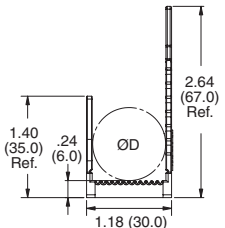
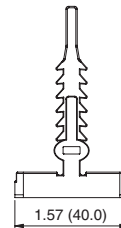
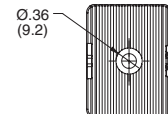
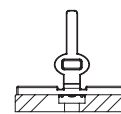
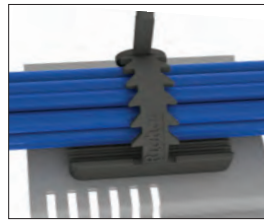
### Universal Rubber Clamps

**Specifications:**

- Material: Neoprene Rubber, 50 Shore A
- Color: Black

**Features:**

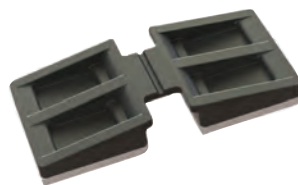
- Flexible, serrated buckle style clamp provides a tight grip to the bundle
- Large, ribbed base gives the cables extra surface area which provides some strain relief
- Two mounting styles available: #10 screw or adhesive



| Item No.  | Mounting Method | D Approx. Max Cable Ø Bundle |      | Bulk Pack Qty |
|-----------|-----------------|------------------------------|------|---------------|
|           |                 | in                           | mm   |               |
| UMB-1     | #10 or M5 Screw | 0.79                         | 20.0 | 200           |
| UMB-1A-RT | Adhesive        | 0.79                         | 20.0 | 200           |

## WM Series

### Adhesive Mount Wire Mounts



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Black

**Features:**

- Mounted over wires to hold them in place
- Quick, secure mounting

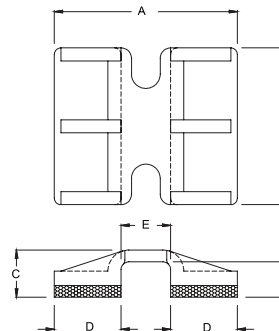


Figure 1

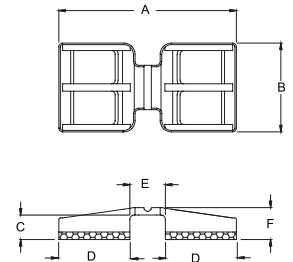


Figure 2

| Item No. | Figure | E     |     | F     |     | A     |      | B     |      | C     |     | D     |     | Bulk Pack Qty |
|----------|--------|-------|-----|-------|-----|-------|------|-------|------|-------|-----|-------|-----|---------------|
|          |        | in    | mm  | in    | mm  | in    | mm   | in    | mm   | in    | mm  | in    | mm  |               |
| WM-1A    | 1      | 0.150 | 3.8 | 0.102 | 2.6 | 0.551 | 14.0 | 0.472 | 12.0 | 0.138 | 3.5 | 0.201 | 5.1 | 1000          |
| WM-2A    | 1      | 0.189 | 4.8 | 0.102 | 2.6 | 0.945 | 24.0 | 0.472 | 12.0 | 0.142 | 3.6 | 0.378 | 9.6 | 500           |
| WM-3A    | 1      | 0.189 | 4.8 | 0.102 | 2.6 | 0.787 | 20.0 | 0.472 | 12.0 | 0.142 | 3.6 | 0.299 | 7.6 | 500           |
| WM-4A    | 1      | 0.205 | 5.2 | 0.110 | 2.8 | 0.945 | 24.0 | 0.472 | 12.0 | 0.150 | 3.8 | 0.370 | 9.4 | 500           |
| WM-5A    | 2      | 0.189 | 4.8 | 0.102 | 2.6 | 0.945 | 24.0 | 0.472 | 12.0 | 0.142 | 3.6 | 0.378 | 9.6 | 500           |
| WM-6A    | 2      | 0.189 | 4.8 | 0.122 | 3.1 | 0.945 | 24.0 | 0.472 | 12.0 | 0.161 | 4.1 | 0.378 | 9.6 | 500           |
| WM-7A    | 2      | 0.205 | 5.2 | 0.122 | 3.1 | 0.945 | 24.0 | 0.472 | 12.0 | 0.161 | 4.1 | 0.370 | 9.4 | 500           |



# CABLE CLAMPS

## HURC/DHURC/HURCBH/HURCS/DHURCS Series U Clamps

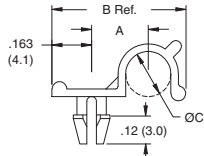


Figure 1

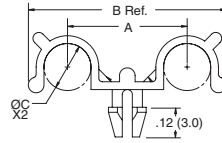


Figure 2

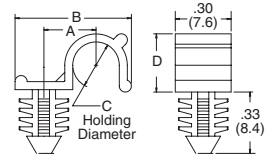


Figure 3

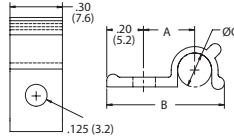


Figure 4

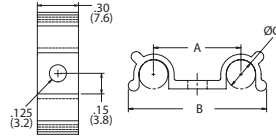


Figure 5

Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

| Item No.    | Figure | Ø C Bundle |     | Ø Mounting Hole |     | Approval | A    |      | B Ref. |      | Panel Thickness |     | Bulk Pack Qty |
|-------------|--------|------------|-----|-----------------|-----|----------|------|------|--------|------|-----------------|-----|---------------|
|             |        | in         | mm  | in              | mm  |          | in   | mm   | in     | mm   | in              | mm  |               |
| HURC-2-01   | 1      | 0.125      | 3.2 | 0.125           | 3.2 | RU       | 0.20 | 5.1  | 0.49   | 12.4 | 0.062           | 1.6 | 1000          |
| HURC-3-01   | 1      | 0.187      | 4.8 | 0.125           | 3.2 | RU       | 0.24 | 6.1  | 0.56   | 14.2 | 0.062           | 1.6 | 1000          |
| HURC-4-01   | 1      | 0.250      | 6.4 | 0.125           | 3.2 | RU       | 0.27 | 6.9  | 0.62   | 15.7 | 0.062           | 1.6 | 1000          |
| HURC1-2-01  | 1      | 0.125      | 3.2 | 0.125           | 3.2 | RU       | 0.20 | 5.1  | 0.49   | 12.4 | 0.093           | 2.4 | 1000          |
| HURC1-3-01  | 1      | 0.187      | 4.8 | 0.125           | 3.2 | RU       | 0.24 | 6.1  | 0.56   | 14.2 | 0.093           | 2.4 | 1000          |
| HURC1-4-01  | 1      | 0.250      | 6.4 | 0.125           | 3.2 | RU       | 0.27 | 6.9  | 0.62   | 15.7 | 0.093           | 2.4 | 1000          |
| DHURC-2-01  | 2      | 0.125      | 3.2 | 0.125           | 3.2 | RU       | 0.41 | 10.4 | 0.66   | 16.8 | 0.062           | 1.6 | 1000          |
| DHURC-3-01  | 2      | 0.187      | 4.8 | 0.125           | 3.2 | RU       | 0.48 | 12.2 | 0.79   | 20.1 | 0.062           | 1.6 | 1000          |
| DHURC-4-01  | 2      | 0.250      | 6.4 | 0.125           | 3.2 | RU       | 0.55 | 14.0 | 0.94   | 23.9 | 0.062           | 1.6 | 1000          |
| HURCS-2-01  | 4      | 0.125      | 3.2 | 0.125           | 3.2 | —        | 0.25 | 6.2  | 0.59   | 15.0 | —               | —   | 1000          |
| HURCS-3-01  | 4      | 0.187      | 4.8 | 0.125           | 3.2 | —        | 0.28 | 7.1  | 0.65   | 15.6 | —               | —   | 1000          |
| HURCS-4-01  | 4      | 0.250      | 6.4 | 0.125           | 3.2 | —        | 0.32 | 8.1  | 0.72   | 18.3 | —               | —   | 1000          |
| DHURCS-2-01 | 5      | 0.125      | 3.2 | 0.125           | 3.2 | —        | 0.49 | 12.4 | 0.75   | 19.0 | —               | —   | 1000          |
| DHURCS-3-01 | 5      | 0.187      | 4.8 | 0.125           | 3.2 | —        | 0.56 | 14.2 | 0.89   | 22.6 | —               | —   | 1000          |
| DHURCS-4-01 | 5      | 0.250      | 6.4 | 0.125           | 3.2 | —        | 0.64 | 16.2 | 1.02   | 25.9 | —               | —   | 1000          |
| HURCBH-2-01 | 3      | 0.125      | 3.2 | 0.250           | 6.4 | —        | 0.49 | 12.4 | 0.17   | 4.3  | 0.250           | 6.4 | 1000          |
| HURCBH-3-01 | 3      | 0.187      | 4.8 | 0.250           | 6.4 | —        | 0.56 | 14.2 | 0.24   | 6.1  | 0.250           | 6.4 | 1000          |
| HURCBH-4-01 | 3      | 0.250      | 6.4 | 0.250           | 6.4 | —        | 0.62 | 15.7 | 0.30   | 7.6  | 0.250           | 6.4 | 1000          |

## WCA/22SWRC Series Split Routing Clamps

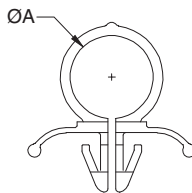


Figure 1

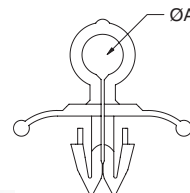


Figure 2

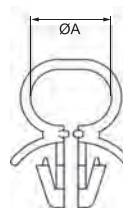


Figure 3

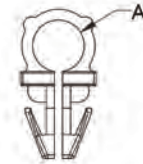


Figure 4

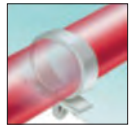


Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: See Table

Features:

- Split design allows bundles to be loaded by separating the clip at the base
- Cannot be removed without removing the clip from the blind side of the application



| Item No.       | Approval | Figure | Ø A Bundle |      | Ø Mounting Hole |     | Panel Thickness |           | Color   | Bulk Pack Qty |
|----------------|----------|--------|------------|------|-----------------|-----|-----------------|-----------|---------|---------------|
|                |          |        | in         | mm   | in              | mm  | in              | mm        |         |               |
| SRC-1-01       | —        | 2      | 0.197      | 5.0  | 0.246           | 6.2 | 0.079 - 0.118   | 2.0 - 3.0 | Natural | 1000          |
| SRC-4-01       | RU       | 1      | 0.250      | 6.4  | 0.250           | 6.4 | 0.050 - 0.060   | 1.3 - 1.5 | Natural | 1000          |
| • 23SWRC250250 | —        | 4      | 0.250      | 6.4  | 0.250           | 6.4 | 0.030 - 0.125   | 0.8 - 3.2 | Natural | 1000          |
| • 23SWRC250375 | —        | 4      | 0.375      | 9.5  | 0.025           | 6.4 | 0.030 - 0.125   | 0.8 - 3.2 | Natural | 500           |
| 101001000202   | —        | 3      | 0.413      | 10.5 | 0.250           | 6.4 | 0.028 - 0.079   | 0.7 - 2.0 | Gray    | 500           |
| SRC-7-01       | RU       | 1      | 0.438      | 11.1 | 0.250           | 6.4 | 0.050 - 0.060   | 1.3 - 1.5 | Natural | 1000          |
| SRC-8-01       | RU       | 1      | 0.500      | 12.7 | 0.250           | 6.4 | 0.050 - 0.060   | 1.3 - 1.5 | Natural | 1000          |
| 101001400202   | —        | 3      | 0.551      | 14.0 | 0.250           | 6.4 | 0.028 - 0.079   | 0.7 - 2.0 | Gray    | 500           |
| SRC-10-01      | —        | 1      | 0.625      | 15.9 | 0.250           | 6.4 | 0.050 - 0.060   | 1.3 - 1.5 | Natural | 1000          |
| 101002100202   | —        | 3      | 0.846      | 21.5 | 0.250           | 6.4 | 0.028 - 0.079   | 0.7 - 2.0 | Gray    | 250           |
| 101003000202   | —        | 3      | 1.181      | 30.0 | 0.250           | 6.4 | 0.028 - 0.079   | 0.7 - 2.0 | Gray    | 250           |

# CABLE CLIPS & CLAMPS



## SRCC Series Strain Relief Clamps

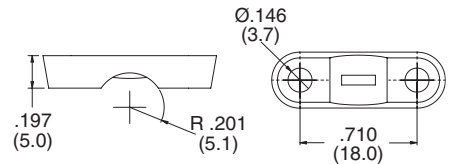


Figure 1

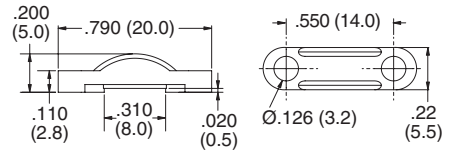


Figure 2

**Specifications:**

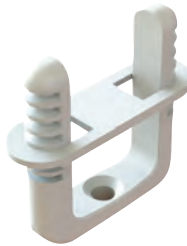
- Material: UL94 V-2 Nylon 6/6
- Color: See Table

**Features:**

- Grips cable providing slight strain relief
- Securely installed with two screws

| Item No. | Figure | Color | Ø Max Cable | Mounting Screws | Bulk Pack Qty |
|----------|--------|-------|-------------|-----------------|---------------|
| 1441741  | 1      | Gray  | 0.177       | M3 or #6        | 1000          |
| SRCC-2   | 2      | Black | 0.310       | M3 or #4        | 1000          |

## D Series Two-Piece Locking Clamps

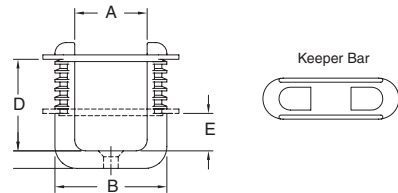


**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

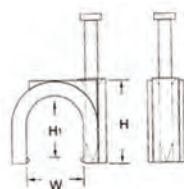
**Features:**

- Mounts with a #8 or M4 flat-head machine screw
- Adjustable holding capacity
- Keeper bar is removable for changes or repairs

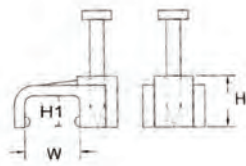


| Item No. | A Ref. |      | B Ref. |      | D Ref. |      | E Ref. |      | Bulk Pack Qty |
|----------|--------|------|--------|------|--------|------|--------|------|---------------|
|          | in     | mm   | in     | mm   | in     | mm   | in     | mm   |               |
| D-1      | 0.990  | 25.1 | 1.530  | 38.9 | 1.25   | 31.8 | 0.51   | 13.0 | 100           |
| D-1.5    | 1.457  | 37.0 | 2.175  | 55.3 | 1.65   | 41.9 | 0.66   | 16.8 | 100           |

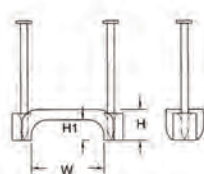
## 22NCC Series Nail In Cable Clips



Single Round



Single Flat



Double

**Specifications:**

- Material: Polyethylene
- Color: See Table

**Features:**

- Pre-assembled with nickel plated steel nails, ready for use in wood, stucco, plaster or masonry
- Contact edges are rounded to protect cable or tubing from damage
- Molded in tough, electrically insulating, high density Polyethylene



**Single Round**

| Item No.   |             | W     |     | H     |      | H1    |     | Bulk Pack Qty |
|------------|-------------|-------|-----|-------|------|-------|-----|---------------|
| Black      | White       | in    | mm  | in    | mm   | in    | mm  |               |
| 22NCC0400R | 22NCC0400RW | 0.145 | 3.6 | 0.257 | 6.5  | 0.155 | 3.9 | 100           |
| 22NCC0500R | 22NCC0500RW | 0.190 | 5.0 | 0.299 | 7.6  | 0.209 | 5.3 | 100           |
| 22NCC0700R | 22NCC0700RW | 0.236 | 6.0 | 0.354 | 9.0  | 0.260 | 6.6 | 100           |
| 22NCC0800R | 22NCC0800RW | 0.302 | 7.6 | 0.453 | 11.5 | 0.335 | 8.5 | 100           |

**Single Flat**

| Item No.   |             | W     |     | H     |     | H1    |     | Bulk Pack Qty |
|------------|-------------|-------|-----|-------|-----|-------|-----|---------------|
| Black      | White       | in    | mm  | in    | mm  | in    | mm  |               |
| 22NCC0450F | 22NCC0450FW | 0.217 | 5.5 | 0.217 | 5.5 | 0.122 | 3.1 | 100           |
| 22NCC0900F | 22NCC0900FW | 0.335 | 8.5 | 0.315 | 8.0 | 0.205 | 5.2 | 100           |

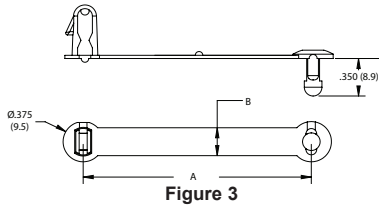
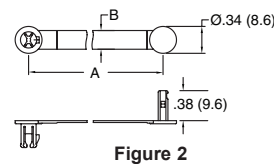
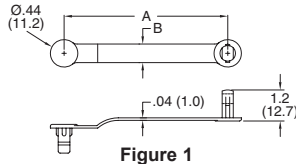
**Double**

| Item No.    |             | W     |      | H     |     | H1    |     | Bulk Pack Qty |
|-------------|-------------|-------|------|-------|-----|-------|-----|---------------|
| Black       | White       | in    | mm   | in    | mm  | in    | mm  |               |
| 22NCC1250FB | 22NCC1250FW | 0.492 | 12.5 | 0.315 | 8.0 | 0.209 | 5.3 | 100           |
| 22NCC1900FB | 22NCC1900FW | 0.736 | 18.7 | 0.315 | 8.0 | 0.209 | 5.3 | 100           |



# CABLE CLIPS & CLAMPS

## CH/RSC/22WTR Series Snap In Cable Hanger



**Specifications:**

- Material: See Table
- Color: See Table

**Features:**

- Gathers and routes cables and wires
- Push mount design allows for fast installation



| Item No.     | Natural |           | Figure | Ø Max Bundle |      | Ø Mounting Hole |     | Length |      | Width |     | Material              | Bulk Pack Qty |
|--------------|---------|-----------|--------|--------------|------|-----------------|-----|--------|------|-------|-----|-----------------------|---------------|
|              | Black   | CH-1-01BK |        | in           | mm   | in              | mm  | in     | mm   | in    | mm  |                       |               |
| 22WTR2500312 | —       | —         | 3      | 0.312        | 7.9  | 0.250           | 6.4 | 1.530  | 38.9 | 0.266 | 6.7 | UL94 V-2 Nylon 6/6    | 1000          |
| CH-1-01      | —       | CH-1-01BK | 1      | 0.375        | 9.5  | 0.250           | 6.4 | 1.750  | 44.5 | 0.297 | 7.5 | UL94 V-2 Nylon 6/6    | 1000          |
| 22WTR2500437 | —       | —         | 3      | 0.437        | 11.1 | 0.250           | 6.4 | 1.930  | 49.0 | 0.266 | 6.7 | UL94 V-2 Nylon 6/6    | 1000          |
| 22WTR2500500 | —       | —         | 3      | 0.500        | 12.7 | 0.250           | 6.4 | 2.130  | 54.1 | 0.266 | 6.7 | UL94 V-2 Nylon 6/6    | 1000          |
| 22WTR2500562 | —       | —         | 3      | 0.562        | 14.3 | 0.250           | 6.4 | 2.360  | 59.9 | 0.266 | 6.7 | UL94 V-2 Nylon 6/6    | 1000          |
| CH-2-01      | —       | CH-2-01BK | 1      | 0.625        | 15.9 | 0.250           | 6.4 | 2.625  | 66.7 | 0.297 | 7.5 | UL94 V-2 Nylon 6/6    | 1000          |
| CH-1-10      | —       | CH-1-10BK | 1      | 0.375        | 9.5  | 0.250           | 6.4 | 1.750  | 44.5 | 0.297 | 7.5 | UL94 HB Polypropylene | 1000          |
| CH-2-10      | —       | CH-2-10BK | 1      | 0.625        | 15.9 | 0.250           | 6.4 | 2.625  | 66.7 | 0.297 | 7.5 | UL94 HB Polypropylene | 1000          |
| —            | —       | RSC-3-01  | 2      | 0.218        | 5.6  | 0.189           | 4.8 | 1.100  | 28.0 | 0.160 | 4.0 | UL94 V-2 Nylon 6/6    | 1000          |
| —            | —       | RSC-4-01  | 2      | 0.250        | 6.4  | 0.189           | 4.8 | 1.300  | 33.0 | 0.240 | 6.0 | UL94 V-2 Nylon 6/6    | 1000          |
| —            | —       | RSC-6-01  | 2      | 0.375        | 9.5  | 0.189           | 4.8 | 1.690  | 43.0 | 0.240 | 6.0 | UL94 V-2 Nylon 6/6    | 1000          |
| —            | —       | RSC-9-01  | 2      | 0.625        | 15.9 | 0.189           | 4.8 | 2.480  | 63.0 | 0.240 | 6.0 | UL94 V-2 Nylon 6/6    | 1000          |
| —            | —       | RSC-9-01  | 2      | 0.625        | 15.9 | 0.189           | 4.8 | 2.480  | 63.0 | 0.240 | 6.0 | UL94 V-2 Nylon 6/6    | 1000          |

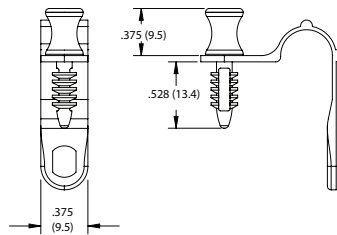
## 22QCC Series Quick Cable Clamp

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

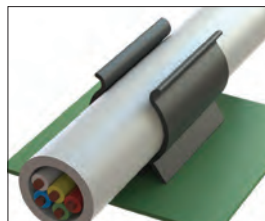
- Quick, easy, one handed installation
- Features an integrated ratchet fastener which eliminates the need for a screw or other fastener
- Self-aligning



| Item No.    | Ø Bundle |      | Ø Mounting Hole |     | Bulk Pack Qty |
|-------------|----------|------|-----------------|-----|---------------|
|             | in       | mm   | in              | mm  |               |
| 22QCC187250 | 0.250    | 6.4  | 0.188           | 4.8 | 1000          |
| 22QCC187312 | 0.313    | 7.9  | 0.188           | 4.8 | 1000          |
| 22QCC187375 | 0.375    | 9.5  | 0.188           | 4.8 | 1000          |
| 22QCC187437 | 0.438    | 11.1 | 0.188           | 4.8 | 1000          |

## V Series

### Screw Mount Component Clip



**Specifications:**

- Material: UL94 V-0 PVC
- Color: Black

**Features:**

- Legs prevent shifting and tipping
- Mounts securely with screws or rivets
- Holds parts firmly

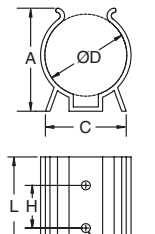
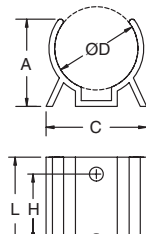
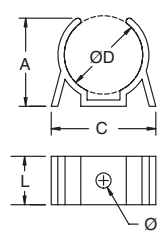


Figure 1

Figure 2

Figure 3

| Item No. | Figure | Ø D Holding |             | Ø F Hole Ref. |     | A Ref. |      | C Ref. |      | H Ref.                |      | L    |      | Bulk Pack Qty |
|----------|--------|-------------|-------------|---------------|-----|--------|------|--------|------|-----------------------|------|------|------|---------------|
|          |        | in          | mm          | in            | mm  | in     | mm   | in     | mm   | in                    | mm   | in   | mm   |               |
| V-1000   | 1      | 0.25        | 6.4         | 0.094         | 2.4 | 0.30   | 7.5  | 0.50   | 12.7 | Single Hole In Center |      | 0.50 | 12.7 | 1000          |
| V-1001   | 1      | 0.31        | 7.9         | 0.094         | 2.4 | 0.36   | 9.1  | 0.50   | 12.7 | Single Hole In Center |      | 0.50 | 12.7 | 1000          |
| V-1002   | 1      | 0.38        | 9.5         | 0.094         | 2.4 | 0.41   | 10.3 | 0.50   | 12.7 | Single Hole In Center |      | 0.50 | 12.7 | 1000          |
| V-1003   | 1      | 0.44        | 11.1        | 0.094         | 2.4 | 0.45   | 11.5 | 0.52   | 13.1 | Single Hole In Center |      | 0.50 | 12.7 | 1000          |
| V-1004   | 1      | 0.50        | 12.7        | 0.094         | 2.4 | 0.50   | 12.7 | 0.66   | 16.7 | Single Hole In Center |      | 0.50 | 12.7 | 1000          |
| V-1005   | 1      | 0.56        | 14.3        | 0.094         | 2.4 | 0.61   | 15.5 | 0.72   | 18.3 | Single Hole In Center |      | 0.50 | 12.7 | 1000          |
| V-1006   | 1      | 0.63        | 15.9        | 0.094         | 2.4 | 0.63   | 15.9 | 0.83   | 21.0 | Single Hole In Center |      | 0.50 | 12.7 | 1000          |
| V-1007   | 1      | 0.69        | 17.6        | 0.156         | 4.0 | 0.63   | 15.9 | 0.84   | 21.0 | Single Hole In Center |      | 0.50 | 12.7 | 1000          |
| V-1008   | 1      | 0.75        | 19.7        | 0.156         | 4.0 | 0.78   | 19.8 | 0.89   | 22.6 | Single Hole In Center |      | 0.50 | 12.7 | 100           |
| V-1009   | 1      | 0.88        | 22.2        | 0.156         | 4.0 | 0.91   | 23.0 | 1.08   | 27.4 | Single Hole In Center |      | 0.50 | 12.7 | 100           |
| V-1010   | 2      | 1.00        | 25.4        | 0.156         | 4.0 | 0.98   | 25.0 | 1.13   | 28.6 | 0.75                  | 19.1 | 1.13 | 28.5 | 100           |
| V-1011   | 2      | 1.38        | 34.9        | 0.156         | 4.0 | 1.34   | 34.1 | 1.25   | 31.8 | 0.75                  | 19.1 | 1.13 | 28.5 | 100           |
| V-1024   | 3      | 1.50        | 38.1        | 0.156         | 4.0 | 1.81   | 46.0 | 1.42   | 36.1 | 0.75                  | 19.1 | 1.75 | 44.5 | 100           |
| V-1028   | 3      | 1.75        | 44.5        | 0.156         | 4.0 | 1.92   | 48.8 | 1.50   | 38.1 | 0.75                  | 19.1 | 1.75 | 44.5 | 100           |
| V-1030   | 3      | 2.25 - 2.75 | 57.1 - 69.9 | 0.156         | 4.0 | 2.44   | 61.9 | 2.61   | 66.3 | 0.75                  | 19.1 | 1.50 | 38.1 | 100           |



**VM Series**  
**Screw Mount Component Clip**

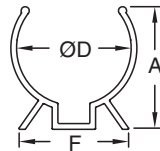


**Specifications:**

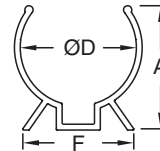
- Material: UL94 V-2 Nylon 6/6
- Color: Black

**Features:**

- Smooth edges protect components from wear and abrasion
- Legs prevent shifting and tipping
- Mounts securely with screws or rivets



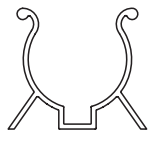
**Figure 1**



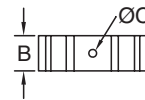
**Figure 2**



**Figure 3**



**Figure 4**



| Item No. | Figure | Ø D Holding |      | Ø C Hole |     | A Ref. |      | B    |      | E                     |      | F Ref. |      | Bulk Pack Qty |
|----------|--------|-------------|------|----------|-----|--------|------|------|------|-----------------------|------|--------|------|---------------|
|          |        | in          | mm   | in       | mm  | in     | mm   | in   | mm   | in                    | mm   | in     | mm   |               |
| VM-1002  | 1      | 3/8         | 9.5  | 0.11     | 2.8 | 0.44   | 11.2 | 0.50 | 12.7 | Single Hole in Center |      | 0.54   | 13.7 | 100           |
| VM-1004  | 1      | 1/2         | 12.7 | 0.11     | 2.8 | 0.52   | 13.2 | 0.50 | 12.7 | Single Hole in Center |      | 0.75   | 19.1 | 100           |
| VM-1007  | 1      | 11/16       | 17.5 | 0.15     | 3.8 | 0.78   | 19.8 | 0.50 | 12.7 | Single Hole in Center |      | 0.82   | 20.8 | 100           |
| VM-1008  | 1      | 3/4         | 19.1 | 0.15     | 3.8 | 0.97   | 24.6 | 0.50 | 12.7 | Single Hole in Center |      | 0.98   | 24.9 | 100           |
| VM-1010  | 2      | 1           | 25.4 | 0.15     | 3.8 | 1.03   | 26.1 | 1.12 | 28.4 | 0.750                 | 19.1 | 1.25   | 31.8 | 100           |
| VM-1011  | 2      | 1-3/8       | 34.9 | 0.15     | 3.8 | 1.51   | 38.4 | 1.16 | 29.5 | 0.750                 | 19.1 | 1.37   | 34.8 | 100           |
| VM-1024  | 3      | 1-1/2       | 38.1 | 0.15     | 3.8 | 1.67   | 42.4 | 1.70 | 43.2 | 0.750                 | 19.1 | 1.50   | 38.1 | 100           |
| VM-1030  | 4      | 2-1/4       | 57.2 | 0.15     | 3.8 | 2.50   | 63.5 | 1.52 | 38.6 | 0.750                 | 19.1 | 3.00   | 76.2 | 100           |

**ASK/RAK Series**  
**Adhesive Mount Aluminum Clamp**

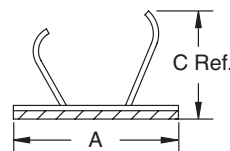


**Specifications:**

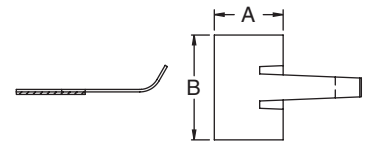
- Material: Aluminum, Bright Finish

**Features:**

- Aluminum arms are flexed around bundle
- Lightweight and durable
- Adhesive mount for quick installation



**Figure 1**



**Figure 2**

| Item No. | Figure | Ø Max Bundle |     | A    |      | B Base Depth |      | Bulk Pack Qty |
|----------|--------|--------------|-----|------|------|--------------|------|---------------|
|          |        | in           | mm  | in   | mm   | in           | mm   |               |
| ASK-3    | 1      | 0.234        | 6.0 | 0.44 | 11.3 | 0.66         | 16.8 | 250           |
| ASK-6    | 1      | 0.375        | 9.5 | 0.62 | 15.7 | 0.74         | 18.8 | 250           |
| RAK-1    | 2      | 0.234        | 6.0 | 0.44 | 11.3 | 0.67         | 17.1 | 250           |
| RAK-2    | 2      | 0.375        | 9.5 | 0.64 | 16.3 | 0.76         | 19.3 | 250           |

**VCC Series**  
**Vinyl Coated Adjustable Steel Clamp**

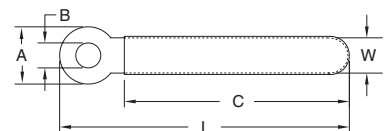


**Specifications:**

- Material: PVC Coated Soft Steel
- Color: Body - Steel Coating - Black

**Features:**

- For bundling and clamping cable or tubing securely
- Vinyl coating grips and insulates the cable
- Easily bends and forms to desired shape for varying holding diameters

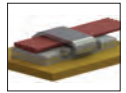


| Item No.   | Ø Bundle |      | C Ref. |       | L Ref. |       | W Ref. |     | A     |     | Ø B   |     | Pack Qty | Bulk Pack Qty |
|------------|----------|------|--------|-------|--------|-------|--------|-----|-------|-----|-------|-----|----------|---------------|
|            | in       | mm   | in     | mm    | in     | mm    | in     | mm  | in    | mm  | in    | mm  |          |               |
| VCC-83028  | 0.22     | 5.7  | 0.71   | 18.0  | 1.10   | 28.0  | 0.12   | 3.0 | 0.315 | 8.0 | 0.118 | 3.0 | 1        | 1000          |
| VCC-83535  | 0.31     | 7.9  | 0.98   | 25.0  | 1.34   | 35.0  | 0.20   | 5.0 | 0.315 | 8.0 | 0.138 | 3.5 | 1        | 1000          |
| VCC-83540  | 0.37     | 9.5  | 1.18   | 30.0  | 1.57   | 40.0  | 0.12   | 3.0 | 0.315 | 8.0 | 0.138 | 3.5 | 1        | 1000          |
| VCC-63048  | 0.50     | 12.7 | 1.57   | 40.0  | 1.89   | 48.0  | 0.08   | 2.0 | 0.236 | 6.0 | 0.118 | 3.0 | 1        | 1000          |
| VCC-84554  | 0.52     | 13.3 | 1.65   | 42.0  | 2.13   | 54.0  | 0.19   | 4.8 | 0.315 | 8.0 | 0.177 | 4.5 | 1        | 1000          |
| VCC-63254  | 0.57     | 14.6 | 1.81   | 46.0  | 2.13   | 54.0  | 0.14   | 3.6 | 0.236 | 6.0 | 0.126 | 3.2 | 1        | 1000          |
| VCC-83664  | 0.66     | 16.9 | 2.09   | 53.0  | 2.52   | 64.0  | 0.20   | 5.0 | 0.315 | 8.0 | 0.161 | 4.1 | 1        | 1000          |
| VCC-84576  | 0.81     | 20.7 | 2.56   | 65.0  | 2.99   | 76.0  | 0.18   | 4.5 | 0.315 | 8.0 | 0.177 | 4.5 | 1        | 1000          |
| VCC-84584  | 0.90     | 22.9 | 2.83   | 72.0  | 3.31   | 84.0  | 0.18   | 4.5 | 0.315 | 8.0 | 0.177 | 4.5 | 1        | 1000          |
| VCC-845126 | 1.40     | 35.6 | 4.41   | 112.0 | 4.96   | 126.0 | 0.24   | 6.0 | 0.315 | 8.0 | 0.177 | 4.5 | 1        | 100           |



# CABLE CLIPS & CLAMPS

## PFC Series Adhesive Mount Foam Coated Adjustable Steel Clamps

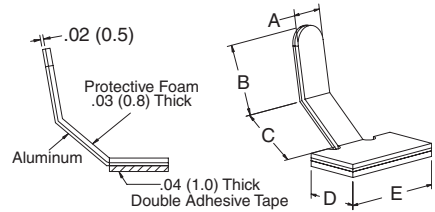


**Specifications:**

- Material: Foam Coated Aluminum
- Color: Gray Coated

**Features:**

- Made of aluminum with a protective foam coating on the inside of the clamp that protects cables and fibers
- Flexible arm holds flat, round or oddly shaped components
- Arm may be opened or closed repeatedly and reshaped for varying holding diameters



| Item No. | A Ref. |     | B Ref. |      | C Ref. |      | D     |      | E     |      | Bulk Pack Qty |
|----------|--------|-----|--------|------|--------|------|-------|------|-------|------|---------------|
|          | in     | mm  | in     | mm   | in     | mm   | in    | mm   | in    | mm   |               |
| PFC-25M  | 0.189  | 4.8 | 0.494  | 12.6 | 0.437  | 11.1 | 0.397 | 10.1 | 0.751 | 19.1 | 1000          |
| PFC-50M  | 0.205  | 5.2 | 0.573  | 14.6 | 0.555  | 14.1 | 0.553 | 14.1 | 0.982 | 25.0 | 1000          |

## RWS/RWSB Series Round Clamps

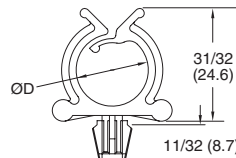


Figure 1

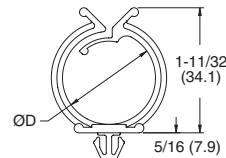


Figure 2

**Specifications:**

- Material: Nylon 6/6
- Color: See Table

**Features:**

- Gathers and routes cables and wires
- Push mount design allows for fast installation
- Adhesive base makes installation quick and easy

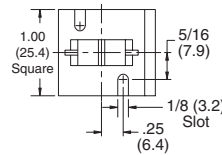


Figure 3



| Item No.       | UL94 V-2  | UL94 V-0 | Mounting Method | Approval | Figure | Ø D Holding |      | Ø Mounting Hole |     | Panel Thickness |           | Depth |      | Color   | Bulk Pack Qty |
|----------------|-----------|----------|-----------------|----------|--------|-------------|------|-----------------|-----|-----------------|-----------|-------|------|---------|---------------|
|                |           |          |                 |          |        | in          | mm   | in              | mm  | in              | mm        | in    | mm   |         |               |
| RWS-10-01      | RWS-10-19 |          | Snap-In         | UL       | 1      | 0.625       | 15.9 | Ø.250           | 6.4 | 0.030 - 0.060   | 0.8 - 1.5 | 0.297 | 17.5 | Natural | 1000          |
| RWS-10-01BK    | —         |          | Snap-In         | UL       | 1      | 0.625       | 15.9 | Ø.250           | 6.4 | 0.030 - 0.060   | 0.8 - 1.5 | 0.297 | 17.5 | Black   | 1000          |
| RWS-16-01      | RWS-16-19 |          | Snap-In         | UL       | 2      | 1.000       | 25.4 | .250 Square     | 6.4 | 0.058 - 0.064   | 1.5 - 1.6 | 0.297 | 17.5 | Natural | 1000          |
| RWS-16-01BK    | —         |          | Snap-In         | UL       | 2      | 1.000       | 25.4 | .250 Square     | 6.4 | 0.058 - 0.064   | 1.5 - 1.6 | 0.297 | 17.5 | Black   | 1000          |
| RWSB-10-01A-RT | —         |          | Adhesive        | —        | 3      | 0.625       | 15.9 | —               | —   | —               | —         | 1.000 | 25.4 | Natural | 1000          |
| RWSB-16-01A-RT | —         |          | Adhesive        | —        | 3      | 1.000       | 25.4 | —               | —   | —               | —         | 1.000 | 25.4 | Natural | 1000          |
| RWSB-10-01     | —         |          | Screw           | —        | 3      | 0.625       | 15.9 | —               | —   | —               | —         | 1.000 | 25.4 | Natural | 1000          |
| RWSB-16-01     | —         |          | Screw           | —        | 3      | 1.000       | 25.4 | —               | —   | —               | —         | 1.000 | 25.4 | Natural | 1000          |

## WCB Series Cord Clips On Adhesive Base

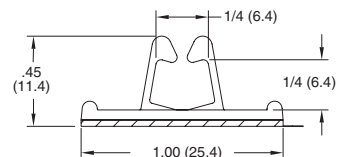
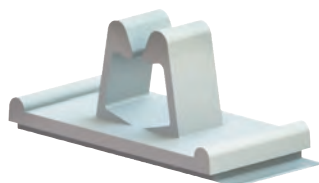


**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Routes and fastens cords and cables
- Adhesive mount design for quick and easy installation



| Item No.       | Approval | Depth |      | Bulk Pack Qty |
|----------------|----------|-------|------|---------------|
|                |          | in    | mm   |               |
| WCB-250-01A-RT | UL       | 0.500 | 12.7 | 1000          |





**SCCA/SCCB Series  
Standoff Cable Clips**

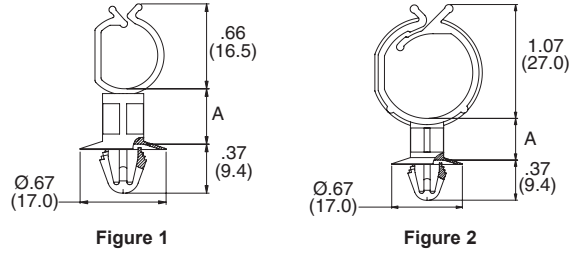


**Specifications:**

- Material: Nylon 6/6
- Color: Natural
- Mounting Hole: 0.256 - 0.276 (6.5 - 7.0)
- Panel Thickness: 0.024 - 0.079 (0.6 - 2.0)

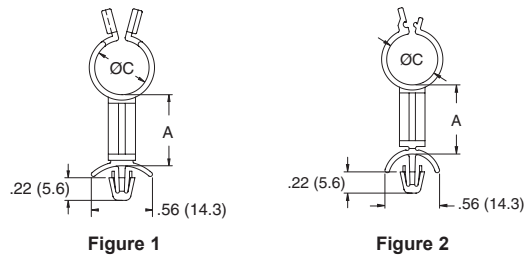
**Features:**

- Gathers and routes wires
- Standoff design provides spacing between the wires and chassis



| Item No.  |           | Figure | Ø Max Bundle |      | A    |      | Bulk Pack Qty |
|-----------|-----------|--------|--------------|------|------|------|---------------|
| UL94 V-2  | UL94 V-0  |        | in           | mm   | in   | mm   |               |
| SCCA-1-01 | SCCA-1-19 | 1      | 0.43         | 11.0 | 0.16 | 4.0  | 1000          |
| SCCA-2-01 | SCCA-2-19 | 1      | 0.43         | 11.0 | 0.24 | 6.0  | 1000          |
| SCCA-3-01 | SCCA-3-19 | 1      | 0.43         | 11.0 | 0.32 | 8.0  | 1000          |
| SCCA-4-01 | —         | 1      | 0.43         | 11.0 | 0.39 | 10.0 | 1000          |
| SCCA-5-01 | SCCA-5-19 | 1      | 0.43         | 11.0 | 0.47 | 12.0 | 1000          |
| SCCB-1-01 | SCCB-1-19 | 2      | 0.87         | 22.0 | 0.16 | 4.0  | 1000          |
| SCCB-2-01 | —         | 2      | 0.87         | 22.0 | 0.24 | 6.0  | 1000          |
| SCCB-3-01 | SCCB-3-19 | 2      | 0.87         | 22.0 | 0.32 | 8.0  | 1000          |
| SCCB-4-01 | —         | 2      | 0.87         | 22.0 | 0.39 | 10.0 | 1000          |
| SCCB-5-01 | SCCB-5-19 | 2      | 0.87         | 22.0 | 0.47 | 12.0 | 1000          |
| SCCB-6-01 | —         | 2      | 0.87         | 22.0 | 1.18 | 30.0 | 1000          |

**SLCS/SLCSE Series  
Standoff Locking Clips**

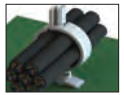


**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural
- Mounting Hole: .187 (4.8)
- SLCS/SLCSE Panel Thickness: 0.031 - 0.078 (0.8 - 2.0)
- SLCSE2 Panel Thickness: 0.078 - 0.160 (2.0 - 4.0)

**Features:**

- Gathers and routes wires
- Easy locking design makes it easy to open and close with very little effort
- Standoff design provides spacing between the wires and the chassis



| Item No.       | Approval | Figure | A     |      | Ø C Max Bundle |      | Bulk Pack Qty |
|----------------|----------|--------|-------|------|----------------|------|---------------|
|                |          |        | in    | mm   | in             | mm   |               |
| SLCS-250-3-01  |          | 1      | 0.187 | 4.8  | 0.187          | 4.8  | 1000          |
| SLCS-250-4-01  |          | 1      | 0.250 | 6.4  | 0.187          | 4.8  | 1000          |
| SLCS-250-6-01  |          | 1      | 0.375 | 9.5  | 0.187          | 4.8  | 1000          |
| SLCS-250-8-01  |          | 1      | 0.500 | 12.7 | 0.187          | 4.8  | 1000          |
| SLCS-250-16-01 |          | 1      | 1.000 | 25.4 | 0.187          | 4.8  | 1000          |
| SLCS-370-3-01  |          | 1      | 0.187 | 4.8  | 0.312          | 7.9  | 1000          |
| SLCS-370-4-01  |          | 1      | 0.250 | 6.4  | 0.312          | 7.9  | 1000          |
| SLCS-370-6-01  |          | 1      | 0.375 | 9.5  | 0.312          | 7.9  | 1000          |
| SLCS-370-8-01  |          | 1      | 0.500 | 12.7 | 0.312          | 7.9  | 1000          |
| SLCS-370-16-01 |          | 1      | 1.000 | 25.4 | 0.312          | 7.9  | 1000          |
| SLCS-500-3-01  |          | 1      | 0.187 | 4.8  | 0.437          | 11.1 | 1000          |
| SLCS-500-4-01  |          | 1      | 0.250 | 6.4  | 0.437          | 11.1 | 1000          |
| SLCS-500-6-01  |          | 1      | 0.375 | 9.5  | 0.437          | 11.1 | 1000          |
| SLCS-500-8-01  |          | 1      | 0.500 | 12.7 | 0.437          | 11.1 | 1000          |

| Item No.        | Approval | Figure | A     |      | Ø C Max Bundle |      | Bulk Pack Qty |
|-----------------|----------|--------|-------|------|----------------|------|---------------|
|                 |          |        | in    | mm   | in             | mm   |               |
| SLCS-500-16-01  |          | 1      | 1.000 | 25.4 | 0.437          | 11.1 | 1000          |
| SLCS-750-3-01   |          | 1      | 0.187 | 4.8  | 0.687          | 17.5 | 1000          |
| SLCS-750-4-01   |          | 1      | 0.250 | 6.4  | 0.687          | 17.5 | 1000          |
| SLCS-750-6-01   |          | 1      | 0.375 | 9.5  | 0.687          | 17.5 | 1000          |
| SLCS-750-8-01   |          | 1      | 0.500 | 12.7 | 0.687          | 17.5 | 1000          |
| SLCS-750-16-01  |          | 1      | 1.000 | 25.4 | 0.687          | 17.5 | 1000          |
| SLCSE-250-3-01  |          | 2      | 0.187 | 4.8  | 0.220          | 5.6  | 1000          |
| SLCSE-370-3-01  |          | 2      | 0.187 | 4.8  | 0.350          | 8.9  | 1000          |
| SLCSE-500-3-01  |          | 2      | 0.187 | 4.8  | 0.470          | 12.0 | 1000          |
| SLCSE-750-3-01  |          | 2      | 0.187 | 4.8  | 0.730          | 18.4 | 1000          |
| SLCSE2-250-3-01 |          | 2      | 0.187 | 4.8  | 0.220          | 5.6  | 1000          |
| SLCSE2-370-3-01 |          | 2      | 0.187 | 4.8  | 0.350          | 8.9  | 1000          |
| SLCSE2-500-3-01 |          | 2      | 0.187 | 4.8  | 0.470          | 12.0 | 1000          |
| SLCSE2-750-3-01 |          | 2      | 0.187 | 4.8  | 0.730          | 18.4 | 1000          |



# CABLE CLIPS / TWIST TIES

## SHK/SHKE/SHKBS Series Standoff Cable Clips

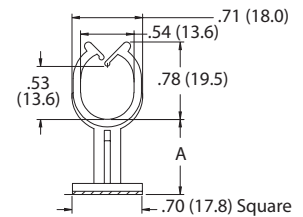
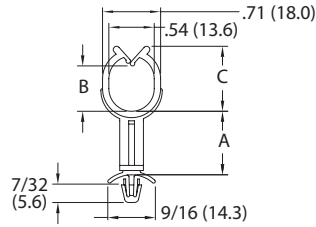


Figure 1

Figure 2

Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Gathers and routes wire harnesses
- Standoff design provides spacing between the wire harnesses and the chassis

| Item No.       | Approval | Figure | A     |      | B Ref. |      | C Ref. |      | Ø Mounting Hole |     | Panel Thickness |           | Bulk Pack Qty |
|----------------|----------|--------|-------|------|--------|------|--------|------|-----------------|-----|-----------------|-----------|---------------|
|                |          |        | in    | mm   | in     | mm   | in     | mm   | in              | mm  | in              | mm        |               |
| SHK-6-01       |          | 1      | 0.375 | 9.5  | 0.540  | 13.6 | 0.770  | 19.5 | 0.187           | 4.8 | 0.031 - 0.78    | 0.8 - 2.0 | 1000          |
| SHK-8-01       |          | 1      | 0.500 | 12.7 | 0.540  | 13.6 | 0.770  | 19.5 | 0.187           | 4.8 | 0.031 - 0.78    | 0.8 - 2.0 | 1000          |
| SHKE-6-01      | —        | 1      | 0.375 | 9.5  | 0.810  | 20.6 | 1.140  | 29.0 | 0.187           | 4.8 | 0.031 - 0.78    | 0.8 - 2.0 | 1000          |
| SHKE-8-01      | —        | 1      | 0.500 | 12.7 | 0.810  | 20.6 | 1.140  | 29.0 | 0.187           | 4.8 | 0.031 - 0.78    | 0.8 - 2.0 | 1000          |
| SHKBS-4-01A-RT | —        | 2      | 0.250 | 6.4  | —      | —    | —      | —    | —               | —   | —               | —         | 1000          |
| SHKBS-8-01A-RT | —        | 2      | 0.500 | 12.7 | —      | —    | —      | —    | —               | —   | —               | —         | 1000          |

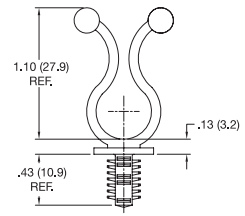
## STL-8 Series Standoff Twist Locks

Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

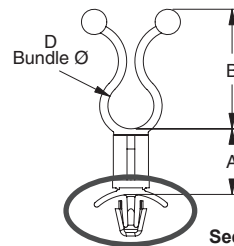
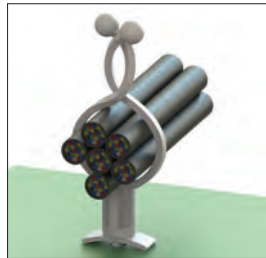
Features:

- Lifts wires off board to isolate from other board components
- Cable and wire bundles load and unload with a fingertip twist



| Item No.       | Ø Bundle      |             | Ø Mounting Hole |     | Min Board Thickness |     | Bulk Pack Qty |
|----------------|---------------|-------------|-----------------|-----|---------------------|-----|---------------|
|                | in            | mm          | in              | mm  | in                  | mm  |               |
| STL-8-450-2-01 | 0.400 - 0.500 | 10.2 - 12.7 | 0.250           | 6.4 | 0.250               | 7.2 | 1000          |

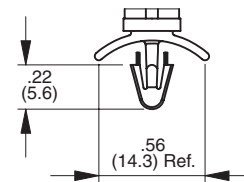
## STL Series Standoff Twist Locks



Hole Ø: .187 (4.75)  
Panel Thickness:  
.031-.078 (0.8-2)

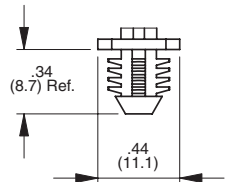
See Individual Styles for Mounting Details

STL Basic Style



Hole Ø: .156 (4)  
Panel Thickness:  
.031-.078 (0.8-2)

STL-1



Hole Ø: .312 (7.9)  
Panel Thickness:  
.250 (7.9) Minimum

STL-3

Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Lifts wires off board to isolate from other board components
- Cable and wire bundles load and unload with a fingertip twist
- Four mounting styles

| STL Basic Style | Item No.       |                | Approval | Ø D Bundle    |             | A Spacer Length |      | B Ref. |      | Bulk Pack Qty |
|-----------------|----------------|----------------|----------|---------------|-------------|-----------------|------|--------|------|---------------|
|                 | STL-1          | STL-3          |          | in            | mm          | in              | mm   | in     | mm   |               |
| STL-250-3-01    | STL-1-250-3-01 | STL-3-250-3-01 |          | 0.200 - 0.300 | 5.1 - 7.6   | 0.187           | 4.8  | 0.750  | 19.1 | 1000          |
| STL-250-8-01    | STL-1-250-8-01 | STL-3-250-8-01 |          | 0.200 - 0.300 | 5.1 - 7.6   | 0.500           | 12.7 | 0.750  | 19.1 | 1000          |
| STL-350-3-01    | STL-1-350-3-01 | STL-3-350-3-01 |          | 0.300 - 0.400 | 7.6 - 10.2  | 0.187           | 4.8  | 0.910  | 23.1 | 1000          |
| STL-350-8-01    | STL-1-350-8-01 | STL-3-350-8-01 |          | 0.300 - 0.400 | 7.6 - 10.2  | 0.500           | 12.7 | 0.910  | 23.1 | 1000          |
| STL-450-3-01    | STL-1-450-3-01 | STL-3-450-3-01 |          | 0.400 - 0.500 | 10.2 - 12.7 | 0.187           | 4.8  | 1.090  | 27.7 | 1000          |
| STL-450-8-01    | STL-1-450-8-01 | STL-3-450-8-01 |          | 0.400 - 0.500 | 10.2 - 12.7 | 0.500           | 12.7 | 1.090  | 27.7 | 1000          |
| STL-600-3-01    | STL-1-600-3-01 | STL-3-600-3-01 |          | 0.500 - 0.600 | 12.7 - 15.2 | 0.187           | 4.8  | 1.280  | 32.5 | 1000          |
| STL-600-8-01    | STL-1-600-8-01 | STL-3-600-8-01 |          | 0.500 - 0.600 | 12.7 - 15.2 | 0.500           | 12.7 | 1.280  | 32.5 | 1000          |
| STL-750-3-01    | STL-1-750-3-01 | STL-3-750-3-01 |          | 0.700 - 0.800 | 17.8 - 20.3 | 0.187           | 4.8  | 1.450  | 36.8 | 1000          |
| STL-750-8-01    | STL-1-750-8-01 | STL-3-750-8-01 |          | 0.700 - 0.800 | 17.8 - 20.3 | 0.500           | 12.7 | 1.450  | 36.8 | 1000          |



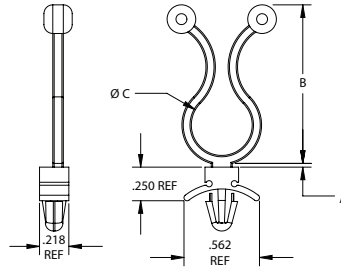
**23EZS Series  
Standoff Twist Locks**

Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Unique locking base easily snaps into chassis by hand
- Cables and wires can be added or removed with the twist of a fingertip



| Item No.       | Ø C Bundle |      | Ø Mounting Hole |     | Panel Thickness |           | A Spacer Length |      | Ø Hole |     | B Ref. |      | Bulk Pack Qty |
|----------------|------------|------|-----------------|-----|-----------------|-----------|-----------------|------|--------|-----|--------|------|---------------|
|                | in         | mm   | in              | mm  | in              | mm        | in              | mm   | in     | mm  | in     | mm   |               |
| 23EZS0200N0030 | 0.200      | 5.1  | 0.187           | 4.7 | 0.030 - 0.078   | 0.8 - 2.0 | 0.011           | 0.3  | 0.187  | 4.7 | 0.844  | 21.4 | 1000          |
| 23EZS0250N0954 | 0.250      | 6.4  | 0.187           | 4.7 | 0.030 - 0.078   | 0.8 - 2.0 | 0.954           | 24.2 | 0.187  | 4.7 | 0.876  | 22.3 | 1000          |
| 23EZS0375N0030 | 0.375      | 9.5  | 0.187           | 4.7 | 0.030 - 0.078   | 0.8 - 2.0 | 0.050           | 1.3  | 0.187  | 4.7 | 1.066  | 27.1 | 1000          |
| 23EZS0450N0030 | 0.450      | 11.4 | 0.187           | 4.7 | 0.030 - 0.078   | 0.8 - 2.0 | 0.028           | 0.7  | 0.187  | 4.7 | 1.180  | 30.0 | 1000          |
| 23EZS0450N0625 | 0.450      | 11.4 | 0.187           | 4.7 | 0.030 - 0.078   | 0.8 - 2.0 | 0.615           | 15.6 | 0.187  | 4.7 | 1.184  | 30.1 | 1000          |
| 23EZS0625N0028 | 0.625      | 15.9 | 0.187           | 4.7 | 0.030 - 0.078   | 0.8 - 2.0 | 0.028           | 0.7  | 0.187  | 4.7 | 1.270  | 32.3 | 1000          |

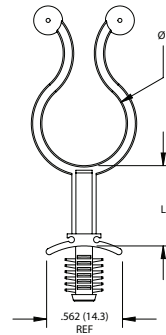
**23EZF Series  
Fir Tree Standoff Twist Locks**

Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Lifts wires off board to isolate from other board components
- Quick and easy to use
- Cables and wires can be added or removed with the twist of a fingertip



| Item No.     | Ø D Bundle |      | Ø Mounting Hole |     | Panel Thickness |           | L     |      | Bulk Pack Qty |
|--------------|------------|------|-----------------|-----|-----------------|-----------|-------|------|---------------|
|              | in         | mm   | in              | mm  | in              | mm        | in    | mm   |               |
| 23EZF037B025 | 0.375      | 9.5  | 0.187           | 4.8 | 0.031 - 0.250   | 0.8 - 6.4 | 0.200 | 5.1  | 1000          |
| 23EZF037B037 | 0.375      | 9.5  | 0.187           | 4.8 | 0.031 - 0.250   | 0.8 - 6.4 | 0.315 | 8.0  | 1000          |
| 23EZF037B050 | 0.375      | 9.5  | 0.187           | 4.8 | 0.031 - 0.250   | 0.8 - 6.4 | 0.437 | 11.1 | 1000          |
| 23EZF037B062 | 0.375      | 9.5  | 0.187           | 4.8 | 0.031 - 0.250   | 0.8 - 6.4 | 0.555 | 14.1 | 1000          |
| 23EZF050C037 | 0.500      | 12.7 | 0.250           | 6.4 | 0.031 - 0.250   | 0.8 - 6.4 | 0.318 | 8.1  | 1000          |
| 23EZF050C050 | 0.500      | 12.7 | 0.250           | 6.4 | 0.031 - 0.250   | 0.8 - 6.4 | 0.447 | 11.4 | 1000          |
| 23EZF050C062 | 0.500      | 12.7 | 0.250           | 6.4 | 0.031 - 0.250   | 0.8 - 6.4 | 0.596 | 15.1 | 500           |
| 23EZF050C100 | 0.500      | 12.7 | 0.250           | 6.4 | 0.031 - 0.250   | 0.8 - 6.4 | 0.942 | 23.9 | 500           |
| 23EZF062C037 | 0.625      | 15.9 | 0.250           | 6.4 | 0.031 - 0.250   | 0.8 - 6.4 | 0.319 | 8.1  | 1000          |
| 23EZF062C050 | 0.625      | 15.9 | 0.250           | 6.4 | 0.031 - 0.250   | 0.8 - 6.4 | 0.442 | 11.2 | 500           |
| 23EZF062C062 | 0.625      | 15.9 | 0.250           | 6.4 | 0.031 - 0.250   | 0.8 - 6.4 | 0.595 | 15.1 | 500           |
| 23EZF062C100 | 0.625      | 15.9 | 0.250           | 6.4 | 0.031 - 0.250   | 0.8 - 6.4 | 0.935 | 23.8 | 500           |

**BHKL Series  
Fir-Tree Curly Locks**

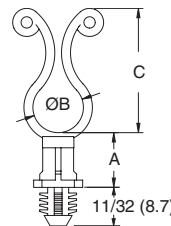


Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural
- To press fit in a .312 (7.9) Ø hole in a 0.250 (6.4) minimum panel thickness

Features:

- Ends twist into place with very little effort
- Releasable and reusable for easy wire bundling
- Rounded edges prevent abrasion



| Item No.       | Approval | Ø B Bundle    |             | A     |      | C Ref. |      | Bulk Pack Qty |
|----------------|----------|---------------|-------------|-------|------|--------|------|---------------|
|                |          | in            | mm          | in    | mm   | in     | mm   |               |
| BHKL-350-4-01  |          | 0.300 - 0.400 | 7.6 - 10.2  | 0.250 | 6.4  | 1.000  | 25.4 | 1000          |
| BHKL-350-10-01 |          | 0.300 - 0.400 | 7.6 - 10.2  | 0.625 | 15.9 | 1.000  | 25.4 | 1000          |
| BHKL-450-4-01  |          | 0.400 - 0.500 | 10.2 - 12.7 | 0.250 | 6.4  | 1.125  | 28.6 | 1000          |
| BHKL-450-6-01  |          | 0.400 - 0.500 | 10.2 - 12.7 | 0.375 | 9.5  | 1.125  | 28.6 | 1000          |
| BHKL-750-4-01  |          | 0.700 - 0.800 | 17.8 - 20.3 | 0.250 | 6.4  | 1.500  | 38.1 | 1000          |
| BHKL-750-6-01  |          | 0.700 - 0.800 | 17.8 - 20.3 | 0.375 | 9.5  | 1.500  | 38.1 | 1000          |



# TWIST TIES

## KLBS/23EZAB Series Adhesive Mount Standoff Curly Locks



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Ends twist into place with very little effort
- Releasable and reusable for easy wire bundling
- Rounded edges prevent abrasion

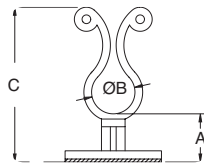


Figure 1



Figure 2

| Item No.        | Figure | Approval | A     |      | Ø B Bundle    |            | C Ref. |      | Base          |             | Bulk Pack Qty |
|-----------------|--------|----------|-------|------|---------------|------------|--------|------|---------------|-------------|---------------|
|                 |        |          | in    | mm   | in            | mm         | in     | mm   | in            | mm          |               |
| KLBS-350-401A   | 1      |          | 0.250 | 6.4  | 0.300 - 0.400 | 7.6 - 10.2 | 1.281  | 32.5 | 1.000 x 1.000 | 25.4 x 25.4 | 1000          |
| KLBS-3508-01A   | 1      |          | 0.500 | 12.7 | 0.300 - 0.401 | 7.6 - 10.2 | 1.531  | 38.9 | 1.000 x 1.000 | 25.4 x 25.4 | 1000          |
| KLBS-35012-01A  | 1      |          | 0.750 | 19.1 | 0.300 - 0.402 | 7.6 - 10.2 | 1.781  | 45.2 | 1.000 x 1.000 | 25.4 x 25.4 | 1000          |
| KLBS-35016-01A  | 1      |          | 1.000 | 25.4 | 0.300 - 0.403 | 7.6 - 10.2 | 2.031  | 51.6 | 1.000 x 1.000 | 25.4 x 25.4 | 1000          |
| • 23EZABS450TAB | 2      | —        | 1.070 | 27.2 | 0.450         | 11.4       | 2.149  | 54.6 | 1.000 x 1.000 | 25.4 x 25.4 | 1000          |
| • 23EZAB450TAB  | 2      | —        | 0.190 | 4.8  | 0.450         | 11.4       | 1.230  | 31.2 | 1.000 x 0.520 | 25.4 x 13.2 | 1000          |
| • 23EZAB580TAB  | 2      | —        | 0.190 | 4.8  | 0.580         | 14.7       | 1.400  | 35.6 | 0.870 x 0.520 | 22.1 x 13.2 | 1000          |

## KLB Series Adhesive Mount Curly Locks

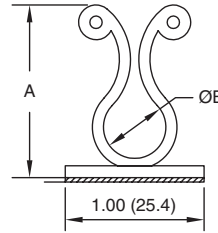


**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Cables are locked in place with a fingertip twist
- Cables are easily removable with another fingertip twist
- Quick mounting adhesive base does not require through-hole



| Item No.    | Approval | Ø B Bundle    |             | A Ref. |      | Base Depth |      | Bulk Pack Qty |
|-------------|----------|---------------|-------------|--------|------|------------|------|---------------|
|             |          | in            | mm          | in     | mm   | in         | mm   |               |
| KLB-350A-RT |          | 0.300 - 0.400 | 7.6 - 10.2  | 1.070  | 27.2 | 0.510      | 13.0 | 1000          |
| KLB-450A-RT |          | 0.400 - 0.500 | 10.2 - 12.7 | 1.230  | 31.2 | 0.510      | 13.0 | 1000          |
| KLB-750A-RT |          | 0.700 - 0.800 | 17.8 - 20.3 | 1.580  | 40.1 | 0.510      | 13.0 | 1000          |

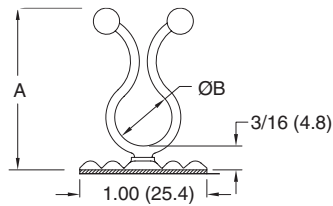
## TLFB Series Twist Locks on Flexible Adhesive Base

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Flexible rubber based adhesive base can be mounted onto contoured surfaces
- Cables are locked into place with a fingertip twist



| Item No.      | Ø B Bundle    |             | A Ref. |      | Base Depth |      | Bulk Pack Qty |
|---------------|---------------|-------------|--------|------|------------|------|---------------|
|               | in            | mm          | in     | mm   | in         | mm   |               |
| TLFB-350-01A1 | 0.300 - 0.400 | 0.08 - 10.2 | 1.150  | 29.3 | 0.500      | 12.7 | 1000          |
| TLFB-450-01A1 | 0.400 - 0.500 | 10.2 - 12.7 | 1.270  | 32.3 | 0.500      | 12.7 | 1000          |
| TLFB-750-01A1 | 0.700 - 0.800 | 17.8 - 20.3 | 1.610  | 40.9 | 0.500      | 12.7 | 1000          |

## TLJ Series Snap In Twist Locks

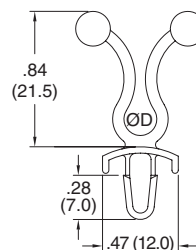


**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

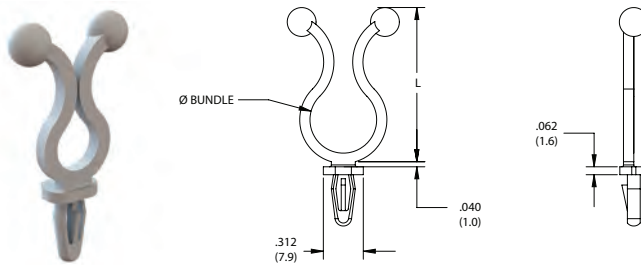
- Ends twist into place with very little effort
- Releasable and reusable for easy wire bundling



| Item No.   | Approval | Ø D Bundle    |           | Ø Mounting Hole |     | Panel Thickness |           | Bulk Pack Qty |
|------------|----------|---------------|-----------|-----------------|-----|-----------------|-----------|---------------|
|            |          | in            | mm        | in              | mm  | in              | mm        |               |
| TLJ-200-01 |          | 0.150 - 0.250 | 3.8 - 6.4 | 0.187           | 4.8 | 0.031 - 0.078   | 0.8 - 2.0 | 1000          |

**NEW**

**23EZS Series  
Snap In Twist Locks**



**Specifications:**

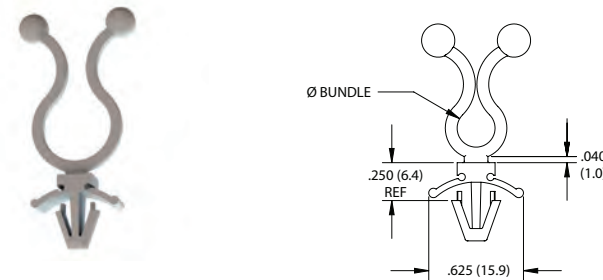
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Unique locking base easily snaps into chassis by hand
- Cables and wires can be added or removed with the twist of a fingertip

| Item No.       | Ø Bundle |      | Ø Mounting Hole |     | Panel Thickness |     | L     |      | Bulk Pack Qty |
|----------------|----------|------|-----------------|-----|-----------------|-----|-------|------|---------------|
|                | in       | mm   | in              | mm  | in              | mm  | in    | mm   |               |
| 23EZS0250C0040 | 0.250    | 6.4  | 0.156           | 4.0 | 0.063           | 1.6 | 0.875 | 22.2 | 1000          |
| 23EZS0375C0040 | 0.375    | 9.5  | 0.156           | 4.0 | 0.063           | 1.6 | 1.078 | 27.4 | 1000          |
| 23EZS0500C0040 | 0.500    | 12.7 | 0.156           | 4.0 | 0.063           | 1.6 | 1.203 | 30.6 | 1000          |

**23EZS Series  
Snap In Twist Locks**



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Unique locking base easily snaps into chassis by hand
- Cables and wires can be added or removed with the twist of a fingertip

| Item No.       | Ø Bundle |      | Ø Mounting Hole |     | Panel Thickness |           | Bulk Pack Qty |
|----------------|----------|------|-----------------|-----|-----------------|-----------|---------------|
|                | in       | mm   | in              | mm  | in              | mm        |               |
| 23EZS0250B0040 | 0.250    | 6.4  | 0.250           | 6.4 | 0.047 - 0.109   | 1.2 - 2.8 | 1000          |
| 23EZS0375B0040 | 0.375    | 9.5  | 0.250           | 6.4 | 0.047 - 0.109   | 1.2 - 2.8 | 1000          |
| 23EZS0500B0040 | 0.500    | 12.7 | 0.250           | 6.4 | 0.047 - 0.109   | 1.2 - 2.8 | 1000          |

**SKL/SKLO Series  
Side Entry & 45° Curly Locks**

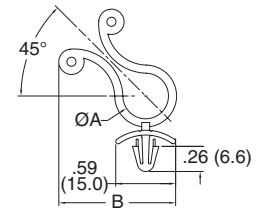
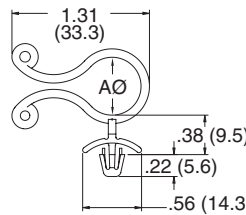


Figure 1

Figure 2

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural
- Mounting Hole: .187 (4.8)
- Panel Thickness: .031 - .078 (0.8 - 2.0)

**Features:**

- Gathers and routes wires
- Ends twist into place with very little effort
- Releasable and reusable for easy wire bundling
- Eases installation in hard to reach places

| Item No.    | Approval | Figure | Ø A Bundle    |             | B Ref.       |      | Bulk Pack Qty |
|-------------|----------|--------|---------------|-------------|--------------|------|---------------|
|             |          |        | in            | mm          | in           | mm   |               |
| SKLO-550-01 | RU       | 1      | 0.500 - 0.600 | 12.7 - 15.2 | See Figure 1 |      | 1000          |
| SKL45-250   | RU       | 2      | 0.150 - 0.250 | 3.8 - 6.35  | 0.980        | 24.9 | 1000          |
| SKL45-350   | RU       | 2      | 0.300 - 0.400 | 7.6 - 10.0  | 1.070        | 27.2 | 1000          |
| SKL45-450   | RU       | 2      | 0.400 - 0.470 | 10.0 - 12.0 | 1.120        | 28.4 | 1000          |

**KLH/TLH/TLHE Series  
Screw Mount Hinged Twist Locks**

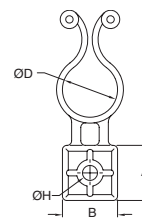
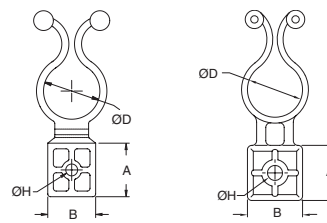


Figure 1

Figure 2

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

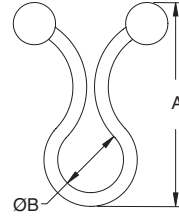
- Ends twist into place with very little effort
- Releasable and reusable for easy wire bundling
- Hinged design makes it easier to adjust your wire angles as needed for the application
- Screw mount design for easy and fast assembly

| Item No.      | Approval | Figure | Ø D Bundle    |             | Ø H Hole |     | Recommended Screw Size | A    |      | B    |      | Bulk Pack Qty |
|---------------|----------|--------|---------------|-------------|----------|-----|------------------------|------|------|------|------|---------------|
|               |          |        | in            | mm          | in       | mm  |                        | in   | mm   | in   | mm   |               |
| TLH-800-01    | RU       | 1      | 0.750 - 0.850 | 19.0 - 21.6 | 0.160    | 4.1 | #6 or M3               | 0.75 | 19.0 | 0.67 | 17.0 | 1000          |
| TLH-500-01    | —        | 1      | 0.450 - 0.550 | 11.4 - 14.0 | 0.170    | 4.2 | #8 or M4               | 0.56 | 14.2 | 0.55 | 14.0 | 1000          |
| TLHE-1-750-01 | —        | 1      | 0.700 - 0.800 | 17.8 - 20.3 | 0.204    | 5.2 | #10 or M5              | 0.75 | 19.0 | 0.67 | 17.0 | 1000          |
| KLH-750-01    | RU       | 2      | 0.700 - 0.800 | 17.8 - 20.3 | 0.204    | 5.2 | #10 or M5              | 0.75 | 19.0 | 0.75 | 19.0 | 1000          |



# TWIST TIES

## TL/TT/23EZ Series Twist Locks



**Specifications:**

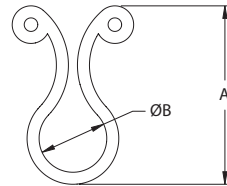
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Ends twist into place with very little effort
- Releasable and reusable for easy wire bundling
- Smooth ball shaped ends won't cut into wire or cable insulation

| Item No.    | Approval | Ø B Bundle    |             | A Ref. |      | Bulk Pack Qty |
|-------------|----------|---------------|-------------|--------|------|---------------|
|             |          | in            | mm          | in     | mm   |               |
| • 23EZ0125N | —        | 0.110 - 0.140 | 2.8 - 3.6   | 0.715  | 18.1 | 1000          |
| TT001A      | —        | 0.15 - 0.19   | 3.8 - 4.8   | 0.850  | 21.6 | 100           |
| TL-250      | RL       | 0.2 - 0.3     | 5.1 - 7.6   | 0.900  | 22.9 | 1000          |
| TL-350      | RL       | 0.3 - 0.4     | 7.6 - 10.2  | 1.030  | 26.1 | 1000          |
| TL-450      | RL       | 0.4 - 0.5     | 10.2 - 12.7 | 1.200  | 30.5 | 1000          |
| TL-600      | RL       | 0.55 - 0.65   | 14.0 - 16.5 | 1.330  | 33.7 | 1000          |
| TL-750      | RL       | 0.7 - 0.8     | 17.8 - 20.3 | 1.550  | 39.4 | 1000          |
| TL-950      | RL       | Max 1.000     | 25.4        | 1.700  | 43.4 | 1000          |
| TL-1125     | RL       | Max 1.187     | 30.2        | 2.190  | 55.6 | 1000          |
| • 23EZ1125N | —        | 1.200 - 1.300 | 30.5 - 33.0 | 2.170  | 55.1 | 1000          |
| TL-1375     | RL       | Max 1.437     | 36.5        | 2.680  | 68.1 | 1000          |
| • 23EZ1500N | —        | 1.550 - 1.650 | 39.4 - 41.9 | 2.930  | 74.4 | 250           |
| TL-1500     | RL       | Max 1.562     | 39.7        | 2.930  | 74.4 | 1000          |
| TL-1750     | RL       | Max 1.812     | 46.0        | 3.450  | 87.6 | 1000          |
| • 23EZ1750N | —        | 1.900 - 2.000 | 48.3 - 50.8 | 3.460  | 87.9 | 1250          |

## KL Series Curly Locks



**Specifications:**

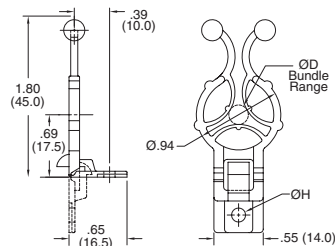
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Ends twist into place with very little effort
- Releasable and reusable for easy wire bundling
- Rounded edges prevent abrasion

| Item No. | Approval | Ø B Bundle    |             | A Ref. |      | Bulk Pack Qty |
|----------|----------|---------------|-------------|--------|------|---------------|
|          |          | in            | mm          | in     | mm   |               |
| KL-125   | RL       | 0.125 - 0.150 | 3.2 - 3.8   | 0.48   | 12.2 | 1000          |
| KL-200   | RL       | 0.160 - 0.240 | 4.1 - 6.1   | 0.82   | 20.7 | 1000          |
| KL-250   | RL       | 0.200 - 0.300 | 5.1 - 7.6   | 0.91   | 23.0 | 1000          |
| KL-350   | RL       | 0.300 - 0.400 | 7.6 - 10.2  | 1.03   | 26.2 | 1000          |
| KL-450   | RL       | 0.400 - 0.500 | 10.2 - 12.7 | 1.20   | 30.5 | 1000          |
| KL-600   | RL       | 0.550 - 0.650 | 14.0 - 16.5 | 1.25   | 31.8 | 1000          |
| KL-750   | RL       | 0.700 - 0.800 | 17.8 - 20.3 | 1.52   | 38.6 | 1000          |
| KL-950   | RL       | 0.900 - 1.000 | 22.9 - 25.4 | 1.75   | 44.5 | 1000          |

## WTLH Series Webbed Hinged Twist Locks



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

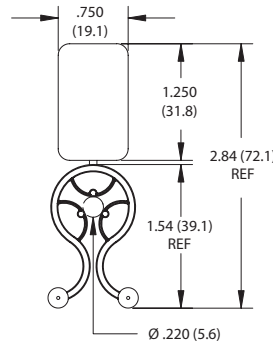
**Features:**

- Once clamp is hinged, it locks into position
- Webbed design provides a positive lock

| Item No.        | Ø Bundle D    |            | Ø H Hole |     | Recommended Screw Size | Bulk Pack Qty |
|-----------------|---------------|------------|----------|-----|------------------------|---------------|
|                 | in            | mm         | in       | mm  |                        |               |
| WTLH90-300-4-01 | 0.140 - 0.480 | 3.6 - 12.2 | 0.130    | 3.3 | #4 or M3               | 500           |
| WTLH90-300-6-01 | 0.140 - 0.480 | 3.6 - 12.2 | 0.150    | 3.8 | #6 or M3.5             | 500           |
| WTLH90300-M4-01 | 0.140 - 0.480 | 3.6 - 12.2 | 0.170    | 4.3 | #8 or M4               | 500           |



**23EZLB Series**  
**Webbed Labelled Twist Locks**



Specifications:

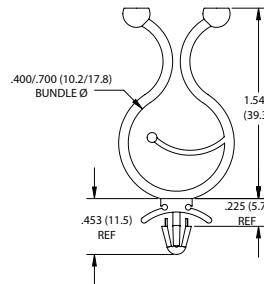
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Cables and wires can be added or removed with the twist of a fingertip
- Additional arm inside the twist lock for holding smaller wires or bundles
- Can use permanent ink pens, felt tip pens, pressure sensitive adhesive labels or even Post-it notes on the polished label area

| Item No.   | Bulk Pack Qty |
|------------|---------------|
| 23EZLB0220 | 500           |

**23EZSFA Series**  
**Snap In Twist Locks with Locking Arm**



Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

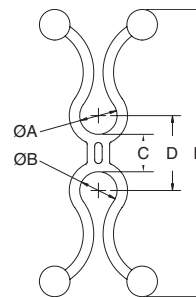
Features:

- Unique locking base easily snaps into chassis by hand
- Cables and wires can be added or removed with the twist of a fingertip
- Additional arm inside the twist lock for holding smaller wires or bundles

| Item No.         | Ø Mounting Hole |     | Panel Thickness |           | Bulk Pack Qty |
|------------------|-----------------|-----|-----------------|-----------|---------------|
|                  | in              | mm  | in              | mm        |               |
| 23EZSFA0500B0018 | 0.187           | 4.8 | 0.030 - 0.070   | 0.8 - 1.8 | 500           |



**DTL/23DBEZ Series**  
**Dual Twist Locks**



Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Routes and separates two bundles
- Six bundle diameter ranges; from .20" - .80"
- Three spacer lengths; 1/4", 3/4" and 1-1/4"
- Cables are locked in place with a fingertip twist

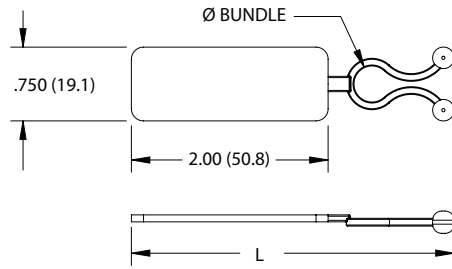


| Item No.      | Ø A and Ø B Bundle |             | C     |      | D     |      | E     |       | Bulk Pack Qty |
|---------------|--------------------|-------------|-------|------|-------|------|-------|-------|---------------|
|               | in                 | mm          | in    | mm   | in    | mm   | in    | mm    |               |
| DTL2525-4-01  | 0.200 - 0.300      | 5.1 - 7.6   | 0.250 | 6.4  | 0.500 | 12.7 | 1.920 | 48.8  | 500           |
| DTL2525-12-01 | 0.200 - 0.300      | 5.1 - 7.6   | 0.750 | 19.1 | 1.000 | 25.4 | 2.420 | 61.5  | 500           |
| DTL2525-20-01 | 0.200 - 0.300      | 5.1 - 7.6   | 1.250 | 31.8 | 1.500 | 38.1 | 2.920 | 74.2  | 500           |
| DTL3535-4-01  | 0.300 - 0.400      | 7.6 - 10.2  | 0.250 | 6.4  | 0.600 | 15.2 | 2.180 | 55.4  | 500           |
| 23DBEZ001     | 0.300 - 0.400      | 7.6 - 10.2  | 0.688 | 17.5 | —     | —    | 2.750 | 69.8  | 500           |
| DTL3535-12-01 | 0.300 - 0.400      | 7.6 - 10.2  | 0.750 | 19.1 | 1.100 | 27.9 | 2.680 | 68.1  | 500           |
| DTL3535-20-01 | 0.300 - 0.400      | 7.6 - 10.2  | 1.250 | 31.8 | 1.600 | 40.6 | 3.180 | 80.8  | 500           |
| DTL4545-4-01  | 0.400 - 0.500      | 10.2 - 12.7 | 0.250 | 6.4  | 0.600 | 15.2 | 2.180 | 55.4  | 500           |
| 23DBEZ002     | 0.400 - 0.500      | 10.2 - 12.7 | 0.688 | 17.5 | —     | —    | 2.969 | 74.4  | 250           |
| DTL4545-12-01 | 0.400 - 0.500      | 10.2 - 12.7 | 0.750 | 19.1 | 1.100 | 27.9 | 2.680 | 68.1  | 500           |
| DTL4545-20-01 | 0.400 - 0.500      | 10.2 - 12.7 | 1.250 | 31.8 | 1.600 | 40.6 | 3.180 | 80.8  | 500           |
| DTL5555-4-01  | 0.500 - 0.600      | 12.7 - 15.2 | 0.250 | 6.4  | 0.600 | 15.2 | 2.180 | 55.4  | 500           |
| DTL5555-12-01 | 0.500 - 0.600      | 12.7 - 15.2 | 0.750 | 19.1 | 1.100 | 27.9 | 2.680 | 68.1  | 500           |
| DTL5555-20-01 | 0.500 - 0.600      | 12.7 - 15.2 | 1.250 | 31.8 | 1.600 | 40.6 | 3.180 | 80.8  | 500           |
| DTL6565-4-01  | 0.600 - 0.700      | 15.2 - 17.8 | 0.250 | 6.4  | 0.600 | 15.2 | 2.180 | 55.4  | 500           |
| DTL6565-12-01 | 0.600 - 0.700      | 15.2 - 17.8 | 0.750 | 19.1 | 1.100 | 27.9 | 2.680 | 68.1  | 500           |
| DTL6565-20-01 | 0.600 - 0.700      | 15.2 - 17.8 | 1.250 | 31.8 | 1.600 | 40.6 | 3.180 | 80.8  | 500           |
| DTL7575-4-01  | 0.700 - 0.800      | 17.8 - 20.3 | 0.250 | 6.4  | 1.000 | 25.4 | 3.100 | 78.7  | 500           |
| DTL7575-12-01 | 0.700 - 0.800      | 17.8 - 20.3 | 0.750 | 19.1 | 1.500 | 38.1 | 3.600 | 91.4  | 500           |
| DTL7575-20-01 | 0.700 - 0.800      | 17.8 - 20.3 | 1.250 | 31.8 | 2.000 | 50.8 | 4.100 | 104.1 | 500           |



# TWIST TIES / CABLE CLIPS

## 23EZLB Series Label Twist Locks



**Specifications:**

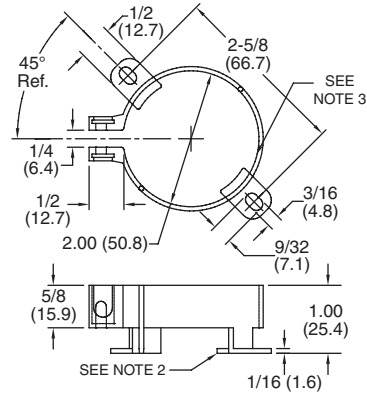
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Can use permanent ink pens, felt tip pens, pressure sensitive adhesive labels or even Post-it notes on the polished label area
- Resists corrosion and abrasion

| Item No.   | Ø Bundle |     | L     |      | Bulk Pack Qty |
|------------|----------|-----|-------|------|---------------|
|            | in       | mm  | in    | mm   |               |
| 23EZLB0250 | 0.250    | 6.4 | 3.094 | 78.6 | 500           |
| 23EZLB0375 | 0.375    | 9.5 | 3.281 | 83.3 | 500           |

## SCH/SCHS Series Standoff Capacitor Holders



**Specifications:**

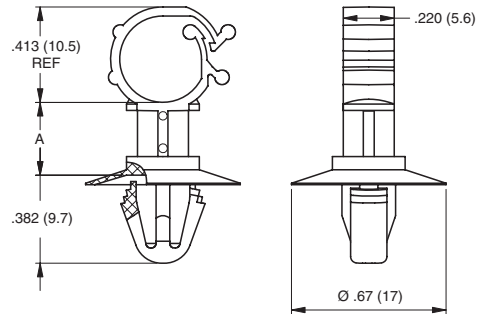
- Material: UL94 HB Glass Filled Nylon 6/6
- Color: Black

**Optional:**

1. Clamping hardware; Screw (S6B)  
Stainless Steel, Zinc Plating;  
Quick Nut (QN-6) Spring Steel C1050,  
Coating: Black Phosphate
2. Spacer to elevate capacitor 3/32 (2.4)  
from chassis
3. Anti-rotation rib (3 locations)

| Item No. | Description                           | Bulk Pack Qty |
|----------|---------------------------------------|---------------|
| SCHS-2   | w/ Spacer, w/o Hardware (see 1 above) | 100           |
| SCH-2    | w/o Spacer, w/o Hardware              | 100           |

## SCC Series Standoff Cable Clips Side Entry



**Specifications:**

- Material: UL94 V-0 Nylon 6/6
- Color: Natural

**Features:**

- Different spacer heights to lift cables away from other components
- Cables securely held in place

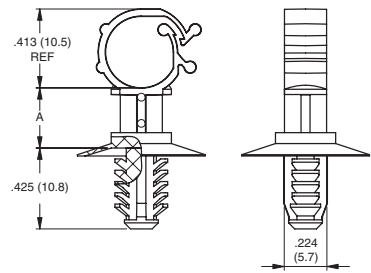
| Item No.     | A     |      | Ø Mounting Hole |           | Panel Thickness Range |            | Ø Max Bundle |     | Bulk Pack Qty |
|--------------|-------|------|-----------------|-----------|-----------------------|------------|--------------|-----|---------------|
|              | in    | mm   | in              | mm        | in                    | mm         | in           | mm  |               |
| SCC-SE-4-19  | 0.157 | 4.0  | 0.256 - 0.276   | 6.5 - 7.0 | 0.031 - 0.049         | 0.8 - 1.25 | 0.354        | 9.0 | 1000          |
| SCC-SE-8-19  | 0.315 | 8.0  | 0.256 - 0.276   | 6.5 - 7.0 | 0.031 - 0.049         | 0.8 - 1.25 | 0.354        | 9.0 | 1000          |
| SCC-SE-10-19 | 0.394 | 10.0 | 0.256 - 0.276   | 6.5 - 7.0 | 0.031 - 0.049         | 0.8 - 1.25 | 0.354        | 9.0 | 1000          |
| SCC-SE-12-19 | 0.472 | 12.0 | 0.256 - 0.276   | 6.5 - 7.0 | 0.031 - 0.049         | 0.8 - 1.25 | 0.354        | 9.0 | 1000          |



## CABLE CLIPS & CLEATS



### SCCBH Series Standoff Cable Clips Side Entry



**Specifications:**

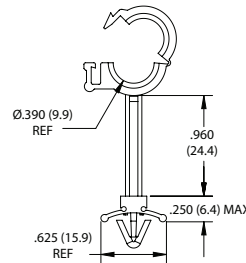
- Material: UL94 V-0 Nylon 6/6
- Color: Natural

**Features:**

- Different spacer heights to lift cables away from other components
- Cables securely held in place

| Item No.       | A     |      | Ø Mounting Hole |     | Min. Panel Thickness |     | A     |      | Ø Max Bundle |     | Bulk Pack Qty |
|----------------|-------|------|-----------------|-----|----------------------|-----|-------|------|--------------|-----|---------------|
|                | in    | mm   | in              | mm  | in                   | mm  | in    | mm   | in           | mm  |               |
| SCCBH-SE-4-19  | 0.157 | 4.0  | 0.256           | 6.5 | 0.028                | 0.7 | 0.157 | 4.0  | 0.354        | 9.0 | 1000          |
| SCCBH-SE-8-19  | 0.315 | 8.0  | 0.256           | 6.5 | 0.028                | 0.7 | 0.315 | 8.0  | 0.354        | 9.0 | 1000          |
| SCCBH-SE-10-19 | 0.394 | 10.0 | 0.256           | 6.5 | 0.028                | 0.7 | 0.394 | 10.0 | 0.354        | 9.0 | 1000          |
| SCCBH-SE-12-19 | 0.472 | 12.0 | 0.256           | 6.5 | 0.028                | 0.7 | 0.472 | 12.0 | 0.354        | 9.0 | 1000          |

### 22SOWC Series Standoff Clamps



**Specifications:**

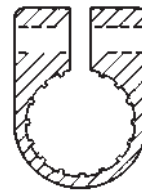
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Resistant to corrosion, vibration and abrasion

| Item No.     | Ø Mounting Hole |     | Panel Thickness |           | Ø Max Bundle |     | Bulk Pack Qty |
|--------------|-----------------|-----|-----------------|-----------|--------------|-----|---------------|
|              | in              | mm  | in              | mm        | in           | mm  |               |
| 22SOWC219390 | 0.219           | 5.6 | 0.030 - 0.055   | 0.8 - 1.4 | 0.390        | 9.9 | 500           |

### Cable Cleats



**Specifications:**

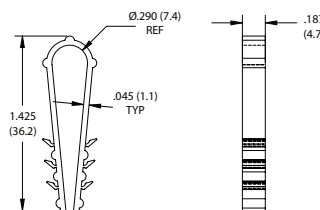
- Material: Low-Density Polyethylene
- Color: Black

**Features:**

- Offers a high-strength cable restraint
- Secures cables from various forces and provides strain relief
- Corrosion resistant

| Item No. | Size | Max. Cable Size |      | For Bolt Size |     | Bulk Pack Qty |
|----------|------|-----------------|------|---------------|-----|---------------|
|          |      | in              | mm   | in            | mm  |               |
| 12875    | 3    | 0.299           | 7.6  | 1/4           | M6  | 100           |
| 12876    | 4    | 0.398           | 10.0 | 1/4           | M6  | 100           |
| 12877    | 5    | 0.500           | 12.7 | 1/4           | M6  | 100           |
| 12848    | 6    | 0.598           | 15.2 | 1/4           | M6  | 100           |
| 12878    | 7    | 0.701           | 17.8 | 1/4           | M6  | 100           |
| 12879    | 8    | 0.799           | 20.3 | 1/4           | M6  | 100           |
| 12880    | 9    | 0.898           | 22.8 | 1/4           | M6  | 100           |
| 12881    | 10   | 1.000           | 25.4 | 1/4           | M6  | 100           |
| 12092    | 11   | 1.098           | 27.9 | 3/8           | M10 | 50            |
| 12882    | 12   | 1.181           | 30.0 | 3/8           | M10 | 50            |
| 12883    | 14   | 1.402           | 35.6 | 3/8           | M10 | 50            |
| 12884    | 16   | 1.598           | 40.6 | 3/8           | M10 | 50            |
| 12885    | 18   | 1.799           | 45.7 | 3/8           | M10 | 50            |
| 12886    | 20   | 1.984           | 50.4 | 3/8           | M10 | 50            |

### 22LF Series Loop Fasteners



**Specifications:**

- Material: High Density Polyethylene
- Color: Natural

**Features:**

- Used for the installation of pipes or cables on a wall or ceiling
- Easy to install
- Slip the "U" shaped fastener over wire or tube and push into drilled hole

| Item No.    | Ø Mounting Hole |     | Ø Max Bundle |     | Bulk Pack Qty |
|-------------|-----------------|-----|--------------|-----|---------------|
|             | in              | mm  | in           | mm  |               |
| 22LF1425250 | 0.250           | 6.4 | 0.290        | 6.4 | 500           |



# CABLE CLIPS / WIRE SADDLES

## XRC Series

### Cable Clips for Extruded Metal Rails

**Specifications:**

- Material: UL94 V-2 Glass Filled Nylon 6/6
- Color: Natural

**Features:**

- Several clip styles available
- Available for several different extruded rail sizes
- Two types of mounting: quarter turn or push in



Extruded Rail

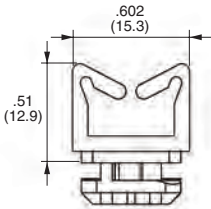
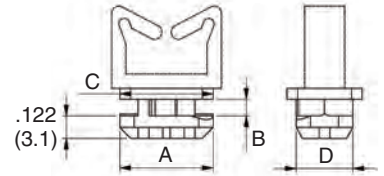


Figure 1

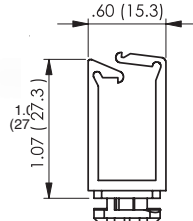


Figure 2

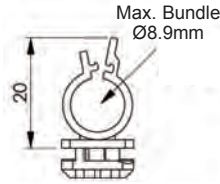


Figure 3

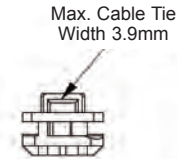


Figure 4

| Item No.    | Figure | A     |      | B     |      | C     |      | D     |     | Extruded Rail Size | Bulk Pack Qty |
|-------------|--------|-------|------|-------|------|-------|------|-------|-----|--------------------|---------------|
|             |        | in    | mm   | in    | mm   | in    | mm   | in    | mm  |                    |               |
| XRC2-WS101  | 1      | 0.394 | 10.0 | 0.063 | 1.6  | 0.394 | 10.0 | 0.228 | 5.8 | 20 x 20            | 1000          |
| XRC3-WS101  | 1      | 0.512 | 13.0 | 0.091 | 2.3  | 0.512 | 13.0 | 0.311 | 7.9 | 30 x 30            | 1000          |
| XRC4-WS101  | 1      | 0.630 | 16.0 | 0.242 | 6.2  | 0.630 | 16.0 | 0.386 | 9.8 | 40 x 40            | 1000          |
| XRC2-LWS01  | 2      | 0.394 | 10.0 | 0.063 | 1.6  | 0.394 | 10.0 | 0.228 | 5.8 | 20 x 20            | 1000          |
| XRC3-LWS01  | 2      | 0.512 | 13.0 | 0.091 | 2.3  | 0.512 | 13.0 | 0.311 | 7.9 | 30 x 30            | 1000          |
| XRC4-LWS01  | 2      | 0.630 | 16.0 | 0.242 | 6.2  | 0.630 | 16.0 | 0.386 | 9.8 | 40 x 40            | 1000          |
| XRC2-WSLT01 | 3      | 0.394 | 10.0 | 0.063 | 1.6  | 0.394 | 10.0 | 0.228 | 5.8 | 20 x 20            | 1000          |
| XRC3-WSLT01 | 3      | 0.512 | 13.0 | 0.091 | 2.3  | 0.512 | 13.0 | 0.311 | 7.9 | 30 x 30            | 1000          |
| XRC4-WSLT01 | 3      | 0.630 | 16.0 | 0.242 | 6.2  | 0.630 | 16.0 | 0.386 | 9.8 | 40 x 40            | 1000          |
| XRC2-TH01   | 4      | 0.394 | 10.0 | 0.063 | 1.6  | 0.394 | 10.0 | 0.228 | 5.8 | 20 x 20            | 1000          |
| XRC3-TH01   | 4      | 0.512 | 13.0 | 0.091 | 2.3  | 0.512 | 13.0 | 0.311 | 7.9 | 30 x 30            | 1000          |
| XRC4-TH01   | 4      | 0.630 | 16.0 | 0.242 | 6.15 | 0.630 | 16.0 | 0.386 | 9.8 | 40 x 40            | 1000          |

## DRC Series

### DIN Rail Wire Saddles

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- For use in all common DIN rail profiles
- Can be retrofitted to current installations

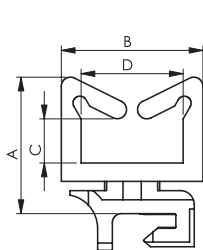
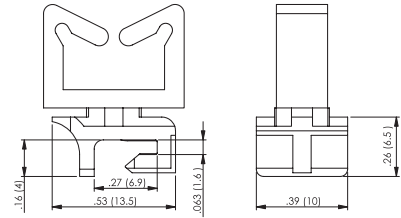


Figure 1

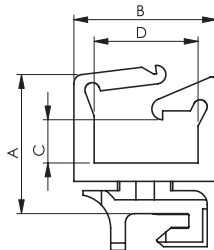


Figure 2

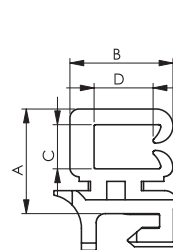


Figure 3

| Item No.   | Figure | A     |      | B     |      | C     |     | D     |      | Din Rail Style  | Bulk Pack Qty |
|------------|--------|-------|------|-------|------|-------|-----|-------|------|-----------------|---------------|
|            |        | in    | mm   | in    | mm   | in    | mm  | in    | mm   |                 |               |
| DRCC-WS01  | 1      | 0.583 | 14.8 | 0.606 | 15.4 | 0.189 | 4.8 | 0.437 | 11.1 | C-Profile       | 1000          |
| DRCC-LWS01 | 2      | 0.594 | 15.1 | 0.610 | 15.5 | 0.142 | 3.6 | 0.445 | 11.3 | C-Profile       | 1000          |
| DRCC-SEC01 | 3      | 0.449 | 11.4 | 0.441 | 11.2 | 0.189 | 4.8 | 0.252 | 6.4  | C-Profile       | 1000          |
| DRCT-WS01  | 1      | 0.583 | 14.8 | 0.606 | 15.4 | 0.189 | 4.8 | 0.437 | 11.1 | Top Hat Profile | 1000          |
| DRCT-LWS01 | 2      | 0.594 | 15.1 | 0.610 | 15.5 | 0.142 | 3.6 | 0.445 | 11.3 | Top Hat Profile | 1000          |
| DRCT-SEC01 | 3      | 0.449 | 11.4 | 0.441 | 11.2 | 0.189 | 4.8 | 0.252 | 6.4  | Top Hat Profile | 1000          |
| DRCG-WS01  | 1      | 0.583 | 14.8 | 0.606 | 15.4 | 0.189 | 4.8 | 0.437 | 11.1 | G-Profile       | 1000          |
| DRCG-LWS01 | 2      | 0.594 | 15.1 | 0.610 | 15.5 | 0.142 | 3.6 | 0.445 | 11.3 | G-Profile       | 1000          |
| DRCG-SEC01 | 3      | 0.449 | 11.4 | 0.441 | 11.2 | 0.189 | 4.8 | 0.252 | 6.4  | G-Profile       | 1000          |



**WS-SR/LWS-SR Series**  
Wire Saddles - Snap Rivet Mount

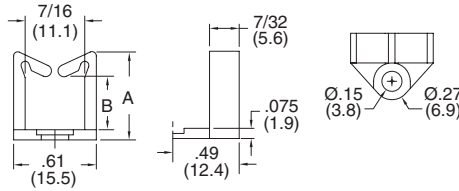


Figure 1

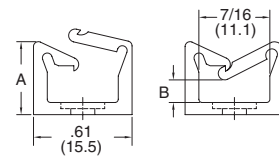
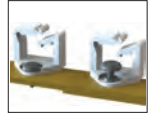


Figure 2



Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

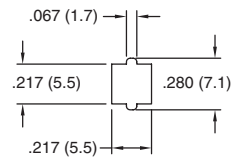
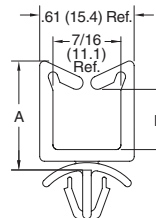
Features:

- Designed to mount easily on chassis with plastic SR rivet (See Table) or a #6 screw
- Allows mounting to a wide range of panel thicknesses; up to 0.219" thick

| Use Essentra Rivet Number | Chassis Thickness Range |           |
|---------------------------|-------------------------|-----------|
|                           | in                      | mm        |
| SR-3535                   | 0.010 - 0.046           | 0.3 - 1.2 |
| SR-3545                   | 0.046 - 0.081           | 1.2 - 2.1 |
| SR-3550                   | 0.069 - 0.105           | 1.8 - 2.7 |
| SR-3555                   | 0.081 - 0.120           | 2.1 - 3.7 |
| SR-3560                   | 0.109 - 0.144           | 2.8 - 3.7 |
| SR-3570                   | 0.140 - 0.180           | 3.6 - 4.6 |
| SR-3580                   | 0.180 - 0.219           | 4.6 - 5.6 |

| Item No.    | Figure | A    |      | B    |      | Ø Mounting Hole |           | Bulk Pack Qty |
|-------------|--------|------|------|------|------|-----------------|-----------|---------------|
|             |        | in   | mm   | in   | mm   | in              | mm        |               |
| WS-SR-1-01  | 1      | 0.45 | 11.4 | 0.17 | 4.3  | 0.142 - 0.146   | 3.6 - 3.7 | 1000          |
| LWS-SR-1-01 | 2      | 0.45 | 11.4 | 0.14 | 3.6  | 0.142 - 0.146   | 3.6 - 3.7 | 1000          |
| WS-SR-2-01  | 1      | 0.64 | 16.3 | 0.36 | 9.1  | 0.142 - 0.146   | 3.6 - 3.7 | 1000          |
| LWS-SR-2-01 | 2      | 0.64 | 16.3 | 0.34 | 8.6  | 0.142 - 0.146   | 3.6 - 3.7 | 1000          |
| WS-SR-3-01  | 1      | 1.00 | 25.4 | 0.73 | 18.5 | 0.142 - 0.146   | 3.6 - 3.7 | 1000          |
| LWS-SR-3-01 | 2      | 1.00 | 25.4 | 0.72 | 18.3 | 0.142 - 0.146   | 3.6 - 3.7 | 1000          |
| WS-SR-4-01  | 1      | 1.31 | 33.3 | 1.04 | 26.4 | 0.142 - 0.146   | 3.6 - 3.7 | 1000          |
| LWS-SR-4-01 | 2      | 1.31 | 33.3 | 1.00 | 25.4 | 0.142 - 0.146   | 3.6 - 3.7 | 1000          |

**WS-SH Series**  
Wire Saddles - Square Hole Mount



Mounting Hole

Specifications:

- Material: Nylon 6/6
- Color: Natural

Features:

- Mounts into a square hole to prevent rotation

| Item No.   |            | Approval | Panel Thickness |           | A Ref. |      | B Ref. |      | Depth |     | Bulk Pack Qty |
|------------|------------|----------|-----------------|-----------|--------|------|--------|------|-------|-----|---------------|
| UL94 V-2   | UL94 V-0   |          | in              | mm        | in     | mm   | in     | mm   | in    | mm  |               |
| WS-SH-1-01 | WS-SH-1-19 |          | 0.031 - 0.078   | 0.8 - 2.0 | 0.51   | 13.0 | 0.19   | 4.8  | 0.219 | 5.6 | 1000          |
| WS-SH-2-01 | WS-SH-2-19 |          | 0.031 - 0.078   | 0.8 - 2.0 | 0.70   | 17.8 | 0.39   | 10.0 | 0.219 | 5.6 | 1000          |
| WS-SH-3-01 | WS-SH-3-19 |          | 0.031 - 0.078   | 0.8 - 2.0 | 1.06   | 26.9 | 0.75   | 19.1 | 0.219 | 5.6 | 1000          |
| WS-SH-4-01 | WS-SH-4-19 |          | 0.031 - 0.078   | 0.8 - 2.0 | 1.37   | 34.8 | 1.07   | 27.2 | 0.219 | 5.6 | 1000          |

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# WIRE SADDLES

WS-SE/LWS-SE/22SEWC Series  
Wire Saddles - Side Entry

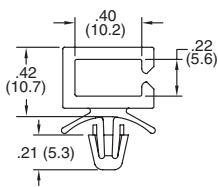


Figure 1

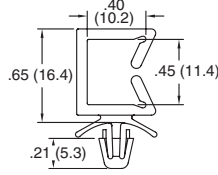


Figure 2

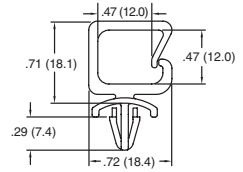


Figure 3

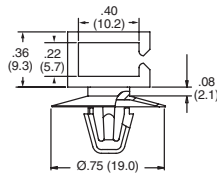


Figure 4

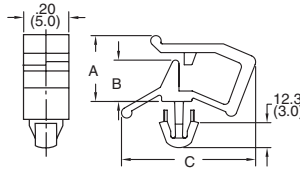


Figure 5

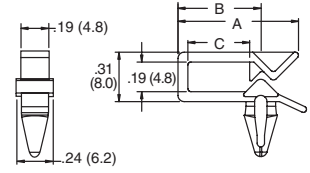


Figure 6

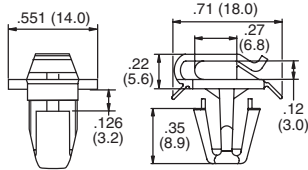


Figure 7

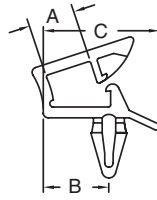


Figure 8

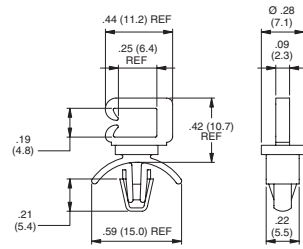


Figure 9

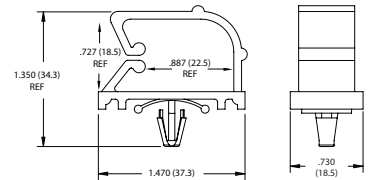


Figure 10

**Specifications:**

- Material: Nylon 6/6
- Color: Natural

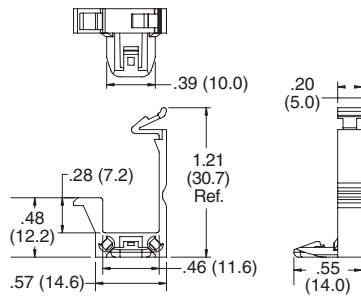
**Features:**

- Gathers and routes single or groups of wires and cables
- Side entry provides low height where clearance is a problem

| Item No.     |              | A Ref. |    | B            |      | C Ref. |      | Ø Mounting Hole |           | Panel Thickness |     | Bulk Pack Qty |           |      |
|--------------|--------------|--------|----|--------------|------|--------|------|-----------------|-----------|-----------------|-----|---------------|-----------|------|
| UL94 V-2     | UL94 V-0     | in     | mm | in           | mm   | in     | mm   | in              | mm        | in              | mm  |               |           |      |
| WS-SE-A-1-01 | WS-SE-A-1-19 | —      | 1  | See Figure 1 |      | 0.187  | 4.8  | 0.031 - 0.078   | 0.8 - 2.0 | 1000            |     |               |           |      |
| WS-SE-A-2-01 | WS-SE-A-2-19 | —      | 2  | See Figure 2 |      | 0.187  | 4.8  | 0.031 - 0.078   | 0.8 - 2.0 | 1000            |     |               |           |      |
| WS-SE-A-3-01 | WS-SE-A-3-19 | —      | 3  | See Figure 3 |      | 0.187  | 4.8  | 0.024 - 0.071   | 0.6 - 1.8 | 1000            |     |               |           |      |
| WS-SE-A-4-01 | WS-SE-A-4-19 | —      | 4  | See Figure 4 |      | 0.256  | 6.5  | 0.031 - 0.078   | 0.8 - 2.0 | 1000            |     |               |           |      |
| WS-SE1-1-01  | —            | 9U     | 5  | 0.190        | 4.8  | 0.090  | 2.4  | 0.500           | 12.7      | 0.138           | 3.5 | 0.020 - 0.063 | 0.5 - 1.6 | 1000 |
| WS-SE1-2-01  | —            | 9U     | 5  | 0.260        | 6.7  | 0.160  | 4.2  | 0.590           | 15.1      | 0.138           | 3.5 | 0.020 - 0.063 | 0.5 - 1.6 | 1000 |
| WS-SE1-3-01  | —            | 9U     | 5  | 0.340        | 8.5  | 0.230  | 5.7  | 0.810           | 20.3      | 0.138           | 3.5 | 0.020 - 0.063 | 0.5 - 1.6 | 1000 |
| WS-SE2-1-01  | —            | 9U     | 6  | 0.650        | 16.6 | 0.410  | 10.5 | 0.280           | 7.1       | 0.187           | 4.8 | 0.020 - 0.063 | 0.5 - 1.6 | 1000 |
| WS-SE2-2-01  | —            | 9U     | 6  | 0.770        | 19.5 | 0.530  | 13.4 | 0.390           | 10.0      | 0.187           | 4.8 | 0.020 - 0.063 | 0.5 - 1.6 | 1000 |
| WS-SE3-1-01  | —            | —      | 7  | See Figure 7 |      | 0.314  | 8.0  | 0.062 - 0.102   | 1.6 - 2.6 | 1000            |     |               |           |      |
| LWS-SE2-1-01 | —            | 9U     | 8  | 0.270        | 6.9  | 0.380  | 9.7  | 0.670           | 17.0      | 0.187           | 4.8 | 0.020 - 0.063 | 0.5 - 1.6 | 1000 |
| LWS-SE2-2-01 | —            | 9U     | 8  | 0.400        | 10.2 | 0.530  | 13.5 | 0.800           | 20.8      | 0.187           | 4.8 | 0.020 - 0.063 | 0.5 - 1.6 | 1000 |
| WS-SE-C-1-19 | —            | 9U     | 9  | See Figure 9 |      | 0.187  | 4.8  | 0.031 - 0.078   | 0.8 - 2.0 | 1000            |     |               |           |      |
| 22SEWC750100 | —            | —      | 10 | —            | —    | —      | —    | —               | —         | 0.250           | 6.4 | 0.105         | 2.7       | 100  |



**SMWSLT Series**  
Side Mount Wire Saddles

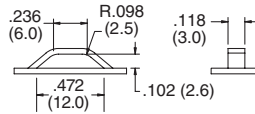


Specifications:

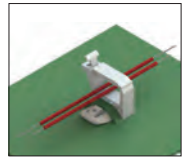
- Material: UL94 V-0 Nylon 6/6
- Color: Natural

Features:

- No protrusion through the chassis
- No risk of rotation
- Easy to install
- Removable by depressing locking tab
- Cables are locked in place yet easily removed



Mounting Dimensions



| Item No.    | Bulk Pack Qty |
|-------------|---------------|
| SMWSLT-1-19 | 1000          |

**WS/WWS/WSBH Series**  
Wire Saddles

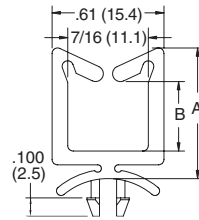
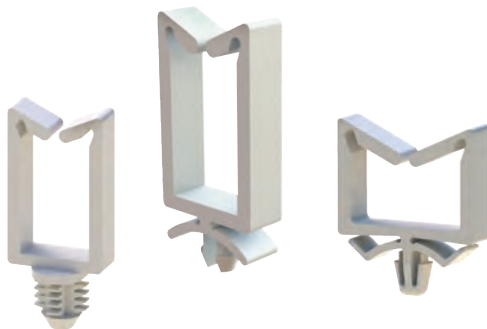


Figure 1

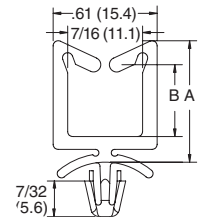


Figure 2

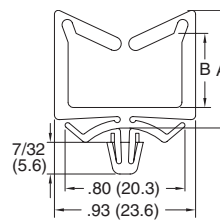


Figure 3

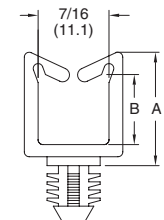


Figure 4

Specifications:

- Material: Nylon 6/6
- Color: Natural
- Depth: 0.22 (5.6)

Features:

- Gathers and routes cables or wires
- WSBH parts are designed to mount in blind holes

| Item No.    |             | Approval | Figure | A Ref. |      | B Ref. |      | Ø Mounting Hole |     | Panel Thickness |      | Bulk Pack Qty |
|-------------|-------------|----------|--------|--------|------|--------|------|-----------------|-----|-----------------|------|---------------|
|             |             |          |        | in     | mm   | in     | mm   | in              | mm  | in              | mm   |               |
| UL94V-2     | UL94 V-0    | RU       | 1      | 0.52   | 13.2 | 0.19   | 4.8  | 0.187           | 4.8 | 0.062           | 1.6  | 1000          |
| WS-1-01     | WS-1-19     | RU       | 2      | 0.52   | 13.2 | 0.19   | 4.8  | 0.187           | 4.8 | 0.062           | 1.6  | 1000          |
| WS-A-1-01   | WS-A-1-19   | RU       | 4      | 0.52   | 13.2 | 0.19   | 4.8  | 0.312           | 7.9 | 0.250           | 6.4  | 1000          |
| WSBH-1-01   | —           | RU       | 1      | 0.71   | 18.0 | 0.38   | 9.7  | 0.187           | 4.8 | 0.062           | 1.6  | 1000          |
| WS-2-01     | WS-2-19     | RU       | 2      | 0.71   | 18.0 | 0.38   | 9.7  | 0.187           | 4.8 | 0.062           | 1.6  | 1000          |
| WS-A-2-01   | WS-A-2-19   | RU       | 2      | 0.71   | 18.0 | 0.38   | 9.7  | 0.187           | 4.8 | 0.125           | 3.2  | 1000          |
| WS-A-2-1-01 | WS-A-2-1-19 | RU       | 4      | 0.71   | 18.0 | 0.38   | 9.7  | 0.312           | 7.9 | 0.250           | 6.4  | 1000          |
| WS-A-2-2-01 | WS-A-2-2-19 | RU       | 3      | 0.77   | 19.6 | 0.50   | 12.7 | 0.187           | 4.8 | 0.047           | 1.19 | 1000          |
| WWS-A-2-01  | WWS-A-2-19  | RU       | 1      | 1.07   | 27.2 | 0.74   | 18.8 | 0.187           | 4.8 | 0.062           | 1.6  | 1000          |
| WS-3-01     | WS-3-19     | RU       | 2      | 1.07   | 27.2 | 0.74   | 18.8 | 0.187           | 4.8 | 0.125           | 3.2  | 1000          |
| WS-A-3-01   | WS-A-3-19   | RU       | 4      | 1.07   | 27.2 | 0.74   | 18.8 | 0.312           | 7.9 | 0.250           | 6.4  | 1000          |
| WS-A-2-3-01 | WS-A-2-3-19 | RU       | 3      | 1.12   | 28.5 | 0.85   | 21.6 | 0.187           | 4.8 | 0.047           | 1.19 | 1000          |
| WSBH-3-01   | —           | RU       | 1      | 1.38   | 35.0 | 1.05   | 26.7 | 0.187           | 4.8 | 0.062           | 1.6  | 1000          |
| WWS-A-3-01  | WWS-A-3-19  | RU       | 2      | 1.38   | 35.0 | 1.05   | 26.7 | 0.187           | 4.8 | 0.125           | 3.2  | 1000          |
| WS-4-01     | WS-4-19     | RU       | 2      | 1.38   | 35.0 | 1.05   | 26.7 | 0.187           | 4.8 | 0.062           | 1.6  | 1000          |
| WS-A-4-01   | WS-A-4-19   | RU       | 4      | 1.38   | 35.0 | 1.05   | 26.7 | 0.312           | 7.9 | 0.250           | 6.4  | 1000          |
| WS-A-2-4-01 | WS-A-2-4-19 | RU       | 2      | 1.38   | 35.0 | 1.05   | 26.7 | 0.187           | 4.8 | 0.125           | 3.2  | 1000          |
| WSBH-4-01   | —           | RU       | 4      | 1.38   | 35.0 | 1.05   | 26.7 | 0.312           | 7.9 | 0.250           | 6.4  | 1000          |



# WIRE SADDLES

## 22MWA/22WHA/22WHB Series Wire/Cable Holders

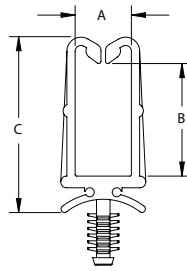


Figure 1

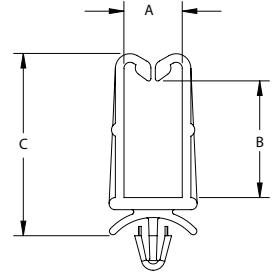
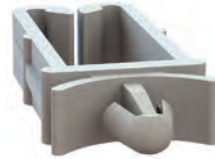


Figure 2

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Can be used in a variety of panel thicknesses and materials
- Sizes are available to handle wire bundle diameters from 0.375" (9.5 mm) to 0.500" (12.7 mm)
- Corrosion, vibration and abrasion resistant

| Item No.    | Figure | Ø Hole |     | A     |      | B     |      | C     |      | Panel Range   |            | Bulk Pack Qty |
|-------------|--------|--------|-----|-------|------|-------|------|-------|------|---------------|------------|---------------|
|             |        | in     | mm  | in    | mm   | in    | mm   | in    | mm   | in            | mm         |               |
| 22WHA375050 | 1      | 0.187  | 4.8 | 0.375 | 9.5  | 0.500 | 12.7 | 0.922 | 23.4 | VARIABLE      |            | 1000          |
| 22WHA375075 | 1      | 0.187  | 4.8 | 0.375 | 9.5  | 0.750 | 19.1 | 1.172 | 29.8 | VARIABLE      |            | 1000          |
| 22WHA500075 | 1      | 0.187  | 4.8 | 0.500 | 12.7 | 0.750 | 19.1 | 1.219 | 31.0 | VARIABLE      |            | 1000          |
| 22WHA500100 | 1      | 0.187  | 4.8 | 0.500 | 12.7 | 1.000 | 25.4 | 1.469 | 37.3 | VARIABLE      |            | 1000          |
| 22MWA095127 | 1      | 0.197  | 5.0 | 0.375 | 9.5  | 0.500 | 12.7 | 0.921 | 23.4 | VARIABLE      |            | 1000          |
| 22MWA095190 | 1      | 0.197  | 5.0 | 0.375 | 9.5  | 0.750 | 19.1 | 1.172 | 29.8 | VARIABLE      |            | 1000          |
| 22MWA127190 | 1      | 0.197  | 5.0 | 0.500 | 12.7 | 0.750 | 19.1 | 1.219 | 21.0 | VARIABLE      |            | 1000          |
| 22MWA127254 | 1      | 0.197  | 5.0 | 0.500 | 12.7 | 1.000 | 25.4 | 1.469 | 37.3 | VARIABLE      |            | 1000          |
| 22WHB375050 | 2      | 0.187  | 4.8 | 0.375 | 9.5  | 0.500 | 12.7 | 0.900 | 22.9 | 0.030 - 0.093 | 0.76 - 2.4 | 1000          |
| 22WHB375075 | 2      | 0.187  | 4.8 | 0.375 | 9.5  | 0.750 | 19.1 | 1.172 | 29.8 | 0.030 - 0.093 | 0.76 - 2.4 | 1000          |
| 22WHB500075 | 2      | 0.187  | 4.8 | 0.500 | 12.7 | 0.750 | 19.1 | 1.200 | 30.5 | 0.030 - 0.093 | 0.76 - 2.4 | 1000          |
| 22WHB500100 | 2      | 0.187  | 4.8 | 0.500 | 12.7 | 1.000 | 25.4 | 1.425 | 36.2 | 0.030 - 0.093 | 0.76 - 2.4 | 500           |

## WS-9/LWS-9 Series Quarter-Turn Wire Saddles

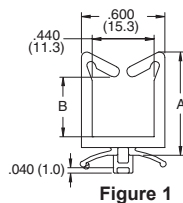


Figure 1

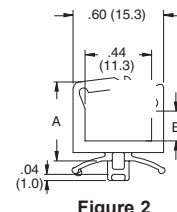


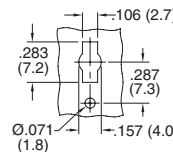
Figure 2

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural
- Depth: 0.22 (5.6)

**Features:**

- Easily inserted and removed by turning 90°
- Low protrusion under board, only 1mm
- Available in locking and non-locking styles



Mounting Hole Detail



| Item No.   | Figure | A Ref. |      | B Ref. |      | Panel Thickness |           | Bulk Pack Qty |
|------------|--------|--------|------|--------|------|-----------------|-----------|---------------|
|            |        | in     | mm   | in     | mm   | in              | mm        |               |
| WS-9-1-01  | 1      | 0.51   | 13.0 | 0.19   | 4.8  | 0.031 - 0.063   | 0.8 - 1.6 | 1000          |
| WS-9-2-01  | 1      | 0.70   | 17.8 | 0.39   | 10.0 | 0.031 - 0.063   | 0.8 - 1.6 | 1000          |
| WS-9-3-01  | 1      | 1.06   | 26.9 | 0.75   | 19.1 | 0.031 - 0.063   | 0.8 - 1.6 | 1000          |
| WS-9-4-01  | 1      | 1.37   | 34.8 | 1.07   | 27.2 | 0.031 - 0.063   | 0.8 - 1.6 | 1000          |
| LWS-9-1-01 | 2      | 0.51   | 13.0 | 0.15   | 3.8  | 0.031 - 0.063   | 0.8 - 1.6 | 1000          |
| LWS-9-2-01 | 2      | 0.70   | 17.8 | 0.39   | 9.8  | 0.031 - 0.063   | 0.8 - 1.6 | 1000          |
| LWS-9-3-01 | 2      | 1.06   | 26.9 | 0.75   | 19.1 | 0.031 - 0.063   | 0.8 - 1.6 | 1000          |
| LWS-9-4-01 | 2      | 1.37   | 34.8 | 1.07   | 27.2 | 0.031 - 0.063   | 0.8 - 1.6 | 1000          |

WIRE SADDLES



LWS/LWSBH/WSLT/WSLC/WSLTRA/22LGWH Series  
Locking Wire/Cable Saddles

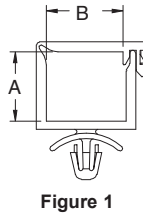
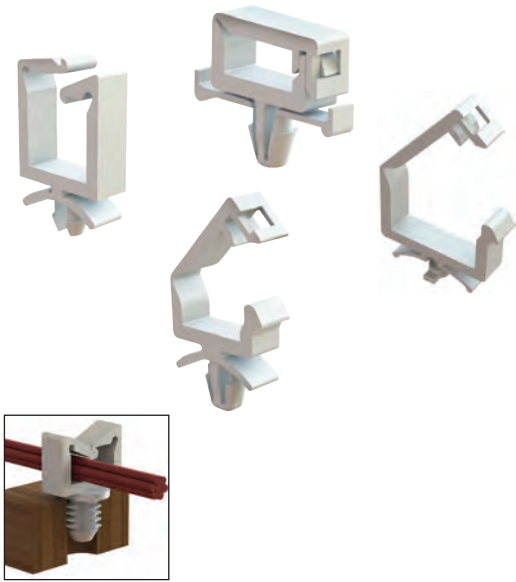


Figure 1

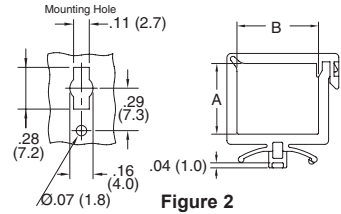


Figure 2

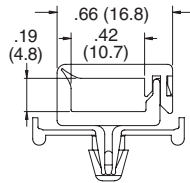


Figure 3

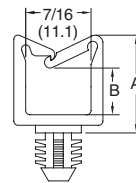


Figure 4

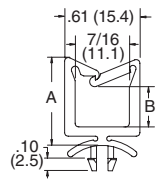


Figure 5

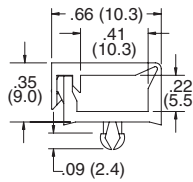


Figure 7

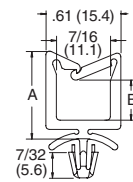


Figure 8

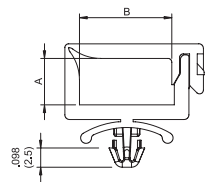


Figure 9

Specifications:

- Material: Nylon 6/6
- Color: Natural

Features:

- Cables are locked in place yet easily removable
- WSLT-9 includes a quarter-turn base
- WSLTRA has a releasable arrow-head for easy removal

| Item No.        |                 | Approval | Figure | A     |       | B     |      | Ø Mounting Hole          |               | Panel Thickness |            | Bulk Pack Qty |
|-----------------|-----------------|----------|--------|-------|-------|-------|------|--------------------------|---------------|-----------------|------------|---------------|
| UL94 V-2        | UL94 V-0        |          |        | in    | mm    | in    | mm   | in                       | mm            | in              | mm         |               |
| WSLC-1-01       | —               | —        | 9      | 0.079 | 6.0   | 0.236 | 6.0  | 0.138                    | 3.5           | 0.031 - 0.087   | 0.8 - 2.2  | 1000          |
| WSLT-3.5-2-1-01 | WSLT-3.5-2-1-19 | RU       | 1      | 0.140 | 3.4   | 0.530 | 13.5 | 0.138                    | 3.5           | 0.031 - 0.078   | 0.8 - 2.0  | 1000          |
| WSLT-02-1-01    | WSLT-02-1-19    | RU       | 1      | 0.140 | 3.4   | 0.530 | 13.5 | 0.187                    | 4.8           | 0.031 - 0.078   | 0.8 - 1.98 | 1000          |
| WSLC-2-01       | —               | —        | 9      | 0.157 | 4.0   | 0.236 | 6.0  | 0.138                    | 3.5           | 0.031 - 0.087   | 0.8 - 2.2  | 1000          |
| WSLC-3-01       | —               | —        | 9      | 0.157 | 4.0   | 0.354 | 9.0  | 0.138                    | 3.5           | 0.031 - 0.087   | 0.8 - 2.2  | 1000          |
| WSLC-5-01       | —               | —        | 9      | 0.157 | 4.0   | 0.472 | 12.0 | 0.138                    | 3.5           | 0.031 - 0.087   | 0.8 - 2.2  | 1000          |
| WSLT-01A-01     | WSLT-01A-19     | RU       | 1      | 0.190 | 4.8   | 0.420 | 10.7 | 0.187                    | 4.8           | 0.031 - 0.078   | 0.8 - 1.98 | 1000          |
| WSLT-9-01A-01   | —               | —        | 2      | 0.190 | 4.8   | 0.420 | 10.7 | See Mounting Hole Detail | 0.031 - 0.063 | 0.8 - 1.6       | 1000       |               |
| WSLC-4-01       | —               | —        | 9      | 0.236 | 6.0   | 0.354 | 9.0  | 0.138                    | 3.5           | 0.031 - 0.087   | 0.8 - 2.2  | 1000          |
| WSLC-6-01       | —               | —        | 9      | 0.236 | 6.0   | 0.472 | 12.0 | 0.138                    | 3.5           | 0.031 - 0.087   | 0.8 - 2.2  | 1000          |
| WSLT-01-2-01    | WSLT-01-2-19    | RU       | 1      | 0.350 | 8.8   | 0.420 | 10.7 | 0.187                    | 4.8           | 0.031 - 0.078   | 0.8 - 1.98 | 1000          |
| WSLT-9-01-2-01  | —               | —        | 2      | 0.360 | 9.1   | 0.420 | 10.7 | See Mounting Hole Detail | 0.031 - 0.063 | 0.8 - 1.6       | 1000       |               |
| WSLT-02A-01     | WSLT-02A-19     | RU       | 1      | 0.390 | 10.0  | 0.640 | 16.3 | 0.187                    | 4.8           | 0.031 - 0.078   | 0.8 - 1.98 | 1000          |
| WSLT-9-02A-1-01 | —               | —        | 2      | 0.390 | 10.0  | 0.640 | 16.3 | See Mounting Hole Detail | 0.031 - 0.063 | 0.8 - 1.6       | 1000       |               |
| LWS-1-01        | LWS-1-19        | RU       | 5      | 0.520 | 13.2  | 0.140 | 3.6  | 0.187                    | 4.8           | 0.062           | 1.6        | 1000          |
| LWSBH-1-01      | —               | RU       | 4      | 0.520 | 13.2  | 0.140 | 3.6  | 0.312                    | 7.9           | 0.250           | 6.4        | 1000          |
| LWS-A-1-01      | LWS-A-1-19      | RU       | 8      | 0.520 | 13.2  | 0.140 | 3.6  | 0.187                    | 4.8           | 0.062           | 1.6        | 1000          |
| LWS-A-2-1-01    | LWS-A-2-1-19    | RU       | 8      | 0.520 | 13.2  | 0.140 | 3.6  | 0.187                    | 4.8           | 0.125           | 3.2        | 1000          |
| • 22LGWH4500190 | —               | —        | 8      | 0.545 | 13.8  | 0.222 | 5.6  | 0.187                    | 4.8           | 0.090           | 2.3        | 500           |
| WSLT-03-2-01    | WSLT-03-2-19    | RU       | 1      | 0.550 | 14.1  | 0.640 | 16.3 | 0.187                    | 4.8           | 0.062           | 1.6        | 1000          |
| WSLT-9-03-2-01  | —               | —        | 2      | 0.560 | 14.1  | 0.640 | 16.3 | See Mounting Hole Detail | 0.031 - 0.063 | 0.8 - 1.6       | 1000       |               |
| LWS-2-01        | LWS-2-19        | RU       | 5      | 0.710 | 18.0  | 0.330 | 8.4  | 0.187                    | 4.8           | 0.062           | 1.6        | 1000          |
| LWSBH-2-01      | —               | RU       | 4      | 0.710 | 18.0  | 0.330 | 8.4  | 0.312                    | 7.9           | 0.250           | 6.4        | 1000          |
| LWS-A-2-01      | LWS-A-2-19      | RU       | 8      | 0.710 | 18.0  | 0.330 | 8.4  | 0.187                    | 4.8           | 0.062           | 1.6        | 1000          |
| LWS-A-2-2-01    | LWS-A-2-2-19    | RU       | 8      | 0.710 | 18.0  | 0.330 | 8.4  | 0.187                    | 4.8           | 0.125           | 3.2        | 1000          |
| • 22LGWH4500360 | —               | —        | 8      | 0.711 | 18.0  | 0.330 | 8.4  | 0.187                    | 4.8           | 0.090           | 2.3        | 1000          |
| WSLT-03-3-01    | WSLT-03-3-19    | RU       | 1      | 0.850 | 21.7  | 0.710 | 18.0 | 0.187                    | 4.8           | 0.031 - 0.078   | 0.8 - 1.98 | 1000          |
| WSLT-9-03-3-01  | —               | —        | 2      | 0.850 | 21.7  | 0.710 | 18.0 | See Mounting Hole Detail | 0.031 - 0.063 | 0.8 - 1.6       | 1000       |               |
| WSLTRA-1-01     | —               | —        | 3      | —     | —     | —     | —    | 0.187                    | 4.8           | 0.062           | 1.6        | 1000          |
| • 22LGWH4500718 | —               | —        | 8      | 1.000 | 25.4  | 0.660 | 16.8 | 0.187                    | 4.8           | 0.090           | 2.3        | 1000          |
| LWS-3-01        | LWS-3-19        | RU       | 5      | 1.070 | 27.2  | 0.690 | 17.5 | 0.187                    | 4.8           | 0.062           | 1.6        | 1000          |
| LWSBH-3-01      | —               | RU       | 4      | 1.070 | 27.2  | 0.690 | 17.5 | 0.312                    | 7.9           | 0.250           | 6.4        | 1000          |
| LWS-A-3-01      | LWS-A-3-19      | RU       | 8      | —     | 1.070 | —     | —    | 0.187                    | 4.8           | 0.062           | 1.6        | 1000          |
| LWS-A-2-3-01    | LWS-A-2-3-19    | RU       | 8      | 1.070 | 27.2  | 0.690 | 17.5 | 0.187                    | 4.8           | 0.125           | 3.2        | 1000          |
| • 22LGWH450750  | —               | —        | 8      | 1.078 | 27.4  | 0.738 | 18.8 | 0.187                    | 4.8           | 0.090           | 2.3        | 1000          |
| LWS-4-01        | LWS-4-19        | RU       | 5      | 1.380 | 35.0  | 1.000 | 25.4 | 0.187                    | 4.8           | 0.062           | 1.6        | 1000          |
| LWSBH-4-01      | —               | RU       | 4      | 1.380 | 35.0  | 1.000 | 25.4 | 0.312                    | 7.9           | 0.250           | 6.4        | 1000          |
| WSLT-T-01A-19   | —               | —        | 7      | —     | —     | —     | —    | 0.118                    | 3.0           | 0.065           | 1.7        | 1000          |
| LWS-A-4-01      | LWS-A-4-19      | RU       | 8      | 1.380 | 35.0  | 1.000 | 25.4 | 0.187                    | 4.8           | 0.062           | 1.6        | 1000          |
| LWS-A-2-4-01    | LWS-A-2-4-19    | RU       | 8      | 1.380 | 35.0  | 1.000 | 25.4 | 0.187                    | 4.8           | 0.125           | 3.2        | 1000          |
| • 22LGWH4501062 | —               | —        | 8      | 1.416 | 36.0  | 1.093 | 27.8 | 0.187                    | 4.8           | 0.090           | 2.3        | 500           |



# WIRE SADDLES

MWSEB/WSB/MWSB/WS-SE-B/22MWCA/22AWC Series  
Wire Saddles on Adhesive Base

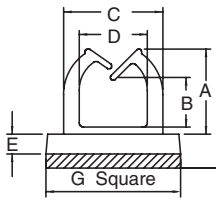
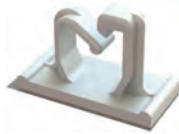
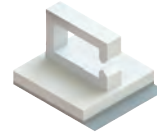


Figure 1

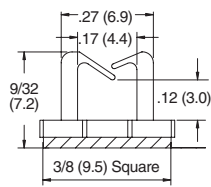


Figure 2

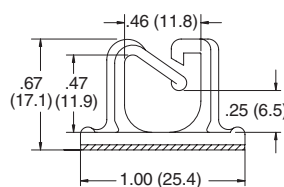


Figure 3

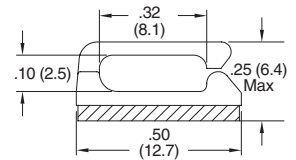


Figure 4

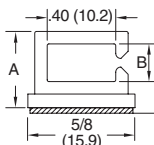


Figure 5

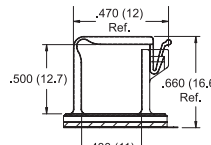


Figure 6

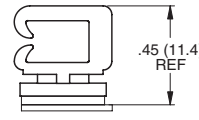


Figure 7

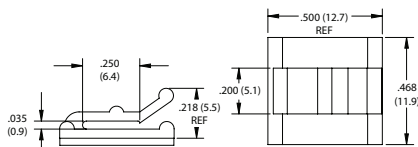


Figure 8

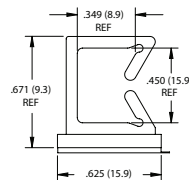


Figure 9

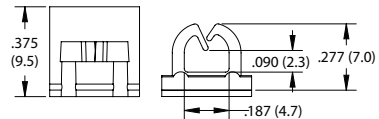


Figure 10

**Specifications:**

- Material: Nylon 6/6
- Color: Natural

**Features:**

- Self adhesive wire saddle is designed to support lightweight wire bundles
- Small profile design is ideal for routing fiber

| Item No.          |                 | Approval | Figure | A Ref.        |      | B Ref. |      | C Ref.       |      | D Ref. |     | E Ref. |      | G Ref. |      | Depth      |      | Bulk Pack Qty |       |       |      |      |
|-------------------|-----------------|----------|--------|---------------|------|--------|------|--------------|------|--------|-----|--------|------|--------|------|------------|------|---------------|-------|-------|------|------|
| UL94 V-2          | UL94 V-0        |          |        | in            | mm   | in     | mm   | in           | mm   | in     | mm  | in     | mm   | in     | mm   | in         | mm   |               |       |       |      |      |
| MWSEB-1-01A-RT    | MWSEB-1-19A-RT  | PA       | 1      | 0.160         | 4.0  | 0.050  | 1.3  | 0.280        | 7.0  | 0.190  | 4.8 | 0.060  | 1.6  | 0.370  | 9.5  | See Fig. 1 | 1000 |               |       |       |      |      |
| • 22MWCA1870375   | —               | —        | 10     | See Figure 10 |      |        |      |              |      |        |     |        |      |        |      |            |      |               |       |       |      |      |
| MWSEB-2-01A-RT    | MWSEB-2-19A-RT  | PA       | 1      | 0.240         | 6.0  | 0.130  | 3.3  | 0.280        | 7.0  | 0.190  | 4.8 | 0.060  | 1.6  | 0.370  | 9.5  | See Fig. 1 | 1000 |               |       |       |      |      |
| MWSEB-3-01A-RT    | MWSEB-3-19A-RT  | PA       | 1      | 0.290         | 7.3  | 0.120  | 3.0  | 0.350        | 9.0  | 0.260  | 6.6 | 0.080  | 2.0  | 0.500  | 12.7 | See Fig. 1 | 1000 |               |       |       |      |      |
| MWSEB-4-01A-RT    | MWSEB-4-19A-RT  | PA       | 1      | 0.360         | 9.2  | 0.190  | 4.8  | 0.430        | 10.8 | 0.320  | 8.0 | 0.080  | 2.0  | 0.500  | 12.7 | See Fig. 1 | 1000 |               |       |       |      |      |
| MWSEB-5-01A-RT    | MWSEB-5-19A-RT  | PA       | 1      | 0.440         | 11.2 | 0.230  | 5.8  | 0.470        | 11.9 | 0.360  | 9.1 | 0.080  | 2.0  | 0.500  | 12.7 | See Fig. 1 | 1000 |               |       |       |      |      |
| MWSEB-6-01A-RT    | MWSEB-6-19A-RT  | PA       | 1      | 0.510         | 13.0 | 0.330  | 8.4  | 0.470        | 12.0 | 0.360  | 9.2 | 0.080  | 2.0  | 0.500  | 12.7 | See Fig. 1 | 1000 |               |       |       |      |      |
| • 22MWCA310500    | —               | —        | 1      | 0.369         | 9.4  | 0.310  | 7.9  | 0.420        | 10.7 | 0.310  | 7.9 | 0.078  | 1.98 | 0.500  | 12.7 | 0.500      | 12.7 | 1000          |       |       |      |      |
| • 22MWCA350500    | —               | —        | 1      | 0.525         | 13.3 | 0.165  | 4.2  | 0.500        | 12.7 | 0.350  | 8.9 | —      | —    | 0.500  | 12.7 | 0.500      | 12.7 | 1000          |       |       |      |      |
| • 22MWCA350750TAB | —               | —        | 1      | 0.525         | 13.3 | 0.250  | 12.7 | —            | —    | 0.350  | 8.9 | —      | —    | 0.750  | 19.1 | 0.750      | 19.1 | 1000          |       |       |      |      |
| MWSB-1-01A-RT     | MWSB-1-19A-RT   | PA       | 2      | See Figure 2  |      |        |      |              |      |        |     |        |      |        |      |            |      |               |       |       |      |      |
| WSB-2-01A-RT      | —               | PA       | 3      | See Figure 3  |      |        |      |              |      |        |     |        |      |        |      |            |      |               |       |       |      |      |
| MWSSEB-1-01A-RT   | MWSSEB-1-19A-RT | PA       | 4      | See Figure 4  |      |        |      |              |      |        |     |        |      |        |      |            |      |               |       |       |      |      |
| • 22AWCF250047    | —               | —        | 8      | See Figure 8  |      |        |      |              |      |        |     |        |      |        |      |            |      |               |       |       |      |      |
| MWSSEB-1-01A      | MWSSEB-1-19A    | PA       | 4      | See Figure 4  |      |        |      |              |      |        |     |        |      |        |      |            |      |               |       |       |      |      |
| WS-SE-B-1-01A     | —               | PA       | 5      | 0.450         | 11.4 | 0.220  | 5.6  | See Figure 5 |      |        |     |        |      |        |      |            |      | 0.375         | 9.5   | 1000  |      |      |
| WS-SE-B-2-01A     | —               | PA       | 5      | 0.675         | 17.1 | 0.450  | 11.4 | See Figure 5 |      |        |     |        |      |        |      |            |      | 0.375         | 9.5   | 1000  |      |      |
| • 22AWC350450TAB  | —               | —        | 9      | 0.671         | 17.0 | 0.450  | 11.4 | See Figure 9 |      |        |     |        |      |        |      |            |      | 0.625         | 15.9  | 0.375 | 9.5  | 1000 |
| —                 | WSLTB-03A-19A   | —        | 6      | See Figure 6  |      |        |      |              |      |        |     |        |      |        |      |            |      |               | 0.750 | 19.0  | 1000 |      |
| —                 | WS-SE-C-19A2-RT | —        | 7      | See Figure 7  |      |        |      |              |      |        |     |        |      |        |      |            |      |               | 0.374 | 9.5   | 1000 |      |



WIRE SADDLES



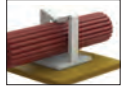
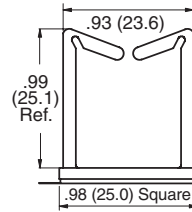
**WWSB Series**  
Wire Saddles on Adhesive Base

Specifications:

- Material: UL94 HB Nylon 6/6
- Color: Natural

Features:

- No through-hole required
- Large capacity



| Item No.       | Bulk Pack Qty |
|----------------|---------------|
| WWSB-3-148A-RT | 500           |

**OFNS Series**  
Optical Fiber Wire Saddles

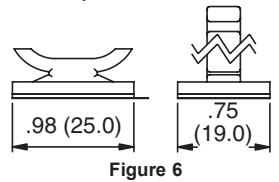
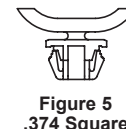
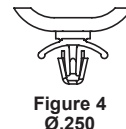
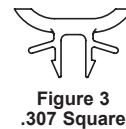
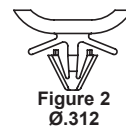
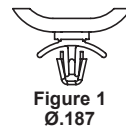
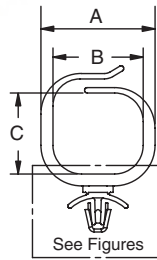


Specifications:

- Material: Nylon 6/6
- Color: Natural

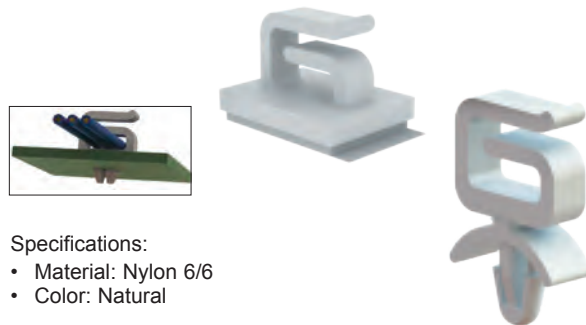
Features:

- No stress is applied to fiber upon entry
- Smooth, rounded corners
- Six mounting styles



| Item No.        |                 | A Ref. | B Ref. | C Ref. | Ø Mounting Hole |      | Panel Thickness |      | Depth        |            | Bulk Pack Qty |           |      |     |      |
|-----------------|-----------------|--------|--------|--------|-----------------|------|-----------------|------|--------------|------------|---------------|-----------|------|-----|------|
| UL94 V-2        | UL94 V-0        | Figure | in     | mm     | in              | mm   | in              | mm   | in           | mm         |               |           |      |     |      |
| OFNS-13-187-01  | OFNS-13-187-19  | 1      | 1.06   | 26.8   | 0.83            | 21.2 | 0.75            | 19.0 | 0.187        | 4.8        | 0.031 - 0.079 | 0.8 - 2.0 | 0.27 | 6.9 | 1000 |
| OFNS-13-312-01  | OFNS-13-312-19  | 2      | 1.06   | 26.8   | 0.83            | 21.2 | 0.75            | 19.0 | 0.312        | 7.9        | 0.031 - 0.063 | 0.8 - 1.6 | 0.27 | 6.9 | 1000 |
| OFNS-13-250-01  | OFNS-13-250-19  | 4      | 1.06   | 26.8   | 0.83            | 21.2 | 0.75            | 19.0 | 0.250        | 6.4        | 0.031 - 0.079 | 0.8 - 2.0 | 0.27 | 6.9 | 1000 |
| OFNS13-S9.5M-01 | OFNS13-S9.5M-19 | 5      | 1.06   | 26.8   | 0.83            | 21.2 | 0.75            | 19.0 | 0.374 Square | 9.5 Square | 0.031 - 0.079 | 0.8 - 2.0 | 0.27 | 6.9 | 1000 |
| OFNSB-13-01A-RT | OFNSB-13-19A-RT | 6      | 1.06   | 26.8   | 0.83            | 21.2 | 0.75            | 19.0 | Adhesive     | Adhesive   | Adhesive      | Adhesive  | 0.27 | 6.9 | 500  |
| OFNS-16-187-01  | OFNS-16-187-19  | 1      | 1.35   | 34.3   | 1.13            | 28.7 | 0.99            | 25.1 | 0.187        | 4.8        | 0.031 - 0.079 | 0.8 - 2.0 | 0.27 | 6.9 | 1000 |
| OFNS-16-312-01  | OFNS-16-312-19  | 2      | 1.35   | 34.3   | 1.13            | 28.7 | 0.99            | 25.1 | 0.312        | 7.9        | 0.031 - 0.063 | 0.8 - 1.6 | 0.27 | 6.9 | 1000 |
| OFNS-16-S307-01 | OFNS-16-S307-19 | 3      | 1.35   | 34.3   | 1.13            | 28.7 | 0.99            | 25.1 | 0.307 Square | 7.8 Square | 0.031 - 0.079 | 0.8 - 2.0 | 0.27 | 6.9 | 1000 |
| OFNS16-S9.5M-01 | OFNS16-S9.5M-19 | 4      | 1.35   | 34.3   | 1.13            | 28.7 | 0.99            | 25.1 | 0.374 Square | 9.5 Square | 0.031 - 0.079 | 0.8 - 2.0 | 0.27 | 6.9 | 1000 |
| OFNSB-16-01A-RT | OFNSB-16-19A-RT | 6      | 1.35   | 34.3   | 1.13            | 28.7 | 0.99            | 25.1 | Adhesive     | Adhesive   | Adhesive      | Adhesive  | 0.27 | 6.9 | 500  |
| OFNS28-S9.5M-01 | OFNS28-S9.5M-19 | 5      | 1.35   | 34.3   | 1.13            | 28.7 | 0.99            | 25.1 | 0.374 Square | 9.5 Square | 0.031 - 0.079 | 0.8 - 2.0 | 0.27 | 6.9 | 500  |

**MOFNSA/MOFNSP/MOFNSB Series**  
Mini Optical Fiber Wire Saddles



Specifications:

- Material: Nylon 6/6
- Color: Natural

Features:

- Design eliminates stress to fiber upon entry
- Smooth, rounded corners

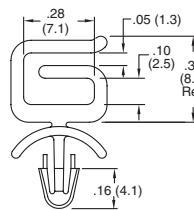


Figure 1

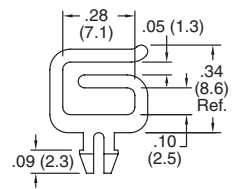


Figure 2

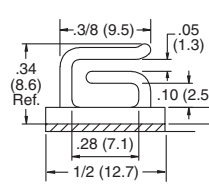
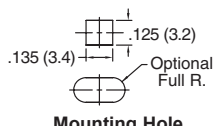


Figure 3



Mounting Hole

| Item No.        |                 | Figure | Ø Mounting Hole |     | Panel Thickness |     | Depth |     | Bulk Pack Qty |
|-----------------|-----------------|--------|-----------------|-----|-----------------|-----|-------|-----|---------------|
| UL94 V-2        | UL94 V-0        |        | in              | mm  | in              | mm  | in    | mm  |               |
| MOFNSA-2-01     | MOFNSA-2-19     | 1      | 0.125           | 3.2 | 0.093           | 2.4 | 0.125 | 3.2 | 1000          |
| MOFNSP-2-01     | MOFNSP-2-19     | 2      | See Figure 2    |     | 0.063           | 1.6 | 0.125 | 3.2 | 1000          |
| MOFNSB-2-01A-RT | MOFNSB-2-19A-RT | 3      |                 |     | Adhesive Mount  |     | 0.375 | 9.5 | 1000          |



# WIRE SADDLES

## MWS/MWSET/MBHWSSE/MWSEA/MWSLT Series Micro Wire Saddles

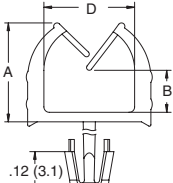


Figure 1

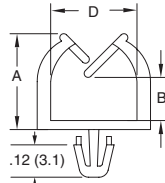


Figure 2

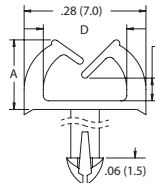


Figure 3

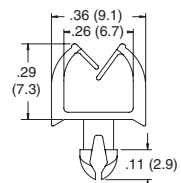


Figure 4

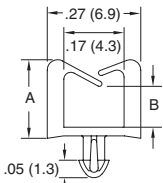


Figure 5

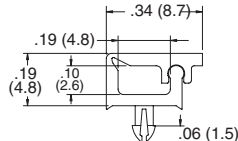


Figure 6

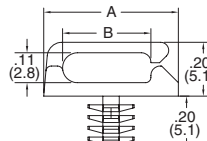


Figure 7

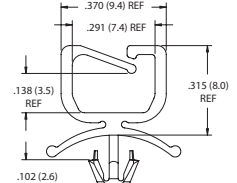


Figure 8

Specifications:

- Material: Nylon 6/6
- Color: Natural

Features:

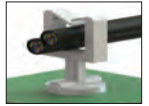
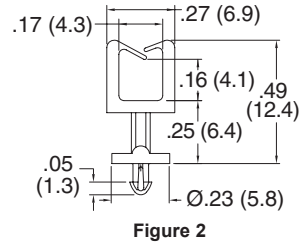
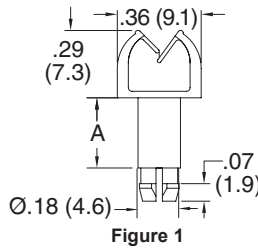
- Gathers and routes wires
- Small profile is ideal for routing fiber

| Item No.      |               | A Ref.   |        | B Ref. |      | D    |      | Ø Mounting Hole |       | Panel Thickness |               | Bulk Pack Qty |           |      |
|---------------|---------------|----------|--------|--------|------|------|------|-----------------|-------|-----------------|---------------|---------------|-----------|------|
| UL94 V-2      | UL94 V-0      | Approval | Figure | in     | mm   | in   | mm   | in              | mm    | in              | mm            |               |           |      |
| MWSET1-1-01   | MWSET1-1-19   | UL       | 3      | 0.16   | 4.0  | 0.04 | 0.9  | 0.19            | 4.8   | 0.067           | 1.7           | 0.063         | 1.6       | 1000 |
| MWSET1-1-1-01 | MWSET1-1-1-19 | UL       | 3      | 0.16   | 4.0  | 0.04 | 0.9  | 0.190           | 4.8   | 0.067           | 1.7           | 0.093         | 2.4       | 1000 |
| MWS-1-01      | MWS-1-19      | UL       | 5      | 0.23   | 5.8  | 0.12 | 3.0  | See Figure 5    | 0.070 | 1.8             | 0.062         | 1.6           | 1000      |      |
| MWS1-1-01     | MWS1-1-19     | —        | 5      | 0.23   | 5.8  | 0.12 | 3.0  | See Figure 5    | 0.070 | 1.8             | 0.093         | 2.4           | 1000      |      |
| MWSET1-2-01   | MWSET1-2-19   | UL       | 3      | 0.24   | 6.0  | 0.11 | 2.9  | 0.19            | 4.8   | 0.067           | 1.7           | 0.063         | 1.6       | 1000 |
| MWSET1-2-1-01 | MWSET1-2-1-19 | UL       | 3      | 0.24   | 6.0  | 0.11 | 2.9  | 0.19            | 4.8   | 0.067           | 1.7           | 0.093         | 2.4       | 1000 |
| MWSEA1-1-01   | MWSEA1-1-19   | UL       | 1      | 0.29   | 7.3  | 0.12 | 3.0  | 0.26            | 6.6   | 0.118           | 3.0           | 0.063         | 1.6       | 1000 |
| MWSEA2-1-01   | MWSEA2-1-19   | UL       | 1      | 0.29   | 7.3  | 0.12 | 3.0  | 0.26            | 6.6   | 0.138           | 3.5           | 0.063         | 1.6       | 1000 |
| MWSEA1-1-1-01 | MWSEA1-1-1-19 | UL       | 1      | 0.29   | 7.3  | 0.12 | 3.0  | 0.26            | 6.6   | 0.118           | 3.0           | 0.093         | 2.4       | 1000 |
| MWSEA2-1-1-01 | MWSEA2-1-1-19 | UL       | 1      | 0.29   | 7.3  | 0.12 | 3.0  | 0.26            | 6.6   | 0.138           | 3.5           | 0.093         | 2.4       | 1000 |
| MWSEA1-2-01   | MWSEA1-2-19   | UL       | 1      | 0.36   | 9.1  | 0.16 | 3.9  | 0.32            | 8.1   | 0.118           | 3.0           | 0.063         | 1.6       | 1000 |
| MWSEA2-2-01   | MWSEA2-2-19   | UL       | 1      | 0.36   | 9.1  | 0.16 | 3.9  | 0.32            | 8.1   | 0.138           | 3.5           | 0.063         | 1.6       | 1000 |
| MWSEA1-1-2-01 | MWSEA1-1-2-19 | UL       | 1      | 0.36   | 9.1  | 0.16 | 3.9  | 0.32            | 8.1   | 0.118           | 3.0           | 0.093         | 2.4       | 1000 |
| MWSEA2-1-2-01 | MWSEA2-1-2-19 | UL       | 1      | 0.36   | 9.1  | 0.16 | 3.9  | 0.32            | 8.1   | 0.138           | 3.5           | 0.093         | 2.4       | 1000 |
| MWSEA3-2-01   | MWSEA3-2-19   | UL       | 2      | 0.36   | 9.1  | 0.16 | 3.9  | 0.32            | 8.1   | 0.138           | 3.5           | 0.063         | 1.6       | 1000 |
| MWSEA1-3-01   | MWSEA1-3-19   | UL       | 1      | 0.44   | 11.2 | 0.24 | 6.0  | 0.36            | 9.1   | 0.118           | 3.0           | 0.063         | 1.6       | 1000 |
| MWSEA2-3-01   | MWSEA2-3-19   | UL       | 1      | 0.44   | 11.2 | 0.24 | 6.0  | 0.36            | 9.1   | 0.138           | 3.5           | 0.063         | 1.6       | 1000 |
| MWSEA1-1-3-01 | MWSEA1-1-3-19 | UL       | 1      | 0.44   | 11.2 | 0.24 | 6.0  | 0.36            | 9.1   | 0.118           | 3.0           | 0.093         | 2.4       | 1000 |
| MWSEA2-1-3-01 | MWSEA2-1-3-19 | UL       | 1      | 0.44   | 11.2 | 0.24 | 6.0  | 0.36            | 9.1   | 0.138           | 3.5           | 0.093         | 2.4       | 1000 |
| —             | MWS-2-19      | —        | 5      | 0.44   | 11.2 | 0.33 | 8.5  | See Figure 5    | 0.070 | 1.8             | 0.063         | 1.6           | 1000      |      |
| —             | MWS-3-19      | —        | 5      | 0.44   | 11.2 | 0.33 | 8.5  | See Figure 5    | 0.070 | 1.8             | 0.087         | 2.2           | 1000      |      |
| MWSEA1-4-01   | MWSEA1-4-19   | UL       | 1      | 0.51   | 13.0 | 0.30 | 7.7  | 0.36            | 9.1   | 0.118           | 3.0           | 0.063         | 1.6       | 1000 |
| MWSEA2-4-01   | MWSEA2-4-19   | UL       | 1      | 0.51   | 13.0 | 0.30 | 7.7  | 0.36            | 9.1   | 0.138           | 3.5           | 0.063         | 1.6       | 1000 |
| MWSEA1-1-4-01 | MWSEA1-1-4-19 | UL       | 1      | 0.51   | 13.0 | 0.30 | 7.7  | 0.36            | 9.1   | 0.118           | 3.0           | 0.093         | 2.4       | 1000 |
| MWSEA2-1-4-01 | MWSEA2-1-4-19 | UL       | 1      | 0.51   | 13.0 | 0.30 | 7.7  | 0.36            | 9.1   | 0.138           | 3.5           | 0.093         | 2.4       | 1000 |
| MWSET2-1-01   | MWSET2-1-19   | UL       | 4      | —      | —    | —    | —    | —               | —     | 0.118           | 3.0           | 0.039 - 0.047 | 1.0 - 1.2 | 1000 |
| MWSET2-2-01   | MWSET2-2-19   | UL       | 4      | —      | —    | —    | —    | —               | —     | 0.118           | 3.0           | 0.047 - 0.063 | 1.2 - 1.6 | 1000 |
| MWSLT1-01     | MWSLT1-1-19   | —        | 6      | —      | —    | —    | —    | —               | —     | 0.067           | 1.7           | 0.063         | 1.6       | 1000 |
| MWSLT1-1-01   | MWSLT1-1-19   | —        | 6      | —      | —    | —    | —    | —               | —     | 0.067           | 1.7           | 0.093         | 2.4       | 1000 |
| MBHWSSE-1-01  | —             | —        | 7      | 0.50   | 12.7 | 0.33 | 8.5  | See Figure 7    | 0.156 | 4.0             | 0.040 - 0.160 | 1.0 - 4.1     | 1000      |      |
| MBHWSSE1-1-01 | —             | —        | 7      | 0.67   | 17.0 | 0.49 | 12.5 | See Figure 7    | 0.156 | 4.0             | 0.040 - 0.160 | 1.0 - 4.1     | 1000      |      |
| • MWSEA4-1-01 | MWSEA4-1-19   | —        | 8      | —      | —    | —    | —    | See Figure 8    | 0.138 | 3.5             | 0.024 - 0.063 | 0.6 - 1.6     | 1000      |      |

# WIRE SADDLES & FLAT CABLE CLAMPS



## MWSELF/SMWS Series Standoff Micro Wire Saddles



**Specifications:**

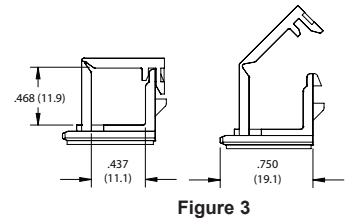
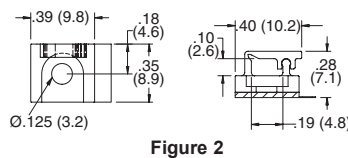
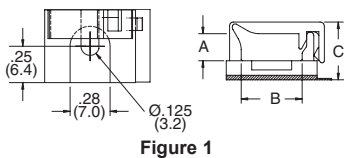
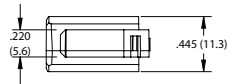
- Material: Nylon 6/6
- Color: Natural

**Features:**

- Gathers and routes wires
- Standoff design provides spacing between the wires and the chassis

| Item No.        |                 | A      | Ø Mounting Hole |     | Panel Thickness |     | Bulk Pack Qty  |
|-----------------|-----------------|--------|-----------------|-----|-----------------|-----|----------------|
| UL94 V-2        | UL94 V-0        | Figure | in              | mm  | in              | mm  |                |
| MWSELF-1-4.1-01 | MWSELF-1-4.1-19 | 1      | 0.16            | 4.1 | 0.15            | 3.8 | 0.063 1.6 1000 |
| MWSELF-1-7.7-01 | MWSELF-1-7.7-19 | 1      | 0.30            | 7.7 | 0.15            | 3.8 | 0.063 1.6 1000 |
| MWSELF-2-4.1-01 | MWSELF-2-4.1-19 | 1      | 0.16            | 4.1 | 0.15            | 3.8 | 0.079 2.0 1000 |
| MWSELF-2-7.7-01 | MWSELF-2-7.7-19 | 1      | 0.30            | 7.7 | 0.15            | 3.8 | 0.079 2.0 1000 |
| SMWS-1-01       | SMWS-1-19       | 2      | See Figure 2    |     | 0.07            | 1.8 | 0.062 1.6 1000 |
| SMWS1-1-01      | SMWS1-1-19      | 2      | See Figure 2    |     | 0.07            | 1.8 | 0.093 2.4 1000 |

## WSLTB/MWSLTB/22AWC Series Wire Saddles Locking Top



**Specifications:**

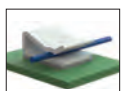
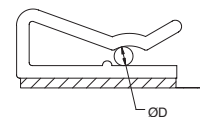
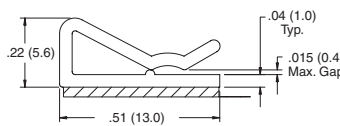
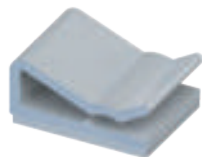
- Material: Nylon 6/6
- Color: Natural

**Features:**

- Gathers, routes and locks cables and wires

| Item No.        |          | Mounting Method                 | Figure | A            |      | B            |      | C Ref.       |      | Bulk Pack Qty |
|-----------------|----------|---------------------------------|--------|--------------|------|--------------|------|--------------|------|---------------|
| UL94 V-0        | UL94 V-2 |                                 |        | in           | mm   | in           | mm   | in           | mm   |               |
| WSLTB-01A-19A   | —        | Adhesive                        | 1      | 0.19         | 4.8  | 0.42         | 10.7 | 0.41         | 10.4 | 1000          |
| WSLTB-01A-19    | —        | #4 or M3 Screw or SR-30XX Rivet | 1      | 0.19         | 4.8  | 0.42         | 10.7 | 0.38         | 9.6  | 1000          |
| WSLTB-02A-19A   | —        | Adhesive                        | 1      | 0.39         | 10.0 | 0.64         | 16.3 | 0.61         | 15.5 | 1000          |
| WSLTB-02A-19    | —        | #4 or M3 Screw or SR-30XX Rivet | 1      | 0.39         | 10.0 | 0.64         | 16.3 | 0.58         | 14.7 | 1000          |
| MWSLTB-1-19A-RT | —        | Adhesive                        | 2      | See Figure 2 |      | See Figure 2 |      | See Figure 2 |      | 1000          |
| MWSLTB-1-19     | —        | #4 or M3 Screw or SR-30XX Rivet | 2      | See Figure 2 |      | See Figure 2 |      | See Figure 2 |      | 1000          |
|                 |          | • 22AWC438469                   | 3      | See Figure 3 |      | See Figure 3 |      | See Figure 3 |      | 1000          |

## SWC Series Single Wire Clips



**Specifications:**

- Material: UL94 V-1 PPE/PS
- Color: White

**Features:**

- To insert or remove cable, simply lift the tip of the clamp

| Item No. | Ø D Holding |           | Base        |            | Bulk Pack Qty |
|----------|-------------|-----------|-------------|------------|---------------|
|          | in          | mm        | in          | mm         |               |
| SWC-0    | 0.03 - 0.06 | 0.8 - 1.5 | 0.51 x 0.38 | 13.0 x 9.5 | 1000          |



# FLAT CABLE CLAMPS

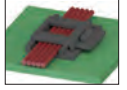
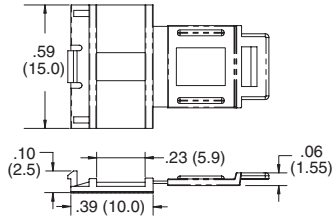
## MCC Series Adhesive Mount Micro Cable Clamps

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Black

**Features:**

- Low profile and small footprint take up little real estate
- Center rib gently grips cables
- Convenient latch is releasable for maintenance
- Easily mounted with adhesive base



| Item No.     | Max Cable Thickness |     | Max Cable Width |     | Bulk Pack Qty |
|--------------|---------------------|-----|-----------------|-----|---------------|
|              | in                  | mm  | in              | mm  |               |
| MCC-1-01A-BK | 0.040               | 1.0 | 0.23            | 5.8 | 1000          |

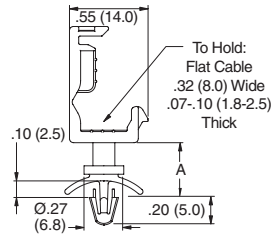
## FCWSS Series Flat Cable Wire Saddles

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Black

**Features:**

- Designed to hold down standard Serial ATA cable
- Flexible tension wing allows a range of cable thicknesses
- Grips cable firmly



| Item No.     | A     |      | Ø Mounting Hole |     | Panel Thickness |           | Bulk Pack Qty |
|--------------|-------|------|-----------------|-----|-----------------|-----------|---------------|
|              | in    | mm   | in              | mm  | in              | mm        |               |
| FCWSS-1-01BK | 0.189 | 4.8  | 0.158           | 4.0 | 0.032 - 0.064   | 0.8 - 1.6 | 1000          |
| FCWSS-2-01BK | 0.394 | 10.0 | 0.158           | 4.0 | 0.032 - 0.064   | 0.8 - 1.6 | 1000          |

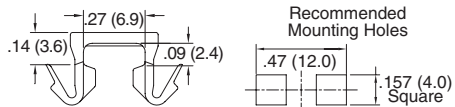
## FCCE Series Flat Cable Clamps

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Holds down ribbon cable
- Extremely low profile



| Item No.  | Max. Cable Width |     | Panel Thickness |           | Depth |     | Bulk Pack Qty |
|-----------|------------------|-----|-----------------|-----------|-------|-----|---------------|
|           | in               | mm  | in              | mm        | in    | mm  |               |
| FCCE-9-01 | 0.250            | 6.4 | 0.039 - 0.047   | 1.0 - 1.2 | 0.28  | 7.0 | 1000          |

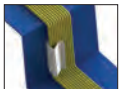
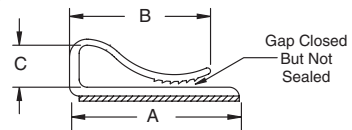
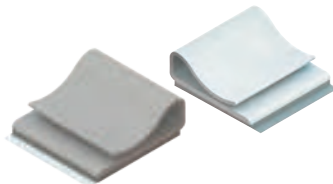
## CFCC Series Side Load Flat Cable Clamps

**Specifications:**

- Material: See Table
- Color: See Table

**Features:**

- Designed for routing flat ribbon cable
- Serrated grip prevents slippage
- Low profile



| Item No.      | A     |      | B Ref. |      | C    |     | Depth |      | Material        | Color | Bulk Pack Qty |
|---------------|-------|------|--------|------|------|-----|-------|------|-----------------|-------|---------------|
|               | in    | mm   | in     | mm   | in   | mm  | in    | mm   |                 |       |               |
| CFCC-3-05A-RT | 0.563 | 14.3 | 0.49   | 12.5 | 0.18 | 4.6 | 1.00  | 25.4 | UL94 V-1 PPE/PS | White | 1000          |
| CFCC-4-05A-RT | 0.563 | 14.3 | 0.42   | 10.7 | 0.25 | 6.4 | 1.00  | 25.4 | UL94 V-1 PPE/PS | White | 1000          |
| CFCC-8-05A-RT | 1.062 | 27.0 | 0.88   | 22.4 | 0.25 | 6.4 | 1.00  | 25.4 | UL94 V-1 PPE/PS | White | 1000          |
| CFCC-8-04A-RT | 1.062 | 27.0 | 0.88   | 22.4 | 0.25 | 6.4 | 1.00  | 25.4 | UL94 V-0 PVC    | Gray  | 1000          |

# FLAT CABLE CLAMPS



## CFCCS Series

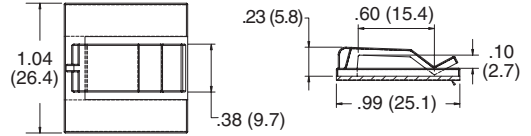
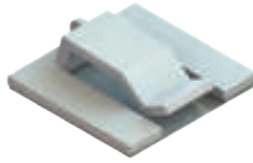
### Split Flat Cable Clamps On Adhesive Base

Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

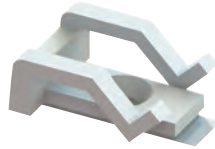
- Tension arm securely holds down flat ribbon cable



| Item No.    | Bulk Pack Qty |
|-------------|---------------|
| CFCCS-8-01A | 1000          |

## SFCC Series

### Split Flat Cable Clamps



Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Two tension arms hold flat ribbon cable firmly in place
- Easily installed with screw or adhesive

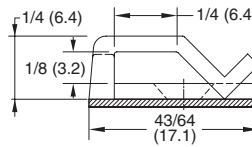


Figure 1

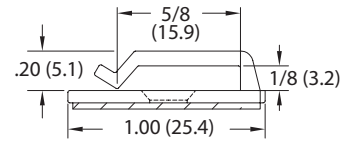


Figure 2

| Item No.      | Figure | Base          |             | Mounting Method            | Bulk Pack Qty |
|---------------|--------|---------------|-------------|----------------------------|---------------|
|               |        | in            | mm          |                            |               |
| SFCC-4-01     | 1      | 0.672 x 0.500 | 17.1 x 12.7 | #4 or M2.5 Flat Head Screw | 1000          |
| SFCC-4-01A-RT | 1      | 0.672 x 0.500 | 17.1 x 12.7 | Adhesive                   | 1000          |
| SFCC-8-01     | 2      | 1.000 x 1.000 | 25.4 x 25.4 | #6 or M3 Flat Head Screw   | 1000          |
| SFCC-8-01A-RT | 2      | 1.000 x 1.000 | 25.4 x 25.4 | Adhesive                   | 1000          |

## CFCCA Series

### Flat Cable Clamps

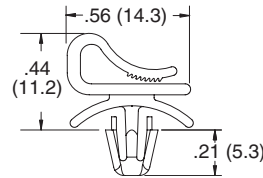


Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Designed for routing flat ribbon cable
- Serrated grip prevents slippage
- Low profile



| Item No.   | Ø Mounting Hole |     | Panel Thickness |           | Base        |             | Bulk Pack Qty |
|------------|-----------------|-----|-----------------|-----------|-------------|-------------|---------------|
|            | in              | mm  | in              | mm        | in          | mm          |               |
| CFCCA-1-01 | 0.187           | 4.8 | 0.310 - 0.078   | 0.8 - 2.0 | 0.56 x 0.63 | 14.3 x 15.9 | 1000          |

## TFCCA Series

### Flat Cable Clamps with Tension

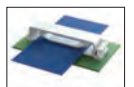
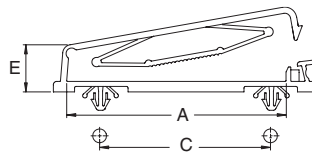


Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Provides tension to flat ribbon cable to ensure stability
- Convenient releasable latch

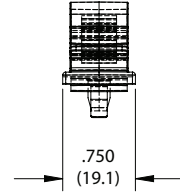
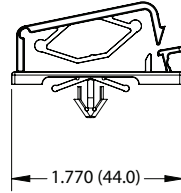


| Item No.    | Max # of Conductors | A    |      | C     |      | E    |      | Ø Mounting Holes |     | Panel Thickness |           | Depth |      | Bulk Pack Qty |
|-------------|---------------------|------|------|-------|------|------|------|------------------|-----|-----------------|-----------|-------|------|---------------|
|             |                     | in   | mm   | in    | mm   | in   | mm   | in               | mm  | in              | mm        | in    | mm   |               |
| TFCCA-15-01 | 10                  | 0.57 | 14.5 | 0.591 | 15.0 | 0.56 | 14.1 | 0.156            | 4.0 | 0.040 - 0.079   | 1.0 - 2.0 | 0.36  | 9.1  | 100           |
| TFCCA-25-01 | 20                  | 0.97 | 24.7 | 0.787 | 20.0 | 0.50 | 12.7 | 0.156            | 4.0 | 0.040 - 0.079   | 1.0 - 2.0 | 0.52  | 13.2 | 100           |
| TFCCA-40-01 | 40                  | 2.13 | 54.1 | 1.575 | 40.0 | 0.64 | 16.3 | 0.156            | 4.0 | 0.040 - 0.079   | 1.0 - 2.0 | 0.39  | 10.0 | 100           |
| TFCCA-50-01 | 50                  | 2.51 | 63.8 | 1.957 | 49.7 | 0.54 | 13.7 | 0.156            | 4.0 | 0.040 - 0.079   | 1.0 - 2.0 | 0.40  | 10.2 | 100           |



# FLAT CABLE CLAMPS

## 22RCPM Series Arrowhead Mounted Flat Cable Clamps



**Specifications:**

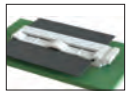
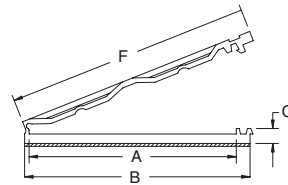
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Quick, easy installation
- Resistant to corrosion, vibration and abrasion
- Convenient releasable latch
- Holds flat wire securely in place

| Item No.   | Ø Mounting Hole |     | Panel Thickness |           | Inside Height |     | Inside Width |      | Bulk Pack Qty |
|------------|-----------------|-----|-----------------|-----------|---------------|-----|--------------|------|---------------|
|            | in              | mm  | in              | mm        | in            | mm  | in           | mm   |               |
| 22RCPM1250 | 0.250           | 6.4 | 0.080 - 0.150   | 2.0 - 3.8 | 0.250         | 6.4 | 1.250        | 31.8 | 100           |

## TFCM Series Flat Cable Clamps with Tension on Adhesive Base



**Specifications:**

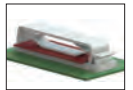
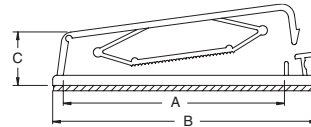
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Provides tension to flat ribbon cable to ensure stability
- Low profile where space is an issue
- Convenient releasable latch

| Item No. | A Ref. |      | B Ref. |      | C Ref. |     | F Ref. |      | Depth |      | Suitable Cable | Bulk Pack Qty |
|----------|--------|------|--------|------|--------|-----|--------|------|-------|------|----------------|---------------|
|          | in     | mm   | in     | mm   | in     | mm  | in     | mm   | in    | mm   |                |               |
| TFCM-25S | 0.87   | 22.0 | 1.06   | 27.0 | 0.12   | 3.0 | 1.26   | 32.0 | 0.39  | 10.0 | 15 Pln         | 200           |
| TFCM-25  | 1.15   | 29.3 | 1.44   | 36.5 | 0.12   | 3.0 | 1.57   | 40.0 | 0.39  | 10.0 | 20 Pln         | 200           |
| TFCM-25M | 2.20   | 55.8 | 2.41   | 61.2 | 0.16   | 4.0 | 2.59   | 66.0 | 0.59  | 15.0 | 40 Pln         | 100           |

## TFCC Series Flat Cable Clamps with Tension on Adhesive Base



**Specifications:**

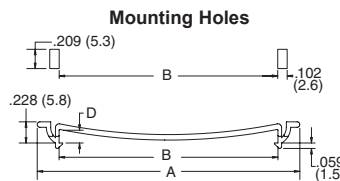
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Provides tension to flat ribbon cable to ensure stability
- Adhesive base for quick mounting

| Item No.   | Max # Of Conductors | A Ref. |      | B    |      | C    |      | Depth |      | Bulk Pack Qty |
|------------|---------------------|--------|------|------|------|------|------|-------|------|---------------|
|            |                     | in     | mm   | in   | mm   | in   | mm   | in    | mm   |               |
| TFCC-30-01 | 30                  | 1.26   | 32.0 | 1.77 | 45.0 | 0.62 | 15.8 | 0.73  | 18.6 | 100           |
| TFCC-40-01 | 40                  | 2.13   | 54.0 | 2.64 | 67.0 | 0.62 | 15.8 | 0.62  | 15.8 | 100           |
| TFCC-50-01 | 50                  | 2.57   | 65.2 | 3.09 | 78.4 | 0.62 | 15.8 | 0.74  | 18.8 | 100           |

## FCCS Series Flat Cable Clamps



**Specifications:**

- Material: UL94 V-0 Nylon 6/6
- Color: Natural

**Features:**

- Very low profile
- Designed to firmly hold down flat ribbon cable
- Easily removable from the top of the panel

| Item No. | A    |      | B    |      | D    |     | Depth |     | Bulk Pack Qty |
|----------|------|------|------|------|------|-----|-------|-----|---------------|
|          | in   | mm   | in   | mm   | in   | mm  | in    | mm  |               |
| FCCS-1   | 1.06 | 27.0 | 0.59 | 15.0 | 0.13 | 3.4 | 0.28  | 7.0 | 500           |
| FCCS-2   | 1.65 | 42.0 | 1.18 | 30.0 | 0.15 | 3.7 | 0.28  | 7.0 | 500           |
| FCCS-3   | 1.85 | 47.0 | 1.38 | 35.0 | 0.15 | 3.7 | 0.28  | 7.0 | 500           |
| FCCS-4   | 2.24 | 57.0 | 1.77 | 45.0 | 0.15 | 3.7 | 0.28  | 7.0 | 500           |
| FCCS-5   | 2.83 | 72.0 | 2.36 | 60.0 | 0.15 | 3.7 | 0.28  | 7.0 | 500           |

# FLAT CABLE CLAMPS



## RDAFCC Series Flat Cable Clamps

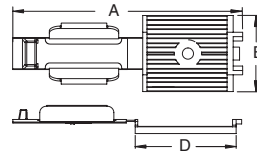


Figure 1

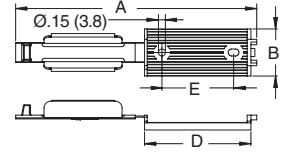


Figure 2

**Specifications:**

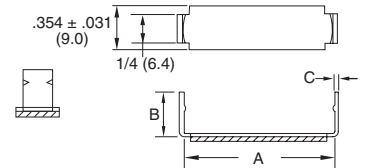
- Material: UL94 V-2 Nylon 6/6
- Color: Gray

**Features:**

- Low profile design
- Releasable latch for adding or removing flat ribbon cable
- Large mounting base for high bonding strength and stability

| Item No.   | Figure | Max Cable Width |      | Mounting Method  | A Ref. |       | B Ref. |      | D Ref. |      | E     |      | Bulk Pack Qty |
|------------|--------|-----------------|------|------------------|--------|-------|--------|------|--------|------|-------|------|---------------|
|            |        | in              | mm   |                  | in     | mm    | in     | mm   | in     | mm   | in    | mm   |               |
| RDAFCC-25  | 1      | 1.000           | 25.4 | #6 or M3.5 Screw | 2.984  | 75.8  | 0.984  | 25.0 | 1.169  | 29.7 | —     | —    | 100           |
| RDAFCC-25A | 1      | 1.000           | 25.4 | Adhesive         | 2.984  | 75.8  | 0.984  | 25.0 | 1.169  | 29.7 | —     | —    | 100           |
| RDAFCC-50  | 2      | 2.000           | 50.8 | #6 or M3.5 Screw | 5.059  | 128.5 | 0.984  | 25.0 | 2.224  | 56.5 | 1.496 | 38.0 | 100           |
| RDAFCC-50A | 2      | 2.000           | 50.8 | Adhesive         | 5.059  | 128.5 | 0.984  | 25.0 | 2.224  | 56.5 | 1.496 | 38.0 | 100           |
| RDAFCC-82  | 2      | 3.000           | 76.2 | #6 or M3.5 Screw | 7.062  | 179.4 | 1.000  | 25.4 | 3.259  | 82.8 | 1.496 | 38.0 | 100           |
| RDAFCC-82A | 2      | 3.000           | 76.2 | Adhesive         | 7.062  | 179.4 | 1.000  | 25.4 | 3.259  | 82.8 | 1.496 | 38.0 | 100           |

## AFCC Series Aluminum Flat Cable Clamps on Adhesive Base



**Specifications:**

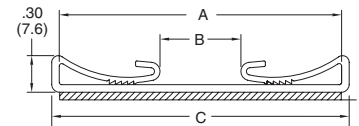
- Material: Aluminum
- Color: Bright Finish

**Features:**

- Aluminum arms secure flat ribbon cable
- Lightweight and durable
- Low profile for limited space applications

| Item No. | Cable Width A |      | B Ref. |      | C    |     | Depth |     | Bulk Pack Qty |
|----------|---------------|------|--------|------|------|-----|-------|-----|---------------|
|          | in            | mm   | in     | mm   | in   | mm  | in    | mm  |               |
| AFCC-08  | 0.500         | 12.7 | 0.250  | 6.4  | 0.02 | 0.5 | 0.350 | 9.0 | 250           |
| AFCC-12  | 0.750         | 19.1 | 0.250  | 6.4  | 0.02 | 0.5 | 0.350 | 9.0 | 250           |
| AFCC-16  | 1.000         | 25.4 | 0.312  | 7.9  | 0.02 | 0.5 | 0.350 | 9.0 | 250           |
| AFCC-20  | 1.250         | 31.8 | 0.375  | 9.5  | 0.02 | 0.5 | 0.350 | 9.0 | 250           |
| AFCC-21  | 1.312         | 33.3 | 0.385  | 9.8  | 0.02 | 0.5 | 0.350 | 9.0 | 250           |
| AFCC-28  | 1.750         | 44.5 | 0.500  | 12.7 | 0.03 | 0.8 | 0.350 | 9.0 | 250           |
| AFCC-32  | 2.000         | 50.8 | 0.562  | 14.3 | 0.03 | 0.8 | 0.350 | 9.0 | 250           |

## DFCC Series Dual Flat Cable Clamps on Adhesive Base



**Specifications:**

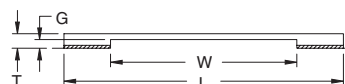
- Material: UL94 V-0 PVC
- Color: Black

**Features:**

- Flat ribbon cable is secured by serrated grips on both sides
- Low profile for limited space applications

| Item No.  | A     |      | B Ref. |      | C     |      | Depth |      | # of Conductors | Bulk Pack Qty |
|-----------|-------|------|--------|------|-------|------|-------|------|-----------------|---------------|
|           | in    | mm   | in     | mm   | in    | mm   | in    | mm   |                 |               |
| DFCC-2-RT | 2.312 | 58.7 | 0.656  | 16.8 | 2.437 | 61.9 | 0.750 | 19.1 | 34-37-40        | 100           |
| DFCC-3-RT | 3.250 | 82.6 | 1.609  | 40.6 | 3.375 | 85.7 | 0.750 | 19.1 | 50-60-64        | 100           |

## FCC Series Flat Cable Clamps on Adhesive Base



**Specifications:**

- Material: UL94 V-0 PVC
- Color: Black

**Features:**

- Clamp is secured with adhesive over flat ribbon cable
- Low profile for limited space applications

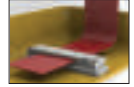
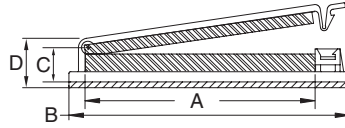
| Item No.    | L    |      | W    |      | T     |     | G     |     | Depth |      | Bulk Pack Qty |
|-------------|------|------|------|------|-------|-----|-------|-----|-------|------|---------------|
|             | in   | mm   | in   | mm   | in    | mm  | in    | mm  | in    | mm   |               |
| FCC-4-3-RT  | 1.50 | 38.1 | 0.50 | 12.7 | 0.156 | 4.0 | 0.093 | 2.4 | 0.500 | 12.7 | 100           |
| FCC-8-3-RT  | 2.00 | 50.8 | 1.00 | 25.4 | 0.156 | 4.0 | 0.093 | 2.4 | 0.500 | 12.7 | 100           |
| FCC-16-3-RT | 3.00 | 76.2 | 2.00 | 50.6 | 0.156 | 4.0 | 0.093 | 2.4 | 0.500 | 12.7 | 100           |



# FLAT CABLE CLAMPS

## FCWSF Series

Cable Clamps with Silicone Foam Center



**Specifications:**

- Material: UL94 V-0 Nylon 6/6 and Silicone Foam
- Color: Natural

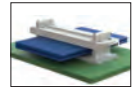
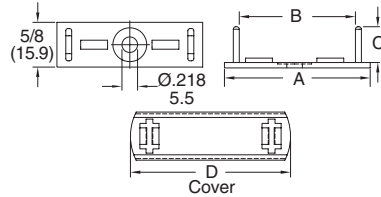
**Features:**

- UL94 V-0 silicone foam securely holds and protects fiber and cable
- Adhesive base for fast installation

| Item No.    | A    |      | B    |      | C Ref. |     | D Ref. |      | Depth |      | Cushion Thickness |     |           |     | Pack Qty | Bulk Pack Qty |
|-------------|------|------|------|------|--------|-----|--------|------|-------|------|-------------------|-----|-----------|-----|----------|---------------|
|             | in   | mm   | in   | mm   | in     | mm  | in     | mm   | in    | mm   | Latch Side        |     | Base Side |     |          |               |
| FCWSF-29-19 | 1.24 | 31.5 | 1.78 | 45.1 | 0.30   | 7.7 | 0.44   | 11.1 | 0.74  | 18.9 | 0.13              | 3.3 | 0.13      | 3.3 | 1        | 100           |
| FCWSF-30-19 | 1.24 | 31.5 | 1.79 | 45.5 | 0.35   | 9.0 | 0.52   | 13.1 | 0.75  | 19.1 | 0.13              | 3.3 | 0.19      | 4.8 | 1        | 100           |
| FCWSF-40-19 | 1.55 | 39.3 | 2.09 | 53.0 | 0.37   | 9.3 | 0.53   | 13.4 | 0.75  | 19.1 | 0.13              | 3.3 | 0.19      | 4.8 | 1        | 100           |
| FCWSF-50-19 | 2.49 | 63.2 | 3.04 | 77.2 | 0.36   | 9.1 | 0.52   | 13.2 | 0.75  | 19.1 | 0.13              | 3.3 | 0.19      | 4.8 | 1        | 100           |

## FCRC Series

Flat Cable Routing Clamps



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

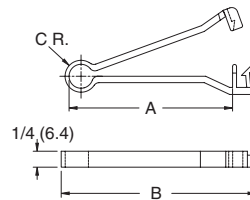
**Features:**

- Two part design: Cable Clamp base and tension-locking cover (sold separately)
- More than one cover can be mounted on base for strain relief; double back cable and secure with a second cover
- Base is secured either with a #10 or #12 screw or adhesive

| Base Item No. |                | A Ref. |      | B Ref. |      | C     |      | Use Cover Item No. | D    |      | Bulk Pack Qty |
|---------------|----------------|--------|------|--------|------|-------|------|--------------------|------|------|---------------|
| w/o Adhesive  | w/ Adhesive    | in     | mm   | in     | mm   | in    | mm   |                    | in   | mm   |               |
| FCRC-13B-4    | FCRC-13B-4A-RT | 2.04   | 51.7 | 1.62   | 41.2 | 0.500 | 12.7 | FCRC-13C           | 2.24 | 56.8 | 100           |
| FCRC-19B-4    | FCRC-19B-4A-RT | 2.72   | 69.1 | 2.31   | 58.7 | 0.500 | 12.7 | FCRC-19C           | 2.92 | 74.2 | 100           |
| FCRC-21B-4    | FCRC-21B-4A-RT | 2.98   | 75.7 | 2.55   | 64.8 | 0.500 | 12.7 | FCRC-21C           | 3.17 | 80.5 | 100           |
| FCRC-26B-4    | FCRC-26B-4A-RT | 3.66   | 93.0 | 3.24   | 82.3 | 0.500 | 12.7 | FCRC-26C           | 3.86 | 98.0 | 100           |
| FCRC-13B-6    | FCRC-13B-6A-RT | 2.04   | 51.7 | 1.62   | 41.2 | 0.750 | 19.1 | FCRC-13C           | 2.24 | 56.8 | 100           |
| FCRC-19B-6    | FCRC-19B-6A-RT | 2.72   | 69.1 | 2.31   | 58.7 | 0.750 | 19.1 | FCRC-19C           | 2.92 | 74.2 | 100           |
| FCRC-21B-6    | FCRC-21B-6A-RT | 2.98   | 75.7 | 2.55   | 64.8 | 0.750 | 19.1 | FCRC-21C           | 3.17 | 80.5 | 100           |
| FCRC-26B-6    | FCRC-26B-6A-RT | 3.66   | 93.0 | 3.24   | 82.3 | 0.750 | 19.1 | FCRC-26C           | 3.86 | 98.0 | 100           |

## FCLC/FCLCS Series

Flat Cable Loop Clips



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

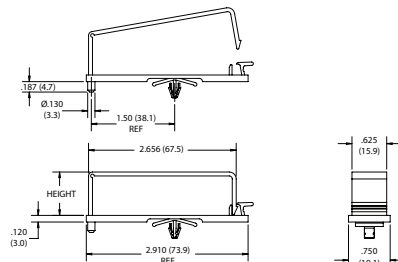
**Features:**

- Allows for quick positive clamping of flat cable without the need for securing the clip to a board

| Item No. | A Max Cable Width |      | B Ref. |      | C Ref. |     | Bulk Pack Qty |
|----------|-------------------|------|--------|------|--------|-----|---------------|
|          | in                | mm   | in     | mm   | in     | mm  |               |
| FCLCS    | 1.50              | 38.1 | 2.00   | 50.8 | 0.23   | 5.8 | 500           |
| FCLC     | 2.50              | 63.5 | 3.00   | 76.2 | 0.25   | 6.4 | 500           |

## 22ACC Series

Arrowhead Mounted Flat Cable Clamps



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Quick, easy installation
- Designed with an anti-rotation pin
- Convenient releasable latch

| Item No.    | Ø Mounting Hole |     | Panel Thickness |            | Height |      | Bulk Pack Qty |
|-------------|-----------------|-----|-----------------|------------|--------|------|---------------|
|             | in              | mm  | in              | mm         | in     | mm   |               |
| 22ACC780265 | 0.188           | 4.8 | 0.020 - 0.080   | 0.05 - 2.0 | 0.780  | 19.8 | 550           |
| 22ACC812265 | 0.188           | 4.8 | 0.020 - 0.080   | 0.05 - 2.0 | 0.900  | 22.9 | 500           |



# FLAT CABLE CLAMPS



## FCW Series Cable Clamps On Adhesive Base

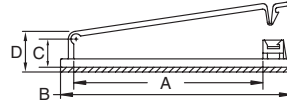
**Specifications:**

- Material: Nylon 6/6
- Color: Natural



**Features:**

- Allows for quick positive clamping of flat cable up to 50 conductors wide
- Adhesive base for quick installation
- Latch allows cables to be added and removed



| Item No.   |            | Max # of Conductors | Depth |      | A    |      | B    |      | C Ref. |      | D Ref. |      | Bulk Pack Qty |
|------------|------------|---------------------|-------|------|------|------|------|------|--------|------|--------|------|---------------|
| UL94 V-2   | UL94 V-0   |                     | in    | mm   | in   | mm   | in   | mm   | in     | mm   | in     | mm   |               |
| FCW-29-01  | FCW-29-19  | 30                  | 0.74  | 18.9 | 1.24 | 31.5 | 1.78 | 45.1 | 0.30   | 7.7  | 0.44   | 11.1 | 100           |
| FCW-30-01  | FCW-30-19  | 30                  | 0.75  | 19.1 | 1.24 | 31.5 | 1.79 | 45.5 | 0.35   | 9.0  | 0.52   | 13.1 | 100           |
| FCW-40-01  | FCW-40-19  | 40                  | 0.75  | 19.1 | 1.55 | 39.3 | 2.09 | 53.0 | 0.37   | 9.3  | 0.53   | 13.4 | 100           |
| FCW-50-01  | FCW-50-19  | 50                  | 0.75  | 19.1 | 2.49 | 63.2 | 3.04 | 77.2 | 0.36   | 9.1  | 0.52   | 13.2 | 100           |
| FCW-50H-01 | FCW-50H-19 | 50                  | 0.74  | 18.9 | 2.54 | 64.6 | 3.08 | 78.2 | 0.59   | 15.1 | 0.75   | 19.0 | 100           |

## FCCA/FCCB Series Arrowhead Mounted Cable Clamps

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Convenient releasable latch allows easy addition and removal of cables
- Easily mounted into pre-drilled holes

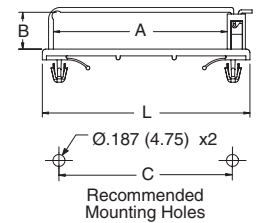
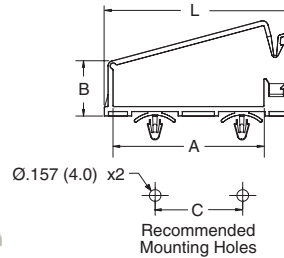
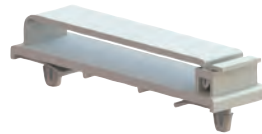


Figure 1

Figure 2

| Item No.    | Figure | L    |      | A    |      | B    |      | C    |      | Panel Thickness |           | Depth |      | Bulk Pack Qty |
|-------------|--------|------|------|------|------|------|------|------|------|-----------------|-----------|-------|------|---------------|
|             |        | in   | mm   | in   | mm   | in   | mm   | in   | mm   | in              | mm        | in    | mm   |               |
| FCCA-30A-01 | 1      | 2.56 | 65.0 | 2.10 | 52.0 | 0.75 | 19.1 | 1.18 | 30.0 | 0.030 - 0.079   | 0.8 - 2.0 | 0.39  | 10.0 | 100           |
| FCCA-40A-01 | 1      | 2.64 | 67.0 | 5.10 | 53.4 | 0.64 | 16.4 | 1.58 | 40.0 | 0.030 - 0.079   | 0.8 - 2.0 | 0.39  | 10.0 | 100           |
| FCCB-1      | 2      | 3.03 | 77.0 | 2.54 | 64.5 | 0.28 | 7.2  | 2.54 | 64.5 | 0.031 - 0.078   | 0.8 - 2.0 | 0.79  | 20.0 | 100           |
| FCCB-2      | 2      | 3.03 | 77.0 | 2.54 | 64.5 | 0.54 | 13.7 | 2.54 | 64.5 | 0.031 - 0.078   | 0.8 - 2.0 | 0.79  | 20.0 | 100           |

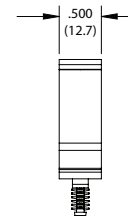
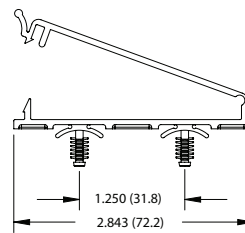
## 22FCC Series Fir Tree Mounted Cable Clamps

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Quick, easy installation
- Resistant to corrosion, vibration and abrasion
- Easily mounted into pre-drilled holes



| Item No.    | Inside Width |      | Inside Height |     | Ø Mounting Hole |     | Min Panel Thickness |     | Bulk Pack Qty |
|-------------|--------------|------|---------------|-----|-----------------|-----|---------------------|-----|---------------|
|             | in           | mm   | in            | mm  | in              | mm  | in                  | mm  |               |
| 22FCC250237 | 2.500        | 63.5 | 0.260         | 6.6 | 0.187           | 4.7 | 0.031               | 0.8 | 100           |

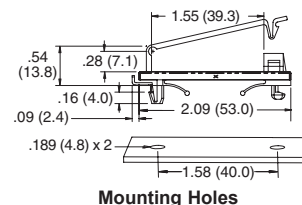
## FCSE Series Slide Entry Cable Clamps

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Removable from the top side of the board



Mounting Holes



| Item No. | Depth |      | Panel Thickness Max |     | Bulk Pack Qty |
|----------|-------|------|---------------------|-----|---------------|
|          | in    | mm   | in                  | mm  |               |
| FCSE-1   | 0.752 | 19.0 | 0.073               | 1.4 | 100           |



# CABLE CLAMPS & CLIPS

## HFCC Series Hinged Cable Clamps



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Easy loading of flat cables
- Hinged design allows cables to be oriented prior to closure
- Once arm is hinged it locks in place
- Arrowhead design for thinner panels
- Fir-tree mount is primarily for particle board

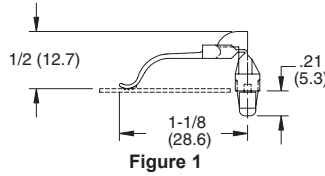


Figure 1

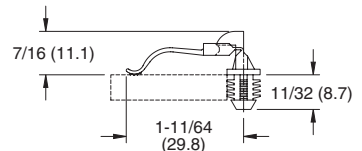


Figure 2

| Item No.     | Figure | Ø Mounting Hole |     | Panel Thickness |           | Bulk Pack Qty |
|--------------|--------|-----------------|-----|-----------------|-----------|---------------|
|              |        | in              | mm  | in              | mm        |               |
| HFCC-A-8-01  | 1      | 0.187           | 4.8 | 0.047 - 0.078   | 1.2 - 2.0 | 1000          |
| HFCC-BH-8-01 | 2      | 0.312           | 7.9 | 0.250 min.      | 6.4 min.  | 1000          |

## TC/22SCP Series Spring Clips

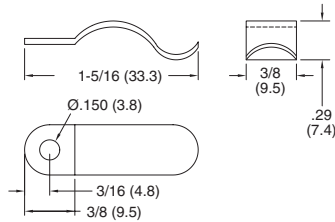


**Specifications:**

- Material: See Table
- Color: See Table

**Features:**

- Holds down round cable, ribbon cable, and tubing
- Mounts with a #6 screw or rivet
- Flexible enough that the cable can be removed without removing the clip
- All contact edges are rounded for product protection



| Item No.       | Max Ø Holding |     | Mounting Screw |         | Material           | Color   | Bulk Pack Qty |
|----------------|---------------|-----|----------------|---------|--------------------|---------|---------------|
|                | in            | mm  | Imperial       | Metric  |                    |         |               |
| TC-30-1        | 0.370         | 9.4 | #6             | M3/M3.5 | UL94 HB Acetal     | Natural | 1000          |
| TC-30-1BK      | 0.370         | 9.4 | #6             | M3/M3.5 | UL94 HB Acetal     | Black   | 1000          |
| TC-30-1-01     | 0.370         | 9.4 | #6             | M3/M3.5 | UL94 V-2 Nylon 6/6 | Natural | 1000          |
| TC-30-1-01BK   | 0.370         | 9.4 | #6             | M3/M3.5 | UL94 V-2 Nylon 6/6 | Black   | 1000          |
| • 22SCP375132A | 0.375         | 9.5 | #6             | M3/M3.5 | UL94 V-2 Nylon 6/6 | Natural | 1000          |

## 22WC Series Wire Clips

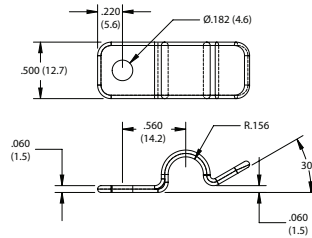


**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Fast, secure assembly and routing of wires, standard round cable, flat cable and tubing
- Contact edges are rounded for product protection
- Corrosion, vibration and abrasion resistant



| Item No.   | Max Ø Holding |      | Mounting Screw |        | Bulk Pack Qty |
|------------|---------------|------|----------------|--------|---------------|
|            | in            | mm   | Imperial       | Metric |               |
| 22WC500312 | 0.5           | 12.7 | #8             | M4     | 1000          |

## STCV Series Vinyl Coated Steel Spring Clips

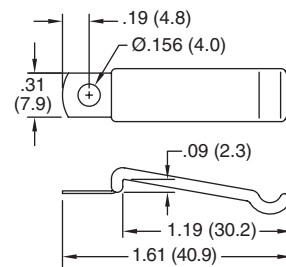


**Specifications:**

- Material: Stainless Steel SAE30301  
Coating: Plastisol Vinyl
- Color: Black

**Features:**

- Vinyl coating protects and insulates product
- Holds down round cable, ribbon cable and tubing
- Mounts with a #6 (M3) screw or rivet
- Flexible enough that the cable can be removed without removing the clip

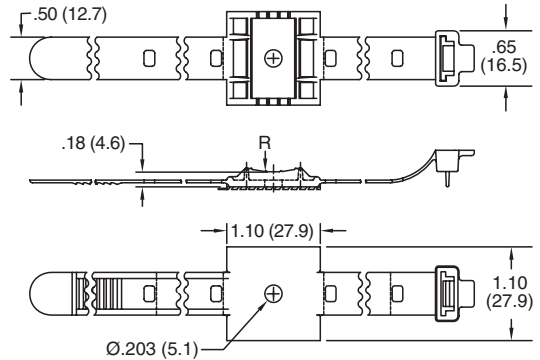


| Item No. | Mounting Screw |        | Pack Qty | Bulk Pack Qty |
|----------|----------------|--------|----------|---------------|
|          | Imperial       | Metric |          |               |
| STCV-1   | #6             | M3     | 1        | 1000          |

# CABLE STRAPS & GRIPS



## UMS Series Universal Mounting Straps



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Black

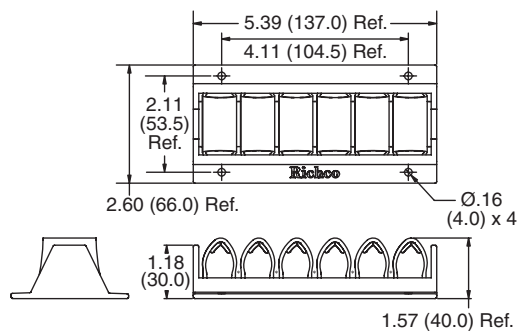
**Features:**

- Mounts with adhesive or a #6 or M4 screw
- Buckle design allows gripping down on cable bundles
- Adjustable to handle multiple bundle sizes



| Item No.      |              | Min Loop Tensile Strength |    | Ø Max Bundle |      | R Radius |      | Bulk Pack Qty |
|---------------|--------------|---------------------------|----|--------------|------|----------|------|---------------|
| w/ Adhesive   | w/o Adhesive | lbs                       | kg | in           | mm   | in       | mm   |               |
| UMS-16-45A-RT | UMS-16-45    | 50                        | 23 | 1.000        | 25.4 | 0.500    | 12.7 | 100           |
| UMS-24-45A-RT | UMS-24-45    | 50                        | 23 | 1.500        | 38.1 | 0.750    | 19.1 | 100           |
| UMS-32-45A-RT | UMS-32-45    | 50                        | 23 | 2.000        | 50.8 | 1.000    | 25.4 | 100           |

## UCG Series Universal Cable Grips



**Specifications:**

- Base Material: High-Density Polyethylene
- Insert Material: TPE
- Color: Black

**Features:**

- Pressure grips accommodate up to 7 cable bundles
- Cable grips are easily removed from the frame to accommodate larger cable bundles
- Cables are pushed into the product by hand and are easily removed
- Mount to panel using #6 or M3.5 screws

| Item No. | Max Cable Ø Bundle Ref (7 Positions) |     | Max Cable Ø Bundle Ref (5 Center Positions Only) |      | Bulk Pack Qty |
|----------|--------------------------------------|-----|--------------------------------------------------|------|---------------|
|          | in                                   | mm  | in                                               | mm   |               |
| UCG-6BK  | 0.08                                 | 2.0 | 0.630                                            | 16.0 | 125           |



CABLE TIES

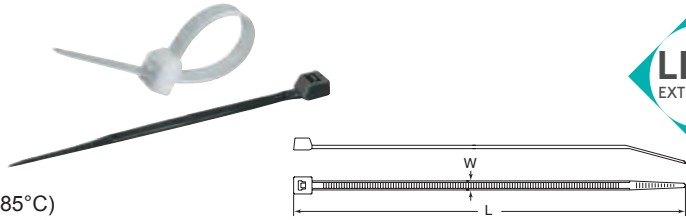
CT/WITA/23CT Series Nylon Locking Cable Ties

Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: See Table

Features:

- Complies with MS-3367 & MIL-S-23190E
- Service Temperature: -40°F to 185°F (-40°C to 85°C)
- UL 181B-C for UL non-metallic air ducts and connectors on CT080A, CT080B, CT082A & CT082B: recommended for use with RX flex ducts found on page 378



| Item No.    |        | L Ref.   |        | W Ref. |       | Ø Max Bundle |        | Tensile Strength |     | Classification | Bulk Pack Qty |      |
|-------------|--------|----------|--------|--------|-------|--------------|--------|------------------|-----|----------------|---------------|------|
| Natural     | Black  | in       | mm     | in     | mm    | in           | mm     | lbs              | N   |                |               |      |
| CT001A      | CT001B | Approval | 3.000  | 75.0   | 0.095 | 2.4          | 0.710  | 18.0             | 18  | 80             | Miniature     | 100  |
| CT002A      | CT002B | Approval | 3.750  | 96.0   | 0.098 | 2.4          | 0.910  | 23.0             | 18  | 80             | Miniature     | 100  |
| WITA-18SF-M | —      | Approval | 3.850  | 97.8   | 0.100 | 2.5          | 0.870  | 22.0             | 18  | 80             | Miniature     | 1000 |
| CT003A      | CT003E | Approval | 4.000  | 100.0  | 0.098 | 2.4          | 0.980  | 25.0             | 18  | 80             | Miniature     | 100  |
| WITA-18R-M  | —      | Approval | 4.720  | 120.0  | 0.100 | 2.5          | 1.060  | 26.9             | 18  | 80             | Miniature     | 1000 |
| CT004A      | CT004B | Approval | 4.750  | 120.0  | 0.098 | 2.5          | 1.180  | 30.0             | 18  | 80             | Miniature     | 100  |
| CT005A      | CT005B | Approval | 5.500  | 142.0  | 0.098 | 2.5          | 1.380  | 35.0             | 18  | 80             | Miniature     | 100  |
| WITA-18L-M  | —      | Approval | 5.900  | 150.0  | 0.100 | 2.5          | 1.460  | 37.1             | 18  | 80             | Miniature     | 1000 |
| CT006A      | CT006B | Approval | 6.500  | 165.0  | 0.098 | 2.5          | 1.730  | 44.0             | 18  | 80             | Miniature     | 100  |
| WITA-18V-M  | —      | Approval | 7.870  | 200.0  | 0.100 | 2.5          | 2.130  | 54.1             | 18  | 80             | Miniature     | 1000 |
| CT007A      | CT007B | Approval | 8.000  | 203.0  | 0.098 | 2.5          | 2.170  | 55.0             | 18  | 80             | Miniature     | 100  |
| WITA-18X-M  | —      | Approval | 15.750 | 400.0  | 0.100 | 2.5          | 4.560  | 116.0            | 18  | 80             | Miniature     | 1000 |
| CT008A      | CT008B | Approval | 4.750  | 120.0  | 0.126 | 3.2          | 1.180  | 40.0             | 40  | 178            | Intermediate  | 100  |
| CT009A      | CT009B | Approval | 5.500  | 142.0  | 0.126 | 3.2          | 1.380  | 40.0             | 40  | 178            | Intermediate  | 100  |
| WITA-40R-C  | —      | Approval | 5.910  | 150.0  | 0.140 | 3.6          | 1.480  | 37.6             | 40  | 178            | Intermediate  | 100  |
| WITA-40R-M  | —      | Approval | 5.910  | 150.0  | 0.140 | 3.6          | 1.480  | 37.6             | 40  | 178            | Intermediate  | 1000 |
| CT010A      | CT010B | Approval | 6.000  | 150.0  | 0.142 | 3.6          | 1.540  | 39.0             | 40  | 178            | Intermediate  | 100  |
| CT020A      | CT020B | Approval | 7.000  | 180.0  | 0.141 | 3.6          | 1.930  | 49.0             | 40  | 178            | Intermediate  | 100  |
| WITA-40L-M  | —      | Approval | 7.870  | 200.0  | 0.140 | 3.6          | 2.050  | 52.0             | 40  | 178            | Intermediate  | 1000 |
| CT011A      | CT011B | Approval | 8.000  | 203.0  | 0.126 | 3.2          | 2.170  | 40.0             | 40  | 178            | Intermediate  | 100  |
| CT012A      | CT012C | Approval | 8.000  | 203.0  | 0.142 | 3.6          | 2.170  | 55.0             | 40  | 178            | Intermediate  | 100  |
| WITA-40XL-M | —      | Approval | 8.070  | 205.0  | 0.140 | 3.6          | 2.100  | 53.3             | 40  | 178            | Intermediate  | 1000 |
| CT013A      | CT013B | Approval | 10.000 | 250.0  | 0.142 | 3.6          | 2.910  | 74.0             | 40  | 178            | Intermediate  | 100  |
| CT014A      | CT014B | Approval | 10.500 | 265.0  | 0.142 | 3.6          | 3.070  | 78.0             | 40  | 178            | Intermediate  | 100  |
| CT015A      | CT015B | Approval | 11.500 | 292.0  | 0.142 | 3.6          | 3.350  | 85.0             | 40  | 178            | Intermediate  | 100  |
| WITA-40VL-M | —      | Approval | 11.810 | 300.0  | 0.140 | 3.6          | 3.270  | 83.0             | 40  | 178            | Intermediate  | 1000 |
| CT016A      | CT016B | Approval | 13.000 | 330.0  | 0.142 | 3.6          | 3.780  | 96.0             | 40  | 178            | Intermediate  | 100  |
| CT017A      | CT017B | Approval | 14.500 | 368.0  | 0.142 | 3.6          | 4.020  | 102.0            | 40  | 178            | Intermediate  | 100  |
| CT018A      | CT018B | Approval | 4.750  | 120.0  | 0.189 | 4.8          | 1.180  | 30.0             | 50  | 222            | Standard      | 100  |
| WITA-50S-M  | —      | Approval | 6.300  | 160.0  | 0.180 | 4.6          | 1.520  | 38.7             | 50  | 222            | Standard      | 1000 |
| CT019A      | CT019B | Approval | 6.500  | 160.0  | 0.189 | 4.8          | 1.650  | 42.0             | 50  | 222            | Standard      | 100  |
| CT021A      | CT021B | Approval | 7.500  | 190.0  | 0.189 | 4.8          | 2.050  | 52.0             | 50  | 222            | Standard      | 100  |
| WITA-50R-M  | —      | Approval | 7.900  | 200.7  | 0.180 | 4.6          | 1.950  | 49.5             | 50  | 222            | Standard      | 1000 |
| CT022A      | CT022B | Approval | 8.000  | 203.0  | 0.181 | 4.6          | 2.170  | 55.0             | 50  | 222            | Standard      | 100  |
| CT023A      | CT023B | Approval | 10.000 | 250.0  | 0.189 | 4.8          | 2.910  | 74.0             | 50  | 222            | Standard      | 100  |
| CT024A      | CT024B | Approval | 11.000 | 280.0  | 0.189 | 4.8          | 3.190  | 81.0             | 50  | 222            | Standard      | 100  |
| WITA-50RL-M | —      | Approval | 11.020 | 280.0  | 0.190 | 4.8          | 3.030  | 77.0             | 50  | 222            | Standard      | 1000 |
| CT025A      | CT025B | Approval | 11.875 | 300.0  | 0.189 | 4.8          | 3.350  | 85.0             | 50  | 222            | Standard      | 100  |
| CT026A      | CT026B | Approval | 12.250 | 310.0  | 0.189 | 4.8          | 3.500  | 89.0             | 50  | 222            | Standard      | 100  |
| CT027A      | CT027B | Approval | 14.500 | 368.0  | 0.189 | 4.8          | 4.020  | 102.0            | 50  | 222            | Standard      | 100  |
| CT028A      | CT028B | Approval | 15.250 | 385.0  | 0.189 | 4.8          | 4.570  | 116.0            | 50  | 222            | Standard      | 100  |
| WITA-50L-M  | —      | Approval | 15.750 | 400.0  | 0.180 | 4.6          | 4.450  | 113.0            | 50  | 222            | Standard      | 1000 |
| CT029A      | CT029B | Approval | 17.000 | 432.0  | 0.189 | 4.8          | 4.920  | 125.0            | 50  | 222            | Standard      | 100  |
| CT030A      | CT030B | Approval | 17.750 | 450.0  | 0.189 | 4.8          | 5.120  | 130.0            | 50  | 222            | Standard      | 100  |
| CT031A      | CT031B | Approval | 19.687 | 500.0  | 0.189 | 4.8          | 5.910  | 150.0            | 50  | 222            | Standard      | 100  |
| CT033A      | CT033B | Approval | 21.687 | 550.0  | 0.189 | 4.8          | 6.540  | 166.0            | 50  | 222            | Standard      | 100  |
| WITA-50XL-C | —      | Approval | 25.000 | 635.0  | 0.190 | 4.8          | 7.480  | 190.0            | 50  | 222            | Standard      | 100  |
| CT063A      | CT063B | Approval | 36.000 | 914.0  | 0.189 | 4.8          | 10.630 | 270.0            | 50  | 222            | Standard      | 100  |
| CT064A      | CT064B | Approval | 4.750  | 120.0  | 0.299 | 7.6          | 1.180  | 30.0             | 120 | 534            | Heavy Duty    | 100  |
| CT065A      | CT065B | Approval | 6.000  | 150.0  | 0.299 | 7.6          | 1.540  | 39.0             | 120 | 534            | Heavy Duty    | 100  |
| CT066A      | CT066B | Approval | 8.000  | 203.0  | 0.299 | 7.6          | 2.170  | 55.0             | 120 | 534            | Heavy Duty    | 100  |
| WITA-120S-D | —      | Approval | 8.600  | 218.0  | 0.300 | 7.6          | 2.010  | 51.0             | 120 | 534            | Heavy Duty    | 500  |
| CT067A      | CT067B | Approval | 9.437  | 240.0  | 0.299 | 7.6          | 2.600  | 66.0             | 120 | 534            | Heavy Duty    | 100  |
| 23CT110120  | —      | Approval | 11.000 | 279.0  | 0.292 | 7.4          | 2.790  | 70.0             | 120 | 534            | Standard      | 100  |
| CT068A      | CT068B | Approval | 11.000 | 280.0  | 0.299 | 7.6          | 3.070  | 78.0             | 120 | 534            | Heavy Duty    | 100  |
| CT069A      | CT069B | Approval | 11.750 | 300.0  | 0.299 | 7.6          | 3.460  | 88.0             | 120 | 534            | Heavy Duty    | 100  |
| CT070A      | CT070B | Approval | 13.500 | 340.0  | 0.299 | 7.6          | 3.900  | 99.0             | 120 | 534            | Heavy Duty    | 100  |
| CT071A      | CT071B | Approval | 15.000 | 380.0  | 0.252 | 6.4          | 4.330  | 110.0            | 100 | 445            | Heavy Duty    | 100  |
| CT072A      | CT072B | Approval | 15.000 | 380.0  | 0.299 | 7.6          | 4.330  | 110.0            | 120 | 534            | Heavy Duty    | 100  |
| WITA-120R-D | —      | Approval | 15.750 | 400.0  | 0.310 | 7.8          | 4.450  | 113.0            | 120 | 534            | Heavy Duty    | 500  |
| CT073A      | CT073B | Approval | 17.750 | 450.0  | 0.315 | 8.0          | 5.240  | 133.0            | 120 | 534            | Heavy Duty    | 100  |
| WITA-120L-D | —      | Approval | 21.650 | 550.0  | 0.310 | 7.8          | 6.380  | 162.0            | 120 | 534            | Heavy Duty    | 500  |
| CT074A      | CT074B | Approval | 21.687 | 550.0  | 0.315 | 8.0          | 6.540  | 166.0            | 175 | 778            | Heavy Duty    | 100  |
| WITA-175R-L | —      | Approval | 24.000 | 610.0  | 0.350 | 9.0          | 7.020  | 178.0            | 175 | 778            | Heavy Duty    | 50   |
| CT075A      | CT075B | Approval | 24.000 | 610.0  | 0.354 | 9.0          | 7.280  | 185.0            | 175 | 778            | Heavy Duty    | 100  |
| CT076A      | CT076B | Approval | 27.000 | 685.0  | 0.354 | 9.0          | 8.270  | 210.0            | 175 | 778            | Heavy Duty    | 100  |
| CT077A      | CT077B | Approval | 28.000 | 710.0  | 0.354 | 9.0          | 8.660  | 220.0            | 175 | 778            | Heavy Duty    | 100  |
| CT078A      | CT078B | Approval | 30.000 | 762.0  | 0.354 | 9.0          | 9.290  | 236.0            | 175 | 778            | Heavy Duty    | 100  |
| CT079A      | CT079B | Approval | 32.000 | 812.0  | 0.354 | 9.0          | 9.690  | 246.0            | 175 | 778            | Heavy Duty    | 100  |
| CT080A      | CT080B | Approval | 36.000 | 914.0  | 0.354 | 9.0          | 10.630 | 270.0            | 175 | 778            | Heavy Duty    | 100  |
| WITA-175L-Q | —      | Approval | 36.000 | 914.0  | 0.350 | 9.0          | 10.910 | 277.0            | 175 | 778            | Heavy Duty    | 25   |
| CT081A      | CT081B | Approval | 46.000 | 1168.0 | 0.354 | 9.0          | 14.170 | 360.0            | 175 | 778            | Heavy Duty    | 100  |
| CT082A      | CT082B | Approval | 48.000 | 1219.0 | 0.354 | 9.0          | 15.000 | 380.0            | 175 | 778            | Heavy Duty    | 100  |
| CT084A      | CT084B | Approval | 59.000 | 1500.0 | 0.354 | 9.0          | 18.270 | 464.0            | 175 | 778            | Heavy Duty    | 100  |



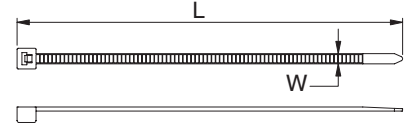
**CTWR/WITA Series**  
Weather Resistant Locking Cable Ties

Specifications:

- Material: UL94 V-2 UV Stabilized Nylon 6/6
- Color: Black

Features:

- Service Temperature: -40°F to 185°F (-40°C to 85°C)
- Designed for outdoor applications



| Item No.        | Approval | L Ref. |       | W Ref. |     | Ø Max Bundle |       | Tensile Strength |     | Classification | Bulk Pack Qty |
|-----------------|----------|--------|-------|--------|-----|--------------|-------|------------------|-----|----------------|---------------|
|                 |          | in     | mm    | in     | mm  | in           | mm    | lbs              | N   |                |               |
| CTWR002A        | UL       | 3.750  | 96.0  | 0.098  | 2.4 | 0.910        | 23.0  | 18               | 80  | Miniature      | 100           |
| WITA-18SF-UVB-M | UL       | 3.850  | 97.8  | 0.100  | 2.5 | 0.870        | 22.0  | 18               | 80  | Miniature      | 1000          |
| CTWR003A        | UL       | 4.000  | 100.0 | 0.098  | 2.4 | 0.980        | 25.0  | 18               | 80  | Miniature      | 100           |
| WITA-18R-UVB-M  | UL       | 4.720  | 120.0 | 0.100  | 2.5 | 1.060        | 26.9  | 18               | 80  | Miniature      | 1000          |
| CTWR004A        | UL       | 4.750  | 120.0 | 0.098  | 2.5 | 1.180        | 30.0  | 18               | 80  | Miniature      | 100           |
| WITA-18L-UVB-M  | UL       | 5.900  | 150.0 | 0.100  | 2.5 | 1.460        | 37.1  | 18               | 80  | Miniature      | 1000          |
| CTWR006A        | UL       | 6.500  | 165.0 | 0.098  | 2.5 | 1.730        | 44.0  | 18               | 80  | Miniature      | 100           |
| WITA-18V-UVB-M  | UL       | 7.870  | 200.0 | 0.100  | 2.5 | 2.130        | 54.1  | 18               | 80  | Miniature      | 1000          |
| CTWR007A        | UL       | 8.000  | 203.0 | 0.098  | 2.5 | 2.170        | 55.0  | 18               | 80  | Miniature      | 100           |
| WITA-18X-UVB-M  | UL       | 15.750 | 400.0 | 0.100  | 2.5 | 4.560        | 116.0 | 18               | 80  | Miniature      | 1000          |
| CTWR008A        | UL       | 4.750  | 120.0 | 0.126  | 3.2 | 1.180        | 30.0  | 40               | 178 | Intermediate   | 100           |
| CTWR009A        | UL       | 5.500  | 142.0 | 0.126  | 3.2 | 1.380        | 35.0  | 40               | 178 | Intermediate   | 100           |
| WITA-40R-UVB-M  | UL       | 5.910  | 150.0 | 0.140  | 3.6 | 1.480        | 37.6  | 40               | 178 | Intermediate   | 1000          |
| WITA-40R-UVB-C  | UL       | 5.910  | 150.0 | 0.140  | 3.6 | 1.480        | 37.6  | 40               | 178 | Intermediate   | 100           |
| WITA-40L-UVB-M  | UL       | 7.870  | 200.0 | 0.140  | 3.6 | 2.050        | 52.0  | 40               | 178 | Intermediate   | 1000          |
| CTWR010A        | UL       | 8.000  | 203.0 | 0.126  | 3.2 | 2.170        | 55.0  | 40               | 178 | Intermediate   | 100           |
| WITA-40XL-UVB-M | UL       | 8.070  | 205.0 | 0.140  | 3.6 | 2.100        | 53.3  | 40               | 178 | Intermediate   | 1000          |
| CTWR011A        | UL       | 6.000  | 150.0 | 0.142  | 3.6 | 1.540        | 39.0  | 40               | 178 | Intermediate   | 100           |
| CTWR012A        | UL       | 8.000  | 203.0 | 0.142  | 3.6 | 2.170        | 55.0  | 40               | 178 | Intermediate   | 100           |
| CTWR013A        | UL       | 10.000 | 250.0 | 0.142  | 3.6 | 2.910        | 74.0  | 40               | 178 | Intermediate   | 100           |
| CTWR014A        | UL       | 10.500 | 265.0 | 0.142  | 3.6 | 3.070        | 78.0  | 40               | 178 | Intermediate   | 100           |
| CTWR015A        | UL       | 11.500 | 292.0 | 0.142  | 3.6 | 3.350        | 85.0  | 40               | 178 | Intermediate   | 100           |
| WITA-40VL-UVB-M | UL       | 11.810 | 300.0 | 0.140  | 3.6 | 3.270        | 83.0  | 40               | 178 | Intermediate   | 1000          |
| CTWR016A        | UL       | 13.000 | 330.0 | 0.142  | 3.6 | 3.780        | 96.0  | 40               | 178 | Intermediate   | 100           |
| CTWR017A        | UL       | 14.500 | 368.0 | 0.142  | 3.6 | 4.020        | 102.0 | 40               | 178 | Intermediate   | 100           |
| CTWR018A        | UL       | 7.000  | 180.0 | 0.142  | 3.6 | 1.930        | 49.0  | 40               | 178 | Intermediate   | 100           |
| WITA-50S-UVB-M  | UL       | 6.300  | 160.0 | 0.180  | 4.6 | 1.520        | 38.7  | 50               | 222 | Standard       | 1000          |
| WITA-50R-UVB-M  | UL       | 7.900  | 200.7 | 0.180  | 4.6 | 1.950        | 49.5  | 50               | 222 | Standard       | 1000          |
| CTWR019A        | UL       | 8.000  | 203.0 | 0.181  | 4.6 | 2.170        | 55.0  | 50               | 222 | Standard       | 100           |
| CTWR020A        | UL       | 4.750  | 120.0 | 0.189  | 4.8 | 1.180        | 30.0  | 50               | 222 | Standard       | 100           |
| CTWR021A        | UL       | 6.500  | 160.0 | 0.189  | 4.8 | 1.650        | 42.0  | 50               | 222 | Standard       | 100           |
| CTWR022A        | UL       | 7.500  | 190.0 | 0.189  | 4.8 | 2.050        | 52.0  | 50               | 222 | Standard       | 100           |
| CTWR023A        | UL       | 10.000 | 250.0 | 0.189  | 4.8 | 2.910        | 74.0  | 50               | 222 | Standard       | 100           |
| CTWR024A        | UL       | 11.000 | 280.0 | 0.189  | 4.8 | 3.190        | 81.0  | 50               | 222 | Standard       | 100           |
| WITA-50RL-UVB-M | UL       | 11.020 | 280.0 | 0.190  | 4.8 | 3.030        | 77.0  | 50               | 222 | Standard       | 1000          |
| CTWR025A        | —        | 11.875 | 300.0 | 0.189  | 4.8 | 3.350        | 85.0  | 50               | 222 | Standard       | 100           |
| CTWR026A        | UL       | 12.250 | 310.0 | 0.189  | 4.8 | 3.500        | 89.0  | 50               | 222 | Standard       | 100           |
| CTWR027A        | UL       | 14.500 | 368.0 | 0.189  | 4.8 | 4.020        | 102.0 | 50               | 222 | Standard       | 100           |
| CTWR028A        | UL       | 15.187 | 385.0 | 0.189  | 4.8 | 4.570        | 116.0 | 50               | 222 | Standard       | 100           |
| WITA-50L-UVB-M  | UL       | 15.750 | 391.2 | 0.180  | 4.6 | 4.520        | 114.8 | 50               | 222 | Standard       | 1000          |
| CTWR029A        | UL       | 17.000 | 432.0 | 0.189  | 4.8 | 4.920        | 125.0 | 50               | 222 | Standard       | 100           |
| CTWR030A        | UL       | 17.750 | 450.0 | 0.189  | 4.8 | 5.120        | 130.0 | 50               | 222 | Standard       | 100           |
| CTWR031A        | UL       | 19.687 | 500.0 | 0.189  | 4.8 | 5.910        | 150.0 | 50               | 222 | Standard       | 100           |
| CTWR033A        | —        | 21.687 | 550.0 | 0.189  | 4.8 | 6.540        | 166.0 | 50               | 222 | Standard       | 100           |
| WITA-50XL-UVB-C | UL       | 25.000 | 635.0 | 0.190  | 4.8 | 7.480        | 190.0 | 50               | 222 | Standard       | 100           |
| CTWR063A        | —        | 36.000 | 914.0 | 0.189  | 4.8 | 10.630       | 270.0 | 50               | 222 | Standard       | 100           |
| CTWR065A        | —        | 6.000  | 150.0 | 0.299  | 7.6 | 1.540        | 39.0  | 120              | 534 | Heavy Duty     | 100           |
| CTWR066A        | UL       | 8.000  | 203.0 | 0.299  | 7.6 | 2.170        | 55.0  | 120              | 534 | Heavy Duty     | 100           |
| WITA-120S-UVB-D | UL       | 8.600  | 218.0 | 0.300  | 7.6 | 2.010        | 51.0  | 120              | 534 | Heavy Duty     | 500           |
| CTWR067A        | UL       | 9.437  | 240.0 | 0.299  | 7.6 | 2.600        | 66.0  | 120              | 534 | Heavy Duty     | 100           |
| CTWR068A        | UL       | 11.000 | 280.0 | 0.299  | 7.6 | 3.070        | 78.0  | 120              | 534 | Heavy Duty     | 100           |
| CTWR069A        | UL       | 11.875 | 300.0 | 0.299  | 7.6 | 3.500        | 88.0  | 120              | 534 | Heavy Duty     | 100           |
| CTWR070A        | UL       | 13.500 | 340.0 | 0.299  | 7.6 | 3.900        | 99.0  | 120              | 534 | Heavy Duty     | 100           |
| CTWR071A        | —        | 15.000 | 380.0 | 0.252  | 6.4 | 4.330        | 110.0 | 100              | 445 | Heavy Duty     | 100           |
| CTWR072A        | UL       | 15.000 | 380.0 | 0.299  | 7.6 | 4.330        | 110.0 | 120              | 534 | Heavy Duty     | 100           |
| WITA-120R-UVB-D | UL       | 15.750 | 400.0 | 0.310  | 7.8 | 4.450        | 113.0 | 120              | 534 | Heavy Duty     | 500           |
| WITA-120L-UVB-D | UL       | 21.650 | 550.0 | 0.310  | 7.8 | 6.380        | 162.0 | 120              | 534 | Heavy Duty     | 500           |
| CTWR073A        | UL       | 17.750 | 450.0 | 0.315  | 8.0 | 5.250        | 133.0 | 175              | 778 | Heavy Duty     | 100           |
| CTWR074A        | UL       | 21.875 | 550.0 | 0.315  | 8.0 | 6.500        | 166.0 | 175              | 778 | Heavy Duty     | 100           |
| WITA-175R-UVB-L | UL       | 24.000 | 610.0 | 0.350  | 9.0 | 7.020        | 178.0 | 175              | 778 | Heavy Duty     | 50            |
| CTWR075A        | UL       | 24.000 | 610.0 | 0.354  | 9.0 | 7.280        | 185.0 | 175              | 778 | Heavy Duty     | 100           |
| CTWR076A        | UL       | 27.000 | 680.0 | 0.354  | 9.0 | 8.270        | 210.0 | 175              | 778 | Heavy Duty     | 100           |
| CTWR077A        | UL       | 28.000 | 705.0 | 0.354  | 9.0 | 8.660        | 220.0 | 175              | 778 | Heavy Duty     | 100           |
| CTWR079A        | UL       | 32.000 | 812.0 | 0.354  | 9.0 | 9.690        | 246.0 | 175              | 778 | Heavy Duty     | 100           |
| CTWR080A        | UL       | 36.000 | 914.0 | 0.354  | 9.0 | 10.630       | 270.0 | 175              | 778 | Heavy Duty     | 100           |
| WITA-175L-UVB-Q | UL       | 36.000 | 914.0 | 0.350  | 9.0 | 10.910       | 277.0 | 175              | 778 | Heavy Duty     | 25            |
| CTWR081A        | UL       | 46.000 | 1168  | 0.354  | 9.0 | 14.170       | 360.0 | 175              | 778 | Heavy Duty     | 100           |
| CTWR082A        | UL       | 48.000 | 1219  | 0.354  | 9.0 | 15.000       | 380.0 | 175              | 778 | Heavy Duty     | 100           |
| CTWR084A        | —        | 59.000 | 1500  | 0.354  | 9.0 | 18.270       | 464.0 | 175              | 778 | Heavy Duty     | 100           |



# CABLE TIES

## CTHD Series Extra Heavy Duty Cable Ties

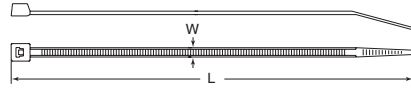


**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: See Table

**Features:**

- Service Temperature: -40°F to 185°F (-40°C to 85°C)
- High tensile strength for demanding applications



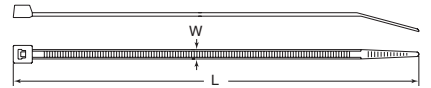
| Item No. |          |          |          | L     |        | W     |      | Ø Max Bundle |       | Tensile Strength |      | Classification   | Bulk Pack Qty |
|----------|----------|----------|----------|-------|--------|-------|------|--------------|-------|------------------|------|------------------|---------------|
| Natural  | Approval | Black    | Approval | in    | mm     | in    | mm   | in           | mm    | lbs              | N    |                  |               |
| CTHD001A | UL       | CTHD001B | —        | 9.06  | 230.0  | 0.500 | 12.7 | 2.480        | 63.0  | 250              | 1113 | Extra Heavy Duty | 100           |
| CTHD002A | UL       | CTHD002B | —        | 11.02 | 280.0  | 0.500 | 12.7 | 3.150        | 80.0  | 250              | 1113 | Extra Heavy Duty | 100           |
| CTHD003A | UL       | CTHD003B | —        | 14.96 | 380.0  | 0.500 | 12.7 | 4.330        | 110.0 | 250              | 1113 | Extra Heavy Duty | 100           |
| CTHD004A | —        | CTHD004B | —        | 18.90 | 480.0  | 0.500 | 12.7 | 5.510        | 140.0 | 250              | 1113 | Extra Heavy Duty | 100           |
| CTHD005A | UL       | CTHD005B | UL       | 21.65 | 550.0  | 0.500 | 12.7 | 6.540        | 166.0 | 250              | 1113 | Extra Heavy Duty | 100           |
| CTHD006A | —        | CTHD006B | —        | 22.83 | 580.0  | 0.500 | 12.7 | 6.890        | 175.0 | 250              | 1113 | Extra Heavy Duty | 100           |
| CTHD007A | —        | CTHD007B | —        | 28.74 | 730.0  | 0.500 | 12.7 | 8.860        | 225.0 | 250              | 1113 | Extra Heavy Duty | 100           |
| CTHD008A | —        | CTHD008B | —        | 34.65 | 880.0  | 0.500 | 12.7 | 10.510       | 267.0 | 250              | 1113 | Extra Heavy Duty | 100           |
| CTHD009A | —        | CTHD009B | —        | 40.55 | 1030.0 | 0.500 | 12.7 | 12.480       | 317.0 | 250              | 1113 | Extra Heavy Duty | 100           |

## CT Series Colored Locking Cable Ties



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: See Table



| Item No. |        |        |        |        | L Ref.   |       | W Ref. |       | Ø Max Bundle |       | Tensile Strength |     | Classification | Bulk Pack Qty |     |
|----------|--------|--------|--------|--------|----------|-------|--------|-------|--------------|-------|------------------|-----|----------------|---------------|-----|
| Green    | Red    | Yellow | Blue   | Silver | Approval | in    | mm     | in    | mm           | in    | mm               | lbs |                |               | N   |
| CT003G   | CT003K | CT003Y | CT003L | CT003S | UL       | 3.94  | 100.0  | 0.098 | 2.5          | 0.980 | 25.0             | 18  | 80             | Miniature     | 100 |
| CT007G   | CT007K | CT007Y | CT007L | CT007S | UL       | 8.00  | 203.0  | 0.098 | 2.5          | 2.170 | 55.0             | 18  | 80             | Miniature     | 100 |
| CT010G   | CT010K | CT010Y | CT010L | CT010S | UL       | 5.91  | 150.0  | 0.142 | 3.6          | 1.540 | 39.0             | 40  | 178            | Intermediate  | 100 |
| CT013G   | CT013K | CT013Y | CT013L | CT013S | UL       | 9.84  | 250.0  | 0.142 | 3.6          | 2.910 | 74.0             | 40  | 178            | Intermediate  | 100 |
| CT022G   | CT022K | CT022Y | CT022L | CT022S | UL       | 8.00  | 203.0  | 0.181 | 4.6          | 2.170 | 55.0             | 50  | 222            | Standard      | 100 |
| CT025G   | CT025K | CT025Y | CT025L | CT025S | UL       | 11.81 | 300.0  | 0.189 | 4.8          | 3.350 | 85.0             | 50  | 222            | Standard      | 100 |
| CT027G   | CT027K | CT027Y | CT027L | CT027S | UL       | 14.49 | 368.0  | 0.189 | 4.8          | 4.020 | 102.0            | 50  | 222            | Standard      | 100 |
| CT072G   | CT072K | CT072Y | CT072L | CT072S | UL       | 14.96 | 380.0  | 0.299 | 7.6          | 4.330 | 110.0            | 120 | 534            | Heavy Duty    | 100 |

## Polypropylene Locking Cable Ties

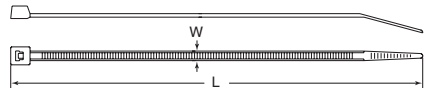


**Specifications:**

- Material: Polypropylene
- Color: Black

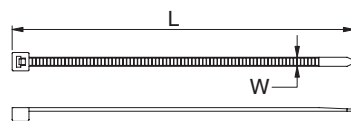
**Features:**

- Excellent chemical resistance
- Moisture levels are relatively unaffected by variations in moisture levels
- Buoyant



| Item No. | L Ref. |       | W Ref. |     | Ø Max Bundle |       | Tensile Strength |     | Bulk Pack Qty |
|----------|--------|-------|--------|-----|--------------|-------|------------------|-----|---------------|
|          | in     | mm    | in     | mm  | in           | mm    | lbs              | N   |               |
| 1293369  | 5.90   | 150.0 | 0.14   | 3.6 | 1.42         | 36.1  | 18               | 80  | 100           |
| 1293370  | 8.00   | 203.0 | 0.18   | 4.6 | 2.05         | 52.1  | 22               | 98  | 100           |
| 1293371  | 9.84   | 250.0 | 0.19   | 4.8 | 2.68         | 68.1  | 22               | 98  | 100           |
| 1293372  | 9.49   | 240.0 | 0.29   | 7.4 | 2.40         | 61.0  | 50               | 222 | 100           |
| 1293373  | 11.81  | 300.0 | 0.30   | 7.6 | 3.15         | 80.0  | 50               | 222 | 100           |
| 1293374  | 14.96  | 380.0 | 0.30   | 7.6 | 4.13         | 104.9 | 50               | 222 | 100           |
| 1293375  | 21.65  | 550.0 | 0.31   | 7.9 | 6.30         | 160   | 50               | 222 | 100           |

## WITA-V0 Series UL94 V-0 Locking Cable Ties



**Specifications:**

- Material: UL94 V-0 Nylon 6/6
- Color: Natural

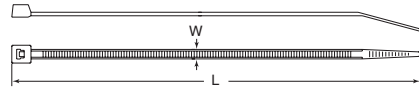


| Item No.      | L Ref. |       | W Ref. |     | Ø Max Bundle |      | Tensile Strength |     | Bulk Pack Qty |
|---------------|--------|-------|--------|-----|--------------|------|------------------|-----|---------------|
|               | in     | mm    | in     | mm  | in           | mm   | lbs              | N   |               |
| WITA-18R-V0-M | 4.72   | 120.0 | 0.100  | 2.5 | 1.060        | 26.9 | 18               | 80  | 1000          |
| WITA-50R-V0-M | 7.90   | 200.7 | 0.180  | 4.6 | 1.950        | 49.5 | 50               | 222 | 1000          |



# CABLE TIES / INSTALLATION TOOLS

## CTHS/WITA-HS Series Heat Stabilized Cable Ties



**Specifications:**

- Material: UL94 V-2 Heat Stabilized Nylon 6/6
- Color: Black

**Features:**

- Service Temperature: -40°F to 221°F (-40°C to 105°C)
- Suitable for higher temperature applications



| Item No.       | Approval | L Ref. |       | W Ref. |     | Ø Max Bundle |       | Tensile Strength |     | Classification | Bulk Pack Qty |
|----------------|----------|--------|-------|--------|-----|--------------|-------|------------------|-----|----------------|---------------|
|                |          | in     | mm    | in     | mm  | in           | mm    | lbs              | N   |                |               |
| CT003F         | RU       | 3.94   | 100.0 | 0.098  | 2.5 | 0.980        | 25.0  | 18               | 80  | Miniature      | 100           |
| WITA-18R-HS-M  | —        | 4.72   | 120.0 | 0.100  | 2.5 | 1.060        | 26.9  | 18               | 80  | Miniature      | 1000          |
| CT005C         | RU       | 5.59   | 142.0 | 0.098  | 2.5 | 1.380        | 35.0  | 18               | 80  | Miniature      | 100           |
| CT007C         | RU       | 8.00   | 203.0 | 0.098  | 2.5 | 2.170        | 55.0  | 18               | 80  | Miniature      | 100           |
| WITA-40R-HS-M  | —        | 5.91   | 150.0 | 0.140  | 3.6 | 1.480        | 37.6  | 40               | 178 | Intermediate   | 1000          |
| CT012D         | RU       | 8.00   | 203.0 | 0.142  | 3.6 | 2.170        | 55.0  | 40               | 178 | Intermediate   | 100           |
| CT015C         | RU       | 11.50  | 292.0 | 0.142  | 3.6 | 3.350        | 85.0  | 40               | 178 | Intermediate   | 100           |
| CT018C         | RU       | 4.72   | 120.0 | 0.189  | 4.8 | 1.180        | 30.0  | 50               | 222 | Standard       | 100           |
| CT019C         | RU       | 6.30   | 160.0 | 0.189  | 4.8 | 1.650        | 42.0  | 50               | 222 | Standard       | 100           |
| CT021C         | RU       | 7.48   | 190.0 | 0.189  | 4.8 | 2.050        | 52.0  | 50               | 222 | Standard       | 100           |
| WITA-50R-HS-M  | —        | 7.90   | 200.7 | 0.180  | 4.6 | 1.950        | 49.5  | 50               | 222 | Standard       | 1000          |
| CT022C         | RU       | 8.00   | 203.0 | 0.181  | 4.6 | 2.170        | 55.0  | 50               | 222 | Standard       | 100           |
| CT024C         | RU       | 11.02  | 280.0 | 0.189  | 4.8 | 3.190        | 81.0  | 50               | 222 | Standard       | 100           |
| WITA-50RL-HS-M | —        | 11.02  | 280.0 | 0.190  | 4.8 | 3.030        | 77.0  | 50               | 222 | Standard       | 1000          |
| CT025C         | RU       | 11.81  | 300.0 | 0.189  | 4.8 | 3.350        | 85.0  | 50               | 222 | Standard       | 100           |
| CT027F         | RU       | 14.49  | 368.0 | 0.189  | 4.8 | 4.020        | 102.0 | 50               | 222 | Standard       | 100           |
| CT029F         | RU       | 17.00  | 432.0 | 0.189  | 4.8 | 4.920        | 125.0 | 50               | 222 | Standard       | 100           |
| CT033C         | —        | 21.65  | 550.0 | 0.189  | 4.8 | 6.540        | 166.0 | 50               | 222 | Standard       | 100           |
| CT067C         | RU       | 9.45   | 240.0 | 0.299  | 7.6 | 2.600        | 66.0  | 120              | 534 | Heavy Duty     | 100           |
| CT072C         | RU       | 14.96  | 380.0 | 0.299  | 7.6 | 4.330        | 110.0 | 120              | 534 | Heavy Duty     | 100           |
| CT075C         | RU       | 24.02  | 610.0 | 0.354  | 9.0 | 7.280        | 185.0 | 175              | 778 | Heavy Duty     | 100           |

## CTG/MTH Series Cable Tie Installation Tools



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6

| Item No. | Figure | Used with Cable Ties | Features:                                                                                   | Pack Qty |
|----------|--------|----------------------|---------------------------------------------------------------------------------------------|----------|
| WIT-1    | 1      | 18 - 50 lbs          | Lightweight for job site installations and repairs                                          | 1        |
| WIT-2A   | 2      | 18 - 50 lbs          | Heavy duty construction - cuts tie flush when adjustable preset bundling tension is reached | 1        |
| CTG004A  | 3      | 50 - 175 lbs         | Heavy duty construction                                                                     | 1        |
| WIT-3A   | 4      | 18 - 50 lbs          | Economy model - glass reinforced Nylon for lightweight durability                           | 1        |
| CTG010A  | 5      | Stainless Steel      | Tightens and cuts locking Stainless Steel ties                                              | 1        |
| MTG-1    | 6      | Stainless Steel      | Tightens and cuts locking Stainless Steel ties                                              | 1        |

## CTR/WIT-RT Series Standard Releasable Cable Ties

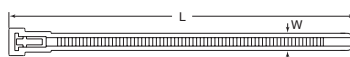


Figure 1

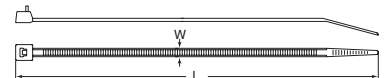


Figure 2

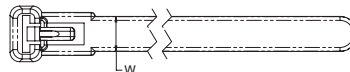


Figure 3

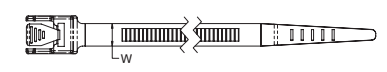


Figure 4

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: See Table

**Features:**

- Ties remain locked until intentionally released using release tab
- Great for temporary bundling purposes or future changes

| Item No.      | L Ref.          |       | W Ref. |       | Ø Max Bundle |     | Tensile Strength |       | Bulk Pack Qty |     |      |
|---------------|-----------------|-------|--------|-------|--------------|-----|------------------|-------|---------------|-----|------|
|               | Natural         | Black | Figure | in    | mm           | in  | mm               | lbs   |               | N   |      |
| WIT-RT-1-M    | WIT-RT-1-UVB-M  | 3     | 8.093  | 206.0 | 0.300        | 7.6 | 1.875            | 48.0  | 30            | 133 | 1000 |
| WIT-RT-0550-M | WITRT-0550-UV-M | 4     | 5.500  | 139.7 | 0.210        | 5.3 | 1.250            | 31.8  | 40            | 178 | 1000 |
| WIT-RT-0800-M | WITRT-0800-UV-M | 4     | 8.000  | 203.2 | 0.210        | 5.3 | 2.000            | 50.8  | 40            | 178 | 1000 |
| WIT-RT-1050-M | —               | 4     | 10.500 | 266.7 | 0.210        | 5.3 | 2.500            | 63.5  | 40            | 178 | 1000 |
| WIT-50SR-M    | WIT-50SR-UVB-M  | 2     | 6.000  | 152.4 | 0.190        | 4.8 | 1.500            | 38.1  | 50            | 222 | 1000 |
| WIT-50RR-M    | WIT-50RR-UVB-M  | 2     | 8.000  | 203.2 | 0.190        | 4.8 | 2.000            | 50.8  | 50            | 222 | 1000 |
| —             | CTR003A         | 1     | 8.000  | 200.0 | 0.299        | 7.6 | 2.000            | 50.0  | 50            | 222 | 100  |
| WIT-50LR-M    | WIT-50LR-UVB-M  | 2     | 11.656 | 295.9 | 0.190        | 4.8 | 3.000            | 76.2  | 50            | 222 | 1000 |
| —             | CTR005A         | 1     | 11.875 | 300.0 | 0.299        | 7.6 | 3.150            | 80.0  | 50            | 222 | 100  |
| CTR011A       | —               | 2     | 14.562 | 370.0 | 0.189        | 4.8 | 4.020            | 102.0 | 50            | 222 | 100  |



## STAINLESS STEEL CABLE TIES / SPECIALTY CABLE TIES

### MT Series Stainless Steel Cable Ties



**Specifications:**

- Material: See Table

**Features:**

- Temperature Range: -328°F to 1000°F (-200°C to 538°C)
- Use 316 Stainless Steel for corrosive environments
- Use Type 304 Stainless Steel for general purpose indoor/outdoor applications
- Radiation, vibration and flame resistant

Use with Installation Tools CTG010A or MTG-1 on page 359.



See page 376 for Stainless Steel Cable Tie Holders.



| Item No.            |                     |          | Length |        | Width |     | Ø Max Bundle |       | Tensile Strength |      | Bulk Pack Qty |
|---------------------|---------------------|----------|--------|--------|-------|-----|--------------|-------|------------------|------|---------------|
| 304 Stainless Steel | 316 Stainless Steel | Approval | in     | mm     | in    | mm  | in           | mm    | lbs              | N    |               |
| MT-1                | MT-16               |          | 5.00   | 127.0  | 0.18  | 4.6 | 1.00         | 25.4  | 100              | 445  | 100           |
| MT-2                | MT-17               |          | 7.91   | 201.0  | 0.18  | 4.6 | 2.00         | 51.0  | 100              | 445  | 100           |
| MT-3                | MT-18               |          | 10.20  | 259.0  | 0.18  | 4.6 | 2.75         | 70.0  | 100              | 445  | 100           |
| MT-4                | MT-19               |          | 14.25  | 362.0  | 0.18  | 4.6 | 4.00         | 102.0 | 100              | 445  | 100           |
| MT-5                | MT-20               |          | 20.51  | 521.0  | 0.18  | 4.6 | 6.00         | 152.0 | 100              | 445  | 100           |
| MT-6                | MT-21               |          | 26.73  | 679.0  | 0.18  | 4.6 | 8.00         | 203.0 | 100              | 445  | 100           |
| MT-7                | MT-22               |          | 32.99  | 838.0  | 0.18  | 4.6 | 10.00        | 254.0 | 100              | 445  | 100           |
| MT-8                | MT-23               |          | 39.29  | 998.0  | 0.18  | 4.6 | 12.00        | 304.0 | 100              | 445  | 50            |
| MT-9                | MT-24               |          | 49.21  | 1250.0 | 0.18  | 4.6 | 15.00        | 380.0 | 100              | 445  | 50            |
| MT-10               | MT-25               |          | 7.91   | 201.0  | 0.31  | 7.9 | 2.00         | 51.0  | 250              | 1113 | 100           |
| MT-11               | MT-26               |          | 14.25  | 362.0  | 0.31  | 7.9 | 4.00         | 102.0 | 250              | 1113 | 100           |
| MT-12               | MT-27               |          | 20.51  | 521.0  | 0.31  | 7.9 | 6.00         | 152.0 | 250              | 1113 | 100           |
| MT-13               | MT-28               |          | 26.73  | 679.0  | 0.31  | 7.9 | 8.00         | 203.0 | 250              | 1113 | 100           |
| MT-14               | MT-29               |          | 32.99  | 838.0  | 0.31  | 7.9 | 10.00        | 254.0 | 250              | 1113 | 50            |
| MT-15               | MT-30               |          | 39.29  | 998.0  | 0.31  | 7.9 | 12.00        | 304.0 | 250              | 1113 | 50            |

### WITA-F Series Identification Marker Ties

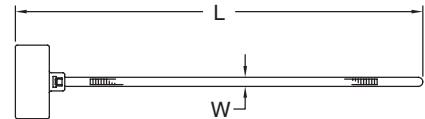
**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural



**Features:**

- Identification label on tie that can be imprinted or written on with markers



| Item No.      | L Ref. |       | W Ref. |     | Ø Max Bundle |      | Tensile Strength |    | Marker Pad  |            | Bulk Pack Qty |
|---------------|--------|-------|--------|-----|--------------|------|------------------|----|-------------|------------|---------------|
|               | in     | mm    | in     | mm  | in           | mm   | lbs              | N  | in          | mm         |               |
| WITA-F2-18R-M | 4.330  | 110.0 | 0.100  | 2.5 | 0.980        | 25.0 | 18               | 80 | 1.00 x 0.31 | 25.0 x 7.9 | 1000          |

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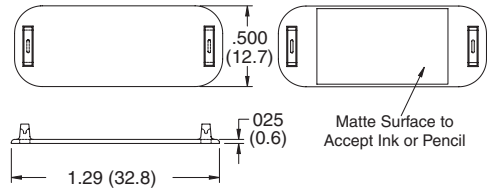
# SPECIALTY CABLE TIES / DOUBLE HEADED & BEADED CABLE TIES

## WIT-MK-1 Series Marker Tag for Cable Ties



- Specifications:
- Material: UL94 V-2 Nylon 6/6
  - Color: Natural

- Features:
- Slide any standard cable tie up to 50 lbs. through mounting slots (ties sold separately)
  - Matte surface to accept ink, pencil or marker



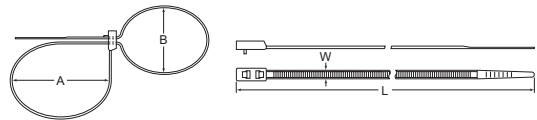
| Item No. | Cable Ties Accepted | Bulk Pack Qty |
|----------|---------------------|---------------|
| WIT-MK-1 | 18 lbs. - 50 lbs.   | 1000          |

## CTDH/WITA-DH Series Double Headed Cable Ties



- Specifications:
- Material: UL94 V-2 Nylon 6/6
  - Color: See Table

- Features:
- Double head design keeps two wire bundles separate



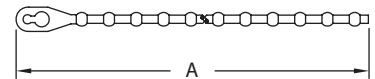
| Item No.      |                     | L      |       | W     |     | A Max |       | A Min |     | B Max |      | B Min |     | Tensile Strength |     | Bulk Pack Qty |
|---------------|---------------------|--------|-------|-------|-----|-------|-------|-------|-----|-------|------|-------|-----|------------------|-----|---------------|
| Natural       | Black UV Stabilized | in     | mm    | in    | mm  | in    | mm    | in    | mm  | in    | mm   | in    | mm  | lbs              | N   |               |
| WITA-50RLDH-M | WITA50RLDH-UV-M     | 8.875  | 225.0 | 0.189 | 4.8 | 2.300 | 59.0  | 0.098 | 2.5 | 2.000 | 52.0 | 0.079 | 2.0 | 50               | 222 | 1000          |
| CTDH002A      | —                   | 11.875 | 300.0 | 0.189 | 4.8 | 3.300 | 83.0  | 0.098 | 2.5 | 3.000 | 76.0 | 0.079 | 2.0 | 50               | 222 | 1000          |
| WITA-50LDH-M  | WITA-50LDH-UV-M     | 14.560 | 370.0 | 0.189 | 4.8 | 4.100 | 105.0 | 0.098 | 2.5 | 3.900 | 98.0 | 0.079 | 2.0 | 50               | 222 | 1000          |

## BT Series Beaded Cable Ties



- Specifications:
- Material: See Table
  - Color: See Table

- Features:
- Easy to install and release
  - Beaded design keeps wires from shifting or slipping
  - Polypropylene material is very flexible



| Item No.                  |                              |                            |                             |                            |                          | A Ref. Length |       | Ø Max Bundle Requires 3 Bead Engagement |      | Bulk Pack Qty |
|---------------------------|------------------------------|----------------------------|-----------------------------|----------------------------|--------------------------|---------------|-------|-----------------------------------------|------|---------------|
| Red UL94 HB Polypropylene | Yellow UL94 HB Polypropylene | Blue UL94 HB Polypropylene | Black UL94 HB Polypropylene | Natural UL94 V-2 Nylon 6/6 | Black UL94 V-2 Nylon 6/6 | in            | mm    | in                                      | mm   |               |
| BT-2-10-RD                | BT-2-10-YL                   | BT-2-10-BL                 | BT-2-10-BK                  | BT-2-01-NT                 | BT-2-01-BK               | 2.50          | 63.5  | 0.563                                   | 14.3 | 1000          |
| BT-4-10-RD                | BT-4-10-YL                   | BT-4-10-BL                 | BT-4-10-BK                  | BT-4-01-NT                 | BT-4-01-BK               | 4.00          | 101.6 | 1.000                                   | 25.4 | 1000          |
| BT-5-10-RD                | BT-5-10-YL                   | BT-5-10-BL                 | BT-5-10-BK                  | BT-5-01-NT                 | BT-5-01-BK               | 5.00          | 127.0 | 1.250                                   | 31.8 | 1000          |
| BT-6-10-RD                | BT-6-10-YL                   | BT-6-10-BL                 | BT-6-10-BK                  | BT-6-01-NT                 | BT-6-01-BK               | 6.00          | 152.4 | 1.750                                   | 44.5 | 1000          |
| BT-8-10-RD                | BT-8-10-YL                   | BT-8-10-BL                 | BT-8-10-BK                  | BT-8-01-NT                 | BT-8-01-BK               | 8.75          | 222.3 | 2.375                                   | 60.3 | 1000          |
| BT-10-10-RD               | BT-10-10-YL                  | BT-10-10-BL                | BT-10-10-BK                 | BT-10-01-NT                | BT-10-01-BK              | 10.75         | 273.1 | 3.125                                   | 85.7 | 1000          |
| BT-12-10-RD               | BT-12-10-YL                  | BT-12-10-BL                | BT-12-10-BK                 | BT-12-01-NT                | BT-12-01-BK              | 12.75         | 323.9 | 3.625                                   | 92.1 | 1000          |



## DOUBLE HEADED & BEADED CABLE TIES

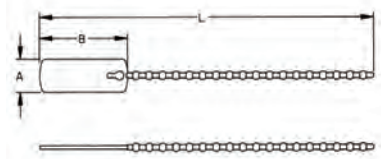
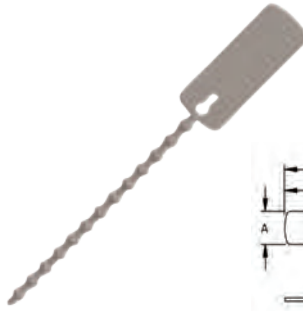
### 23LB/23LP Series Label Beaded Ties

Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

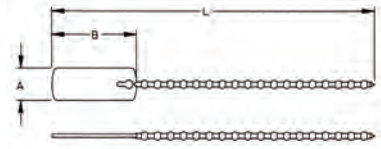
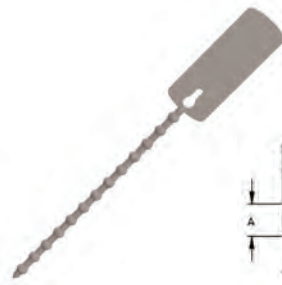
Features:

- Use permanent ink pens, felt tip pens, pressure sensitive adhesive labels or even Post-it notes on the polished label area
- Resists corrosion and abrasion
- "LB" blunt tip for general use. "LP" pointed tip can be used to pierce thin materials



LB Version

| Item No.  | L     |       | A     |      | B     |      | Bulk Pack Qty |
|-----------|-------|-------|-------|------|-------|------|---------------|
|           | in    | mm    | in    | mm   | in    | mm   |               |
| 23LB0400N | 4.000 | 101.6 | 0.500 | 12.7 | 1.313 | 33.3 | 500           |
| 23LB0600N | 6.000 | 152.4 | 0.500 | 12.7 | 1.313 | 33.3 | 500           |



LP Version

| Item No.  | L     |       | A     |      | B     |      | Bulk Pack Qty |
|-----------|-------|-------|-------|------|-------|------|---------------|
|           | in    | mm    | in    | mm   | in    | mm   |               |
| 23LP0400N | 4.000 | 101.6 | 0.500 | 12.7 | 1.313 | 33.3 | 500           |
| 23LP0600N | 6.000 | 152.4 | 0.500 | 12.7 | 1.313 | 33.3 | 500           |

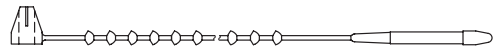
### LBT Series Locking Beaded Cable Ties

Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Has a permanent locking feature



| Item No.  | Approval | Length |       | Width Max |     | Ø Max Bundle |      | Tensile Strength |    | Bulk Pack Qty |
|-----------|----------|--------|-------|-----------|-----|--------------|------|------------------|----|---------------|
|           |          | in     | mm    | in        | mm  | in           | mm   | lbs              | N  |               |
| LBT-18-01 |          | 5.90   | 150.0 | 0.080     | 2.0 | 1.4          | 35.6 | 18               | 80 | 1000          |

### HT Series Hanking Cable Ties

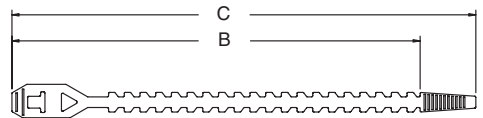


Specifications:

- Material: Polyethylene
- Color: Natural

Features:

- Good for wrapping electrical cords for shipping and packaging
- Extremely flexible

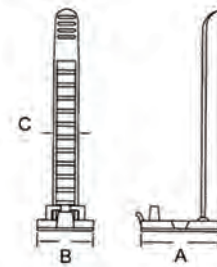


| Item No. | B Ref. |       | C Ref. |       | Ø Max Bundle |      | Width of Strap |     | Bulk Pack Qty |
|----------|--------|-------|--------|-------|--------------|------|----------------|-----|---------------|
|          | in     | mm    | in     | mm    | in           | mm   | in             | mm  |               |
| HT-3.9   | 3.19   | 81.0  | 3.90   | 99.0  | 0.91         | 23.0 | 0.250          | 6.4 | 1000          |
| HT-4.9   | 4.21   | 107.0 | 4.92   | 125.0 | 1.10         | 28.0 | 0.250          | 6.4 | 1000          |
| HT-5.9   | 5.20   | 132.0 | 5.91   | 150.0 | 1.42         | 36.0 | 0.250          | 6.4 | 1000          |

# SCREW MOUNT & SPECIALTY CABLE TIES



## NM22LCC Series Adhesive Based Ladder Ties



**Specifications:**

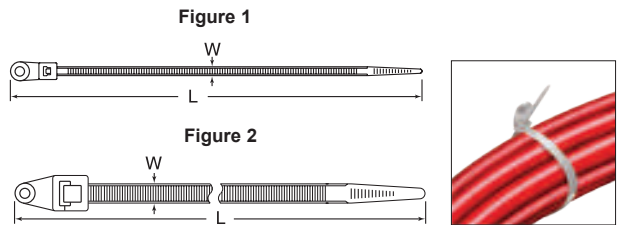
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Adhesive backing allows for easy installation, no tools or mounting screws needed
- Keeps wires or cables neatly and securely in place
- Resists corrosion, vibration and abrasion

| Item No.    | Max Cable Ø |      | L     |      | W     |      | Bulk Pack Qty |
|-------------|-------------|------|-------|------|-------|------|---------------|
|             | in          | mm   | in    | mm   | in    | mm   |               |
| NM22LCC0625 | 0.669       | 17.0 | 0.984 | 25.0 | 0.709 | 18.0 | 100           |
| NM22LCC0812 | 0.866       | 22.0 | 1.201 | 30.5 | 0.827 | 21.0 | 100           |
| NM22LCC1000 | 1.024       | 26.0 | 1.201 | 30.5 | 0.827 | 21.0 | 100           |

## CTMT Series Screw Mount Cable Ties



**Specifications:**

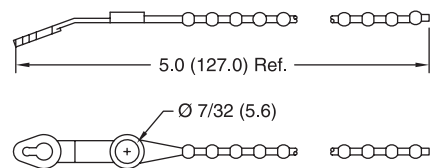
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Mountable with single screw or bolt

| Item No. | Figure | L     |       | W     |       | Ø Max Bundle |       | Tensile Strength |     | Screw Size | Bulk Pack Qty |
|----------|--------|-------|-------|-------|-------|--------------|-------|------------------|-----|------------|---------------|
|          |        | in    | mm    | in    | mm    | in           | mm    | lbs.             | N   |            |               |
| CTMT001A | 1      | 4.33  | 110   | 0.098 | 2.5   | 0.984        | 25    | 18               | 80  | #4         | 100           |
| CTMT002A | 1      | 6.75  | 171.5 | 0.146 | 3.7   | 1.575        | 40    | 40               | 178 | #10        | 100           |
| CTMT003A | 1      | 8.62  | 219   | 0.165 | 4.2   | 2.047        | 52    | 50               | 222 | #10        | 100           |
| CTMT006A | 2      | 16.14 | 410   | 0.311 | 7.9   | 4.409        | 112   | 120              | 534 | M6         | 100           |
| CTMT007A | —      | 2     | 11.81 | 300   | 0.307 | 7.8          | 3.150 | 80               | 120 | M6         | 100           |

## ST Series Screw Mount Beaded Cable Ties



**Specifications:**

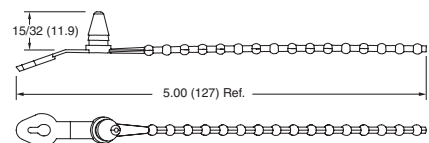
- Material: See table
- Color: Natural

**Features:**

- Tie is easily releasable
- Polypropylene material is very flexible
- Easily and securely mounted with a #12 (M5) screw

| Item No. | Material              | Ø Bundle Range |            | Screw Size | Bulk Pack Qty |
|----------|-----------------------|----------------|------------|------------|---------------|
|          |                       | in             | mm         |            |               |
| ST-205   | UL94 HB Polypropylene | 0.250 - 1.250  | 6.4 - 31.8 | #12        | 1000          |
| ST-305   | UL94 V-2 Nylon 6/6    | 0.250 - 1.250  | 6.4 - 31.8 | #12        | 1000          |

## PT Series Push In Beaded Cable Ties



**Specifications:**

- Material: See table
- Color: See table

**Features:**

- Easily snaps into mounting hole
- Tie is easily releasable
- Polypropylene material is very flexible

| Item No. |                    | Color   | Ø Bundle Range |            | Ø Mounting Hole |     | Panel Thickness |           | Bulk Pack Qty |
|----------|--------------------|---------|----------------|------------|-----------------|-----|-----------------|-----------|---------------|
| UL94 HB  | UL94 V-2 Nylon 6/6 |         | in             | mm         | in              | mm  | in              | mm        |               |
| PT-203   | PT-303             | Black   | 1/4 - 1-1/4    | 6.4 - 31.8 | 0.250           | 6.4 | 0.031 - 0.125   | 0.8 - 3.2 | 1000          |
| PT-205   | PT-305             | Natural | 1/4 - 1-1/4    | 6.4 - 31.8 | 0.250           | 6.4 | 0.031 - 0.125   | 0.8 - 3.2 | 1000          |



# ARROWHEAD CABLE TIES / PUSH MOUNT CABLE TIES

## WIT-30RRA/TOAH Series Releasable Arrowhead Cable Ties

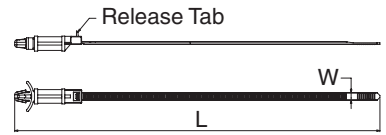


Figure 1

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Combines cable tie, mount and fastener in a single part
- Used to attach wire or cable bundles to a surface
- Easily snaps into pre-drilled holes
- WIT-30RRA part has a spacer after the arrowhead

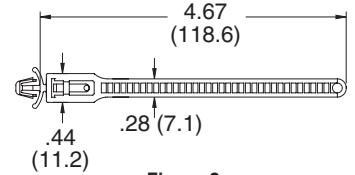


Figure 2

| Item No.       | Figure | L Ref. |       | W Ref. |     | Ø Max Bundle |      | Tensile Strength |     | Ø Mounting Hole |     | Panel Thickness |           | Spacer Length |      | Bulk Pack Qty |
|----------------|--------|--------|-------|--------|-----|--------------|------|------------------|-----|-----------------|-----|-----------------|-----------|---------------|------|---------------|
|                |        | in     | mm    | in     | mm  | in           | mm   | lbs.             | N   | in              | mm  | in              | mm        | in            | mm   |               |
| WIT-30RRA-4-M  | 1      | 6.312  | 160.3 | 0.141  | 3.6 | 1.250        | 31.8 | 30               | 135 | 0.187           | 4.8 | 0.030 - 0.078   | 0.8 - 2.0 | 0.280         | 7.1  | 1000          |
| WIT-30RRA-8-M  | 1      | 6.562  | 166.7 | 0.141  | 3.6 | 1.250        | 31.8 | 30               | 135 | 0.187           | 4.8 | 0.030 - 0.078   | 0.8 - 2.0 | 0.530         | 13.5 | 1000          |
| WIT-30RRA-12-M | 1      | 6.812  | 173.0 | 0.141  | 3.6 | 1.250        | 31.8 | 30               | 135 | 0.187           | 4.8 | 0.030 - 0.078   | 0.8 - 2.0 | 0.780         | 19.8 | 1000          |
| WIT-30RRA-16-M | 1      | 7.062  | 179.4 | 0.141  | 3.6 | 1.250        | 31.8 | 30               | 135 | 0.187           | 4.8 | 0.030 - 0.078   | 0.8 - 2.0 | 1.000         | 25.4 | 1000          |
| WIT-30RAA-4-M  | 1      | 6.362  | 161.6 | 0.141  | 3.6 | 1.250        | 31.8 | 30               | 135 | 0.250           | 6.4 | 0.030 - 0.078   | 0.8 - 2.0 | 0.280         | 7.1  | 1000          |
| WIT-30RAA-8-M  | 1      | 6.614  | 168.0 | 0.141  | 3.6 | 1.250        | 31.8 | 30               | 135 | 0.250           | 6.4 | 0.030 - 0.078   | 0.8 - 2.0 | 0.530         | 13.5 | 1000          |
| WIT-30RAA-12-M | 1      | 6.862  | 174.3 | 0.141  | 3.6 | 1.250        | 31.8 | 30               | 135 | 0.250           | 6.4 | 0.030 - 0.078   | 0.8 - 2.0 | 0.780         | 19.8 | 1000          |
| WIT-30RAA-16-M | 1      | 7.114  | 180.7 | 0.141  | 3.6 | 1.250        | 31.8 | 30               | 135 | 0.250           | 6.4 | 0.030 - 0.078   | 0.8 - 2.0 | 1.000         | 25.4 | 1000          |
| TOAH-18-01     | 2      | 4.670  | 118.6 | 0.280  | 7.1 | 1.125        | 28.5 | 40               | 178 | 0.250           | 6.4 | 0.062           | 1.6       | —             | —    | 1000          |

## WIT-A/WITBH/NTA Series Push Mount Cable Ties

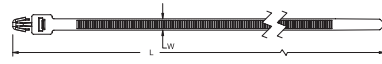
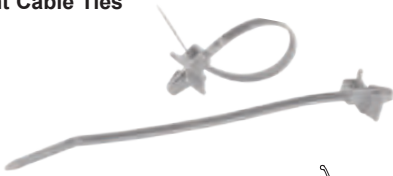


Figure 1

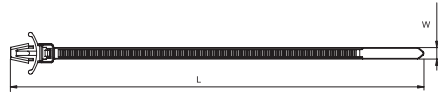


Figure 3

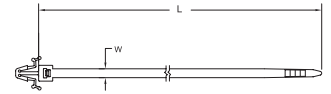


Figure 2

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- WITBH-50R-HS Material: UL94 V-2 Heat Stabilized Nylon serviceable to 239°F
- Color: Natural

**Features:**

- Easily snaps into pre-drilled holes
- Can be mounted to installation before final assembly
- Combines a cable tie, mount and fastener in a single part
- Figures 2 and 6 are removable from the top of the board

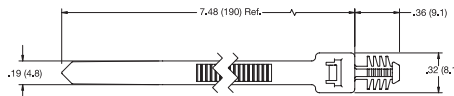


Figure 5

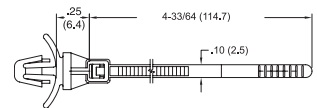


Figure 4

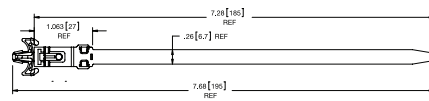


Figure 6



| Item No.          | Figure                       | L Ref. |              | W Ref.       |              | Ø Max Bundle |       | Tensile Strength |    | Ø Mounting Hole |               | Panel Thickness |               | Bulk Pack Qty |      |
|-------------------|------------------------------|--------|--------------|--------------|--------------|--------------|-------|------------------|----|-----------------|---------------|-----------------|---------------|---------------|------|
|                   |                              | in     | mm           | in           | mm           | in           | mm    | lbs.             | N  | in              | mm            | in              | mm            |               |      |
| Natural Nylon 6/6 | Black UV Resistant Nylon 6/6 |        |              |              |              |              |       |                  |    |                 |               |                 |               |               |      |
| WIT-50RLA-1       | —                            | 1      | 5.320        | 135.0        | 0.190        | 4.8          | 1.000 | 25.4             | 50 | 0.222           | 0.250         | 6.4             | 0.125         | 3.2           | 1000 |
| • NTA15535PMTG    | • NTA15535PMTGB              | 1      | 6.125        | 168.0        | 0.150        | 3.8          | 1.550 | 40.0             | 40 | 178             | 0.189         | 4.8             | 0.118         | 3.0           | 100  |
| WIT-50RLA-2       | —                            | 1      | 6.690        | 170.0        | 0.190        | 4.8          | 1.500 | 38.1             | 50 | 222             | 0.250         | 6.4             | 0.125         | 3.2           | 1000 |
| WIT-50RLA-3       | —                            | 1      | 7.870        | 200.0        | 0.190        | 4.8          | 1.750 | 44.5             | 50 | 222             | 0.250         | 6.4             | 0.125         | 3.2           | 1000 |
| • NTA20347PMTG    | • NTA20347PMTGB              | 1      | 8.000        | 203.0        | 0.189        | 4.8          | 1.968 | 50.0             | 50 | 228             | 0.250         | 6.4             | 0.118         | 3.0           | 100  |
| WIT-50RLA-M       | —                            | 1      | 8.870        | 225.4        | 0.190        | 4.8          | 2.000 | 50.8             | 50 | 222             | 0.187         | 4.7             | 0.093         | 2.4           | 1000 |
| WIT-30RAR1-2      | —                            | 2      | 5.125        | 130.0        | 0.140        | 3.6          | 1.000 | 25.4             | 30 | 135             | 0.189         | 4.8             | 0.079 - 0.094 | 2.0 - 2.4     | 100  |
| WIT-30LAR1-2      | —                            | 2      | 6.125        | 155.5        | 0.140        | 3.6          | 1.250 | 31.8             | 30 | 135             | 0.189         | 4.8             | 0.079 - 0.094 | 2.0 - 2.4     | 100  |
| • NTA11225WPM     | • NTA11225WPMB               | 3      | 4.375        | 112.0        | 0.098        | 2.5          | 0.980 | 25.0             | 18 | 80              | 0.181         | 4.6             | 0.070         | 1.7           | 100  |
| WIT-18RA-01       | —                            | 3      | 4.290        | 109.0        | 0.100        | 2.5          | 0.830 | 21.0             | 18 | 80              | 0.190         | 4.8             | 0.060         | 1.6           | 1000 |
| • NTA13048WPM     | • NTA13048WPMB               | 3      | 5.125        | 132.0        | 0.189        | 4.8          | 1.180 | 30.0             | 50 | 228             | 0.236         | 6.0             | 0.110         | 2.8           | 100  |
| WIT-50SA-01       | —                            | 3      | 5.240        | 133.0        | 0.190        | 4.8          | 0.910 | 23.0             | 50 | 222             | 0.250         | 6.4             | 0.060         | 1.6           | 1000 |
| WIT-50SA-1-01     | —                            | 3      | 5.240        | 133.0        | 0.190        | 4.8          | 0.910 | 23.0             | 50 | 222             | 0.250 - 0.270 | 6.4 - 6.8       | 0.030 - 0.080 | 0.8 - 2.0     | 1000 |
| • NTA15535WPM     | • NTA15535WPMB               | 3      | 6.125        | 157.0        | 0.138        | 3.5          | 1.420 | 36.0             | 40 | 178             | 0.181         | 4.6             | 0.118         | 3.0           | 100  |
| WIT-50SRA-01      | —                            | 3      | 6.810        | 173.0        | 0.190        | 4.8          | 1.420 | 36.0             | 50 | 222             | 0.250         | 6.4             | 0.060         | 1.6           | 1000 |
| WIT-50SRA-1-01    | —                            | 3      | 6.810        | 173.0        | 0.190        | 4.8          | 1.420 | 36.0             | 50 | 222             | 0.250 - 0.270 | 6.4 - 6.8       | 0.030 - 0.080 | 0.8 - 2.0     | 1000 |
| WIT-50RA-01       | —                            | 3      | 7.800        | 198.0        | 0.190        | 4.8          | 1.690 | 43.0             | 50 | 222             | 0.250         | 6.4             | 0.060         | 1.6           | 500  |
| WIT-50RA-1-01     | —                            | 3      | 7.800        | 198.0        | 0.190        | 4.8          | 1.690 | 43.0             | 50 | 222             | 0.250 - 0.270 | 6.4 - 6.8       | 0.030 - 0.080 | 0.8 - 2.0     | 500  |
| • NTA20048WPM     | • NTA20048WPMB               | 3      | 8.000        | 201.0        | 0.189        | 4.8          | 1.970 | 50.0             | 50 | 228             | 0.236         | 6.0             | 0.109         | 2.8           | 100  |
| WIT-18R1A-4-01    | —                            | 4      | 4.760        | 121.1        | 0.100        | 2.5          | 0.750 | 19.1             | 18 | 80              | 0.156         | 4.0             | 0.031 - 0.078 | 0.8 - 2.0     | 1000 |
| WIT-18RA-4-01-M   | —                            | 4      | 4.760        | 121.1        | 0.100        | 2.5          | 0.750 | 19.1             | 18 | 80              | 0.187         | 4.8             | 0.031 - 0.078 | 0.8 - 2.0     | 1000 |
| WIT-18R2A-4-01    | —                            | 4      | 4.760        | 121.1        | 0.100        | 2.5          | 0.750 | 19.1             | 18 | 80              | 0.187         | 4.8             | 0.062 - 0.140 | 1.6 - 3.6     | 1000 |
| WITBH-50R         | —                            | 5      | See Figure 5 | See Figure 5 | See Figure 5 | See Figure 5 | 1.750 | 44.5             | 50 | 228             | 0.250         | 6.4             | 0.250         | 6.4           | 100  |
| WITBH-50R-HS      | —                            | 5      | See Figure 5 | See Figure 5 | See Figure 5 | See Figure 5 | 1.750 | 44.5             | 50 | 228             | 0.250         | 6.4             | 0.250         | 6.4           | 100  |
| WIT-40LAR         | —                            | 6      | See Figure 6 | See Figure 6 | See Figure 6 | See Figure 6 | 1.970 | 50.0             | 40 | 178             | 0.187         | 4.8             | 0.020 - 0.091 | 0.5 - 2.3     | 100  |



# SCREW MOUNT CABLE TIES / STRAPS / HOOK AND LOOP

## TOBS Series Adhesive/Screw Mount Ties

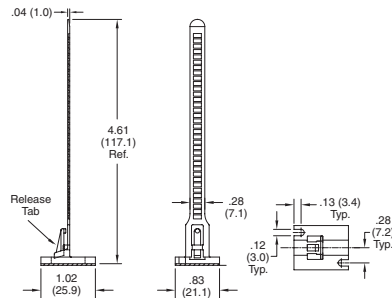


**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Black

**Features:**

- Mounts with two #4 (M3) screws or adhesive
- Cable tie is releasable



| Item No.       | Slots for Screw Size |    | Ø Max Bundle |      | Bulk Pack Qty |
|----------------|----------------------|----|--------------|------|---------------|
|                | in                   | mm | in           | mm   |               |
| TOBS-18-01A-RT | #4                   | M3 | 1.125        | 28.5 | 1000          |

## ES Series Rubber Straps with Locking Button

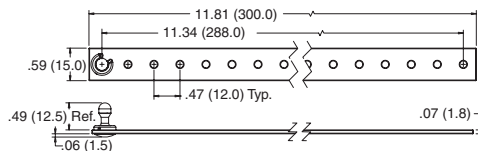


**Specifications:**

- Material: Strap; Silicone Rubber, 50 Shore A  
Latch Pin: UL94 HB Nylon 6/6
- Color: Black

**Features:**

- Rubber strap can be stretched and wrapped around bundles up to three times
- Grips the cables preventing movement
- For additional latch pins, order part number CS-113-6



| Item No. | Ø Max Bundle |       | Max Perimeter |       | Bulk Pack Qty |
|----------|--------------|-------|---------------|-------|---------------|
|          | in           | mm    | in            | mm    |               |
| ES-1     | 4.33         | 110.0 | 13.6          | 345.0 | 100           |

## RNS/LB Series Nylon Straps with Locking Button

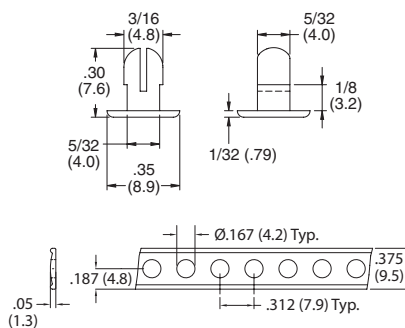


**Specifications:**

- Material: Nylon 6/6
- Color: Black

**Features:**

- 100 foot long strap can be cut to desired length
- Once bundle is wrapped, the strap is secured with mounting button, LB-5



| Item No. | Description    | Material | Flame Rating | Bulk Pack Qty    |
|----------|----------------|----------|--------------|------------------|
| RNS-167  | Strap          | UL94 HB  |              | 1 (100 ft. roll) |
| LB-5     | Locking Button | UL94 V-2 |              | 100              |

## RKS Series Hook and Loop Straps

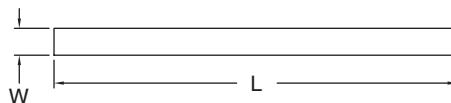


**Specifications:**

- Material: Hook: Low Density Polyethylene  
Loop: Nylon Knit
- Color: Black

**Features:**

- Heavy duty hook and loop
- Features VELCRO® brand hook and loop material
- User can cut to desired length
- Excellent in reusable applications

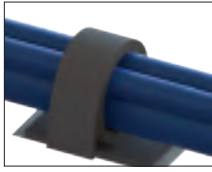


| Item No.     | L    |       | W    |      | Bulk Pack Qty |
|--------------|------|-------|------|------|---------------|
|              | in   | mm    | in   | mm   |               |
| RKS-8-6-BK   | 6.0  | 152.4 | .50  | 12.7 | 10            |
| RKS-8-8-BK   | 8.0  | 203.2 | .50  | 12.7 | 10            |
| RKS-8-12BK   | 12.0 | 304.8 | .50  | 12.7 | 10            |
| RKS-16-8-BK  | 8.0  | 203.2 | 1.00 | 25.4 | 10            |
| RKS-16-12-BK | 12.0 | 304.8 | 1.00 | 25.4 | 10            |



# HOOK AND LOOP

## RKWB/RKWFA Series Hook and Loop Clamps



**Specifications:**

- Material: Hook and Loop
- Color: Black

**Features:**

- Hook and loop design
- RKWB accommodates multiple bundle diameters; up to 1-1/2"
- RKWFA accommodates multiple bundle diameters; up to 0.75"

Figure 1

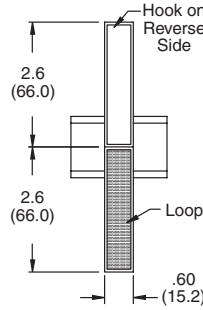
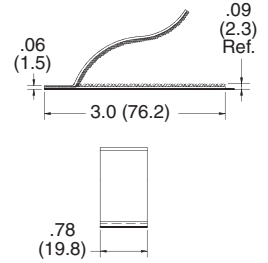


Figure 2



| Item No. | Figure | Ø Max Bundle |      | Base        |             | Bulk Pack Qty |
|----------|--------|--------------|------|-------------|-------------|---------------|
|          |        | in           | mm   | in          | mm          |               |
| RKWB-1   | 1      | 1.50         | 38.1 | 2.00 x 1.00 | 50.8 x 25.4 | 100           |
| RKWFA-1  | 2      | 1.50         | 38.1 | 3.00 x 0.78 | 52.3 x 19.8 | 100           |

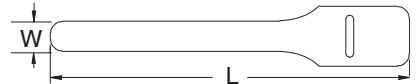
## RKW Series Hook and Loop Cable Ties

**Specifications:**

- Material: Loop - Nylon Knit  
Hook - Low-Density Polyethylene
- Color: See Table

**Features:**

- Easy assembly and removal
- Can be fastened and released several times
- Features: VELCRO® brand hook and loop material



See page 377 for Hook and Loop Cable Tie Holders.

| Item No.     |              |              | Screw Mount | L    |       | W    |      | Ø Max Bundle |       | Bulk Pack Qty |
|--------------|--------------|--------------|-------------|------|-------|------|------|--------------|-------|---------------|
| Black        | Blue         | Green        |             | in   | mm    | in   | mm   | in           | mm    |               |
| RKW-6-6-BK   | RKW-6-6-BL   | RKW-6-6-GN   | No          | 6.0  | 152.4 | 0.38 | 9.5  | 1.400        | 35.6  | 10            |
| RKW-8-6-BK   | RKW-8-6-BL   | RKW-8-6-GN   | No          | 6.0  | 152.4 | 0.50 | 12.7 | 1.400        | 35.6  | 10            |
| RKW-8-8-BK   | RKW-8-8-BL   | RKW-8-8-GN   | Yes         | 8.0  | 203.2 | 0.50 | 12.7 | 1.920        | 48.7  | 10            |
| RKW-8-9-BK   | RKW-8-9-BL   | RKW-8-9-GN   | Yes         | 9.0  | 228.6 | 0.50 | 12.7 | 2.140        | 54.4  | 10            |
| RKW-8-11-BK  | RKW-8-11-BL  | RKW-8-11-GN  | No          | 11.0 | 279.4 | 0.50 | 12.7 | 2.618        | 66.5  | 10            |
| RKW-8-12-BK  | RKW-8-12-BL  | RKW-8-12-GN  | Yes         | 12.0 | 304.8 | 0.50 | 12.7 | 2.856        | 72.5  | 10            |
| RKW-8-13-BK  | RKW-8-13-BL  | RKW-8-13-GN  | Yes         | 13.0 | 330.2 | 0.50 | 12.7 | 3.396        | 86.3  | 10            |
| RKW-12-9-BK  | RKW-12-9-BL  | RKW-12-9-GN  | Yes         | 9.0  | 228.6 | 0.75 | 19.1 | 2.140        | 54.4  | 10            |
| RKW-12-15-BK | RKW-12-15-BL | RKW-12-15-GN | No          | 15.0 | 381.0 | 0.75 | 19.1 | 3.918        | 99.5  | 10            |
| RKW-12-18-BK | RKW-12-18-BL | RKW-12-18-GN | No          | 18.0 | 457.2 | 0.75 | 19.1 | 4.716        | 119.8 | 10            |
| RKW-12-24-BK | RKW-12-24-BL | RKW-12-24-GN | No          | 24.0 | 609.6 | 0.75 | 19.1 | 6.288        | 159.7 | 10            |

| Item No.     |              |             |              | Screw Mount | L    |       | W    |      | Ø Max Bundle |       | Bulk Pack Qty |
|--------------|--------------|-------------|--------------|-------------|------|-------|------|------|--------------|-------|---------------|
| Orange       | Red          | White       | Yellow       |             | in   | mm    | in   | mm   | in           | mm    |               |
| RKW-6-6-OR   | RKW-6-6-RD   | RKW-6-6-W   | RKW-6-6-YL   | No          | 6.0  | 152.4 | 0.38 | 9.5  | 1.400        | 35.6  | 10            |
| RKW-8-6-OR   | RKW-8-6-RD   | RKW-8-6-W   | RKW-8-6-YL   | No          | 6.0  | 152.4 | 0.50 | 12.7 | 1.400        | 35.6  | 10            |
| RKW-8-8-OR   | RKW-8-8-RD   | RKW-8-8-W   | RKW-8-8-YL   | Yes         | 8.0  | 203.2 | 0.50 | 12.7 | 1.920        | 48.7  | 10            |
| RKW-8-9-OR   | RKW-8-9-RD   | RKW-8-9-W   | RKW-8-9-YL   | Yes         | 9.0  | 228.6 | 0.50 | 12.7 | 2.140        | 54.4  | 10            |
| RKW-8-11-OR  | RKW-8-11-RD  | RKW-8-11-W  | RKW-8-11-YL  | No          | 11.0 | 279.4 | 0.50 | 12.7 | 2.618        | 66.5  | 10            |
| RKW-8-12-OR  | RKW-8-12-RD  | RKW-8-12-W  | RKW-8-12-YL  | Yes         | 12.0 | 304.8 | 0.50 | 12.7 | 2.856        | 72.5  | 10            |
| RKW-8-13-OR  | RKW-8-13-RD  | RKW-8-13-W  | RKW-8-13-YL  | Yes         | 13.0 | 330.2 | 0.50 | 12.7 | 3.396        | 86.3  | 10            |
| RKW-12-9-OR  | RKW-12-9-RD  | RKW-12-9-W  | RKW-12-9-YL  | Yes         | 9.0  | 228.6 | 0.75 | 19.1 | 2.140        | 54.4  | 10            |
| RKW-12-15-OR | RKW-12-15-RD | RKW-12-15-W | RKW-12-15-YL | No          | 15.0 | 381.0 | 0.75 | 19.1 | 3.918        | 99.5  | 10            |
| RKW-12-18-OR | RKW-12-18-RD | RKW-12-18-W | RKW-12-18-YL | No          | 18.0 | 457.2 | 0.75 | 19.1 | 4.716        | 119.8 | 10            |
| RKW-12-24-OR | RKW-12-24-RD | RKW-12-24-W | RKW-12-24-YL | No          | 24.0 | 609.6 | 0.75 | 19.1 | 6.288        | 159.7 | 10            |

| Item No.       | Screw Mount | L    |       | W    |      | Ø Max Bundle |        | Bulk Pack Qty |
|----------------|-------------|------|-------|------|------|--------------|--------|---------------|
|                |             | in   | mm    | in   | mm   | in           | mm     |               |
| RKW-6-6-BK-C   | No          | 6.0  | 152.4 | 0.38 | 9.5  | 1.400        | 35.56  | 100           |
| RKW-8-6-BK-C   | No          | 6.0  | 152.4 | 0.50 | 12.7 | 1.400        | 35.56  | 100           |
| RKW-8-8-BK-C   | Yes         | 8.0  | 203.2 | 0.50 | 12.7 | 1.920        | 48.70  | 100           |
| RKW-8-9-BK-C   | Yes         | 9.0  | 228.6 | 0.50 | 12.7 | 2.140        | 54.40  | 100           |
| RKW-8-11-BK-C  | No          | 11.0 | 279.4 | 0.50 | 12.7 | 2.618        | 66.50  | 100           |
| RKW-8-12-BK-C  | Yes         | 12.0 | 304.8 | 0.50 | 12.7 | 2.856        | 72.54  | 100           |
| RKW-8-13-BK-C  | Yes         | 13.0 | 330.2 | 0.50 | 12.7 | 3.396        | 86.25  | 100           |
| RKW-12-9-BK-C  | Yes         | 9.0  | 228.6 | 0.75 | 19.1 | 2.140        | 54.40  | 100           |
| RKW-12-15-BK-C | No          | 15.0 | 381.0 | 0.75 | 19.1 | 3.918        | 99.52  | 100           |
| RKW-12-18-BK-C | No          | 18.0 | 457.2 | 0.75 | 19.1 | 4.716        | 119.78 | 100           |
| RKW-12-24-BK-C | No          | 24.0 | 609.6 | 0.75 | 19.1 | 6.288        | 159.71 | 100           |



# HOOK AND LOOP CABLE TIES & CINCH STRAPS

## RKWPR Series Plenum Rated Hook and Loop Cable Ties



**Specifications:**

- Material/Color  
Hook: Black UL94 V-2 Polypropylene  
Loop: Maroon UL94 V-2 Nylon

**Features:**

- Meets UL94 V-2 requirements, UL #E143339
- Accepted as wire positioning device (16SA) in air handling spaces in accordance with section 300-22 paragraph (C) and (D) of the National Electrical Code
- VELCRO® brand hook and loop material



| Item No.    | Screw Mount | L    |       | W    |      | A    |      | Bulk Pack Qty |
|-------------|-------------|------|-------|------|------|------|------|---------------|
|             |             | in   | mm    | in   | mm   | in   | mm   |               |
| RKWPR-6-6   | No          | 6.0  | 152.4 | 1.00 | 25.4 | 0.50 | 12.7 | 10            |
| RKWPR-8-8   | Yes         | 8.0  | 203.2 | 1.00 | 25.4 | 0.50 | 12.7 | 10            |
| RKWPR-8-12  | Yes         | 12.0 | 304.8 | 1.00 | 25.4 | 0.50 | 12.7 | 10            |
| RKWPR-12-13 | Yes         | 13.0 | 330.2 | 1.50 | 38.1 | 0.75 | 19.1 | 10            |

## RKWE Series Economy Hook and Loop Cable Ties

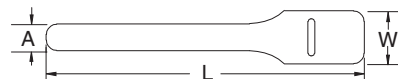


**Specifications:**

- Material: Hook: Low-Density Polyethylene  
Loop: Nylon Knit
- Color: Black

**Features:**

- VELCRO® brand hook and loop material
- Similar in function and purpose to the RKW Series, these economy ties are made from a lower-profile, economical material



| Item No.      | L    |       | W    |      | A    |      | Bulk Pack Qty |
|---------------|------|-------|------|------|------|------|---------------|
|               | in   | mm    | in   | mm   | in   | mm   |               |
| RKWE-6-6-BK   | 6.0  | 152.4 | 0.75 | 19.1 | 0.38 | 9.5  | 10            |
| RKWE-8-6-BK   | 6.0  | 152.4 | 1.00 | 25.4 | 0.50 | 12.7 | 10            |
| RKWE-8-8-BK   | 8.0  | 203.2 | 1.00 | 25.4 | 0.50 | 12.7 | 10            |
| RKWE-8-11-BK  | 11.0 | 279.4 | 1.00 | 25.4 | 0.50 | 12.7 | 10            |
| RKWE-12-15-BK | 12.0 | 304.8 | 1.50 | 38.1 | 0.75 | 19.1 | 10            |

## RKWDM Series Hook and Loop Cinch Straps with Metal Buckle

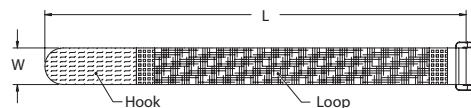


**Specifications:**

- Material: Nylon Woven Hook and Loop  
Buckle: Metal
- Color: Black

**Features:**

- Metal buckle for heavy duty industrial applications



| Item No.       | L    |       | W    |      | Ø Approximate Bundle w/ Hook Fully Engaged |       | Bulk Pack Qty |
|----------------|------|-------|------|------|--------------------------------------------|-------|---------------|
|                | in   | mm    | in   | mm   | in                                         | mm    |               |
| RKWDM-16-15-BK | 15.0 | 381.0 | 1.00 | 25.4 | 3.750                                      | 95.0  | 10            |
| RKWDM-16-20-BK | 20.0 | 508.0 | 1.00 | 25.4 | 5.500                                      | 140.0 | 10            |
| RKWDM-16-22-BK | 22.0 | 559.0 | 1.00 | 25.4 | 5.938                                      | 151.0 | 10            |
| RKWDM-16-24-BK | 24.0 | 610.0 | 1.00 | 25.4 | 6.625                                      | 168.0 | 10            |
| RKWDM-32-15-BK | 15.0 | 381.0 | 2.00 | 51.0 | 3.750                                      | 95.0  | 10            |
| RKWDM-32-20-BK | 20.0 | 508.0 | 2.00 | 51.0 | 5.500                                      | 140.0 | 10            |
| RKWDM-32-22-BK | 22.0 | 559.0 | 2.00 | 51.0 | 6.000                                      | 152.0 | 10            |
| RKWDM-32-24-BK | 24.0 | 610.0 | 2.00 | 51.0 | 6.625                                      | 168.0 | 10            |



# HOOK AND LOOP CINCH STRAPS

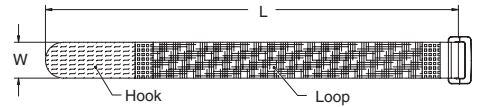
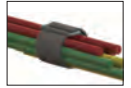
## RKWD Series Hook and Loop Cinch Straps

**Specifications:**

- Material: Nylon Woven Hook and Loop
- Buckle: Nylon
- Color: See Table

**Features:**

- Heavy duty hook and loop
- Buckle on the tie acts as a pulley providing leverage to pull the strap as tightly as needed
- The strap section goes through the buckle, the remainder of the material gets pulled around the buckle and can then be attached to the same side of the material
- The non-metallic buckle is safe to use around electrical and magnetic applications



| Item No.      | L    |     | W    |      | Ø Approximate Bundle w/ Hook Fully Engaged |     | Bulk Pack Qty |
|---------------|------|-----|------|------|--------------------------------------------|-----|---------------|
|               | in   | mm  | in   | mm   | in                                         | mm  |               |
| RKWD-12-12-BK | 12.0 | 305 | 0.75 | 19.1 | 2.875                                      | 73  | 10            |
| RKWD-12-18-BK | 18.0 | 457 | 0.75 | 19.1 | 4.750                                      | 121 | 10            |
| RKWD-16-9-BK  | 9.0  | 229 | 1.00 | 25.4 | 1.875                                      | 48  | 10            |
| RKWD-16-12-BK | 12.0 | 305 | 1.00 | 25.4 | 2.875                                      | 73  | 10            |
| RKWD-16-15-BK | 15.0 | 381 | 1.00 | 25.4 | 3.750                                      | 95  | 10            |
| RKWD-16-20-BK | 20.0 | 508 | 1.00 | 25.4 | 5.500                                      | 140 | 10            |
| RKWD-16-24-BK | 24.0 | 609 | 1.00 | 25.4 | 6.625                                      | 168 | 10            |

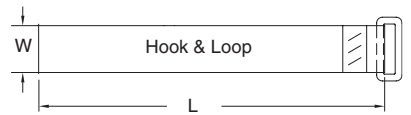
## RKWDA Series Extra Long/Cut to Length Cinch Straps

**Specifications:**

- Material: Hook and Loop: Nylon Woven
- Buckle: Nylon
- Color: Black

**Features:**

- Unique cut-to-length design eliminates the need to predetermine exact strap length
- Adheres to itself along its entire length



| Item No.       | L    |      | W    |      | Ø Bundle w/ Hook Fully Engaged |     | Bulk Pack Qty |
|----------------|------|------|------|------|--------------------------------|-----|---------------|
|                | in   | mm   | in   | mm   | in                             | mm  |               |
| RKWDA-16-20-BK | 20.0 | 508  | 1.00 | 25.4 | 5.500                          | 140 | 10            |
| RKWDA-16-24-BK | 24.0 | 609  | 1.00 | 25.4 | 6.325                          | 168 | 10            |
| RKWDA-16-36-BK | 36.0 | 914  | 1.00 | 25.4 | 10.500                         | 267 | 10            |
| RKWDA-16-48-BK | 48.0 | 1219 | 1.00 | 25.4 | 14.375                         | 365 | 10            |
| RKWDA-32-20-BK | 20.0 | 508  | 2.00 | 50.8 | 5.500                          | 140 | 10            |
| RKWDA-32-24-BK | 24.0 | 610  | 2.00 | 50.8 | 6.628                          | 169 | 10            |
| RKWDA-32-36-BK | 36.0 | 914  | 2.00 | 50.8 | 10.500                         | 267 | 10            |
| RKWDA-32-48-BK | 48.0 | 1219 | 2.00 | 50.8 | 14.375                         | 365 | 10            |

## RKWDG/RKWDE Series Hook and Loop Cinch Straps with Grommet

**Specifications:**

- Material: Nylon Woven Hook and Loop
- Buckle: Nylon
- Grommet: Brass
- Color: Black

**Features:**

- Grommet for mounting to walls, racks and mobile carts to organize and neatly route cables
- RKWDG centers bundle over mounting point
- RKWDE offsets bundle from mounting point
- Takes the stress off horizontal cable runs

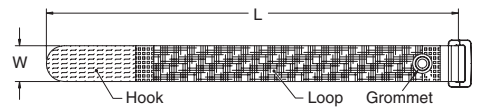


Figure 1

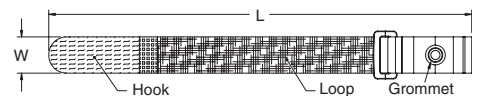


Figure 2

| Item No.       | Figure | L    |     | W    |      | Ø Approximate Bundle w/ Hook Fully Engaged |     | Grommet Ø Ref. |     | Bulk Pack Qty |
|----------------|--------|------|-----|------|------|--------------------------------------------|-----|----------------|-----|---------------|
|                |        | in   | mm  | in   | mm   | in                                         | mm  | in             | mm  |               |
| RKWDG-16-9-BK  | 1      | 9.0  | 229 | 1.00 | 25.4 | 1.875                                      | 48  | 0.250          | 6.4 | 10            |
| RKWDE-16-9-BK  | 2      | 9.0  | 229 | 1.00 | 25.4 | 1.875                                      | 48  | 0.250          | 6.4 | 10            |
| RKWDG-12-12-BK | 1      | 12.0 | 305 | 0.75 | 19.1 | 2.875                                      | 73  | 0.250          | 6.4 | 10            |
| RKWDE-12-12-BK | 2      | 10.5 | 267 | 0.75 | 19.1 | 2.375                                      | 60  | 0.250          | 6.4 | 10            |
| RKWDG-16-12-BK | 1      | 12.0 | 305 | 1.00 | 25.4 | 2.875                                      | 73  | 0.250          | 6.4 | 10            |
| RKWDE-16-12-BK | 2      | 12.0 | 305 | 1.00 | 25.4 | 2.875                                      | 73  | 0.250          | 6.4 | 10            |
| RKWDG-16-15-BK | 1      | 15.0 | 381 | 1.00 | 25.4 | 3.750                                      | 95  | 0.250          | 6.4 | 10            |
| RKWDE-16-15-BK | 2      | 15.0 | 381 | 1.00 | 25.4 | 3.750                                      | 95  | 0.250          | 6.4 | 10            |
| RKWDG-12-18-BK | 1      | 18.0 | 457 | 0.75 | 19.1 | 4.750                                      | 121 | 0.250          | 6.4 | 10            |
| RKWDE-12-18-BK | 2      | 16.5 | 419 | 0.75 | 19.1 | 4.250                                      | 108 | 0.250          | 6.4 | 10            |
| RKWDG-16-20-BK | 1      | 20.0 | 508 | 1.00 | 25.4 | 5.500                                      | 140 | 0.250          | 6.4 | 10            |
| RKWDE-16-20-BK | 2      | 20.0 | 508 | 1.00 | 25.4 | 5.500                                      | 140 | 0.250          | 6.4 | 10            |
| RKWDG-16-24-BK | 1      | 24.0 | 609 | 1.00 | 25.4 | 6.625                                      | 168 | 0.250          | 6.4 | 10            |
| RKWDE-16-24-BK | 2      | 24.0 | 609 | 1.00 | 25.4 | 6.625                                      | 168 | 0.250          | 6.4 | 10            |





# HOOK AND LOOP ROLLS

## RKWR Series Hook and Loop Rolls

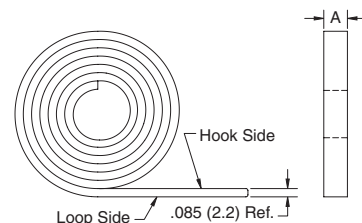


**Specifications:**

- Material: Hook: Low-Density Polyethylene  
Loop: Nylon Knit
- Color: See Table

**Features:**

- This product features VELCRO® brand Hook and Loop material
- User can cut to desired length
- Available in two lengths; 5 yards and 25 yards



| Item No.   |            |            |            | A    |      | Roll Length | Pack Qty |
|------------|------------|------------|------------|------|------|-------------|----------|
| Black      | Blue       | Gray       | Red        | in   | mm   |             |          |
| RKWR-3-BK  | RKWR-3-BL  | RKWR-3-GY  | RKWR-3-RD  | 0.50 | 12.7 | 5 Yards     | 1        |
| RKWR-1-BK  | RKWR-1-BL  | RKWR-1-GY  | RKWR-1-RD  | 0.75 | 19.1 | 5 Yards     | 1        |
| RKWR-2-BK  | RKWR-2-BL  | RKWR-2-GY  | RKWR-2-RD  | 1.00 | 25.4 | 5 Yards     | 1        |
| RKWR-3L-BK | RKWR-3L-BL | RKWR-3L-GY | RKWR-3L-RD | 0.50 | 12.7 | 25 Yards    | 1        |
| RKWR-1L-BK | RKWR-1L-BL | RKWR-1L-GY | RKWR-1L-RD | 0.75 | 19.1 | 25 Yards    | 1        |
| RKWR-2L-BK | RKWR-2L-BL | RKWR-2L-GY | RKWR-2L-RD | 1.00 | 25.4 | 25 Yards    | 1        |

## RKWRE Series Economy Hook and Loop Rolls

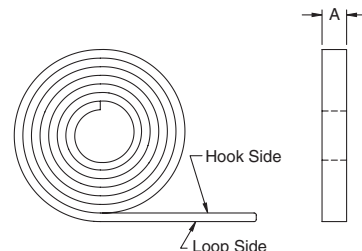


**Specifications:**

- Material: Hook: Low-Density Polyethylene  
Loop: Nylon Knit
- Color: Black

**Features:**

- This product features VELCRO® brand hook and loop material
- Similar in function and purpose to the RKWR series of rolls, these economy rolls are made from a lower-profile, economical material
- User can cut to desired length



| Item No. | A    |      | Roll Length | Pack Qty |
|----------|------|------|-------------|----------|
|          | in   | mm   |             |          |
| RKWRE-3L | 0.50 | 12.7 | 25 Yards    | 1        |
| RKWRE-1L | 0.75 | 19.1 | 25 Yards    | 1        |

## RKWRPR Series Plenum Rated Hook and Loop Rolls

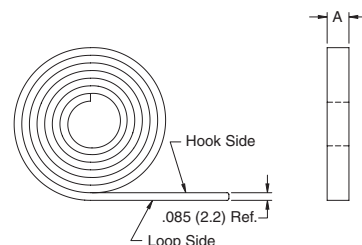


**Specifications:**

- Material: Hook: UL94 V-2 Black Polypropylene  
Loop: UL94 V-2 Maroon Nylon
- Color: Maroon

**Features:**

- This product features VELCRO® brand hook and loop material
- Meets UL94 V-2 requirements. UL E143339
- Accepted as a wire positioning device (16SA) in air handling spaces in accordance with section 300-22 paragraph (C) and (D) of the National Electrical Code
- User can cut to desired length



| Item No.  | A    |      | Roll Length | Pack Qty |
|-----------|------|------|-------------|----------|
|           | in   | mm   |             |          |
| RKWRPR-3  | 0.50 | 12.7 | 5 Yards     | 1        |
| RKWRPR-1  | 0.75 | 19.1 | 5 Yards     | 1        |
| RKWRPR-2  | 1.00 | 25.4 | 5 Yards     | 1        |
| RKWRPR-3L | 0.50 | 12.7 | 25 Yards    | 1        |
| RKWRPR-1L | 0.75 | 19.1 | 25 Yards    | 1        |
| RKWRPR-2L | 1.00 | 25.4 | 25 Yards    | 1        |



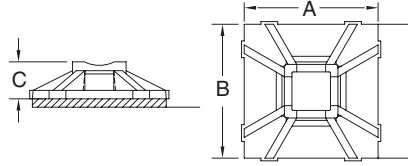
# CABLE TIE MOUNTS

## MFTH Series Mini Cable Tie Mounts with Adhesive Base



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural



**Features:**

- Cable ties can be inserted from all four sides
- Acrylic adhesive is a general purpose adhesive and gains strength with dwell time
- Rubber adhesive develops its strength extremely fast



1/2" x 1/2"

| Item No.        |                 | Used w/<br>Cable Ties | Approval | Adhesive | A     |      | B     |      | C    |     |
|-----------------|-----------------|-----------------------|----------|----------|-------|------|-------|------|------|-----|
| 1000/Bag        | 100/Bag         |                       |          |          | in    | mm   | in    | mm   | in   | mm  |
| MFTH-2-01A-RT-M | MFTH-2-01A-RT-C | 18 lbs.               |          | Acrylic  | 0.500 | 12.7 | 0.500 | 12.7 | 0.14 | 3.5 |
| MFTH-2-01A1-M   | MFTH-2-01A1-C   | 18 lbs.               |          | Rubber   | 0.500 | 12.7 | 0.500 | 12.7 | 0.14 | 3.5 |

## FTH-5/FTH-7/23TA Series Four Way Cable Tie Mounts

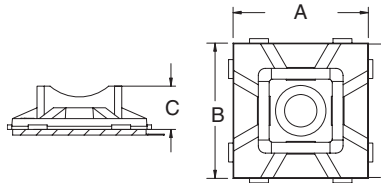
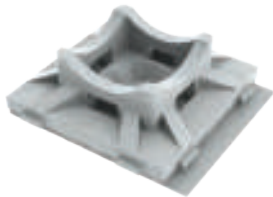


Figure 1

**Specifications:**

- Material: UL94 V-2 Nylon 6/6 (Black is UV Stabilized)
- Color: See Table

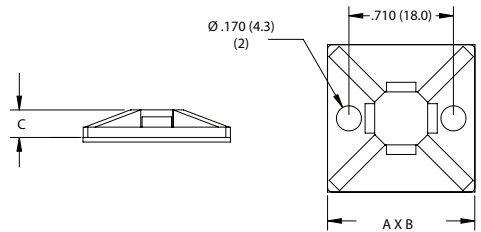


Figure 2

**Features:**

- Now available in high bond acrylic adhesive for demanding applications
- Cable ties can be inserted from all four sides
- May be secured with screws or adhesive
- Rubber adhesive develops its strength extremely fast
- Acrylic adhesive is a general purpose adhesive and gains strength with dwell time

3/4" x 3/4"

| Item No. Natural |              |           | Item No. Black  |                 |    | Approval | Fig.         | Used w/<br>Cable Ties | Adhesive              | Recommended<br>Mounting<br>Screw | A    |       | B    |       | C   |  |
|------------------|--------------|-----------|-----------------|-----------------|----|----------|--------------|-----------------------|-----------------------|----------------------------------|------|-------|------|-------|-----|--|
| 1000/Bag         | 100/Bag      | 10/Bag    | 1000/Bag        | 100/Bag         | in |          |              |                       |                       |                                  | mm   | in    | mm   | in    | mm  |  |
| FTH-5A-RT-M      | FTH-5A-RT-C  | —         | FTH-5A-RT-UVB-M | FTH-5A-RT-UVB-C |    | 1        | 18 & 40 lbs. | Acrylic               | #6 and M3.5 Flat Head | 0.750                            | 19.1 | 0.750 | 19.1 | 0.240 | 6.1 |  |
| FTH-5A1-RT-M     | FTH-5A1-RT-C | —         | —               | —               |    | 1        | 18 & 40 lbs. | Rubber                | #6 and M3.5 Flat Head | 0.750                            | 19.1 | 0.750 | 19.1 | 0.240 | 6.1 |  |
| —                | —            | FTH-5-DHB | —               | —               | —  | 1        | 18 & 40 lbs. | High Bond Acrylic     | #6 and M3.5 Flat Head | 0.750                            | 19.1 | 0.750 | 19.1 | 0.240 | 6.1 |  |
| FTH-5-01-M       | FTH-5-01-C   | —         | FTH-5-UVB-M     | FTH-5-UVB-C     |    | 1        | 18 & 40 lbs. | Screw Mount           | #6 and M3.5 Flat Head | 0.750                            | 19.1 | 0.750 | 19.1 | 0.240 | 6.1 |  |

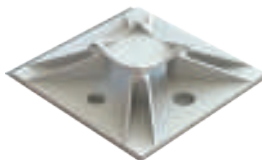
1" x 1"

| Item No. Natural |              |           | Item No. Black  |                 |    | Approval | Fig.    | Used w/<br>Cable Ties | Adhesive            | Recommended<br>Mounting<br>Screw | A    |       | B    |       | C   |  |
|------------------|--------------|-----------|-----------------|-----------------|----|----------|---------|-----------------------|---------------------|----------------------------------|------|-------|------|-------|-----|--|
| 1000/Bag         | 100/Bag      | 10/Bag    | 1000/Bag        | 100/Bag         | in |          |         |                       |                     |                                  | mm   | in    | mm   | in    | mm  |  |
| FTH-7A-RT-M      | FTH-7A-RT-C  | —         | FTH-7A-RT-UVB-M | FTH-7A-RT-UVB-C |    | 1        | 50 lbs. | Acrylic               | #8 and M4 Flat Head | 1.000                            | 25.4 | 1.000 | 25.4 | 0.280 | 7.1 |  |
| FTH-7A1-RT-M     | FTH-7A1-RT-C | —         | —               | —               |    | 1        | 50 lbs. | Rubber                | #8 and M4 Flat Head | 1.000                            | 25.4 | 1.000 | 25.4 | 0.280 | 7.1 |  |
| —                | —            | FTH-7-DHB | —               | —               | —  | 1        | 50 lbs. | High Bond Acrylic     | #8 and M4 Flat Head | 1.000                            | 25.4 | 1.000 | 25.4 | 0.280 | 7.1 |  |
| FTH-7-01-M       | FTH-7-01-C   | —         | FTH-7-UVB-M     | FTH-7-UVB-C     |    | 1        | 50 lbs. | Screw Mount           | #8 and M4 Flat Head | 1.000                            | 25.4 | 1.000 | 25.4 | 0.280 | 7.1 |  |
| • 23TA00400      | —            | —         | —               | —               | —  | 2        | 50 lbs. | Rubber                | #8 and M4 Flat Head | 1.000                            | 25.4 | 1.000 | 25.4 | 0.188 | 4.8 |  |
| • 23TA00420      | —            | —         | —               | —               | —  | 2        | 50 lbs. | Screw Mount           | #8 and M4 Flat Head | 1.000                            | 25.4 | 1.000 | 25.4 | 0.188 | 4.8 |  |

CABLE TIE MOUNTS



**FTH-8/FTH-10 Series**  
Four Way Cable Tie Mounts

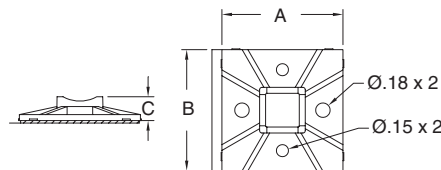


Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Cable ties can be inserted from all four sides
- May be secured with screws or adhesive
- Acrylic adhesive is a general purpose adhesive and gains strength with dwell time
- Low profile for tight spaces



1-1/2" x 1-1/2"

| Item No.    |             | Used with Cable Ties | Approval | Adhesive | Recommended Mounting Screw | A     |      | B     |      | C    |     |
|-------------|-------------|----------------------|----------|----------|----------------------------|-------|------|-------|------|------|-----|
| 1000/Bag    | 100/Bag     |                      |          |          |                            | in    | mm   | in    | mm   | in   | mm  |
| FTH-8A-RT-M | FTH-8A-RT-C | 50 & 120 lbs.        |          | Acrylic  | 2 x #6, #8 or M4           | 1.500 | 38.1 | 1.500 | 38.1 | 0.30 | 7.6 |

2" x 2"

| Item No.     |              | Used with Cable Ties | Approval | Adhesive | Recommended Mounting Screw | A     |      | B    |      | C    |     |
|--------------|--------------|----------------------|----------|----------|----------------------------|-------|------|------|------|------|-----|
| 1000/Bag     | 100/Bag      |                      |          |          |                            | in    | mm   | in   | mm   | in   | mm  |
| FTH-10A-RT-M | FTH-10A-RT-C | 50 & 120 lbs.        |          | Acrylic  | 2 x #6, #8 or M4           | 2.000 | 50.8 | 2.00 | 50.8 | 0.30 | 7.6 |

**FTH-40/23TA Series**  
Low Profile Cable Tie Mounts with Adhesive

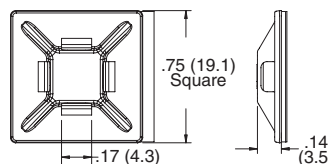


Specifications:

- Material: See Table
- Color: See Table

Features:

- Cable ties can be inserted from all four sides
- Acrylic adhesive is a general purpose adhesive and gains strength with dwell time
- Rubber adhesive develops its strength extremely fast
- Low profile for tight spaces

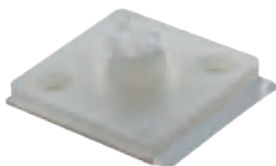


3/4" x 3/4"

| Item No.          |                            | Used w/ Cable Ties | Adhesive | Bulk Pack Qty |
|-------------------|----------------------------|--------------------|----------|---------------|
| White UL94 HB ABS | Natural UL94 V-2 Nylon 6/6 |                    |          |               |
| FTH-40            | —                          | 18 & 40 lbs.       | None     | 1000          |
| FTH-40A-RT        | —                          | 18 & 40 lbs.       | Acrylic  | 1000          |
| —                 | —                          | 18 & 40 lbs.       | Acrylic  | 1000          |
| FTH-40A1-RT       | • 23TA00500*               | 18 & 40 lbs.       | Rubber   | 1000          |

\* Dimensions will vary slightly

**FTH-4 Series**  
Cable Tie Mounts with Swivel

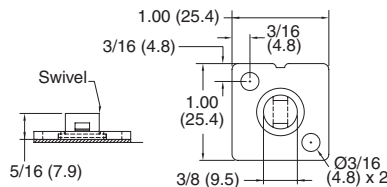


Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Unique swivel head allows 360° rotation of the mounted bundle



| Part Number | Used w/ Cable Ties | Approval | Recommended Mounting Screw | Bulk Pack Qty |
|-------------|--------------------|----------|----------------------------|---------------|
| FTH-4A-RT-M | 18 & 40 lbs.       |          | #8 or M4                   | 1000          |

**TMA Series**  
Cable Tie Mount

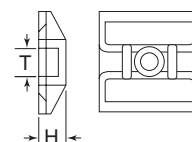


Specifications:

- Material: UL 94 V-2 Nylon 6/6
- Color: Natural

Features:

- Supplies lightweight support to wire bundles with adhesive backing
- Apply to clean, smooth, grease-free surface

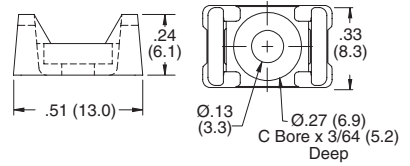
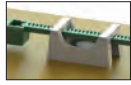


| Item No. | Length |       | Width |       | Height |      | Mounting Hole Ø |      | Slot Width T |      | Use With Cable Tie Classification | Bulk Pack Qty |
|----------|--------|-------|-------|-------|--------|------|-----------------|------|--------------|------|-----------------------------------|---------------|
|          | In     | mm    | In    | mm    | In     | mm   | In              | mm   | In           | mm   |                                   |               |
| TMA005A  | 1.102  | 28.00 | 1.102 | 28.00 | 0.157  | 4.00 | 0.197           | 5.00 | 0.197        | 5.00 | Miniature, Intermediate, Standard | 100           |



# CABLE TIE MOUNTS

## FTH-28RS Series Rivet/Screw Mount Cable Tie Mounts



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Mounts with a screw or snap rivet (see rivet table)
- Cradle design provides stability for the bundle

| Mounting Rivets for FTH-28RS |           |                    |
|------------------------------|-----------|--------------------|
| Panel Thickness              |           | Use Rivet Item No. |
| Up to 0.034                  | Up to 0.9 | SR-3035            |
| 0.034 - 0.073                | Up to 0.9 | SR-3045            |
| 0.073 - 0.113                | 1.9 - 2.9 | SR-3055            |
| 0.113 - 0.152                | 2.9 - 3.9 | SR-3065            |
| 0.152 - 0.191                | 3.9 - 4.9 | SR-3075            |
| 0.172 - 0.211                | 4.4 - 5.4 | SR-3080            |
| 0.211 - 0.250                | 5.4 - 6.4 | SR-3090            |
| 0.250 - 0.290                | 6.4 - 7.4 | SR-3100            |

| Item No.    | Used w/ Cable Ties | Recommended Mounting Screw        | Pack Qty |
|-------------|--------------------|-----------------------------------|----------|
| FTH-28RS-01 | 18 & 40 lbs.       | #4, M3 Screw, SR-3XXX (See Table) | 1000     |

## FTH-13/FTH-14 Series Rivet/Screw Mount Cable Tie Mounts



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Mounts with screw or snap rivet (see rivet table)
- Cradle design provides stability for the bundle
- Rivets found on page 120

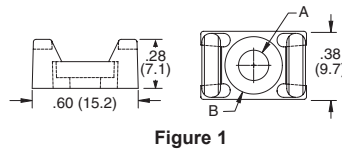


Figure 1

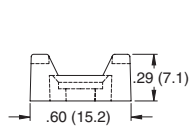


Figure 2

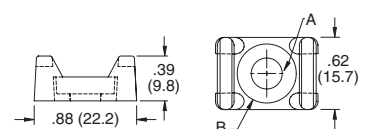


Figure 3

| Item No.     | 1000/Bag     | 100/Bag | Approval | Figure | Used w/ Cable Ties | A    |     | B    |      | Mounting Method          | Bulk Pack Qty |
|--------------|--------------|---------|----------|--------|--------------------|------|-----|------|------|--------------------------|---------------|
|              |              |         |          |        |                    | in   | mm  | in   | mm   |                          |               |
| FTH-13R-01-M | FTH-13R-01-C |         | UL       | 1      | 18 - 50 lbs.       | 0.17 | 4.3 | 0.32 | 8.1  | #8 or M4 screw or rivet  | 1000          |
| FTH-13S-01-M | FTH-13S-01-C |         | UL       | 2      | 18 - 50 lbs.       | 0.17 | 4.3 | 0.32 | 8.1  | #6 or M3/#8 or M4 screw  | 1000          |
| FTH-14R-01-M | FTH-14R-01-C |         | UL       | 3      | 18 - 120 lbs.      | 0.21 | 5.2 | 0.38 | 9.5  | #10 or M5 screw or rivet | 1000          |
| FTH-14S-01-M | FTH-14S-01-C |         | UL       | 3      | 18 - 120 lbs.      | 0.26 | 6.6 | 0.49 | 12.5 | 1/4 or M6 screw          | 1000          |

| Mounting Rivets for Figure 1 |           |                       |
|------------------------------|-----------|-----------------------|
| Panel Thickness              |           | Use Rivet Part Number |
| 0.018 - 0.058                | 0.5 - 1.5 | SR-4050               |
| 0.058 - 0.097                | 1.5 - 2.5 | SR-4060               |
| 0.097 - 0.137                | 2.5 - 3.5 | SR-4070               |
| 0.137 - 0.176                | 3.5 - 4.5 | SR-4080               |
| 0.215 - 0.255                | 5.5 - 6.5 | SR-4100               |

| Mounting Rivets for Figure 3 |           |                       |
|------------------------------|-----------|-----------------------|
| Panel Thickness              |           | Use Rivet Part Number |
| 0.020 - 0.048                | 0.5 - 1.2 | SR-5055               |
| 0.048 - 0.087                | 1.2 - 2.2 | SR-5065               |
| 0.087 - 0.127                | 2.2 - 3.2 | SR-5075               |
| 0.127 - 0.166                | 3.2 - 4.2 | SR-5085               |
| 0.166 - 0.205                | 4.2 - 5.2 | SR-5095               |
| 0.205 - 0.245                | 5.2 - 6.2 | SR-5105               |

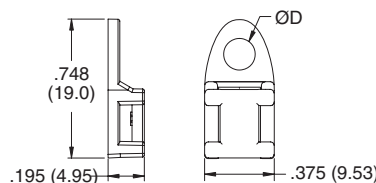
## FTH-34/FTH-35 Series Screw Mount Cable Tie Mounts

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Cable ties can be inserted from all four sides
- Small size allows for use where space is limited

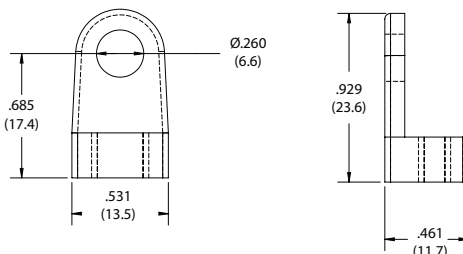


| Item No.  | Ø Hole D |     | Used with Cable Ties | Accepts Screw Size | Bulk Pack Qty |
|-----------|----------|-----|----------------------|--------------------|---------------|
|           | in       | mm  |                      |                    |               |
| FTH-34-01 | 0.170    | 4.3 | 18 - 50 lbs.         | #8 or M4           | 1000          |
| FTH-35-01 | 0.200    | 5.1 | 18 - 50 lbs.         | #10 or M5          | 1000          |

# CABLE TIE MOUNTS



## 23TA Series Cable Tie Mounts



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Secures easily with a mounting screw
- Resists corrosion, vibration and abrasion

| Item No.  | Ø Hole |     | Used with Cable Ties | Accepts Screw Size |        | Bulk Pack Qty |
|-----------|--------|-----|----------------------|--------------------|--------|---------------|
|           | in     | mm  |                      | Imperial           | Metric |               |
| 23TA40260 | 0.260  | 6.6 | 120 lbs.             | 1/4                |        | 1000          |

## FTH-1/FTH-11/23TA Series Low Profile Screw Mount Cable Tie Mounts

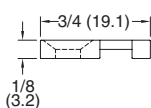


Figure 1

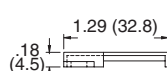
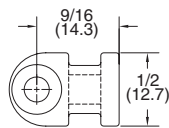
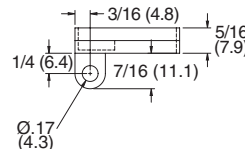


Figure 2



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Mounts with a #8 or M4 screw
- Low profile for limited space
- FTH-11-8-01 secures bundle length with multiple cable ties

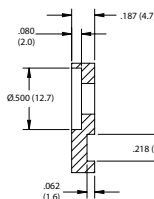
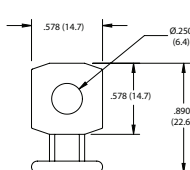
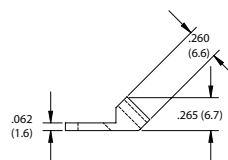
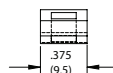
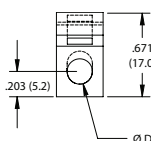


Figure 3



| Item No.    | Approval | Figure | Used w/ Cable Ties | Accepts Screw Size | Bulk Pack Qty |
|-------------|----------|--------|--------------------|--------------------|---------------|
| FTH-1-01-M  |          | 1      | 18 - 50 lbs.       | #8 or M4           | 1000          |
| FTH-11-8-01 |          | 2      | 18 - 50 lbs.       | #8 or M4           | 100           |
| • 23TA00250 | —        | 3      | 18 - 50 lbs.       | 1/4-20             | 1000          |

## 23TA Series Screw Mount Cable Tie Mounts



**Specifications:**

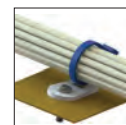
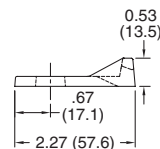
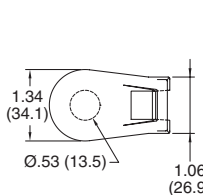
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Compact design is ideal for applications where space is limited
- Resists corrosion, vibration and abrasion

| Item No.   | Ø D   |     | Used w/ Cable Ties | Accepts Screw Size |        | Bulk Pack Qty |
|------------|-------|-----|--------------------|--------------------|--------|---------------|
|            | in    | mm  |                    | Imperial           | Metric |               |
| 23TA207128 | 0.128 | 3.3 | 50 lbs.            | #4                 | M3     | 1000          |
| 23TA207140 | 0.140 | 3.6 | 50 lbs.            | #6                 | M3.5   | 1000          |
| 23TA207167 | 0.167 | 4.2 | 50 lbs.            | #8                 | M4     | 1000          |
| 23TA207203 | 0.203 | 5.2 | 50 lbs.            | #10                | M5     | 1000          |

## FTH-17 Series Heavy Duty Screw Mount Cable Tie Mounts



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

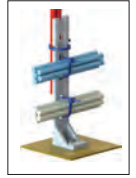
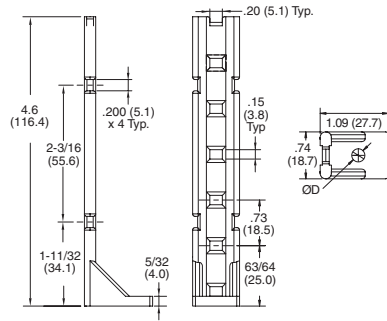
- Can be used with ties up to 250 lbs.
- Low profile for tight spaces

| Item No.    | Accepts Screw Size | Used w/ Cable Ties | Bulk Pack Qty |
|-------------|--------------------|--------------------|---------------|
| FTH-17-8-01 | 1/2 or M12         | All Ties           | 100           |



# CABLE TIE MOUNTS

## FTH-24 Series Screw Mount Wire Harness Cable Tie Mounts



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Allows tying up multiple bundles of cables
- Supports cable bundles above the surface

| Item No.    | Mounting Method | Approval | Ø D  |     | Used w/<br>Cable Ties | Bulk Pack Qty |
|-------------|-----------------|----------|------|-----|-----------------------|---------------|
|             |                 |          | in   | mm  |                       |               |
| FTH-24-01   | #10 or M5 Screw |          | 0.21 | 5.2 | 18 - 50 lbs.          | 100           |
| FTH-24-1-01 | 1/4 or M6 Screw |          | 0.25 | 6.4 | 18 - 50 lbs.          | 100           |

## FTH Series Snap In Cable Tie Mounts

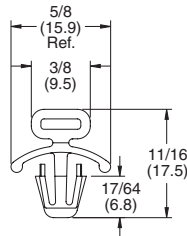


Figure 1

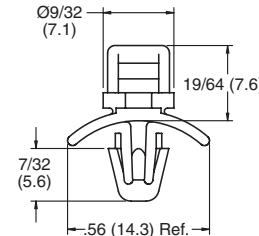


Figure 2

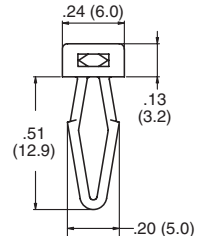


Figure 3

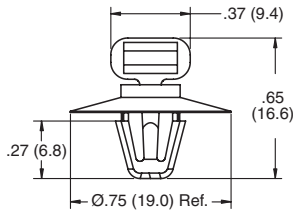


Figure 4

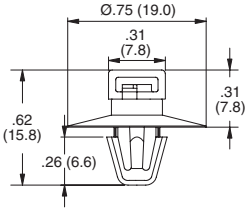


Figure 5

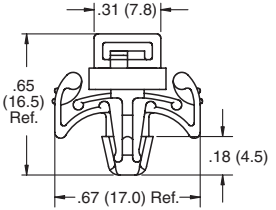


Figure 6

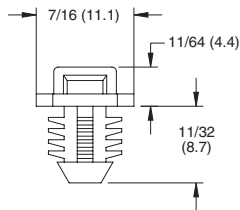


Figure 7

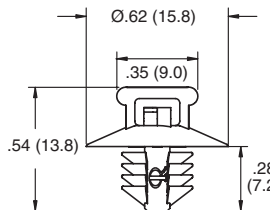


Figure 8

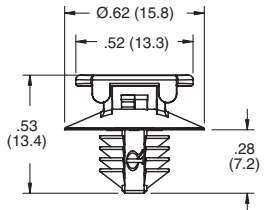


Figure 9

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: See Table

**Features:**

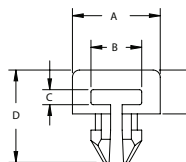
- Requires no adhesive or other mounting hardware
- Can be used in applications where back of panel is not accessible
- Figures 5,6,8, and 9 have pressure-hold feature that holds cable tie inside the tie holder
- Figures 4,5,8, and 9 have a cupped base that provides stability and also covers the mounting hole

| Item No.    | Ø Mounting Hole |       | Figure | Panel Thickness |           | Used w/<br>Cable Ties | Bulk Pack Qty |              |      |
|-------------|-----------------|-------|--------|-----------------|-----------|-----------------------|---------------|--------------|------|
|             | Natural         | Black |        | in              | mm        |                       |               | in           | mm   |
| FTH-6-01-M  | —               |       | 1      | 0.250           | 6.4       | 0.047 - 0.109         | 1.2 - 2.8     | 18 - 50 lbs. | 1000 |
| FTH-6-01-C  | —               |       | 1      | 0.250           | 6.4       | 0.047 - 0.109         | 1.2 - 2.8     | 18 - 50 lbs. | 100  |
| FTH-3-01-M  | —               |       | 2      | 0.187           | 4.8       | 0.031 - 0.078         | 0.8 - 2.0     | 18 - 50 lbs. | 1000 |
| FTH-3-01-C  | —               |       | 2      | 0.187           | 4.8       | 0.031 - 0.078         | 0.8 - 2.0     | 18 - 50 lbs. | 100  |
| FTH-39-1-01 | —               | —     | 3      | 0.126           | 3.2       | 0.039 - 0.177         | 1.0 - 4.5     | 18 lbs.      | 1000 |
| FTH-29-01   | —               | —     | 4      | 0.250           | 6.4       | 0.062                 | 1.6           | 18 - 50 lbs. | 1000 |
| FTH-33-01   | —               | —     | 5      | 0.250           | 6.4       | 0.062                 | 1.6           | 40 - 50 lbs. | 1000 |
| FTH-41-01   | —               | —     | 6      | 0.187           | 4.8       | 0.020 - 0.090         | 0.5 - 2.3     | 18 - 50 lbs. | 1000 |
| FTH-15-01-M | —               |       | 7      | 0.312           | 7.8       | 0.250                 | 6.4           | 18 - 40 lbs. | 1000 |
| FTH-15-01-C | —               |       | 7      | 0.312           | 7.8       | 0.250                 | 6.4           | 18 - 40 lbs. | 100  |
| —           | FTH-36-01BK     | —     | 8      | 0.260 - 0.280   | 6.5 - 7.0 | 0.030 - 0.120         | 0.8 - 3.0     | 40 - 50 lbs. | 1000 |
| —           | FTH-37-01BK     | —     | 9      | 0.260 - 0.280   | 6.5 - 7.0 | 0.030 - 0.120         | 0.8 - 3.0     | 40 - 50 lbs. | 1000 |

# CABLE TIE MOUNTS



## 23TA Series Push In Cable Tie Mounts

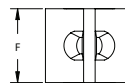


**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

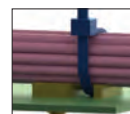
**Features:**

- Designed to securely connect a tie to a predrilled hole
- Can be used when the back of the panel is inaccessible
- No adhesive or mounting hardware needed



| Item No.  | Ø Mounting Hole |     | Panel Thickness |     | Used with Cable Ties | A     |     | B     |     | C     |     | D     |      | E     |     | F     |     | Bulk Pack Qty |
|-----------|-----------------|-----|-----------------|-----|----------------------|-------|-----|-------|-----|-------|-----|-------|------|-------|-----|-------|-----|---------------|
|           | in              | mm  | in              | mm  |                      | in    | mm  | in    | mm  | in    | mm  | in    | mm   | in    | mm  | in    | mm  |               |
| 23TA00090 | 0.187           | 4.8 | 0.062           | 1.6 | 18 lbs.              | 0.320 | 8.1 | 0.220 | 5.6 | 0.050 | 1.3 | 0.350 | 8.9  | 0.150 | 3.8 | 0.320 | 8.1 | 1000          |
| 23TA00100 | 0.187           | 4.8 | 0.062           | 1.6 | 120 lbs.             | 0.380 | 9.7 | 0.220 | 5.6 | 0.065 | 1.7 | 0.400 | 10.2 | 0.190 | 4.8 | 0.320 | 8.1 | 1000          |
| 23TA00110 | 0.250           | 6.4 | 0.062           | 1.6 | 120 lbs.             | 0.380 | 9.7 | 0.220 | 5.6 | 0.065 | 1.7 | 0.400 | 10.2 | 0.190 | 4.8 | 0.320 | 8.1 | 1000          |

## FTH-22 Series Rivet Mount Cable Tie Mounts

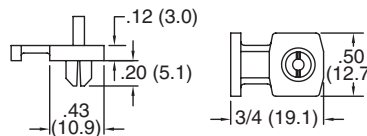


**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Yellow

**Features:**

- Rivet designed into part expands to lock the tie holder in place
- Low profile design for where space is limited



| Item No.  | Ø Mounting Hole |     | Panel Thickness |           | Used with Cable Ties | Bulk Pack Qty |
|-----------|-----------------|-----|-----------------|-----------|----------------------|---------------|
|           | in              | mm  | in              | mm        |                      |               |
| FTH-22-01 | 0.196           | 5.0 | 0.030 - 0.125   | 0.8 - 3.2 | 18 - 50 lbs.         | 1000          |

## FTH-9/23TA Series Reverse Mount Cable Tie Mounts

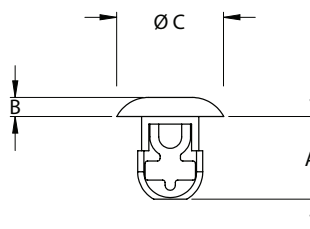


**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Snap locks into place from outside of the chassis
- Low profile on the inside of the chassis
- Both sides of the panel must be accessible



| Item No.   | Approval | Ø Mounting Hole |     | Max Panel Thickness |     | A     |     | B     |     | C     |      | Accepts Cable Ties with Tensile lbs. | Bulk Pack Qty |
|------------|----------|-----------------|-----|---------------------|-----|-------|-----|-------|-----|-------|------|--------------------------------------|---------------|
|            |          | in              | mm  | in                  | mm  | in    | mm  | in    | mm  |       |      |                                      |               |
| FTH-9-01-M |          | 0.250           | 6.4 | 0.125               | 3.2 | 0.328 | 8.3 | 0.078 | 2.0 | 0.422 | 10.7 | 18 - 50                              | 1000          |
| FTH-9-01-C |          | 0.250           | 6.4 | 0.125               | 3.2 | 0.328 | 8.3 | 0.078 | 2.0 | 0.422 | 10.7 | 18 - 50                              | 100           |
| 23TA250188 | —        | 0.250           | 6.4 | 0.188               | 4.8 | 0.390 | 9.9 | 0.080 | 2.0 | 0.425 | 10.8 | 18 - 50                              | 1000          |

## FTH-30 Series Cable Tie Mounts with Cable Tie Head

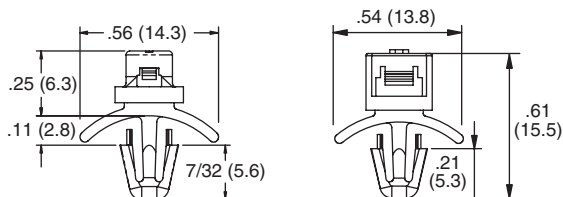


**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Cable tie head contained in the tie holder
- Good for application in which a bundle is already wrapped
- Simply insert the end of the cable tie for secure hold



FTH-30-01

FTH-30-1-01

| Item No.    | Ø Mounting Hole |     | Panel Thickness |           | Accepts Cable Ties with Tensile lbs. | Bulk Pack Qty |
|-------------|-----------------|-----|-----------------|-----------|--------------------------------------|---------------|
|             | in              | mm  | in              | mm        |                                      |               |
| FTH-30-01   | 0.187           | 4.8 | 0.031 - 0.078   | 0.8 - 2.0 | 18                                   | 1000          |
| FTH-30-1-01 | 0.187           | 4.8 | 0.031 - 0.078   | 0.8 - 2.0 | 50                                   | 1000          |



# CABLE TIE MOUNTS

## 23FCPM Series Fin Clip Cable Tie Mounts

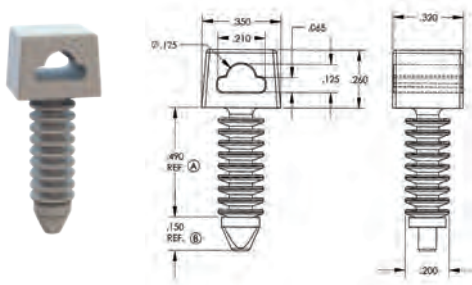


Fig. 1

Specifications:

- Material: US Stabilized HDPE Density Polyethylene
- Color: Black

Features:

- Special head configuration allows for use with beaded ties as well as conventional cable ties
- Suitable for use in pre-drilled holes in wood, masonry and a variety of other materials

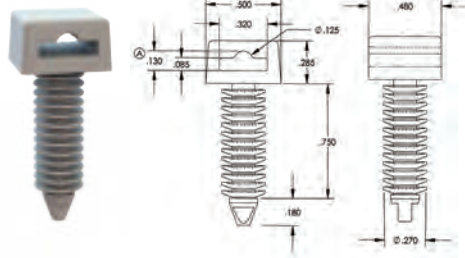


Fig. 2

| Item No.    | Figure | Ø Mounting Hole |     | Used w/ Cable Ties | Bulk Pack Qty |
|-------------|--------|-----------------|-----|--------------------|---------------|
|             |        | in              | mm  |                    |               |
| 23FCPM18765 | 1      | 0.188           | 4.8 | Up to 50 lbs.      | 500           |
| 23FCPM25095 | 2      | 0.250           | 6.4 | Up to 175 lbs.     | 1000          |

## MTH1 Series Stainless Steel Tie Holders

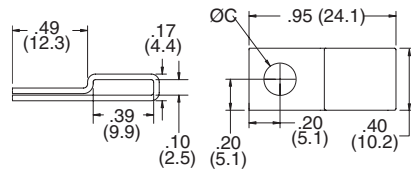
Specifications:

- Material: 304 Stainless Steel



Features:

- Low profile design
- Mounts with a screw or rivet



See page 360 for Stainless Steel Cable Ties.

| Item No. | C Hole |     | Recommended Mounting Screw | Bulk Pack Qty |
|----------|--------|-----|----------------------------|---------------|
|          | in     | mm  |                            |               |
| MTH1-1   | 0.177  | 4.5 | #8 or M4                   | 100           |
| MTH1-2   | 0.213  | 5.4 | #10 or M5                  | 100           |
| MTH1-3   | 0.266  | 6.8 | 1/4 or M6                  | 100           |

## FTH-27 Series Hook and Loop Cable Tie Mounts

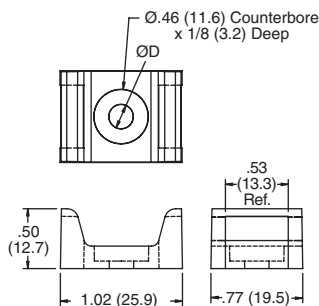
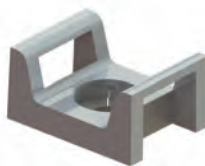


Figure 1

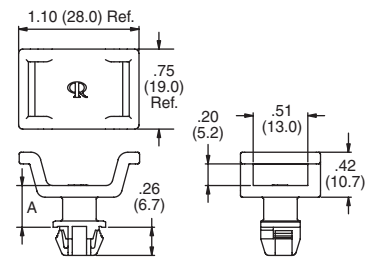


Figure 2

Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: See Table

Features:

- Mounts 1/2" RKW Hook and Loop Ties

See page 366 - 376 for Hook and Loop Cable Ties.

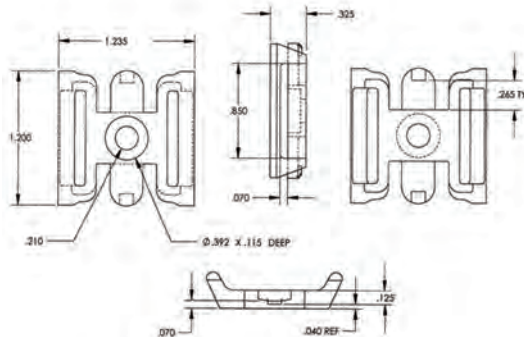
| Item No.      | Color   | Accepts Hook and Loop Up To Width |    | Figure | Mounting Method         | D     |     | A     |      | Panel Thickness |           | Bulk Pack Qty |
|---------------|---------|-----------------------------------|----|--------|-------------------------|-------|-----|-------|------|-----------------|-----------|---------------|
|               |         | in                                | mm |        |                         | in    | mm  | in    | mm   |                 |           |               |
| FTH-27-RS-01  | Natural | 0.510                             | 13 | 1      | #10, M5 or #12 Screw    | 0.205 | 5.2 | —     | —    | —               | —         | 1000          |
| FTH-27-12-01  | Natural | 0.510                             | 13 | 1      | #10, M5 or #12 Screw    | 0.230 | 5.8 | —     | —    | —               | —         | 1000          |
| FTH-27-1-01BK | Black   | 0.510                             | 13 | 2      | 0.370 (9.5) Square Hole | —     | —   | 0.120 | 3.0  | 0.030 - 0.080   | 0.8 - 2.0 | 500           |
| FTH-27-2-01BK | Black   | 0.510                             | 13 | 2      | 0.370 (9.5) Square Hole | —     | —   | 0.390 | 10.0 | 0.030 - 0.080   | 0.8 - 2.0 | 500           |



CABLE TIE MOUNTS



**23TAHL Series**  
Hook & Loop and Cable Tie Mounts



Specifications:

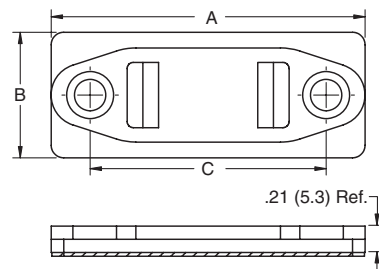
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Can be secured with a screw or rivet
- Use with standard wire ties or hook and loop wire ties
- Resists corrosion, vibration and abrasion

| Item No.     | Bulk Pack Qty |
|--------------|---------------|
| 23TAHL110340 | 500           |

**FTH-RKW Series**  
Hook and Loop Cable Tie Mounts



Specifications:

- Material: Polyethylene
- Color: Black

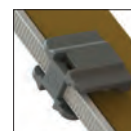
Features:

- Mounts with adhesive or screws

See page 366 - 367 for Hook and Loop Cable Ties.

| Item No.   | Accepts Hook and Loop Up To Width |      | Mounting Method | A     |      | B     |      | C     |      | Bulk Pack Qty |
|------------|-----------------------------------|------|-----------------|-------|------|-------|------|-------|------|---------------|
|            | in                                | mm   |                 | in    | mm   | in    | mm   | in    | mm   |               |
| FTH-RKW-1  | 0.500                             | 12.7 | 1/4" Screw      | 2.500 | 63.5 | 1.000 | 25.4 | 1.880 | 47.8 | 100           |
| FTH-RKW-1A | 0.500                             | 12.7 | Adhesive        | 2.500 | 63.5 | 1.000 | 25.4 | 1.880 | 47.8 | 100           |
| FTH-RKW-2  | 1.000                             | 25.4 | 1/4" Screw      | 3.250 | 82.6 | 1.500 | 38.1 | 2.620 | 66.5 | 100           |
| FTH-RKW-2A | 1.000                             | 25.4 | Adhesive        | 3.250 | 82.6 | 1.500 | 38.1 | 2.620 | 66.5 | 100           |

**FTH-31 Series**  
Edge Mount Cable Tie Mounts

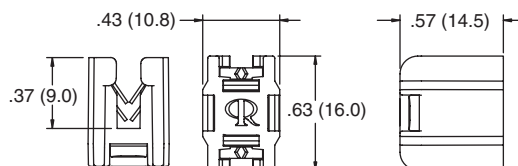


Specifications:

- Material: UL94 V-2 Nylon 6/6 and 304 Stainless Steel
- Color: Black

Features:

- Push the tie holder onto the edge of panel to accept a cable tie and mount a cable bundle
- Tie can be inserted from all four sides
- Retention Force:  
Steel Panel .03 (0.8) thick: 5 Lbs.  
Steel Panel .12 (3) thick: 10 Lbs.  
Plastic Panel .09-.12 (2.4-3) thick: 33 Lbs.



| Item No.  | Panel Thickness |           | Accepts Cable Ties w/ Tensile lbs. | Bulk Pack Qty |
|-----------|-----------------|-----------|------------------------------------|---------------|
|           | in              | mm        |                                    |               |
| FTH-31-01 | 0.03 - 0.12     | 0.8 - 3.0 | 40 - 50                            | 1000          |



# EDGE CABLE TIE MOUNTS / CABLE DUCT

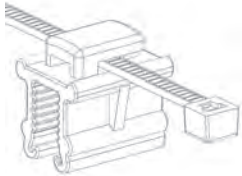
## Edge Mount Cable Tie Mounts

**Specifications:**

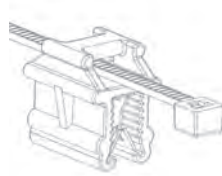
- Material: UL94 V-2 Nylon 6/6 and 302 Stainless Steel
- Color: Black

**Features:**

- Push the tie holder onto the edge of panel to accept a cable tie and mount a cable bundle
- Retention of 45 lbs. based on a 0.078 panel thickness
- Available with or without a pre-installed cable tie
- Types 1 through 5 do not come with cable tie pre-installed



Type 1



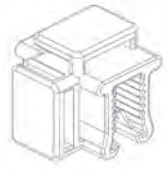
Type 2



Type 3



Type 4



Type 5



Type 6



Type 7



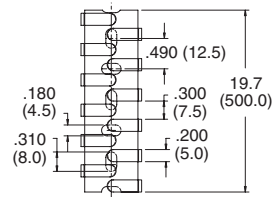
Type 8



Type 9

| Item No. | Used w/ Cable Ties | Pre-Installed Cable Tie | Type | Panel Thickness |           | Width |      | Length |      | Height |       | Bulk Pack Qty |
|----------|--------------------|-------------------------|------|-----------------|-----------|-------|------|--------|------|--------|-------|---------------|
|          |                    |                         |      | in              | mm        | in    | mm   | in     | mm   | in     | mm    |               |
| 550243   | Up to 50 Lbs.      | —                       | 1    | 0.028 - 0.118   | 0.7 - 3.0 | 0.472 | 12.0 | 0.591  | 15.0 | 0.622  | 15.8  | 100           |
| 550244   | Up to 50 Lbs.      | —                       | 3    | 0.028 - 0.118   | 0.7 - 3.0 | 0.574 | 13.9 | 0.591  | 15.0 | 0.614  | 15.6  | 100           |
| 550245   | Up to 50 Lbs.      | —                       | 2    | 0.028 - 0.118   | 0.7 - 3.0 | 0.472 | 12.0 | 0.591  | 15.0 | 0.614  | 15.6  | 100           |
| 550246   | Up to 50 Lbs.      | —                       | 2    | 0.118 - 0.236   | 3.0 - 6.0 | 0.594 | 15.1 | 0.787  | 20.0 | 0.740  | 18.8  | 100           |
| 550247   | Up to 50 Lbs.      | —                       | 3    | 0.028 - 0.118   | 0.7 - 3.0 | 0.547 | 13.9 | 0.591  | 15.0 | 0.614  | 15.6  | 100           |
| 550249   | Up to 50 Lbs.      | —                       | 4    | 0.118 - 0.236   | 3.0 - 6.0 | 0.673 | 17.1 | 0.787  | 20.0 | 0.748  | 19.0  | 100           |
| 550250   | Up to 50 Lbs.      | —                       | 3    | 0.118 - 0.236   | 3.0 - 6.0 | 0.673 | 17.1 | 0.787  | 20.0 | 0.740  | 18.8  | 100           |
| 550251   | Up to 50 Lbs.      | —                       | 5    | 0.028 - 0.118   | 0.7 - 3.0 | 0.594 | 15.1 | 0.591  | 15.0 | 0.594  | 15.1  | 100           |
| 550252   | —                  | 7.87 (200), 50 Lbs.     | 1    | 0.028 - 0.118   | 0.7 - 3.0 | 0.472 | 12.0 | 0.591  | 15.0 | 0.622  | 15.8  | 100           |
| 550253   | —                  | 7.87 (200), 50 Lbs.     | 3    | 0.028 - 0.118   | 0.7 - 3.0 | 0.574 | 13.9 | 0.591  | 15.0 | 0.614  | 15.6  | 100           |
| 550254   | —                  | 7.87 (200), 50 Lbs.     | 2    | 0.028 - 0.118   | 0.7 - 3.0 | 0.472 | 12.0 | 0.591  | 15.0 | 0.614  | 15.6  | 100           |
| 550255   | —                  | 7.87 (200), 50 Lbs.     | 2    | 0.118 - 0.236   | 3.0 - 6.0 | 0.594 | 15.1 | 0.787  | 20.0 | 0.740  | 18.8  | 100           |
| 550256   | —                  | 7.87 (200), 50 Lbs.     | 3    | 0.028 - 0.118   | 0.7 - 3.0 | 0.574 | 13.9 | 0.591  | 15.0 | 0.614  | 15.6  | 100           |
| 550259   | —                  | 7.87 (200), 50 Lbs.     | 3    | 0.118 - 0.236   | 3.0 - 6.0 | 0.673 | 17.1 | 0.787  | 20.0 | 0.740  | 18.8  | 100           |
| 550260   | —                  | 7.87 (200), 50 Lbs.     | 5    | 0.028 - 0.118   | 0.7 - 3.0 | 0.594 | 15.1 | 0.591  | 15.0 | 0.594  | 15.1  | 100           |
| 550277   | —                  | 5.51 (140), 40 Lbs.     | 6    | 0.028 - 0.118   | 0.7 - 3.0 | 0.591 | 15.0 | 0.787  | 20.0 | 6.575  | 167.0 | 100           |
| 550279   | —                  | 5.51 (140), 40 Lbs.     | 8    | 0.028 - 0.118   | 0.7 - 3.0 | 0.591 | 15.0 | 0.787  | 20.0 | 6.575  | 167.0 | 100           |
| 550280   | —                  | 5.51 (140), 40 Lbs.     | 9    | 0.028 - 0.118   | 0.7 - 3.0 | 0.591 | 15.0 | 0.787  | 20.0 | 6.575  | 167.0 | 100           |

## RX Series Flexible Duct



**Specifications:**

- Material: UL94 V-2 Polypropylene
- Color: Gray

**Features:**

- Flexible ribs allow the cables to be easily pushed and pulled into and out of channel
- Flexible base makes routing cables from the back and sides of control panels to components mounted on panel doors easy

| Item No. | External A x A |             | Internal A x A |       | Length |      | Bulk Pack Qty |     |
|----------|----------------|-------------|----------------|-------|--------|------|---------------|-----|
|          | w/o Adhesive   | w/ Adhesive | in             | mm    | in     | mm   |               |     |
| RX1313-0 | RX1313-4       | 0.49 x 0.49 | 12.5 x 12.5    | 0.171 | 110.0  | 19.7 | 500.0         | 112 |
| RX1616-0 | RX1616-4       | 0.63 x 0.63 | 16.0 x 16.0    | 0.287 | 185.0  | 19.7 | 500.0         | 84  |
| RX2020-0 | RX2020-4       | 0.79 x 0.79 | 20.0 x 20.0    | 0.496 | 320.0  | 19.7 | 500.0         | 112 |
| RX2525-0 | RX2525-4       | 0.98 x 0.98 | 25.0 x 25.0    | 0.775 | 500.0  | 19.7 | 500.0         | 70  |
| RX3030-0 | RX3030-4       | 1.18 x 1.18 | 30.0 x 30.0    | 1.116 | 720.0  | 19.7 | 500.0         | 50  |
| RX4040-0 | RX4040-4       | 1.57 x 1.57 | 40.0 x 40.0    | 2.046 | 1320.0 | 19.7 | 500.0         | 50  |
| RX5050-0 | RX5050-4       | 1.97 x 1.99 | 50.0 x 50.0    | 3.162 | 2040.0 | 19.7 | 500.0         | 32  |



**SRWD Series**  
Slotted Wire Duct

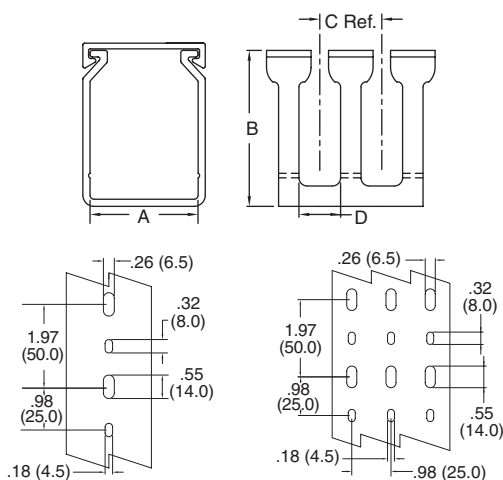


**Specifications:**

- Material: PVC
- Color: Gray

**Features:**

- Lid is supplied with the base
- Fingers are scored for easy break off
- Used for general purpose control panel wiring and to route and protect wiring in communication closets
- Holds breakout wires while providing flexibility for adding or removing wires
- Sold in 6-1/2 foot lengths

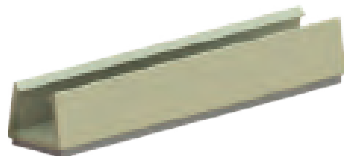


**Mounting Style 1**

**Mounting Style 2**

| Item No.    | Approval | A     |       | B     |      | C    |      | D    |     | Mounting Style | Length |     | Pack Qty |         |
|-------------|----------|-------|-------|-------|------|------|------|------|-----|----------------|--------|-----|----------|---------|
|             |          | in    | mm    | in    | mm   | in   | mm   | in   | mm  |                | ft     | m   |          | In Pack |
| SRWD-1015   |          | 1.000 | 25.4  | 1.500 | 38.1 | 0.79 | 20.0 | 0.31 | 8.0 | 1              | 6.5    | 2.0 | 78 ft    | 1       |
| SRWD-1515   |          | 1.500 | 38.1  | 1.500 | 38.1 | 0.79 | 20.0 | 0.31 | 8.0 | 1              | 6.5    | 2.0 | 78 ft    | 1       |
| SRWD-1520   |          | 1.500 | 38.1  | 2.000 | 50.8 | 0.79 | 20.0 | 0.31 | 8.0 | 1              | 6.5    | 2.0 | 52 ft    | 1       |
| SRWDN1-1530 |          | 1.500 | 38.1  | 3.000 | 76.2 | 0.39 | 10.0 | 0.16 | 4.0 | 1              | 6.5    | 2.0 | 78 ft    | 1       |
| SRWD-2020   |          | 2.000 | 50.8  | 2.000 | 50.8 | 0.79 | 20.0 | 0.31 | 8.0 | 1              | 6.5    | 2.0 | 52 ft    | 1       |
| SRWDN1-2030 |          | 2.000 | 50.8  | 3.000 | 76.2 | 0.39 | 10.0 | 0.16 | 4.0 | 1              | 6.5    | 2.0 | 78 ft    | 1       |
| SRWD-4020   |          | 4.000 | 101.6 | 2.000 | 50.8 | 0.79 | 20.0 | 0.31 | 8.0 | 2              | 6.5    | 2.0 | 26 ft    | 1       |

**SCD Series**  
Single Cable Duct

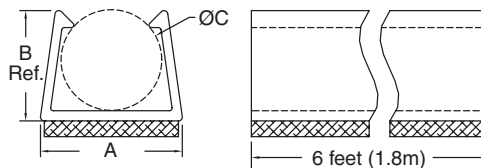


**Specifications:**

- Material: UL94 V-0 PVC
- Color: Tan

**Features:**

- Designed to route single coax or computer cable
- Supplied in 6 foot lengths
- Adhesive base for easy mounting



| Item No. | C Holding Ø   |           | A    |     | B Ref. |     | Cable Recommendations   | Length |     | Pack Qty |         |
|----------|---------------|-----------|------|-----|--------|-----|-------------------------|--------|-----|----------|---------|
|          | in            | mm        | in   | mm  | in     | mm  |                         | ft     | m   |          | In Pack |
| SCD-1521 | 0.156 - 0.218 | 4.0 - 5.5 | 0.30 | 7.6 | 0.25   | 6.4 | RG58                    | 6      | 1.8 | 60 ft    | 1       |
| SCD-2228 | 0.218 - 0.280 | 5.5 - 7.1 | 0.36 | 9.1 | 0.29   | 6.6 | RG59, RG62, RG6, 9 Line | 6      | 1.8 | 60 ft    | 1       |

**SRL Series**  
Locking Duct on Adhesive Base

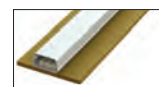
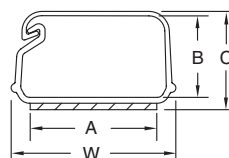


**Specifications:**

- Material: UL94 V-0 PVC
- Color: White

**Features:**

- Adhesive base for fast, easy installation
- When lid is shut the cables are locked into place
- Lightweight and aesthetically pleasing



| Item No.     | A     |      | B    |      | W    |      | C Ref. | Length |   | Pack Qty |         |   |
|--------------|-------|------|------|------|------|------|--------|--------|---|----------|---------|---|
|              | in    | mm   | in   | mm   | in   | mm   |        | ft     | m |          | In Pack |   |
| SRL1-3-WH6A  | 0.625 | 15.9 | 0.40 | 10.2 | 0.81 | 20.7 | 0.49   | 12.3   | 6 | 1.8      | 72 ft   | 1 |
| SRL1-5-WH6A  | 0.750 | 19.1 | 0.58 | 14.7 | 0.99 | 25.1 | 0.67   | 8.5    | 6 | 1.8      | 72 ft   | 1 |
| SRL1-10-WH6A | 1.125 | 28.6 | 0.82 | 20.8 | 1.52 | 38.3 | 0.95   | 24.1   | 6 | 1.8      | 72 ft   | 1 |



## FLEXIBLE CONDUIT & FITTINGS

### CF Series

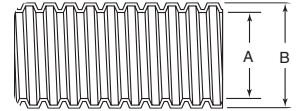
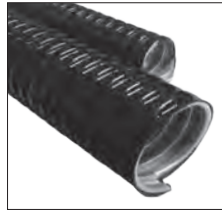
#### PVC Coated Metal Conduit

Specifications:

- Material: PVC Coated Steel in Coil
- Color: Black

Features:

- Designed to be liquid-tight and has high tensile strength
- Good resistance to corrosion and high heat



| Item No. | Sizes | A ID Min |       | B OD Min |       | Roll Length |    | Pack Qty |
|----------|-------|----------|-------|----------|-------|-------------|----|----------|
|          |       | in       | mm    | in       | mm    | ft          | m  |          |
| CF3020A  | 3/8   | 0.393    | 10.00 | 0.570    | 14.50 | 164         | 50 | 1        |
| CF3060A  | 1/2   | 0.496    | 12.60 | 0.637    | 16.20 | 164         | 50 | 1        |
| CF3090A  | 3/4   | 0.826    | 21.00 | 0.960    | 24.40 | 164         | 50 | 1        |
| CF3140A  | 1     | 1.035    | 26.30 | 1.204    | 30.60 | 164         | 50 | 1        |
| CF3160A  | 1-1/4 | 1.377    | 35.00 | 1.598    | 40.60 | 98          | 30 | 1        |
| CF3180A  | 1-1/2 | 1.586    | 40.30 | 1.811    | 46.00 | 82          | 25 | 1        |
| CF3200A  | 2     | 2.031    | 51.60 | 2.299    | 58.40 | 65          | 20 | 1        |

### MCF Series

#### Fittings for EMT Pipe to Metal Conduit

Specifications:

- Material: Zinc Alloy
- Connection Type: Set Screw EMT Pipe

Features:

- Connects convoluted metal conduit to EMT pipe in order to protect wires or cables



| Item No. | EMT Pipe Sizes | Used With Metal Conduit | Mounting Hole |       | Bulk Pack Qty |
|----------|----------------|-------------------------|---------------|-------|---------------|
|          |                |                         | in            | mm    |               |
| MCF04A   | 1/2            | CF3060A                 | 0.767         | 19.50 | 50            |
| MCF06A   | 3/4            | CF3090A                 | 1.027         | 26.10 | 50            |
| MCF08A   | 1              | CF3140A                 | 1.267         | 32.20 | 30            |
| MCF10A   | 1-1/4          | CF3160A                 | 1.523         | 38.70 | 20            |
| MCF12A   | 1-1/2          | CF3180A                 | 2.035         | 51.70 | 10            |
| MCF14A   | 2              | CF3200A                 | 2.515         | 63.90 | 5             |

### MCF Series

#### Fittings for PVC Pipe to Metal Conduit

Specifications:

- Material: Zinc Alloy
- Connection Type: Set Screw EMT Pipe

Features:

- Connects convoluted metal conduit to PVC pipe in order to protect wires or cables



| Item No. | PVC Pipe Sizes | Used With Metal Conduit | Mounting Hole |       | Bulk Pack Qty |
|----------|----------------|-------------------------|---------------|-------|---------------|
|          |                |                         | in            | mm    |               |
| MCF106A  | 3/4            | CF3090A                 | 1.091         | 27.70 | 50            |
| MCF108A  | 1              | CF3140A                 | 1.350         | 34.30 | 30            |
| MCF110A  | 1-1/4          | CF3160A                 | 1.724         | 43.80 | 20            |
| MCF112A  | 1-1/2          | CF3180A                 | 2.035         | 51.70 | 10            |
| MCF114A  | 2              | CF3200A                 | 2.516         | 63.90 | 5             |



# HASSLE-FREE SERVICE

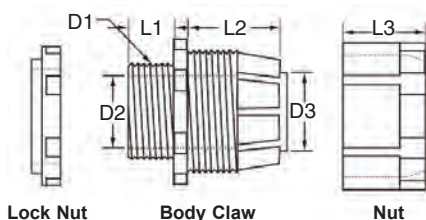


Our teams of knowledgeable, dedicated employees are committed to providing a hassle-free experience from sampling and quoting through delivery. Call us today!

# FLEXIBLE CONDUIT & FITTINGS



## FCA200 Series Flexible Conduit Fittings



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Gray
- Temperature Range: -40°F to 221°F (-40°C to 105°C)

**Features:**

- Connects plastic convoluted conduit to control panels, machinery, and other equipment



| Item No. | Ø Mounting Hole |      | Used w/ Plastic Conduit | D2    |      | D3    |      | L1    |      | L2    |      | L3    |      | Bulk Pack Qty |
|----------|-----------------|------|-------------------------|-------|------|-------|------|-------|------|-------|------|-------|------|---------------|
|          | in              | mm   |                         | in    | mm   | in    | mm   | in    | mm   | in    | mm   | in    | mm   |               |
| FCA200A  | 0.567           | 14.4 | CF001A                  | 0.248 | 6.3  | 0.295 | 7.5  | 0.382 | 9.7  | 0.728 | 18.5 | 0.626 | 15.9 | 50            |
| FCA202A  | 0.626           | 15.9 | CF003A                  | 0.433 | 11.0 | 0.425 | 10.8 | 0.394 | 10.0 | 0.705 | 17.9 | 0.618 | 15.7 | 50            |
| FCA204A  | 0.630           | 16.0 | CF004A                  | 0.437 | 11.1 | 0.524 | 13.3 | 0.382 | 9.7  | 0.732 | 18.6 | 0.626 | 15.9 | 50            |
| FCA206A  | 0.756           | 19.2 | CF005A                  | 0.591 | 15.0 | 0.579 | 14.7 | 0.394 | 10.0 | 0.697 | 17.7 | 0.630 | 16.0 | 50            |
| FCA208A  | 0.787           | 20.0 | CF006A                  | 0.606 | 15.4 | 0.677 | 17.2 | 0.386 | 9.8  | 0.693 | 17.6 | 0.642 | 16.3 | 50            |
| FCA210A  | 0.984           | 25.0 | CF008A                  | 0.744 | 18.9 | 0.780 | 19.8 | 0.449 | 11.4 | 0.929 | 23.6 | 0.811 | 20.6 | 50            |
| FCA212A  | 1.228           | 31.2 | CF009A                  | 1.024 | 26.0 | 0.957 | 24.3 | 0.472 | 12.0 | 0.898 | 22.8 | 0.811 | 20.6 | 25            |
| FCA214A  | 1.260           | 32.0 | CF010A                  | 1.055 | 26.8 | 1.126 | 28.6 | 0.445 | 11.3 | 0.917 | 23.3 | 0.815 | 20.7 | 25            |
| FCA216A  | 1.476           | 37.5 | CF011A                  | 1.240 | 31.5 | 1.244 | 31.6 | 0.445 | 11.3 | 0.929 | 23.6 | 0.815 | 20.7 | 25            |
| FCA218A  | 1.575           | 40.0 | CF012A                  | 1.287 | 32.7 | 1.370 | 34.8 | 0.453 | 11.5 | 0.917 | 23.3 | 0.819 | 20.8 | 25            |
| FCA220A  | 1.732           | 44.0 | CF013A                  | 1.476 | 37.5 | 1.594 | 40.5 | 0.496 | 12.6 | 0.878 | 22.3 | 0.815 | 20.7 | 10            |
| FCA222A  | 1.732           | 44.0 | CF014A                  | 1.476 | 37.5 | 1.555 | 39.5 | 0.496 | 12.6 | 0.850 | 21.6 | 0.815 | 20.7 | 10            |

## FCA Series Flexible Conduit Adapters



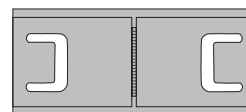
Conduit to Conduit

**Specifications:**

- Material: UL94 HB ABS
- Color: Gray

**Features:**

- FCA02A to FCA08A can be used to connect plastic convoluted conduit
- FCA102A to FCA108A can be used to connect plastic convoluted conduit to PVC pipe

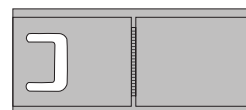


**Conduit to Conduit Connector**

| Item No. | Used w/ Plastic Conduit | Bulk Pack Qty |
|----------|-------------------------|---------------|
| FCA02A   | CF004A                  | 20            |
| FCA04A   | CF006A                  | 20            |
| FCA06A   | CF008A                  | 20            |
| FCA08A   | CF010A                  | 20            |



Conduit to PVC Pipe



**Conduit to PVC Pipe**

| Item No. | Used w/ Plastic Conduit | Bulk Pack Qty |
|----------|-------------------------|---------------|
| FCA102A  | CF004A                  | 20            |
| FCA104A  | CF006A                  | 20            |
| FCA106A  | CF008A                  | 20            |
| FCA108A  | CF010A                  | 20            |



# FLEXIBLE CONDUIT & WRAPS

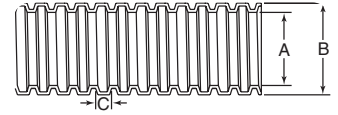
## CF Series Unsplit Polyethylene Conduit

Specifications:

- Material: High-Density Polyethylene
- Color: Gray
- Temperature Range: -40°F to 200°F (-40°C to 93°C)

Features:

- Wire and cable protection for electrical harnesses
- Can also be used to protect hydraulic hoses
- Flexible body allows for easy corner/elbow wiring



| Item No. | Ø Nominal |       | A     |       | B     |       | C    |     | Roll Length |   | Pack Qty |
|----------|-----------|-------|-------|-------|-------|-------|------|-----|-------------|---|----------|
|          | in        | mm    | in    | mm    | in    | mm    | in   | mm  | ft          | m |          |
| CF001A   | 1/4       | 0.291 | 7.390 | 0.402 | 10.21 | 0.104 | 2.64 | 984 | 300         | 1 |          |
| CF002A   | 3/8       | 0.421 | 10.69 | 0.555 | 14.10 | 0.080 | 2.04 | 328 | 100         | 1 |          |
| CF003A   | 3/8       | 0.421 | 10.69 | 0.630 | 16.00 | 0.130 | 3.30 | 328 | 100         | 1 |          |
| CF004A   | 1/2       | 0.543 | 13.79 | 0.787 | 19.99 | 0.124 | 3.14 | 328 | 100         | 1 |          |
| CF005A   | 5/8       | 0.555 | 14.10 | 0.866 | 22.00 | 0.144 | 3.66 | 328 | 100         | 1 |          |
| CF006A   | 11/16     | 0.677 | 17.20 | 0.866 | 22.00 | 0.124 | 3.14 | 328 | 100         | 1 |          |
| CF007A   | 3/4       | 0.720 | 18.29 | 0.984 | 24.99 | 0.162 | 4.12 | 328 | 100         | 1 |          |
| CF008A   | 7/8       | 0.835 | 21.21 | 1.016 | 25.81 | 0.124 | 3.14 | 328 | 100         | 1 |          |
| CF009A   | 1         | 0.957 | 24.31 | 1.260 | 32.00 | 0.142 | 3.61 | 164 | 50          | 1 |          |
| CF010A   | 1-1/8     | 1.130 | 28.70 | 1.339 | 34.01 | 0.124 | 3.14 | 164 | 50          | 1 |          |
| CF011A   | 1-1/4     | 1.228 | 31.19 | 1.575 | 40.01 | 0.162 | 4.12 | 164 | 50          | 1 |          |
| CF012A   | 1-3/8     | 1.374 | 34.90 | 1.654 | 42.01 | 0.124 | 3.14 | 164 | 50          | 1 |          |
| CF013A   | 1-1/2     | 1.575 | 40.00 | 1.890 | 48.01 | 0.124 | 3.14 | 164 | 50          | 1 |          |
| CF014A   | 1-5/8     | 1.559 | 39.60 | 1.969 | 50.01 | 0.191 | 4.85 | 164 | 50          | 1 |          |

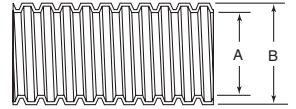
## CF Series Unsplit Nylon Conduit

Specifications:

- Material: UL-94 HB Nylon
- Color: Black with Gray Stripe
- Temperature Range: -40°F to 300°F (-40°C to 149°C)

Features:

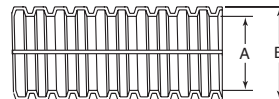
- Wire and cable protection for electrical harnesses
- Can also be used to protect hydraulic hoses
- Flexible body allows for easy corner/elbow wiring



| Item No. | Ø Nominal |       | A Min |       | A Max |       | B Min |       | B Max |       | Wall Thickness |      | Roll Length |   | Pack Qty |
|----------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------|------|-------------|---|----------|
|          | in        | mm    | in    | mm    | in    | mm    | in    | mm    | in    | mm    | in             | mm   | ft          | m |          |
| CF1010A  | 1/4       | 0.237 | 6.02  | 0.266 | 6.76  | 0.375 | 9.53  | 0.400 | 10.16 | 0.040 | 1.02           | 2500 | 762         | 1 |          |
| CF1020A  | 3/8       | 0.341 | 8.66  | 0.380 | 9.65  | 0.497 | 12.62 | 0.526 | 13.36 | 0.040 | 1.02           | 1500 | 457.2       | 1 |          |
| CF1040A  | 7/16      | 0.399 | 10.13 | 0.437 | 11.10 | 0.573 | 14.55 | 0.597 | 15.16 | 0.050 | 1.27           | 1500 | 457.2       | 1 |          |
| CF1060A  | 1/2       | 0.473 | 12.01 | 0.516 | 13.11 | 0.664 | 16.87 | 0.700 | 17.78 | 0.050 | 1.27           | 1000 | 304.8       | 1 |          |
| CF1080A  | 5/8       | 0.603 | 15.32 | 0.639 | 16.23 | 0.805 | 20.45 | 0.837 | 21.26 | 0.050 | 1.27           | 700  | 213.4       | 1 |          |
| CF1090A  | 3/4       | 0.707 | 17.96 | 0.759 | 19.28 | 0.950 | 24.13 | 0.989 | 25.12 | 0.050 | 1.27           | 450  | 137.2       | 1 |          |
| 900081   | 7/8       | 0.848 | 21.54 | 0.898 | 22.81 | 1.107 | 28.12 | 1.151 | 29.24 | 0.050 | 1.27           | 400  | 121.9       | 1 |          |
| CF1140A  | 1         | 1.020 | 25.91 | 1.069 | 27.16 | 1.251 | 31.78 | 1.304 | 33.13 | 0.060 | 1.52           | 250  | 76.2        | 1 |          |
| CF1140B* | 1         | 1.020 | 25.91 | 1.069 | 27.16 | 1.251 | 31.78 | 1.304 | 33.13 | 0.060 | 1.52           | 250  | 76.2        | 1 |          |
| CF1150A  | 1-1/8     | 1.122 | 28.50 | 1.176 | 29.86 | 1.356 | 34.58 | 1.413 | 35.88 | 0.060 | 1.52           | 200  | 60.9        | 1 |          |
| 900082   | 1-1/4     | 1.199 | 30.45 | 1.257 | 31.93 | 1.446 | 36.73 | 1.500 | 38.10 | 0.060 | 1.52           | 200  | 60.9        | 1 |          |

\* No gray stripe

## CS/22SL Series Split Polypropylene Conduit



Specifications:

- Material: Polypropylene
- Color: Black
- Temperature Range: -40°F to 225°F (-40°C to 107°C)

Features:

- Split design for easy installation and removal of wiring
- Wire and cable protection for electrical harnesses
- Flexible body allows for corner/elbow wiring
- Can be used to protect hydraulic hoses
- C22SL is available in Payout Boxes, by the Mini Gaylord or by the Gaylord

| Item No.     | Nominal Ø |       | A     |       | B     |       | Roll Length |        | Pack Qty |
|--------------|-----------|-------|-------|-------|-------|-------|-------------|--------|----------|
|              | in        | mm    | in    | mm    | in    | mm    | ft          | m      |          |
| CS001A       | 0.250     | 0.291 | 7.39  | 0.402 | 10.21 | 0.104 | 984.00      | 300.00 | 1        |
| • 22SL0250PP | 0.250     | 0.266 | 6.80  | 0.395 | 10.00 | 0.100 | 100.00      | 30.48  | 1        |
| • 22SL0375PP | 0.375     | 0.419 | 10.60 | 0.535 | 13.60 | 0.100 | 100.00      | 30.48  | 1        |
| CS002A       | 0.438     | 0.421 | 10.69 | 0.630 | 16.00 | 0.130 | 656.00      | 200.00 | 1        |
| CS003A       | 0.500     | 0.543 | 13.79 | 0.689 | 17.50 | 0.124 | 656.00      | 200.00 | 1        |
| • 22SL0500PP | 0.500     | 0.505 | 12.80 | 0.670 | 17.00 | 0.100 | 100.00      | 30.48  | 1        |
| CS004A       | 0.625     | 0.591 | 15.01 | 0.768 | 19.51 | 0.124 | 328.00      | 100.00 | 1        |
| • 22SL0625PP | 0.625     | 0.650 | 16.50 | 0.825 | 21.00 | 0.100 | 100.00      | 30.48  | 1        |
| CS005A       | 0.750     | 0.760 | 19.30 | 0.937 | 23.80 | 0.124 | 328.00      | 100.00 | 1        |
| • 22SL0750PP | 0.750     | 0.761 | 19.30 | 0.927 | 23.60 | 0.100 | 100.00      | 30.48  | 1        |
| CS006A       | 0.875     | 0.835 | 21.21 | 1.016 | 25.81 | 0.124 | 328.00      | 100.00 | 1        |
| CS007A       | 1.000     | 0.957 | 24.31 | 1.260 | 32.00 | 0.142 | 164.00      | 50.00  | 1        |
| • 22SL1000PP | 1.000     | 0.909 | 23.10 | 1.033 | 26.20 | 0.100 | 100.00      | 30.48  | 1        |
| CS008A       | 1.000     | 0.984 | 24.99 | 1.181 | 30.00 | 0.124 | 164.00      | 50.00  | 1        |
| CS009A       | 1.125     | 1.102 | 27.99 | 1.339 | 34.01 | 0.124 | 164.00      | 50.00  | 1        |
| CS010A       | 1.250     | 1.228 | 31.19 | 1.575 | 40.01 | 0.124 | 164.00      | 50.00  | 1        |
| CS011A       | 1.625     | 1.559 | 39.59 | 1.969 | 50.00 | 0.191 | 164.00      | 50.00  | 1        |

# FLEXIBLE CONDUIT & WRAPS



## CS/22SL (Nylon) Series Split Nylon Conduit

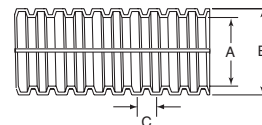
**Specifications:**

- Material: UL94 HB Nylon
- Color: Black with Gray Stripe
- Temperature Range: -40°F to 300°F (-40°C to 149°C)



**Features:**

- Split design for easy installation and removal of wiring
- Cable protection for electrical wiring harnesses
- Flexible body allows for corner/elbow wiring
- Can be used to protect hydraulic hoses
- Split design for easy installation
- 22SL is available in Payout Boxes, by the Mini Gaylord or by the Gaylord



| Item No.       | Nominal Ø | A Min |       | A Max |       | B Min |       | B Max |       | C     |      | Roll Length |        | Pack Qty |
|----------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------------|--------|----------|
|                |           | in    | mm    | in    | mm    | in    | mm    | in    | mm    | in    | mm   | ft          | m      |          |
| • 22SL0250NYGY | 0.250     | —     | —     | 0.266 | 6.80  | —     | —     | 0.395 | 10.00 | 0.120 | 3.05 | 100.00      | 30.48  | 1        |
| CS1020A        | 0.375     | 0.341 | 8.66  | 0.380 | 9.65  | 0.497 | 12.62 | 0.526 | 13.36 | —     | —    | 1900.00     | 579.10 | 1        |
| • 22SL0375NYGY | 0.375     | —     | —     | 0.419 | 10.60 | —     | —     | 0.535 | 13.60 | 0.128 | 3.25 | 100.00      | 30.48  | 1        |
| CS1040A        | 0.438     | 0.399 | 10.13 | 0.437 | 11.10 | 0.573 | 14.55 | 0.597 | 15.16 | —     | —    | 1500.00     | 457.20 | 1        |
| CS1060A        | 0.500     | 0.473 | 12.01 | 0.516 | 13.11 | 0.664 | 16.87 | 0.700 | 17.78 | —     | —    | 1100.00     | 335.30 | 1        |
| • 22SL0500NYGY | 0.500     | —     | —     | 0.505 | 12.80 | —     | —     | 0.670 | 17.00 | 0.143 | 3.63 | 100.00      | 30.48  | 1        |
| CS1080A        | 0.625     | 0.603 | 15.32 | 0.639 | 16.23 | 0.805 | 20.45 | 0.837 | 21.26 | —     | —    | 800.00      | 243.80 | 1        |
| • 22SL0625NYGY | 0.625     | —     | —     | 0.650 | 16.50 | —     | —     | 0.825 | 21.00 | 0.145 | 3.68 | 100.00      | 30.48  | 1        |
| CS1090A        | 0.750     | 0.707 | 17.96 | 0.759 | 19.28 | 0.950 | 24.13 | 0.989 | 25.12 | —     | —    | 550.00      | 164.60 | 1        |
| • 22SL0750NYGY | 0.750     | —     | —     | 0.761 | 19.30 | —     | —     | 0.927 | 23.60 | 0.144 | 3.66 | 100.00      | 30.48  | 1        |
| CS1140A        | 1.000     | 1.020 | 25.91 | 1.069 | 27.16 | 1.251 | 31.78 | 1.304 | 33.13 | —     | —    | 300.00      | 91.40  | 1        |
| • 22SL1000NYGY | 1.000     | —     | —     | 0.909 | 23.10 | —     | —     | 1.033 | 26.20 | 0.172 | 4.37 | 100.00      | 30.48  | 1        |

## 22SL Series Split Loom Black Polyethylene

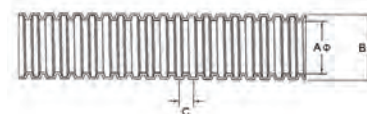
**Specifications:**

- Material: Polyethylene
- Color: Black



**Features:**

- Easy, quick installation that offers the best in wire and harness protection
- Accommodates any manufacturing application
- Great for use around the house to organize cords and wires, giving them a neat and attractive look
- Resists corrosion
- Available in Payout Boxes, by the Mini Gaylord or by the Gaylord
- Other colors are available upon request



| Item No.   | Nominal Ø | A     |       | B     |       | C     |      | Roll Length |       | Pack Qty |
|------------|-----------|-------|-------|-------|-------|-------|------|-------------|-------|----------|
|            |           | in    | mm    | in    | mm    | in    | mm   | ft          | m     |          |
| 22SL0250PE | 0.250     | 0.266 | 6.80  | 0.395 | 10.00 | 0.120 | 3.05 | 100.00      | 30.48 | 1        |
| 22SL0375PE | 0.375     | 0.419 | 10.60 | 0.535 | 13.60 | 0.128 | 3.25 | 100.00      | 30.48 | 1        |
| 22SL0500PE | 0.500     | 0.505 | 12.80 | 0.670 | 17.00 | 0.143 | 3.63 | 100.00      | 30.48 | 1        |
| 22SL0625PE | 0.625     | 0.650 | 16.50 | 0.825 | 21.00 | 0.145 | 3.68 | 100.00      | 30.48 | 1        |
| 22SL0750PE | 0.750     | 0.761 | 19.30 | 0.927 | 23.60 | 0.144 | 3.66 | 100.00      | 30.48 | 1        |
| 22SL1000PE | 1.000     | 0.909 | 23.10 | 1.033 | 26.20 | 0.172 | 4.37 | 100.00      | 30.48 | 1        |

## 22SL Series Split Loom Black Polyethylene Flame Retardant

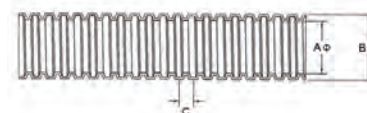
**Specifications:**

- Material: Polypropylene Flame Retardant
- Color: Black



**Features:**

- Easy, quick installation that offers the best in wire and harness protection
- Accommodates any manufacturing application
- Great for use around the house to organize cords and wires, giving them a neat and attractive look
- Resists corrosion
- Available in Payout Boxes, by the Mini Gaylord or by the Gaylord



| Item No.       | Nominal Ø | A     |       | B     |       | C     |      | Roll Length |       | Pack Qty |
|----------------|-----------|-------|-------|-------|-------|-------|------|-------------|-------|----------|
|                |           | in    | mm    | in    | mm    | in    | mm   | ft          | m     |          |
| 22SL0250FRPPBL | 0.250     | 0.266 | 6.80  | 0.395 | 10.00 | 0.120 | 3.05 | 100.00      | 30.48 | 1        |
| 22SL0375FRPPBL | 0.375     | 0.419 | 10.60 | 0.535 | 13.60 | 0.128 | 3.25 | 100.00      | 30.48 | 1        |
| 22SL0500FRPPBL | 0.500     | 0.505 | 12.80 | 0.670 | 17.00 | 0.143 | 3.63 | 100.00      | 30.48 | 1        |
| 22SL0625FRPPBL | 0.625     | 0.650 | 16.50 | 0.825 | 21.00 | 0.145 | 3.68 | 100.00      | 30.48 | 1        |
| 22SL0750FRPPBL | 0.750     | 0.761 | 19.30 | 0.927 | 23.60 | 0.144 | 3.66 | 100.00      | 30.48 | 1        |
| 22SL1000FRPPBL | 1.000     | 0.909 | 23.10 | 1.033 | 26.20 | 0.172 | 4.37 | 100.00      | 30.48 | 1        |



# FLEXIBLE CONDUIT, MOUNTS & CLIPS

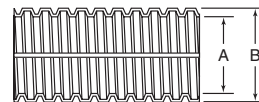
## CSEZ Series EZ Dispenser Split Nylon Conduit

### Specifications:

- Material: UL94 HB Nylon
- Color: Black with Gray Stripe
- Temperature Range: -40°F to 300°F (-40°C to 149°C)

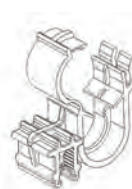
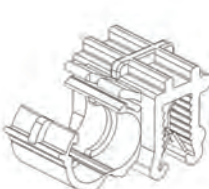
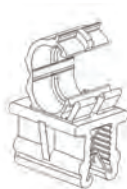
### Features:

- Supplied in easy pull dispenser box
- Tangle free dispenses on interior reel
- Split design for easy installation and removal



| Item No.  | Ø Nominal |       | A Min |       | A Max |       | B Min |       | B Max |       | Wall Thickness |     | Roll Length |   | Pack Qty |
|-----------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------|-----|-------------|---|----------|
|           | in        | mm    | in    | mm    | in    | mm    | in    | mm    | in    | mm    | in             | mm  | ft          | m |          |
| CSEZ1010A | 1/4       | 0.256 | 6.50  | 0.276 | 7.01  | 0.373 | 9.47  | 0.398 | 10.11 | 0.040 | 1.02           | 100 | 30.48       | 1 |          |
| CSEZ1030A | 3/8       | 0.368 | 9.35  | 0.398 | 10.11 | 0.494 | 12.56 | 0.525 | 13.32 | 0.050 | 1.27           | 100 | 30.48       | 1 |          |
| CSEZ1060A | 1/2       | 0.473 | 12.01 | 0.516 | 13.11 | 0.664 | 16.87 | 0.700 | 17.78 | 0.050 | 1.27           | 100 | 30.48       | 1 |          |
| CSEZ1080A | 5/8       | 0.603 | 15.32 | 0.639 | 16.23 | 0.805 | 20.45 | 0.837 | 21.26 | 0.050 | 1.27           | 100 | 30.48       | 1 |          |
| CSEZ1090A | 3/4       | 0.707 | 17.96 | 0.759 | 19.28 | 0.950 | 24.13 | 0.989 | 25.12 | 0.050 | 1.27           | 100 | 30.48       | 1 |          |
| CSEZ1140A | 1         | 1.020 | 25.91 | 1.069 | 27.16 | 1.251 | 31.78 | 1.304 | 33.13 | 0.060 | 1.52           | 50  | 15.24       | 1 |          |

## Edge Mount Conduit Holders



Type 1

Type 2

Type 3

Type 4

Type 5

Type 6

### Specifications:

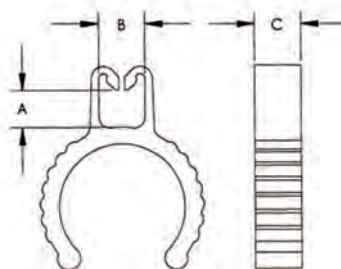
- Material: Heat Stabilized Nylon 6/6 and 302 Stainless Steel
- Color: Black

### Features:

- Holds a variety of sizes of corrugated tubing in place
- Easy to install by pushing onto plastic or metal sheet edge
- Ideal for applications where holes or adhesive is not suitable

| Item No. | Type | Tube Size mm | Panel Thickness |         | Width |    | Length |    | Height to Center |      | Bulk Pack Qty |
|----------|------|--------------|-----------------|---------|-------|----|--------|----|------------------|------|---------------|
|          |      |              | in              | mm      | in    | mm | in     | mm | in               | mm   |               |
| 550261   | 1    | 4.5          | 0.028 - 0.118   | 0.7 - 3 | 0.591 | 15 | 0.591  | 15 | 0.610            | 15.5 | 100           |
| 550262   | 2    | 4.5          | 0.028 - 0.118   | 0.7 - 3 | 0.591 | 15 | 0.591  | 15 | 0.610            | 15.5 | 100           |
| 550263   | 3    | 4.5          | 0.028 - 0.118   | 0.7 - 3 | 0.787 | 20 | 0.591  | 15 | 0.256            | 6.5  | 100           |
| 550264   | 3    | 4.5          | 0.118 - 0.236   | 3 - 6   | 0.787 | 20 | 0.787  | 20 | 0.303            | 7.7  | 100           |
| 550265   | 4    | 4.5          | 0.118 - 0.236   | 3 - 6   | 0.787 | 20 | 0.787  | 20 | 0.728            | 18.5 | 100           |
| 550266   | 4    | 7.5          | 0.118 - 0.236   | 3 - 6   | 0.591 | 15 | 0.591  | 15 | 0.689            | 17.5 | 100           |
| 550267   | 1    | 10           | 0.118 - 0.236   | 3 - 6   | 0.472 | 12 | 0.866  | 22 | 0.728            | 18.5 | 100           |
| 550268   | 3    | 10           | 0.028 - 0.118   | 0.7 - 3 | 0.866 | 22 | 0.591  | 15 | 0.343            | 8.7  | 100           |
| 550269   | 3    | 10           | 0.118 - 0.236   | 3 - 6   | 0.866 | 22 | 0.787  | 20 | 0.350            | 8.9  | 100           |
| 550270   | 4    | 2 x 10       | 0.028 - 0.118   | 0.7 - 3 | 0.472 | 12 | 1.339  | 34 | 0.764            | 19.4 | 100           |
| 550271   | 5    | 2 x 10       | 0.028 - 0.118   | 0.7 - 3 | 0.591 | 15 | 1.614  | 41 | 0.535            | 13.6 | 100           |
| 550272   | 6    | 2 x 10       | 0.028 - 0.118   | 0.7 - 3 | 1.181 | 30 | 0.591  | 15 | 0.335 / 0.728    | —    | 100           |
| 550273   | 3    | 13           | 0.028 - 0.118   | 0.7 - 3 | 0.591 | 15 | 0.591  | 15 | 0.413            | 10.5 | 100           |
| 550274   | 2    | 13           | 0.118 - 0.236   | 3 - 6   | 0.906 | 23 | 0.787  | 20 | 0.917            | 23.3 | 100           |
| 550275   | 1    | 13           | 0.118 - 0.236   | 3 - 6   | 0.512 | 13 | 0.906  | 23 | 0.787            | 20   | 100           |
| 550276   | 2    | 17           | 0.028 - 0.118   | 0.7 - 3 | 1.181 | 30 | 0.591  | 15 | 0.894            | 22.7 | 100           |

## 23CDC Series Conduit Clips



### Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

### Features:

- Designed to easily snap onto electrical conduit
- Faster and easier installation than with a standard wire tie
- Resistant to corrosion, vibration and abrasion

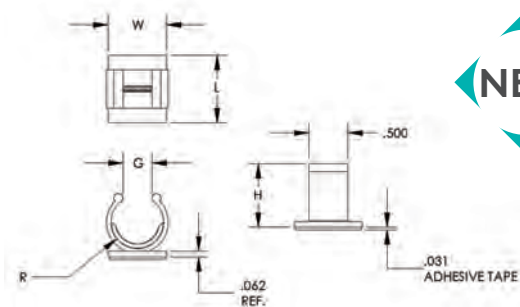
| Item No.   | Conduit Size | A     |     | B     |     | C     |     | Bulk Pack Qty |
|------------|--------------|-------|-----|-------|-----|-------|-----|---------------|
|            |              | in    | mm  | in    | mm  | in    | mm  |               |
| 23CDC05025 | 1/2"         | 0.200 | 5.1 | 0.250 | 6.4 | 0.250 | 6.4 | 1000          |
| 23CDC07531 | 3/4"         | 0.312 | 7.9 | 0.312 | 7.9 | 0.250 | 6.4 | 500           |



# FLEXIBLE CONDUIT & CLIPS



## 22SLCLIP Series Split Loom Clips



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Use to route split loom
- Installs quickly and easily with adhesive base
- Resists corrosion, vibration and abrasion

| Item No.       | Nominal Ø | R     |       | G     |       | W     |       | L     |       | H     |       | Bulk Pack Qty |
|----------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|
|                |           | in    | mm    | in    | mm    | in    | mm    | in    | mm    | in    | mm    |               |
| 22SL0250ADCLIP | 0.250     | 0.400 | 10.10 | 0.220 | 5.58  | 0.750 | 19.00 | 0.750 | 19.00 | 0.512 | 13.00 | 100           |
| 22SL0375ADCLIP | 0.375     | 0.540 | 13.70 | 0.297 | 7.54  | 0.750 | 19.00 | 0.750 | 19.00 | 0.666 | 16.90 | 100           |
| 22SL0500ADCLIP | 0.500     | 0.680 | 17.20 | 0.374 | 9.49  | 0.750 | 19.00 | 0.875 | 22.20 | 0.819 | 20.80 | 100           |
| 22SL0625ADCLIP | 0.625     | 0.840 | 21.30 | 0.462 | 11.70 | 0.750 | 19.00 | 0.875 | 22.20 | 0.995 | 25.20 | 100           |
| 22SL0750ADCLIP | 0.750     | 0.940 | 23.80 | 0.500 | 12.70 | 1.000 | 25.40 | 1.000 | 25.40 | 1.104 | 28.00 | 100           |
| 22SL1000ADCLIP | 1.000     | 1.140 | 28.90 | 0.575 | 14.60 | 1.000 | 25.40 | 1.000 | 25.40 | 1.324 | 33.60 | 100           |

## SHR Series Slit Harness Wrap



**Specifications:**

- Material: See Table
- Color: Black

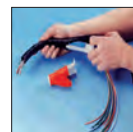
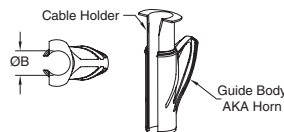
**Features:**

- Protects wires from wear
- Easy to install



| Item No.         |            | Max Bundle Range |          | A     |      | B     |      | C     |     | Roll Length |      | Installation Tool Part Number | Pack Qty |              |   |
|------------------|------------|------------------|----------|-------|------|-------|------|-------|-----|-------------|------|-------------------------------|----------|--------------|---|
| UL94 V-0 Nylon 6 | Nylon 6    | LDPE             | Approval | in    | mm   | in    | mm   | in    | mm  | in          | mm   |                               |          | ft           | m |
| SHR-05-6V0B      | SHR-05-6NB | SHR-05-PPB       | UL       | 0.240 | 6.0  | 0.200 | 5.0  | 0.032 | 0.8 | 0.390       | 10.0 | 328                           | 100      | CAT-05-PP-BL | 1 |
| SHR-08-6V0B      | SHR-08-6NB | SHR-08-PPB       | UL       | 0.390 | 10.0 | 0.310 | 8.0  | 0.032 | 0.8 | 0.390       | 10.0 | 328                           | 100      | CAT-08-PP    | 1 |
| SHR-15-6V0B      | SHR-15-6NB | SHR-15-PPB       | UL       | 0.630 | 16.0 | 0.590 | 15.0 | 0.032 | 0.8 | 0.550       | 14.0 | 164                           | 50       | CAT-15-PP    | 1 |
| SHR-20-6V0B      | SHR-20-6NB | SHR-20-PPB       | UL       | 0.900 | 23.0 | 0.790 | 20.0 | 0.035 | 0.9 | 0.670       | 17.0 | 98                            | 30       | CAT-20-PP    | 1 |
| SHR-25-6V0B      | SHR-25-6NB | SHR-25-PPB       | UL       | 0.980 | 25.0 | 0.980 | 25.0 | 0.039 | 1.0 | 0.790       | 20.0 | 66                            | 20       | CAT-25-PP    | 1 |
| SHR-32-6V0B      | SHR-32-6NB | SHR-32-PPB       | UL       | 1.250 | 32.0 | 1.250 | 32.0 | 0.050 | 1.3 | 0.980       | 24.9 | 49                            | 15       | CAT-32-PP    | 1 |

## CAT Series Installation Tool for SHR



**Features:**

- The easiest and quickest way to wrap cables
- Insert cables into the CAT installation tool
- Feed the slit end of the wrap over the horn of the tool and "zip" the wires into a neat bundle
- Allows for breakout of the cables
- Provides abrasion protection

| Item No.     |                | Ø Max Bundle B |      | To Be Used With |
|--------------|----------------|----------------|------|-----------------|
| Pack Qty = 1 | Pack Qty = 100 | in             | mm   |                 |
| CAT-05-PP-BL | —              | 0.240          | 6.0  | SHR-05          |
| CAT-08-PP    | CAT-08-PP-BU   | 0.370          | 9.5  | SHR-08          |
| CAT-15-PP    | CAT-15-PP-BU   | 0.630          | 16.0 | SHR-15          |
| CAT-20-PP    | CAT-20-PP-BU   | 0.790          | 20.0 | SHR-20          |
| CAT-25-PP    | CAT-25-PP-BU   | 0.960          | 24.5 | SHR-25          |
| CAT-32-PP    | CAT-32-PP-BU   | 1.220          | 31.0 | SHR-32          |

## SHR-C Series SHR Clips

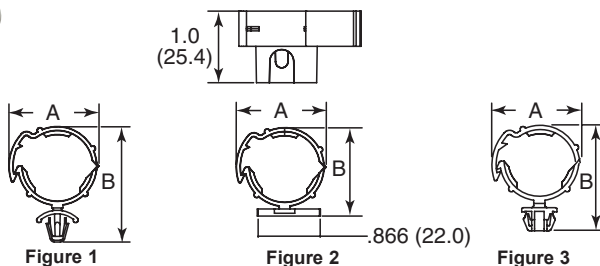


**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Black

**Features:**

- Adjustable clips to hold both the SHR-20 and SHR-25 slit harness wrap (see above)
- Internal ribs grip the wrap securely

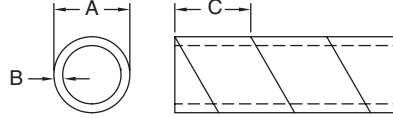


| Item No. | Ø Holding               | Figure | Figure                                                                              | A Ref |      | B Ref |      | Bulk Pack Qty |
|----------|-------------------------|--------|-------------------------------------------------------------------------------------|-------|------|-------|------|---------------|
|          |                         |        |                                                                                     | in    | mm   | in    | mm   |               |
| SHR-C1   | To hold SHR-20 & SHR-25 | 1      | Snaps into a 0.252 in. (6.4 mm) Hole in a 0.031-0.079 in. (0.8-2.0 mm) Panel        | 1.140 | 29.0 | 1.670 | 42.5 | 500           |
| SHR-C2   | To hold SHR-20 & SHR-25 | 2      | #8 or M4 Screw                                                                      | 1.180 | 30.0 | 1.280 | 32.5 | 500           |
| SHR-C3   | To hold SHR-20 & SHR-25 | 2      | Adhesive                                                                            | 1.180 | 30.0 | 1.280 | 32.5 | 500           |
| SHR-C4   | To hold SHR-20 & SHR-25 | 3      | Snaps into a 0.370 in. (9.5 mm) Square Hole in a 0.031-0.079 in. (0.8-2.0 mm) Panel | 1.180 | 30.0 | 1.630 | 40.5 | 500           |



# WRAPS / BRAIDED SLEEVING

## HR/22SPW Series Spiral Wrap



Specifications:

- Material: See Table
- Color: See Table

| Item No.  | Bundle Range  |              |      | Approval | A           |            | B     |      | C     |     | Roll Length |      | Pack Qty |       |    |
|-----------|---------------|--------------|------|----------|-------------|------------|-------|------|-------|-----|-------------|------|----------|-------|----|
|           | UL94 HB Nylon | Polyethylene | LDPE |          | in          | mm         | in    | mm   | in    | mm  | in          | mm   |          | ft    | m  |
| HR2N-1/8  | —             | —            | —    | UL       | 0.062-0.500 | 1.6-12.7   | 0.125 | 3.2  | 0.020 | 0.5 | 0.170       | 4.3  | 100      | 30.48 | 1  |
| HR3N-3/16 | —             | —            | —    | UL       | 0.125-1.000 | 3.2-25.4   | 0.187 | 4.8  | 0.020 | 0.5 | 0.250       | 6.4  | 100      | 30.48 | 1  |
| HR4N-1/4  | —             | —            | —    | UL       | 0.187-1.500 | 4.8-38.7   | 0.250 | 6.4  | 0.025 | 0.6 | 0.300       | 7.6  | 100      | 30.48 | 1  |
| HR6N-3/8  | —             | —            | —    | UL       | 0.312-2.000 | 7.9-50.8   | 0.375 | 9.5  | 0.035 | 0.9 | 0.380       | 9.5  | 100      | 30.48 | 1  |
| HR8N-1/2  | —             | —            | —    | UL       | 0.750-3.000 | 19.1-76.2  | 0.500 | 12.7 | 0.040 | 1.0 | 0.500       | 12.7 | 100      | 30.48 | 1  |
| —         | HR2P-1/8      | —            | —    | UL       | 0.062-0.375 | 1.6-9.5    | 0.125 | 3.2  | 0.020 | 0.5 | 0.170       | 4.3  | 100      | 30.48 | 1  |
| —         | HR3P-3/16     | —            | —    | UL       | 0.125-1.000 | 3.2-25.4   | 0.187 | 4.8  | 0.030 | 0.8 | 0.250       | 6.4  | 100      | 30.48 | 1  |
| —         | HR4P-1/4      | —            | —    | UL       | 0.187-1.000 | 4.8-25.4   | 0.250 | 6.4  | 0.050 | 1.3 | 0.300       | 7.6  | 100      | 30.48 | 1  |
| —         | • 22SPW25NA   | —            | —    | —        | 0.187-0.750 | 4.8-19.1   | 0.250 | 6.4  | 0.050 | 1.3 | 0.300       | 7.6  | 100      | 30.48 | 1  |
| —         | HR6P-3/8      | —            | —    | UL       | 0.312-2.000 | 7.9-50.8   | 0.375 | 9.5  | 0.050 | 1.3 | 0.380       | 9.5  | 100      | 30.48 | 1  |
| —         | • 22SPW36NA   | —            | —    | —        | 0.312-2.000 | 7.9-50.8   | 0.375 | 9.5  | 0.050 | 1.3 | 0.380       | 9.5  | 100      | 30.48 | 1  |
| —         | • 22SPW37NA   | —            | —    | —        | 0.312-3.000 | 7.9-76.2   | 0.375 | 9.5  | 0.052 | 1.3 | —           | —    | 100      | 30.48 | 1  |
| —         | • 22SPW38NA   | —            | —    | —        | 0.312-3.000 | 7.9-76.2   | 0.375 | 9.5  | 0.062 | 1.6 | —           | —    | 100      | 30.48 | 1  |
| —         | • 22SPW48NA   | —            | —    | —        | 0.375-3.000 | 9.5-76.2   | 0.500 | 12.7 | 0.030 | 0.8 | —           | —    | 100      | 30.48 | 1  |
| —         | • 22SPW49NA   | —            | —    | —        | 0.375-4.000 | 9.5-101.6  | 0.500 | 12.7 | 0.040 | 1.0 | —           | —    | 100      | 30.48 | 1  |
| —         | • 22SPW50NA   | —            | —    | —        | 0.375-4.000 | 9.5-101.6  | 0.500 | 12.7 | 0.062 | 1.6 | —           | —    | 100      | 30.48 | 1  |
| —         | • 22SPW62NA   | —            | —    | —        | 0.625-4.500 | 1.6-114.3  | 0.625 | 15.9 | 0.062 | 1.6 | —           | —    | 100      | 30.48 | 1  |
| —         | HR8P-1/2      | —            | —    | UL       | 0.750-3.000 | 19.1-76.2  | 0.500 | 12.7 | 0.060 | 1.5 | 0.500       | 12.7 | 100      | 30.48 | 1  |
| —         | • 22SPW75NA   | —            | —    | —        | 0.750-5.000 | 19.1-127.0 | 0.750 | 19.1 | 0.065 | 1.7 | —           | —    | 100      | 30.48 | 1  |
| —         | • 22SPW10NA   | —            | —    | —        | 1.000-7.000 | 25.4-177.8 | 1.000 | 25.4 | 0.070 | 1.8 | —           | —    | 100      | 30.48 | 75 |
| —         | • 22SPW11NA   | —            | —    | —        | 1.000-7.000 | 25.4-177.8 | 1.000 | 25.4 | 0.095 | 2.4 | —           | —    | 100      | 30.48 | 75 |
| —         | • 22SPW24BK   | —            | —    | —        | 0.187-2.000 | 4.8-50.8   | 0.250 | 6.4  | 0.035 | 0.9 | —           | —    | 100      | 30.48 | 1  |
| —         | • 22SPW25BK   | —            | —    | —        | 0.187-2.000 | 4.8-50.8   | 0.250 | 6.4  | 0.040 | 1.0 | —           | —    | 100      | 30.48 | 1  |
| —         | HR4U-1/4      | —            | —    | UL       | 0.187-0.750 | 4.8-19.1   | 0.250 | 6.4  | 0.050 | 1.3 | 0.300       | 7.6  | 100      | 30.48 | 1  |
| —         | • 22SPW36BK   | —            | —    | —        | 0.312-3.000 | 7.9-76.2   | 0.375 | 9.5  | 0.040 | 1.0 | —           | —    | 100      | 30.48 | 1  |
| —         | HR6U-3/8      | —            | —    | UL       | 0.312-2.000 | 7.9-50.8   | 0.375 | 9.5  | 0.050 | 1.3 | 0.380       | 9.5  | 100      | 30.48 | 1  |
| —         | • 22SPW37BK   | —            | —    | —        | 0.312-3.000 | 7.9-76.2   | 0.375 | 9.5  | 0.052 | 1.3 | —           | —    | 100      | 30.48 | 1  |
| —         | • 22SPW38BK   | —            | —    | —        | 0.312-3.000 | 7.9-76.2   | 0.375 | 9.5  | 0.062 | 1.6 | —           | —    | 100      | 30.48 | 1  |
| —         | • 22SPW48BK   | —            | —    | —        | 0.375-3.000 | 9.5-76.2   | 0.500 | 12.7 | 0.030 | 0.8 | —           | —    | 100      | 30.48 | 1  |
| —         | • 22SPW49BK   | —            | —    | —        | 0.375-4.000 | 9.5-101.6  | 0.500 | 12.7 | 0.040 | 1.0 | —           | —    | 100      | 30.48 | 1  |
| —         | • 22SPW50BK   | —            | —    | —        | 0.375-4.000 | 9.5-101.6  | 0.500 | 12.7 | 0.062 | 1.6 | —           | —    | 100      | 30.48 | 1  |
| —         | • 22SPW62BK   | —            | —    | —        | 0.625-4.500 | 1.6-114.3  | 0.625 | 15.9 | 0.062 | 1.6 | —           | —    | 100      | 30.48 | 1  |
| —         | HR8U-1/2      | —            | —    | UL       | 0.750-3.500 | 19.1-88.9  | 0.500 | 12.7 | 0.060 | 1.5 | 0.500       | 12.7 | 100      | 30.48 | 1  |
| —         | • 22SPW75BK   | —            | —    | —        | 0.750-5.000 | 19.1-127.0 | 0.750 | 19.1 | 0.065 | 1.7 | —           | —    | 100      | 30.48 | 1  |
| —         | • 22SPW10BK   | —            | —    | —        | 1.000-7.000 | 25.4-177.8 | 1.000 | 25.4 | 0.070 | 1.8 | —           | —    | 100      | 30.48 | 75 |
| —         | • 22SPW11BK   | —            | —    | —        | 1.000-7.000 | 25.4-177.8 | 1.000 | 25.4 | 0.095 | 2.4 | —           | —    | 100      | 30.48 | 75 |

## Polyester Expandable Braided Sleeving

Specifications:

- Material: VV-1 Polyester
- Color: Black

Features:

- The open weave construction allows for easy installation reducing assembly cost
- Cut and abrasion resistant with high thermal properties
- Used on wire harnessing applications where durability and low cost are essential
- Cuts cleanly with a hot knife



| Item No. | Nominal Size |      | Expansion Range |          |          |          | Roll Length |      | Pack Qty |
|----------|--------------|------|-----------------|----------|----------|----------|-------------|------|----------|
|          | in           | mm   | Min (in)        | Max (in) | Min (mm) | Max (mm) | ft          | m    |          |
| 900303   | 1/8          | 3.0  | 0.039           | 0.236    | 1.0      | 6.0      | 200         | 60.9 | 1        |
| 900304   | 1/4          | 6.0  | 0.118           | 0.354    | 3.0      | 9.0      | 200         | 60.9 | 1        |
| 900305   | 5/16         | 8.0  | 0.197           | 0.630    | 5.0      | 16.0     | 100         | 30.5 | 1        |
| 900306   | 3/8          | 10.0 | 0.276           | 0.748    | 7.0      | 19.0     | 100         | 30.5 | 1        |
| 900307   | 1/2          | 12.0 | 0.315           | 0.945    | 8.0      | 24.0     | 100         | 30.5 | 1        |
| 900308   | 5/8          | 15.0 | 0.394           | 1.063    | 10.0     | 27.0     | 100         | 30.5 | 1        |
| 900309   | 3/4          | 20.0 | 0.551           | 1.181    | 14.0     | 30.0     | 50          | 15.2 | 1        |
| 900310   | 1            | 25.0 | 0.709           | 1.378    | 18.0     | 35.0     | 50          | 15.2 | 1        |
| 900311   | 1-1/4        | 30.0 | 0.787           | 1.969    | 20.0     | 50.0     | 50          | 15.2 | 1        |
| 900312   | 1-1/2        | 40.0 | 1.181           | 2.362    | 30.0     | 60.0     | 50          | 15.2 | 1        |
| 900313   | 1-3/4        | 45.0 | 1.378           | 2.953    | 35.0     | 75.0     | 50          | 15.2 | 1        |
| 900314   | 2            | 50.0 | 1.575           | 3.150    | 40.0     | 80.0     | 50          | 15.2 | 1        |
| 900315   | 2-1/2        | 64.0 | 1.772           | 4.134    | 45.0     | 105.0    | 50          | 15.2 | 1        |
| 900302   | 3            | 76.0 | 2.520           | 3.150    | 64.0     | 80.0     | 50          | 15.2 | 1        |



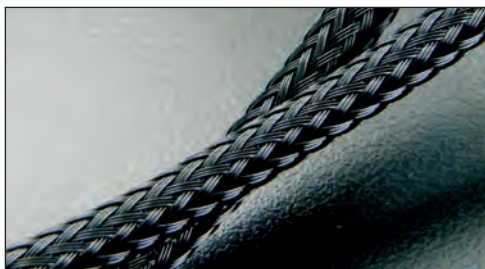
**Nylon Expandable Sleeving**

Specifications:

- Material: UL94 V-2 Nylon 6/6 Monofilament
- Color: Black

Features:

- Offers excellent abrasion resistance while maintaining a high degree of flexibility and durability
- Provides a smooth and slick surface that resists snags when dragged over a rough surface
- Cuts cleanly with a hot knife



| Item No. | Nominal Flat Width |      | Expanded Range |          |          |          | Roll Length |      | Pack Qty |
|----------|--------------------|------|----------------|----------|----------|----------|-------------|------|----------|
|          | in                 | mm   | Min (in)       | Max (in) | Min (mm) | Max (mm) | ft          | m    |          |
| 900426   | 1/8                | 3.0  | 0.039          | 0.236    | 1.0      | 6.0      | 200         | 60.9 | 1        |
| 900427   | 1/4                | 6.0  | 0.118          | 0.354    | 3.0      | 9.0      | 200         | 60.9 | 1        |
| 900428   | 5/16               | 8.0  | 0.197          | 0.630    | 5.0      | 16.0     | 100         | 30.5 | 1        |
| 900429   | 3/8                | 10.0 | 0.276          | 0.748    | 7.0      | 19.0     | 100         | 30.5 | 1        |
| 900430   | 1/2                | 12.0 | 0.315          | 0.945    | 8.0      | 24.0     | 100         | 30.5 | 1        |
| 900431   | 5/8                | 16.0 | 0.394          | 1.063    | 10.0     | 27.0     | 100         | 30.5 | 1        |
| 900432   | 3/4                | 19.0 | 0.551          | 1.181    | 14.0     | 30.0     | 50          | 15.2 | 1        |
| 900433   | 1                  | 25.0 | 0.709          | 1.378    | 18.0     | 35.0     | 50          | 15.2 | 1        |
| 900434   | 1-1/4              | 32.0 | 0.787          | 1.969    | 20.0     | 50.0     | 50          | 15.2 | 1        |
| 900435   | 1-1/2              | 38.0 | 1.181          | 2.362    | 30.0     | 60.0     | 50          | 15.2 | 1        |
| 900436   | 1-3/4              | 45.0 | 1.378          | 2.953    | 35.0     | 75.0     | 50          | 15.2 | 1        |
| 900483   | 2                  | 50.0 | 1.575          | 3.150    | 40.0     | 80.0     | 50          | 15.2 | 1        |
| 900484   | 2-1/2              | 64.0 | 1.772          | 4.134    | 45.0     | 105.0    | 50          | 15.2 | 1        |
| 900485   | 3                  | 76.0 | 2.520          | 4.724    | 64.0     | 120.0    | 50          | 15.2 | 1        |

**PPS UL94 V-0 Expandable Sleeve**

Specifications:

- Material: UL94 V-0 Polyphenylene Sulfide
- Color: Black

Features:

- Used on flame retardant and high temperature cable assemblies and wire harness applications
- Lightweight sleeve that has chemical resistance, low wear, dimensional stability, and low moisture stability
- Cuts cleanly with a hot knife



| Item No. | Nominal Flat Width |      | Expanded Range |          |          |          | Roll Length |      | Pack Qty |
|----------|--------------------|------|----------------|----------|----------|----------|-------------|------|----------|
|          | in                 | mm   | Min (in)       | Max (in) | Min (mm) | Max (mm) | ft          | m    |          |
| 900437   | 1/8                | 3.0  | 0.039          | 0.236    | 1.0      | 6.0      | 200         | 60.9 | 1        |
| 900438   | 1/4                | 6.0  | 0.118          | 0.354    | 3.0      | 9.0      | 200         | 60.9 | 1        |
| 900439   | 5/16               | 8.0  | 0.197          | 0.630    | 5.0      | 16.0     | 100         | 30.5 | 1        |
| 900440   | 3/8                | 10.0 | 0.276          | 0.748    | 7.0      | 19.0     | 100         | 30.5 | 1        |
| 900441   | 1/2                | 12.0 | 0.315          | 0.945    | 8.0      | 24.0     | 100         | 30.5 | 1        |
| 900442   | 5/8                | 16.0 | 0.394          | 1.063    | 10.0     | 27.0     | 100         | 30.5 | 1        |
| 900443   | 3/4                | 19.0 | 0.551          | 1.181    | 14.0     | 30.0     | 50          | 15.2 | 1        |
| 900444   | 1                  | 25.0 | 0.709          | 1.378    | 18.0     | 35.0     | 50          | 15.2 | 1        |
| 900445   | 1-1/4              | 32.0 | 0.787          | 1.969    | 20.0     | 50.0     | 50          | 15.2 | 1        |
| 900446   | 1-1/2              | 38.0 | 1.181          | 2.362    | 30.0     | 60.0     | 50          | 15.2 | 1        |
| 900479   | 1-3/4              | 45.0 | 1.378          | 2.953    | 35.0     | 75.0     | 50          | 15.2 | 1        |
| 900449   | 2                  | 50.0 | 1.575          | 3.150    | 40.0     | 80.0     | 50          | 15.2 | 1        |
| 900450   | 2-1/2              | 64.0 | 1.772          | 4.134    | 45.0     | 105.0    | 50          | 15.2 | 1        |
| 900451   | 3                  | 76.0 | 2.520          | 4.724    | 64.0     | 120.0    | 50          | 15.2 | 1        |

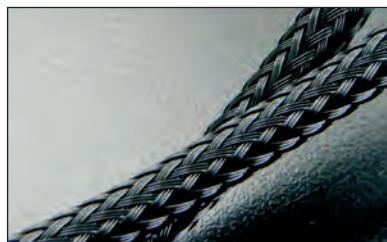
**PET Anti-Abrasion Sleeve**

Specifications:

- Material: VW-1 Polyethylene Terephthalate
- Color: Black

Features:

- Has 300% more abrasion resistance than the standard polyester expandable sleeve
- Exceptional mechanical properties
- Cuts cleanly with a hot knife



| Item No. | Nominal Flat Width |      | Expanded Range |          |          |          | Roll Length |      | Pack Qty |
|----------|--------------------|------|----------------|----------|----------|----------|-------------|------|----------|
|          | in                 | mm   | Min (in)       | Max (in) | Min (mm) | Max (mm) | ft          | m    |          |
| 900461   | 1/8                | 3.0  | 0.039          | 0.236    | 1.0      | 6.0      | 200         | 60.9 | 1        |
| 900462   | 1/4                | 6.0  | 0.118          | 0.354    | 3.0      | 9.0      | 200         | 60.9 | 1        |
| 900463   | 5/16               | 8.0  | 0.197          | 0.630    | 5.0      | 16.0     | 100         | 30.5 | 1        |
| 900464   | 3/8                | 10.0 | 0.276          | 0.748    | 7.0      | 19.0     | 100         | 30.5 | 1        |
| 900465   | 1/2                | 12.0 | 0.315          | 0.945    | 8.0      | 24.0     | 100         | 30.5 | 1        |
| 900466   | 5/8                | 16.0 | 0.394          | 1.063    | 10.0     | 27.0     | 100         | 30.5 | 1        |
| 900467   | 3/4                | 19.0 | 0.551          | 1.181    | 14.0     | 30.0     | 50          | 15.2 | 1        |
| 900468   | 1                  | 25.0 | 0.709          | 1.378    | 18.0     | 35.0     | 50          | 15.2 | 1        |
| 900469   | 1-1/4              | 32.0 | 0.787          | 1.969    | 20.0     | 50.0     | 50          | 15.2 | 1        |
| 900470   | 1-1/2              | 38.0 | 1.181          | 2.362    | 30.0     | 60.0     | 50          | 15.2 | 1        |
| 900471   | 1-3/4              | 45.0 | 1.378          | 2.953    | 35.0     | 75.0     | 50          | 15.2 | 1        |
| 900472   | 2                  | 50.0 | 1.575          | 3.150    | 40.0     | 80.0     | 50          | 15.2 | 1        |
| 900473   | 2-1/2              | 64.0 | 1.772          | 4.134    | 45.0     | 105.0    | 50          | 15.2 | 1        |
| 900474   | 3                  | 76.0 | 2.520          | 4.724    | 64.0     | 120.0    | 50          | 15.2 | 1        |



## BRAIDED SLEEVING

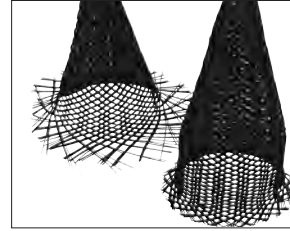
### Scissor Cut Sleeve

**Specifications:**

- Material: VW-1 Polyester
- Color: Black

**Features:**

- Can be cut with scissors and maintains a frayless end
- Perfect for use in the field where a hot knife is not available
- Excellent abrasion resistance



| Item No. | Approval | Nominal Size |      | Expansion Range |          |          |          | Roll Length |       | Pack Qty |
|----------|----------|--------------|------|-----------------|----------|----------|----------|-------------|-------|----------|
|          |          | in           | mm   | Min (in)        | Min (mm) | Max (in) | Max (mm) | ft          | m     |          |
| 900289   | UL       | 1/8          | 3.0  | 0.039           | 1.0      | 0.197    | 5.0      | 200         | 60.98 | 1        |
| 900290   | UL       | 1/4          | 6.0  | 0.118           | 3.0      | 0.315    | 8.0      | 200         | 60.98 | 1        |
| 900291   | UL       | 5/16         | 8.0  | 0.197           | 5.0      | 0.394    | 10.0     | 100         | 30.49 | 1        |
| 900292   | UL       | 3/8          | 10.0 | 0.276           | 7.0      | 0.472    | 12.0     | 100         | 30.49 | 1        |
| 900293   | UL       | 1/2          | 12.0 | 0.315           | 8.0      | 0.551    | 14.0     | 100         | 30.49 | 1        |
| 900294   | UL       | 5/8          | 15.0 | 0.394           | 10.0     | 0.709    | 18.0     | 100         | 30.49 | 1        |
| 900295   | UL       | 3/4          | 20.0 | 0.551           | 14.0     | 0.906    | 23.0     | 50          | 15.24 | 1        |
| 900296   | UL       | 1            | 25.0 | 0.709           | 18.0     | 1.102    | 28.0     | 50          | 15.24 | 1        |
| 900297   | UL       | 1-1/4        | 30.0 | 0.787           | 20.0     | 1.378    | 35.0     | 50          | 15.24 | 1        |
| 900298   | UL       | 1-1/2        | 40.0 | 1.181           | 30.0     | 1.654    | 42.0     | 50          | 15.24 | 1        |
| 900299   | UL       | 1-3/4        | 45.0 | 1.378           | 35.0     | 1.890    | 48.0     | 50          | 15.24 | 1        |
| 900300   | UL       | 2            | 50.0 | 1.575           | 40.0     | 2.126    | 54.0     | 50          | 15.24 | 1        |
| 900301   | UL       | 2-1/2        | 64.0 | 1.772           | 45.0     | 2.756    | 70.0     | 50          | 15.24 | 1        |
| 900302   | UL       | 3            | 76.0 | 2.520           | 64.0     | 3.150    | 80.0     | 50          | 15.24 | 1        |

### FRBS Series

#### High Flame-Retardant Expandable Sleeving

**Specifications:**

- Material: UL94 V0 Polyester
- Operating Range: -50°C ~ +150°C
- Melt Point: 240±10°C
- Color: Black, Gray

**Features:**

- Made of sturdy polyester; cuts with hot knife
- Designed for abrasion protection of bundles of electrical cables
- Self-extinguishing according to UL94 V0 for enhanced fire protection
- Highly flexible and easy to apply over irregular shapes, wires, cables, wire harnesses, pipes and industrial hoses where additional protection and high flame resistance is required
- Applications: public transport, aircraft industry, telecommunications, underground cables



| Item No. | Nominal Size |      | Expansion Range |       |      |       | Roll Length |         | Pack Qty |
|----------|--------------|------|-----------------|-------|------|-------|-------------|---------|----------|
|          | in           | mm   | in              | max   | min  | mm    | max         | ft      |          |
| FRBS-03  | 0.118        | 3.0  | 0.039           | 0.236 | 1.0  | 6.0   | 3280.8      | 1000.00 | 1        |
| FRBS-06  | 0.236        | 6.0  | 0.118           | 0.354 | 3.0  | 9.0   | 1640.4      | 500.00  | 1        |
| FRBS-08  | 0.315        | 8.0  | 0.197           | 0.472 | 5.0  | 12.0  | 1148.3      | 350.00  | 1        |
| FRBS-10  | 0.394        | 10.0 | 0.276           | 0.669 | 7.0  | 17.0  | 1148.3      | 350.00  | 1        |
| FRBS-12  | 0.472        | 12.0 | 0.315           | 0.787 | 8.0  | 20.0  | 1148.3      | 350.00  | 1        |
| FRBS-14  | 0.551        | 14.0 | 0.394           | 1.063 | 10.0 | 27.0  | 820.2       | 250.00  | 1        |
| FRBS-16  | 0.630        | 16.0 | 0.551           | 1.181 | 14.0 | 30.0  | 656.2       | 200.00  | 1        |
| FRBS-20  | 0.787        | 20.0 | 0.709           | 1.299 | 18.0 | 33.0  | 656.2       | 200.00  | 1        |
| FRBS-25  | 0.984        | 25.0 | 0.787           | 1.969 | 20.0 | 50.0  | 492.1       | 150.00  | 1        |
| FRBS-30  | 1.181        | 30.0 | 1.181           | 2.362 | 30.0 | 60.0  | 328.1       | 100.00  | 1        |
| FRBS-40  | 1.575        | 40.0 | 1.378           | 2.953 | 35.0 | 75.0  | 328.1       | 100.00  | 1        |
| FRBS-45  | 1.772        | 45.0 | 1.575           | 3.150 | 40.0 | 80.0  | 328.1       | 100.00  | 1        |
| FRBS-50  | 1.969        | 50.0 | 1.772           | 4.134 | 45.0 | 105.0 | 328.1       | 100.00  | 1        |
| FRBS-64  | 2.520        | 64.0 | 2.520           | 4.724 | 64.0 | 120.0 | 328.1       | 100.00  | 1        |

### Thermal Protection Sleeve

**Specifications:**

- Material: UL94 V-0 Nomex™ Fiber
- Color: Natural

**Features:**

- Provides thermal protection and high abrasion resistance
- Soft feel and smooth appearance makes installation easy
- Cuts easily with standard scissors
- Operating Range: -320°F to 662°F (-196°C to 350°C)



| Item No. | Nominal Size |      | Expansion Range |       |     |       | Roll Length |  | Pack Qty |
|----------|--------------|------|-----------------|-------|-----|-------|-------------|--|----------|
|          | in           | mm   | in              | mm    | ft  | m     |             |  |          |
| 900365   | 0.118        | 3.0  | 0.039           | 0.157 | 100 | 30.48 | 1           |  |          |
| 900366   | 0.236        | 6.0  | 0.196           | 0.314 | 100 | 30.48 | 1           |  |          |
| 900367   | 0.314        | 8.0  | 0.236           | 0.393 | 100 | 30.48 | 1           |  |          |
| 900368   | 0.393        | 10.0 | 0.275           | 0.511 | 100 | 30.48 | 1           |  |          |
| 900369   | 0.472        | 12.0 | 0.314           | 0.629 | 100 | 30.48 | 1           |  |          |
| 900370   | 0.591        | 15.0 | 0.393           | 0.787 | 100 | 30.48 | 1           |  |          |
| 900371   | 0.787        | 20.0 | 0.551           | 1.023 | 100 | 30.48 | 1           |  |          |
| 900372   | 0.984        | 25.0 | 0.708           | 1.299 | 100 | 30.48 | 1           |  |          |
| 900373   | 1.181        | 30.0 | 0.787           | 1.535 | 100 | 30.48 | 1           |  |          |
| 900374   | 1.574        | 40.0 | 1.181           | 2.047 | 100 | 30.48 | 1           |  |          |
| 900375   | 1.968        | 50.0 | 1.574           | 2.559 | 100 | 30.48 | 1           |  |          |

**BRAIDED SLEEVING**



**AFS Series  
Aluminum Fiberglass Self-Closing Wrap**

Specifications:

- Material: Aluminum Foil, Fiberglass, Polyester
- Working Temperature: -40°C ~ +150°C
- Thermal Insulation: Test method refer to SAE J2302
- Heat Insulation Performance: ≥100°C
- Color: Natural

Features:

- Adds a layer of protection that prevents scraping; cut and abrasion resistant
- Resists gasoline and engine chemicals
- Creates an insulation barrier for vulnerable cable and wire materials within high-temperature environments
- Cuts cleanly with a cutting machine or scissors
- Protects delicate wire bundles, cables and hoses from damage caused by nearby exhaust pipes, headers or heat-generating components



| Item No. | ID    |      | Thickness |     | Piece Length |      | Pack Qty |
|----------|-------|------|-----------|-----|--------------|------|----------|
|          | in    | mm   | min       | max | ft           | m    |          |
| AFSCW-08 | 0.315 | 8.0  | 0.016     | 0.4 | 3.4          | 1.00 | 1        |
| AFSCW-10 | 0.394 | 10.0 | 0.020     | 0.5 | 3.4          | 1.00 | 1        |
| AFSCW-13 | 0.512 | 13.0 | 0.020     | 0.5 | 3.4          | 1.00 | 1        |
| AFSCW-16 | 0.630 | 16.0 | 0.020     | 0.5 | 3.4          | 1.00 | 1        |
| AFSCW-20 | 0.787 | 20.0 | 0.028     | 0.7 | 3.4          | 1.00 | 1        |
| AFSCW-25 | 0.984 | 25.0 | 0.028     | 0.7 | 3.4          | 1.00 | 1        |
| AFSCW-32 | 1.260 | 32.0 | 0.028     | 0.7 | 3.4          | 1.00 | 1        |
| AFSCW-38 | 1.496 | 38.0 | 0.028     | 0.7 | 3.4          | 1.00 | 1        |

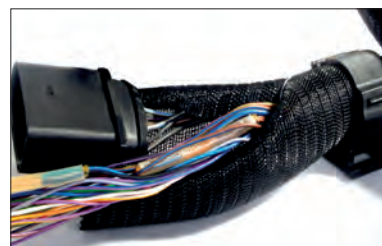
**Self Closing Wrap**

Specifications:

- Material: DIN5510, VW-1 Polyester Monofilament
- Color: Black

Features:

- The self closing 25% overlap design allows easy access to the bundle inside
- Can be assembled over components after they have already been installed
- Excellent flame resistance, heat dispersion, and durable protection
- Installation tool to zip cables in is available in most sizes
- Cuts cleanly with a hot knife



| Item No. | ID    |      | Ø Max Bundle |    | Installation Tool Part Number | Roll Length |       | Pack Qty |
|----------|-------|------|--------------|----|-------------------------------|-------------|-------|----------|
|          | in    | mm   | in           | mm |                               | ft          | m     |          |
| 900412   | 0.196 | 5.0  | 0.236        | 6  | 900475                        | 100         | 30.50 | 1        |
| 900413   | 0.314 | 8.0  | 0.354        | 9  | 900475                        | 100         | 30.50 | 1        |
| 900414   | 0.511 | 13.0 | 0.551        | 14 | 900476                        | 100         | 30.50 | 1        |
| 900415   | 0.748 | 19.0 | 0.787        | 20 | 900478                        | 100         | 30.50 | 1        |
| 900416   | 0.984 | 25.0 | 1.023        | 26 | 900478                        | 100         | 30.50 | 1        |
| 900417   | 1.496 | 38.0 | 1.574        | 40 | —                             | 100         | 30.50 | 1        |

**Self Closing Braided Wrap**

Specifications:

- Material: UL94 V-2 Polyester
- Color: Black

Features:

- The self closing 25% overlap design allows easy access to the bundle inside
- Can be assembled over components after they have already been installed
- Lightweight and abrasion resistant
- Installation tool to zip cables in is available in most sizes
- Cuts cleanly with a hot knife



| Item No. | ID    |      | Ø Max Bundle |      | Installation Tool Part Number | Roll Length |      | Pack Qty |
|----------|-------|------|--------------|------|-------------------------------|-------------|------|----------|
|          | in    | mm   | in           | mm   |                               | ft          | m    |          |
| 900452   | 0.236 | 6.0  | 0.275        | 7.0  | 900475                        | 100         | 30.5 | 1        |
| 900453   | 0.354 | 9.0  | 0.393        | 10.0 | 900476                        | 100         | 30.5 | 1        |
| 900454   | 0.511 | 13.0 | 0.551        | 14.0 | 900476                        | 100         | 30.5 | 1        |
| 900455   | 0.629 | 16.0 | 0.669        | 17.0 | 900477                        | 100         | 30.5 | 1        |
| 900456   | 0.748 | 19.0 | 0.787        | 20.0 | 900478                        | 100         | 30.5 | 1        |
| 900457   | 0.984 | 25.0 | 1.023        | 26.0 | 900478                        | 100         | 30.5 | 1        |
| 900458   | 1.259 | 32.0 | 1.299        | 33.0 | —                             | 50          | 15.2 | 1        |
| 900459   | 1.496 | 38.0 | 1.574        | 40.0 | —                             | 50          | 15.2 | 1        |
| 900460   | 1.968 | 50.0 | 2.047        | 52.0 | —                             | 50          | 15.2 | 1        |



## BRAIDED SLEEVING / HOSE OR CABLE WRAP SLEEVES

### PMMSCW/PMMSCW-OR Series Self-Closing Wrap

**Specifications:**

- Material: Polyester Mono-Filament and Multi-Filament
- Operating Range: -50°C ~ +150°C
- Melt Point: 240±10°C
- Color: See Table

**Features:**

- Cuts with hot knife
- Center-slit overlapping design allows quick and easy access to wires and cables for future maintenance or inspection without disassembly.
- Flexible material easily wraps around a variety of component shapes and sizes, making it easier to use than slit-loom tubing or spiral-wrap materials
- Unique weave pattern provides increased coverage and greater resistance to abrasion, dust and debris
- Provides tough, durable protection to wire harnesses and cable assemblies in automotive, telecom, automatic equipment, railways and panel boards



| Item No.  |              | Nominal Ø |      | Ø Max Bundle |      | Roll Length |     | Pack Qty |
|-----------|--------------|-----------|------|--------------|------|-------------|-----|----------|
| black     | orange       | in        | mm   | in           | mm   | ft          | m   |          |
| PMMSCW-05 | PMMSCW-05-OR | 0.197     | 5.0  | 0.236        | 6.0  | 328.08      | 100 | 1        |
| PMMSCW-08 | PMMSCW-08-OR | 0.315     | 8.0  | 0.354        | 9.0  | 328.08      | 100 | 1        |
| PMMSCW-10 | PMMSCW-10-OR | 0.394     | 10.0 | 0.433        | 11.0 | 328.08      | 100 | 1        |
| PMMSCW-13 | PMMSCW-13-OR | 0.512     | 13.0 | 0.551        | 14.0 | 164.04      | 50  | 1        |
| PMMSCW-16 | PMMSCW-16-OR | 0.630     | 16.0 | 0.669        | 17.0 | 82.02       | 25  | 1        |
| PMMSCW-19 | PMMSCW-19-OR | 0.748     | 19.0 | 0.787        | 20.0 | 82.02       | 25  | 1        |
| PMMSCW-25 | PMMSCW-25-OR | 0.984     | 25.0 | 1.063        | 27.0 | 82.02       | 25  | 1        |
| PMMSCW-29 | PMMSCW-29-OR | 1.142     | 29.0 | 1.220        | 31.0 | 82.02       | 25  | 1        |
| PMMSCW-32 | PMMSCW-32-OR | 1.260     | 32.0 | 1.339        | 34.0 | 82.02       | 25  | 1        |
| PMMSCW-38 | PMMSCW-38-OR | 1.496     | 38.0 | 1.575        | 40.0 | 82.02       | 25  | 1        |
| PMMSCW-50 | PMMSCW-50-OR | 1.969     | 50.0 | 2.047        | 52.0 | 82.02       | 25  | 1        |

### Hook and Loop Braided Cable or Hose Wrap

**Specifications:**

- Material: VW-1 Polyester and Nylon
- Color: Black

**Features:**

- Easily opened and closed
- Can be easily installed over connectors, fittings, splices, cables and hoses
- Breakouts can be made by bringing cables out through hook and loop
- Open weave design easily conforms to many irregular shapes



| Item No. | Nominal Size |      | Max Bundle Dia. |      | Hook & Loop Width |      | Roll Length |    | Pack Qty |
|----------|--------------|------|-----------------|------|-------------------|------|-------------|----|----------|
|          | in           | mm   | in              | mm   | in                | mm   | ft          | m  |          |
| 900360   | 0.512        | 13.0 | 0.315           | 8.0  | 0.394             | 10.0 | 164         | 50 | 1        |
| 900361   | 0.748        | 19.0 | 0.472           | 12.0 | 0.394             | 10.0 | 164         | 50 | 1        |
| 900362   | 1.260        | 32.0 | 0.787           | 20.0 | 0.787             | 20.0 | 164         | 50 | 1        |
| 900363   | 2.008        | 51.0 | 1.260           | 32.0 | 0.787             | 20.0 | 164         | 50 | 1        |
| 900364   | 2.520        | 64.0 | 1.575           | 40.0 | 0.787             | 20.0 | 164         | 50 | 1        |

### Quick Assemble Hook and Loop Cable or Hose Sleeve

**Specifications:**

- Material: VW-1 Polyester with Hook and Loop
- Color: Black

**Features:**

- Non-expanable sleeve is easily opened and closed
- Lightweight, high strength, excellent flame and abrasion resistance
- Can be easily installed over connectors, fittings, splices, cables and hoses
- Breakouts can be made by bringing cables out through hook and loop



| Item No. | ID    |      | Spread Width |       | Roll Length |    | Pack Qty |
|----------|-------|------|--------------|-------|-------------|----|----------|
|          | in    | mm   | in           | mm    | ft          | m  |          |
| 900328   | 0.787 | 20.0 | 3.149        | 80.0  | 82          | 25 | 1        |
| 900329   | 0.984 | 25.0 | 3.740        | 95.0  | 82          | 25 | 1        |
| 900330   | 1.181 | 30.0 | 4.527        | 115.0 | 82          | 25 | 1        |
| 900331   | 1.377 | 35.0 | 5.118        | 130.0 | 82          | 25 | 1        |
| 900332   | 1.574 | 40.0 | 5.748        | 146.0 | 82          | 25 | 1        |
| 900333   | 1.771 | 45.0 | 6.377        | 162.0 | 82          | 25 | 1        |
| 900334   | 1.968 | 50.0 | 7.007        | 178.0 | 82          | 25 | 1        |



**Hose & Cable Protection Sleeve**



**Specifications:**

- Material: Polyester
- Color: Black

**Features:**

- Most economical MSHA approved sleeve protection option
- Lightweight but high strength and abrasion resistant
- Protects people, environment and machinery against hydraulic hose ruptures

| Item No. | Flattened Width |       | Round ID |       | Roll Length |      | Pack Qty |
|----------|-----------------|-------|----------|-------|-------------|------|----------|
|          | in              | mm    | in       | mm    | ft          | m    |          |
| 900359   | 0.787           | 20.0  | 0.472    | 12.0  | 100         | 30.5 | 1        |
| 900344   | 0.984           | 25.0  | 0.591    | 15.0  | 100         | 30.5 | 1        |
| 900345   | 1.181           | 30.0  | 0.748    | 19.0  | 100         | 30.5 | 1        |
| 900346   | 1.378           | 35.0  | 0.866    | 22.0  | 100         | 30.5 | 1        |
| 900347   | 1.575           | 40.0  | 0.984    | 25.0  | 100         | 30.5 | 1        |
| 900348   | 1.772           | 45.0  | 1.102    | 28.0  | 100         | 30.5 | 1        |
| 900349   | 1.969           | 50.0  | 1.220    | 31.0  | 100         | 30.5 | 1        |
| 900350   | 2.362           | 60.0  | 1.496    | 38.0  | 100         | 30.5 | 1        |
| 900351   | 2.756           | 70.0  | 1.732    | 44.0  | 100         | 30.5 | 1        |
| 900352   | 3.150           | 80.0  | 1.969    | 50.0  | 100         | 30.5 | 1        |
| 900353   | 3.543           | 90.0  | 2.244    | 57.0  | 100         | 30.5 | 1        |
| 900354   | 3.937           | 100.0 | 2.362    | 60.0  | 100         | 30.5 | 1        |
| 900355   | 4.528           | 115.0 | 2.756    | 70.0  | 50          | 15.2 | 1        |
| 900356   | 5.709           | 145.0 | 3.543    | 90.0  | 50          | 15.2 | 1        |
| 900357   | 6.929           | 176.0 | 4.331    | 110.0 | 50          | 15.2 | 1        |
| 900358   | 7.874           | 200.0 | 4.921    | 125.0 | 50          | 15.2 | 1        |

**Heatshrink Braided Sleeve**

**Specifications:**

- Material: Polyester and Polyolefin
- Color: Black
- Shrink Ratio: 2:1
- Minimum Shrink Temperature: 176° F (80° C)
- Minimum Full Recovery Temperature: 248° F (120° C)

**Features:**

- Braided sleeving will shrink when exposed to a heat source
- Unique woven construction is extremely flexible and easy to install on hoses with irregular shapes
- Provides excellent abrasion resistance and noise reduction

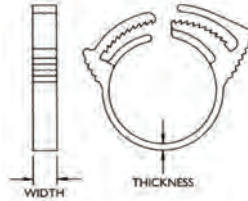


| Item No. | Nominal Size |      | As Supplied ID |      | After Recovery ID |      | Roll Length |      | Pack Qty |
|----------|--------------|------|----------------|------|-------------------|------|-------------|------|----------|
|          | in           | mm   | in             | mm   | in                | mm   | ft          | m    |          |
| 900317   | 3/8          | 10.0 | 0.393          | 10.0 | 0.196             | 5.0  | 100         | 30.5 | 1        |
| 900318   | 1/2          | 12.0 | 0.472          | 12.0 | 0.236             | 6.0  | 100         | 30.5 | 1        |
| 900319   | 3/4          | 20.0 | 0.787          | 20.0 | 0.393             | 10.0 | 100         | 30.5 | 1        |
| 900320   | 1            | 25.0 | 0.984          | 25.0 | 0.492             | 12.5 | 100         | 30.5 | 1        |
| 900321   | 1-1/4        | 30.0 | 1.181          | 30.0 | 0.59              | 15.0 | 100         | 30.5 | 1        |
| 900322   | 1-3/8        | 34.0 | 1.338          | 34.0 | 0.669             | 17.0 | 100         | 30.5 | 1        |
| 900323   | 1-1/2        | 40.0 | 1.574          | 40.0 | 0.787             | 20.0 | 100         | 30.5 | 1        |
| 900324   | 2            | 50.0 | 1.968          | 50.0 | 0.984             | 25.0 | 100         | 30.5 | 1        |
| 900325   | 2-3/8        | 60.0 | 2.362          | 60.0 | 1.181             | 30.0 | 100         | 30.5 | 1        |
| 900326   | 2-3/4        | 70.0 | 2.755          | 70.0 | 1.377             | 35.0 | 100         | 30.5 | 1        |
| 900327   | 3-1/8        | 80.0 | 3.149          | 80.0 | 1.574             | 40.0 | 100         | 30.5 | 1        |



# HOSE CLAMPS

## 22HC Series Premium Hose Clamps



**Specifications:**

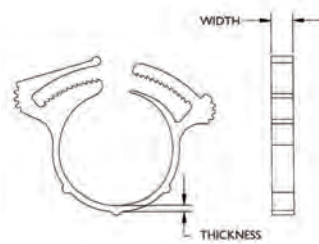
- Material: UL94 V-2 Nylon 6/6
- Color: See Table

**Features:**

- Provides a superior seal on hose and tubing with a patented interlocking design that eliminates the leak path
- Removable and reusable
- Easy installation on most liquid, gas or vacuum lines

| Item No. |           | Bundle Range  |             | Width |      | Thickness |     | Bulk Pack Qty |
|----------|-----------|---------------|-------------|-------|------|-----------|-----|---------------|
| Natural  | Black     | in            | mm          | in    | mm   | in        | mm  |               |
| 22HC0250 | 22HC0250B | 0.235 - 0.260 | 5.9 - 6.6   | 0.219 | 5.6  | 0.047     | 1.2 | 1000          |
| 22HC0312 | 22HC0312B | 0.300 - 0.350 | 7.6 - 8.9   | 0.219 | 5.6  | 0.062     | 1.6 | 1000          |
| 22HC0344 | 22HC0344B | 0.360 - 0.390 | 9.1 - 9.9   | 0.219 | 5.6  | 0.062     | 1.6 | 500           |
| 22HC0406 | 22HC0406B | 0.410 - 0.468 | 10.4 - 11.9 | 0.250 | 6.4  | 0.062     | 1.6 | 1000          |
| 22HC0468 | 22HC0468B | 0.475 - 0.536 | 12.1 - 13.6 | 0.219 | 5.6  | 0.062     | 1.6 | 1000          |
| 22HC0531 | 22HC0531B | 0.538 - 0.608 | 13.7 - 15.4 | 0.250 | 6.4  | 0.062     | 1.6 | 1000          |
| 22HC0593 | 22HC0593B | 0.597 - 0.680 | 15.2 - 17.3 | 0.250 | 6.4  | 0.062     | 1.6 | 500           |
| 22HC0672 | 22HC0672B | 0.670 - 0.776 | 17.0 - 19.7 | 0.219 | 5.6  | 0.062     | 1.6 | 500           |
| 22HC0750 | 22HC0750B | 0.720 - 0.825 | 18.3 - 21.0 | 0.219 | 5.6  | 0.062     | 1.6 | 500           |
| 22HC0813 | 22HC0813B | 0.750 - 0.875 | 19.1 - 22.2 | 0.216 | 5.5  | 0.062     | 1.6 | 500           |
| 22HC0875 | 22HC0875B | 0.840 - 0.940 | 21.3 - 23.9 | 0.219 | 5.6  | 0.062     | 1.6 | 500           |
| 22HC0953 | 22HC0953B | 0.885 - 1.025 | 22.5 - 26.0 | 0.250 | 6.4  | 0.062     | 1.6 | 250           |
| 22HC1031 | 22HC1031B | 1.031 - 1.187 | 26.2 - 30.2 | 0.313 | 7.9  | 0.062     | 1.6 | 250           |
| 22HC1250 | 22HC1250B | 1.250 - 1.425 | 31.8 - 36.2 | 0.313 | 7.9  | 0.062     | 1.6 | 250           |
| 22HC1406 | 22HC1406B | 1.406 - 1.610 | 35.7 - 40.9 | 0.344 | 8.7  | 0.062     | 1.6 | 100           |
| 22HC1593 | 22HC1593B | 1.593 - 1.812 | 40.5 - 46.0 | 0.344 | 8.7  | 0.062     | 1.6 | 100           |
| 22HC1687 | 22HC1687B | 1.790 - 2.110 | 45.5 - 53.6 | 0.344 | 8.7  | 0.062     | 1.6 | 100           |
| 22HC1875 | 22HC1875B | 1.870 - 2.125 | 47.5 - 54.0 | 0.406 | 10.3 | 0.062     | 1.6 | 100           |
| 22HC2125 | 22HC2125B | 2.120 - 2.390 | 53.9 - 60.8 | 0.406 | 10.3 | 0.062     | 1.6 | 100           |

## 22HSC Series Standard Hose Clamps



**Specifications:**

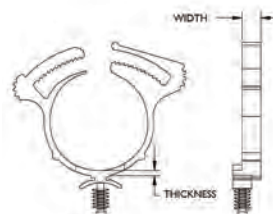
- Material: UL94 V-2 Nylon 6/6
- Color: See Table

**Features:**

- Provides a superior seal on hose and tubing with a patented interlocking design that eliminates the leak path
- Removable and reusable
- Easy installation on most liquid, gas or vacuum lines

| Item No.  |            | Bundle Range  |             | Width |     | Thickness |     | Bulk Pack Qty |
|-----------|------------|---------------|-------------|-------|-----|-----------|-----|---------------|
| Natural   | Black      | in            | mm          | in    | mm  | in        | mm  |               |
| 22HSC0010 | 22HSC0010B | 0.235 - 0.260 | 6.0 - 6.6   | 0.156 | 4.0 | 0.040     | 1.0 | 1000          |
| 22HSC0015 | 22HSC0015B | 0.283 - 0.312 | 7.2 - 7.9   | 0.150 | 3.8 | 0.050     | 1.3 | 500           |
| 22HSC0020 | 22HSC0020B | 0.350 - 0.395 | 8.9 - 10.0  | 0.230 | 5.8 | 0.070     | 1.8 | 1000          |
| 22HSC0040 | 22HSC0040B | 0.360 - 0.410 | 9.1 - 10.4  | 0.230 | 5.8 | 0.070     | 1.8 | 1000          |
| 22HSC0060 | 22HSC0060B | 0.430 - 0.480 | 10.9 - 12.2 | 0.230 | 5.8 | 0.070     | 1.8 | 1000          |
| 22HSC0080 | 22HSC0080B | 0.500 - 0.545 | 12.7 - 13.8 | 0.230 | 5.8 | 0.070     | 1.8 | 1000          |
| 22HSC0100 | 22HSC0100B | 0.525 - 0.605 | 13.3 - 15.4 | 0.230 | 5.8 | 0.070     | 1.8 | 500           |
| 22HSC0120 | 22HSC0120B | 0.580 - 0.660 | 14.7 - 16.8 | 0.230 | 5.8 | 0.070     | 1.8 | 500           |
| 22HSC0140 | 22HSC0140B | 0.655 - 0.750 | 16.6 - 19.1 | 0.230 | 5.8 | 0.070     | 1.8 | 500           |
| 22HSC0180 | 22HSC0180B | 0.779 - 0.899 | 19.8 - 22.8 | 0.230 | 5.8 | 0.070     | 1.8 | 500           |
| 22HSC0190 | 22HSC0190B | 0.859 - 0.989 | 21.8 - 25.1 | 0.230 | 5.8 | 0.070     | 1.8 | 100           |
| 22HSC0220 | 22HSC0220B | 0.900 - 1.072 | 22.9 - 27.2 | 0.250 | 6.4 | 0.070     | 1.8 | 250           |
| 22HSC0240 | 22HSC0240B | 0.990 - 1.135 | 25.2 - 28.8 | 0.250 | 6.4 | 0.070     | 1.8 | 250           |
| 22HSC0280 | 22HSC0280B | 1.123 - 1.296 | 28.5 - 32.9 | 0.280 | 7.1 | 0.070     | 1.8 | 250           |

## 22HCFC Series Standard Hose Clamps Fin Clip Base



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: See Table

**Features:**

- Tough, corrosion resistant and resilient
- Removable and reusable
- Easy installation on most liquid, gas or vacuum lines

| Item No.     |               | Bundle Range  |             | Hole Size |     | Hole Size |     | Panel Thickness |           | Thickness |     | Width |     | Bulk Pack Qty |
|--------------|---------------|---------------|-------------|-----------|-----|-----------|-----|-----------------|-----------|-----------|-----|-------|-----|---------------|
| Natural      | Black         | in            | mm          | in        | mm  | in        | mm  | in              | mm        | in        | mm  | in    | mm  |               |
| 22HCFC037188 | 22HCFC037188B | 0.360 - 0.395 | 9.1 - 10.0  | 0.230     | 5.8 | 0.187     | 4.8 | 0.031 - 0.250   | 0.8 - 6.4 | 0.070     | 1.8 | 0.230 | 5.8 | 100           |
| 22HCFC106188 | 22HCFC106188B | 0.990 - 1.135 | 25.2 - 28.8 | 0.250     | 6.4 | 0.187     | 4.8 | 0.031 - 0.251   | 0.8 - 6.4 | 0.070     | 1.8 | 0.250 | 6.4 | 100           |



# HOSE & CABLE CLAMPS / HEAT SHRINK TUBING



## 22DGHC Series Quick Assemble Hose Clamps

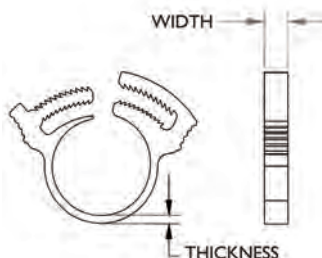


**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Black

**Features:**

- Double tooth interlocking jaw for exceptional strength
- Tough, corrosion resistant and resilient
- Removable and reusable
- Easy installation on most liquid, gas or vacuum lines



| Item No.   | Bundle Range  |             | Width |      | Bulk Pack Qty |
|------------|---------------|-------------|-------|------|---------------|
|            | in            | mm          | in    | mm   |               |
| 22DGHC00A  | 0.220 - 0.256 | 5.6 - 6.5   | 0.172 | 4.3  | 500           |
| 22DGHC0AA  | 0.256 - 0.300 | 6.5 - 7.6   | 0.177 | 4.5  | 500           |
| 22DGHC00B  | 0.311 - 0.362 | 7.9 - 9.2   | 0.188 | 4.8  | 500           |
| 22DGHC00BB | 0.362 - 0.406 | 9.2 - 10.3  | 0.177 | 4.5  | 1000          |
| 22DGHC00C  | 0.402 - 0.465 | 10.2 - 11.9 | 0.228 | 5.8  | 1000          |
| 22DGHC00CC | 0.437 - 0.508 | 11.1 - 12.9 | 0.250 | 6.4  | 500           |
| 22DGHC00D  | 0.472 - 0.543 | 12.0 - 13.8 | 0.240 | 6.1  | 500           |
| 22DGHC00E  | 0.516 - 0.594 | 13.1 - 15.1 | 0.283 | 7.2  | 500           |
| 22DGHC00F  | 0.591 - 0.673 | 15.0 - 17.1 | 0.285 | 7.2  | 500           |
| 22DGHC00G  | 0.665 - 0.752 | 16.9 - 19.1 | 0.281 | 7.1  | 500           |
| 22DGHC00H  | 0.713 - 0.811 | 18.1 - 20.6 | 0.280 | 7.1  | 250           |
| 22DGHC00J  | 0.799 - 0.906 | 20.3 - 23.0 | 0.252 | 6.4  | 250           |
| 22DGHC00K  | 0.874 - 0.980 | 22.2 - 24.9 | 0.276 | 7.0  | 250           |
| 22DGHC00L  | 0.965 - 1.087 | 24.5 - 27.6 | 0.280 | 7.11 | 250           |
| 22DGHC00M  | 1.043 - 1.161 | 26.5 - 29.5 | 0.317 | 8.1  | 250           |
| 22DGHC00N  | 1.134 - 1.268 | 28.8 - 32.2 | 0.354 | 9.0  | 250           |
| 22DGHC00P  | 1.260 - 1.370 | 32.0 - 34.8 | 0.358 | 9.1  | 250           |
| 22DGHC00Q  | 1.350 - 1.492 | 34.3 - 37.9 | 0.350 | 8.9  | 250           |

| Item No.  | Bundle Min.   |               | Width |     | Bulk Pack Qty |
|-----------|---------------|---------------|-------|-----|---------------|
|           | in            | mm            | in    | mm  |               |
| 22DGHC00R | 1.496 - 1.614 | 38.0 - 41.0   | 0.362 | 9.2 | 250           |
| 22DGHC00S | 1.579 - 1.740 | 40.1 - 44.2   | 0.354 | 9.0 | 250           |
| 22DGHC00T | 1.701 - 1.819 | 43.2 - 46.2   | 0.350 | 9.0 | 250           |
| 22DGHC00U | 1.811 - 1.988 | 46.0 - 50.5   | 0.354 | 9.0 | 250           |
| 22DGHC00V | 1.909 - 2.118 | 48.5 - 53.8   | 0.354 | 9.0 | 250           |
| 22DGHC00W | 2.087 - 2.224 | 53.0 - 56.5   | 0.354 | 9.0 | 250           |
| 22DGHC00X | 2.165 - 2.382 | 55.0 - 60.5   | 0.370 | 9.4 | 250           |
| 22DGHC00Y | 2.323 - 2.547 | 59.0 - 64.7   | 0.359 | 9.1 | 250           |
| 22DGHC00Z | 2.480 - 2.654 | 63.0 - 67.4   | 0.361 | 9.2 | 250           |
| 22DGHC001 | 2.559 - 2.717 | 65.0 - 69.0   | 0.374 | 9.5 | 250           |
| 22DGHC002 | 2.591 - 2.823 | 65.8 - 71.7   | 0.362 | 9.2 | 250           |
| 22DGHC003 | 2.756 - 2.969 | 70.0 - 75.4   | 0.359 | 9.1 | 250           |
| 22DGHC004 | 2.941 - 3.169 | 74.7 - 80.5   | 0.369 | 9.4 | 250           |
| 22DGHC005 | 3.059 - 3.197 | 77.7 - 81.2   | 0.347 | 8.8 | 250           |
| 22DGHC006 | 3.142 - 3.346 | 79.8 - 85.0   | 0.354 | 9.0 | 250           |
| 22DGHC007 | 3.350 - 3.567 | 85.1 - 90.6   | 0.350 | 9.0 | 250           |
| 22DGHC008 | 3.846 - 4.020 | 97.7 - 102.1  | 0.336 | 8.5 | 250           |
| 22DGHC009 | 4.146 - 4.402 | 105.3 - 111.8 | 0.342 | 8.7 | 250           |

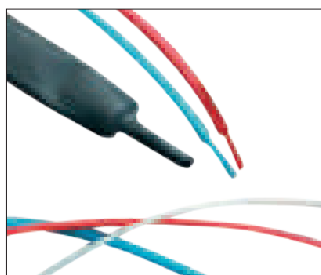
## HST Series 2:1 Heat Shrink Tubing

**Specifications:**

- Material: Crosslinked Polyolefin
- Color: See Table
- Operating Temperature: -67°F to 257°F (-55°C to 125°C)
- Minimum Shrink Temperature: 158°F (70°C)
- Minimum Full Recovery Temperature: 212°F (100°C)
- Shrink Ratio: 2:1

**Features:**

- UL Approval: 125°C VW-1 600V File No. E204071
- RoHS Compliant
- Widely used in the communication, electronics and automotive fields
- Excellent electrical and physical properties
- Provided in standard roll lengths
- Flame retardant
- Highly flexible
- Comes in a variety of colors to color code wires, cables, terminals and components
- Provided in mini or standard roll lengths



| Item No. | As Supplied |        |        |           | After Recovery |        |                    | Roll Length |       | Pack Qty |      |     |          |
|----------|-------------|--------|--------|-----------|----------------|--------|--------------------|-------------|-------|----------|------|-----|----------|
|          | Black       | Red    | Blue   | White     | ID Min         | ID Max | Wall Thickness Min | ft          | m     |          |      |     |          |
| 495686   | 495709      | 495755 | 495824 | Size (in) | in             | mm     | in                 | mm          | in    | mm       | ft   | m   | Pack Qty |
| 495687   | —           | 495756 | —      | 1/16      | 0.047          | 1.20   | 0.024              | 0.60        | 0.013 | 0.33     | 492  | 150 | 1        |
| 495688   | —           | 495757 | 495826 | 3/32      | 0.063          | 1.60   | 0.031              | 0.80        | 0.014 | 0.36     | 492  | 150 | 1        |
| 495689   | 495712      | 495758 | 495827 | 1/8       | 0.094          | 2.40   | 0.047              | 1.20        | 0.017 | 0.44     | 492  | 150 | 1        |
| 495690   | 495713      | 495759 | 495828 | 3/16      | 0.126          | 3.20   | 0.063              | 1.60        | 0.017 | 0.44     | 492  | 150 | 1        |
| 495691   | 495714      | 495760 | 495829 | 1/4       | 0.189          | 4.80   | 0.094              | 2.40        | 0.020 | 0.51     | 246  | 75  | 1        |
| 495692   | 495715      | 495761 | 495830 | 3/8       | 0.252          | 6.40   | 0.126              | 3.20        | 0.022 | 0.56     | 246  | 75  | 1        |
| 495693   | 495716      | 495762 | 495831 | 1/2       | 0.374          | 9.50   | 0.189              | 4.80        | 0.022 | 0.56     | 246  | 75  | 1        |
| 495694   | 495717      | —      | 495832 | 5/8       | 0.500          | 12.70  | 0.252              | 6.40        | 0.026 | 0.65     | 164  | 50  | 1        |
| 495695   | 495718      | 495764 | 495833 | 3/4       | 0.630          | 16.00  | 0.315              | 8.00        | 0.027 | 0.69     | 164  | 50  | 1        |
| HST022A  | —           | —      | —      | 15/16     | 0.748          | 19.00  | 0.374              | 9.50        | 0.031 | 0.80     | 98.4 | 30  | 1        |
| 495696   | 495719      | 495765 | 495834 | 1         | 0.913          | 23.20  | 0.433              | 11.00       | 0.030 | 0.80     | 164  | 50  | 1        |
| 495697   | 495720      | 495766 | 495835 | 1-1/4     | 1.000          | 25.40  | 0.500              | 12.70       | 0.035 | 0.90     | 98.4 | 30  | 1        |
| 495698   | 495721      | 495767 | —      | 1-1/2     | 1.260          | 32.00  | 0.630              | 16.00       | 0.040 | 1.02     | 98.4 | 30  | 1        |
| HST028A  | —           | —      | —      | 2-3/32    | 1.500          | 38.10  | 0.748              | 19.00       | 0.040 | 1.02     | 98.4 | 30  | 1        |
|          |             |        |        |           | 2.087          | 53.00  | 0.984              | 25.00       | 0.039 | 1.00     | 164  | 50  | 1        |



# HEAT SHRINK TUBING

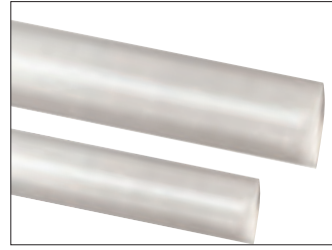
## HST CLEAR Series 2:1 Clear Heat Shrink Tubing

**Specifications:**

- Material: Crosslinked Polyolefin
- Color: Clear (100% Transparent)
- Operating Temperature: -67° F to 221° F (-55° C to 105° C)
- Minimum Shrink Temperature: 158°F (70°C)
- Minimum Full Recovery Temperature: 203°F (95°C)
- Shrink Ratio: 2:1

**Features:**

- RoHS Compliant
- Used in the appliance, automotive and on consumer goods applications
- Commercial grade for general applications where flame-retardancy is not required
- Excellent electrical and physical properties
- Provided in standard roll lengths



| Item No. | Size (in) | As Supplied |      | After Recovery |      |                    |      | Roll Length |     | Pack Qty |
|----------|-----------|-------------|------|----------------|------|--------------------|------|-------------|-----|----------|
|          |           | ID Min      |      | ID Max         |      | Wall Thickness Min |      | ft          | m   |          |
| 495883   | 3/64      | 0.047       | 1.20 | 0.024          | 0.60 | 0.013              | 0.33 | 492         | 150 | 1        |
| 495884   | 1/16      | 0.063       | 1.60 | 0.031          | 0.80 | 0.014              | 0.36 | 492         | 150 | 1        |
| 495885   | 3/32      | 0.094       | 2.40 | 0.047          | 1.20 | 0.017              | 0.44 | 492         | 150 | 1        |
| 495886   | 1/8       | 0.126       | 3.20 | 0.063          | 1.60 | 0.017              | 0.44 | 492         | 150 | 1        |
| 495887   | 3/16      | 0.189       | 4.80 | 0.094          | 2.40 | 0.022              | 0.56 | 246         | 75  | 1        |
| 495888   | 1/4       | 0.252       | 6.40 | 0.126          | 3.20 | 0.022              | 0.56 | 246         | 75  | 1        |
| 495889   | 3/8       | 0.374       | 9.50 | 0.189          | 4.80 | 0.022              | 0.56 | 246         | 75  | 1        |
| 495890   | 1/2       | 0.500       | 12.7 | 0.252          | 6.40 | 0.026              | 0.65 | 164         | 50  | 1        |
| 495891   | 5/8       | 0.630       | 16.0 | 0.315          | 8.00 | 0.027              | 0.69 | 164         | 50  | 1        |
| 495892   | 3/4       | 0.748       | 19.0 | 0.374          | 9.50 | 0.031              | 0.80 | 98.4        | 30  | 1        |
| 495893   | 1         | 1.000       | 25.4 | 0.500          | 12.7 | 0.035              | 0.90 | 98.4        | 30  | 1        |
| 495894   | 1-1/4     | 1.260       | 32.0 | 0.630          | 16.0 | 0.039              | 1.00 | 98.4        | 30  | 1        |
| 495895   | 1-1/2     | 1.500       | 38.1 | 0.748          | 19.0 | 0.039              | 1.00 | 98.4        | 30  | 1        |

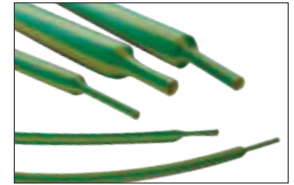
## HST YG Series 2:1 Yellow & Green Striped Heat Shrink Tubing

**Specifications:**

- Material: Crosslinked Polyolefin
- Color: Yellow and Green Striped
- Operating Temperature: -67° F to 275° F (-55° C to 135° C)
- Minimum Shrink Temperature: 158° F (70° C)
- Minimum Full Recovery Temperature: 212° F (100° C)

**Features:**

- UL Approval: 125°C VW-1 600V File No. E204071
- RoHS Compliant
- Outstanding physical, chemical and electrical properties
- Easy to install and makes identifying ground conductors easier
- Highly flame retardant and UV resistant



| Item No. | Size (in) | As Supplied |      | After Recovery |      |                    |      | Roll Length |     | Pack Qty |
|----------|-----------|-------------|------|----------------|------|--------------------|------|-------------|-----|----------|
|          |           | ID Min      |      | ID Max         |      | Wall Thickness Min |      | ft          | m   |          |
| 495896   | 1/16      | 0.063       | 1.60 | 0.031          | 0.80 | 0.020              | 0.51 | 492         | 150 | 1        |
| 495898   | 1/8       | 0.126       | 3.20 | 0.063          | 1.60 | 0.022              | 0.55 | 492         | 150 | 1        |
| 495900   | 1/4       | 0.252       | 6.40 | 0.126          | 3.20 | 0.026              | 0.65 | 246         | 75  | 1        |
| 495901   | 3/8       | 0.374       | 9.50 | 0.189          | 4.80 | 0.030              | 0.75 | 246         | 75  | 1        |
| 495902   | 1/2       | 0.500       | 12.7 | 0.252          | 6.40 | 0.030              | 0.75 | 164         | 50  | 1        |
| 495903   | 3/4       | 0.748       | 19.0 | 0.374          | 9.50 | 0.033              | 0.85 | 98.4        | 30  | 1        |
| 495904   | 1         | 1.000       | 25.4 | 0.500          | 12.7 | 0.039              | 1.00 | 98.4        | 30  | 1        |
| 495905   | 1-1/2     | 1.500       | 38.1 | 0.748          | 19.0 | 0.045              | 1.15 | 98.4        | 30  | 1        |

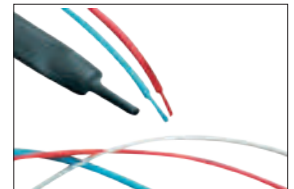
## HST 3:1 Series 3:1 Heat Shrink Tubing

**Specifications:**

- Material: Crosslinked Polyolefin
- Color: See Table
- Operating Temperature: -67° F to 257° F (-55° C to 125° C)
- Minimum Shrink Temperature: 158° F (70° C)
- Minimum Full Recovery Temperature: 212° F (100° C)

**Features:**

- UL Approval: 125°C VW-1 600V File No. E204071
- RoHS Compliant
- Widely used for electrical insulation
- Flame retardant and highly flexible
- Protects in line components, disconnect terminals and splices
- Variety of colors to code wires, cables, terminals and components



| Item No. | As Supplied |        |        |       | After Recovery |        |        |                    | Roll Length |       | Pack Qty |      |     |   |
|----------|-------------|--------|--------|-------|----------------|--------|--------|--------------------|-------------|-------|----------|------|-----|---|
|          | Black       | Red    | Blue   | White | Size           | ID Min | ID Max | Wall Thickness Min | ft          | m     |          |      |     |   |
| 495906   | —           | —      | —      | —     | 1/16           | 0.059  | 1.50   | 0.020              | 0.50        | 0.018 | 0.45     | 492  | 150 | 1 |
| 495907   | 495916      | 495934 | 495961 | —     | 1/8            | 0.118  | 3.00   | 0.039              | 1.00        | 0.022 | 0.55     | 492  | 150 | 1 |
| 495908   | 495917      | 495935 | —      | —     | 3/16           | 0.177  | 4.50   | 0.059              | 1.50        | 0.024 | 0.60     | 246  | 75  | 1 |
| 495909   | 495918      | 495936 | 495963 | —     | 1/4            | 0.236  | 6.00   | 0.079              | 2.00        | 0.026 | 0.65     | 246  | 75  | 1 |
| 495910   | 495919      | 495937 | 495964 | —     | 3/8            | 0.354  | 9.00   | 0.118              | 3.00        | 0.030 | 0.75     | 246  | 75  | 1 |
| 495911   | 495920      | 495938 | 495965 | —     | 1/2            | 0.472  | 12.0   | 0.157              | 4.00        | 0.031 | 0.80     | 164  | 50  | 1 |
| 495912   | —           | 495939 | 495966 | —     | 3/4            | 0.709  | 18.0   | 0.236              | 6.00        | 0.035 | 0.90     | 98.4 | 30  | 1 |
| 495913   | 495922      | 495940 | —      | —     | 1              | 0.945  | 24.0   | 0.315              | 8.00        | 0.043 | 1.10     | 98.4 | 30  | 1 |
| 495914   | 495923      | 495941 | —      | —     | 1-1/2          | 1.535  | 39.0   | 0.512              | 13.0        | 0.049 | 1.25     | 98.4 | 30  | 1 |



## HEAT SHRINK TUBING / FIBER SPLICE ACCESSORIES

### HST ADHESIVE Series

#### 3:1 Adhesive Lined Heat Shrink Tubing

Specifications:

- Material: Crosslinked Adhesive Lined Polyolefin
- Color: See Table
- Operating Temperature: -67° F to 257° F (-55° C to 125° C)
- Minimum Shrink Temperature: 176° F (80° C)
- Minimum Full Recovery Temperature: 230° F (110° C)
- Shrink Ratio: 3:1



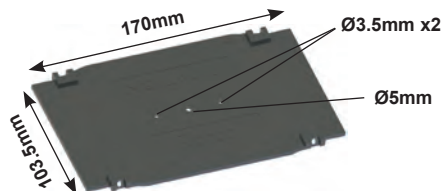
Features:

- UL Approval: 125°C VW-1 600V File No. E204071
- RoHS Compliant
- UV Resistant and flame retardant (with the exception of clear)
- Provides insulation and sealing on applications like wire splices and harnesses
- Comes in a variety of colors to code wires, cables, terminals and components
- Provided in standard roll lengths and pre-cut length in packs

| Color  | Clear  | Item No. | Red    | Blue   | White  | Size  | As Supplied |        | After Recovery |      |       | Roll Length |      | Pack Qty |   |
|--------|--------|----------|--------|--------|--------|-------|-------------|--------|----------------|------|-------|-------------|------|----------|---|
|        |        |          |        |        |        |       | ID Min      | ID Max | in             | mm   | in    | mm          | ft   |          | m |
| Black  | 495987 | 496011   | 496003 | —      | 496083 | 1/8   | 0.118       | 3.00   | 0.039          | 1.00 | 0.039 | 1.00        | 492  | 150      | 1 |
| 495988 | —      | —        | —      | 496036 | 496084 | 3/16  | 0.189       | 4.80   | 0.059          | 1.50 | 0.039 | 1.00        | 246  | 75       | 1 |
| 495989 | 496013 | 496005   | 496037 | 496085 | 496086 | 1/4   | 0.236       | 6.00   | 0.079          | 2.00 | 0.039 | 1.00        | 246  | 75       | 1 |
| 495990 | 496014 | 496006   | 496038 | 496086 | 496086 | 3/8   | 0.354       | 9.00   | 0.118          | 3.00 | 0.055 | 1.40        | 164  | 50       | 1 |
| 495991 | 496015 | 496007   | 496039 | 496087 | 496087 | 1/2   | 0.472       | 12.00  | 0.157          | 4.00 | 0.063 | 1.60        | 98.4 | 30       | 1 |
| 495992 | 496016 | 496008   | —      | 496088 | 496088 | 3/4   | 0.748       | 19.00  | 0.236          | 6.00 | 0.085 | 2.15        | 98.4 | 30       | 1 |
| 495993 | 496017 | 496009   | —      | 496089 | 496089 | 1     | 0.945       | 24.00  | 0.315          | 8.00 | 0.094 | 2.40        | 98.4 | 30       | 1 |
| 495994 | 496018 | 496010   | —      | —      | —      | 1-1/2 | 1.575       | 40.00  | 0.512          | 13.0 | 0.094 | 2.40        | 98.4 | 30       | 1 |

### OFST Series

#### Fiber Splice Tray System



OFST-1-L Splice Tray Lid

Specifications:

- Color: See Table

Features:

- Lid, trays, and hinges are sold separately or in a kit: OFST-A-P-1
- Stackable to any number of trays
- Inter-tray fiber routing possible through slots along one of the long sides of the tray
- Color coded hinges indicate side of tray to open from. Part numbers are OFSTH-1-RED and OFSTH-1-GRN.
- Can be used with OFSH splice holders, OFSP splice protectors and OFBLT bend limiting tubing
- Three mounting holes go through the lid and trays



OFST-1-P Splice Tray with Basic Storage Facility



OFST-1-M Splice Tray with Radius Control and Fiber Storage Elements

| Item No.    | Color | Description                                                  | Bulk Pack Qty |
|-------------|-------|--------------------------------------------------------------|---------------|
| OFST-1-L    | Black | Splice Tray Lid                                              | 10            |
| OFST-1-M    | Black | Splice Tray Managed with Radius Control & Dark Fiber Storage | 10            |
| OFST-1-P    | Black | Splice Tray Plain with Basic Storage Facility                | 10            |
| OFST-A-P-1  | Black | 1 x OFST-1-L, 1 x OFST-1-P, 2 x OFSTH-1-RED, 2 x OFSTH-1-GRN | 10            |
| OFSTH-1-GRN | Green | OF Splice Tray Hinge                                         | 20            |
| OFSTH-1-RED | Red   | OF Splice Tray Hinge                                         | 20            |

### EFA04-25-001 Series

#### Splice Tray

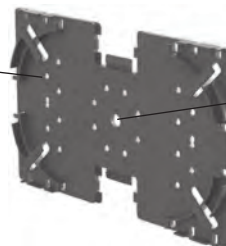
Specifications:

- Material: UL94 V-0 Nylon 6
- Color: Black

Features:

- Molded-in features maintain bend radius at 30mm
- Accepts Fiber Clips EFA04-61, 63 and 64-001
- Accepts 16-way Fiber Clip EFA04-06 and 08-001 broken into a 4-way segment for holding splicing components

All Periphery Holes: Ø2.8mm



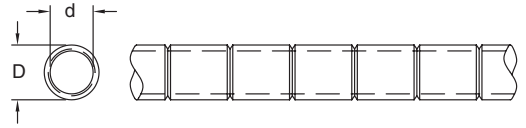
Center Hole Ø6 mm

| Item No.     | L x W         |              | Thickness |     | Bulk Pack Qty |
|--------------|---------------|--------------|-----------|-----|---------------|
|              | in            | mm           | in        | mm  |               |
| EFA04-25-001 | 5.197 x 3.228 | 132.0 x 82.0 | 0.260     | 6.6 | 50            |



# FIBER BEND LIMITING TUBING

## OFBLT Series Optical Fiber Bend Limiting Tubing



**Specifications:**

- Material: See Table
- Color: See Table

**Features:**

- Optical Fiber Bend-Limiting Tubing offers the ultimate protection to fibers, eliminating problems such as crushing, kinking, and micro-bending, while supplying a self-managing solution for routing of fiber
- Provides superior crush protection against micro fiber bends over conventional corrugated tubing
- Limits the bend in a fiber by controlling radius to a minimum of 30mm
- Has a smooth inner bore for ease of use and elimination of micro-bending
- Suitable for blown fiber applications over short distance and for curbside FTTH/FTTB applications

| Item No.            |                    | Style     | Ø D   |      | Ø d   |     | Length     | Pack Qty |
|---------------------|--------------------|-----------|-------|------|-------|-----|------------|----------|
| White Polypropylene | Black UL94 V-0 PBT |           | in    | mm   | in    | mm  |            |          |
| OFBLT-3-1-05-PP     | OFBLT-31-05V0      | Standard  | 0.195 | 4.95 | 0.122 | 3.1 | 100 Meters | 1        |
| OFBLT-42-635PP      | —                  | Standard  | 0.250 | 6.35 | 0.165 | 4.1 | 100 Meters | 1        |
| OFBLT-42-635PP      | —                  | Pull-Cord | 0.250 | 6.35 | 0.165 | 4.1 | 100 Meters | 1        |

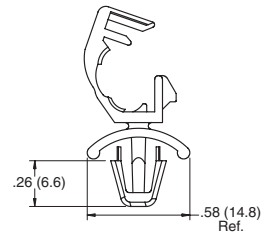
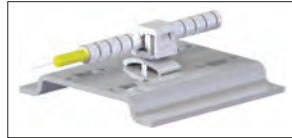
## OFBLT-C Series OFBLT Tubing Clips

**Specifications:**

- Material: See Table
- Color: Natural

**Features:**

- Holds the 5mm OFBLT tube (see above) or up to a 4.3mm rod
- Clamp is releasable for repairs



| Item No.           |                    | Ø Max Bundle |     | Ø Mounting Hole |     | Panel Thickness |           | Bulk Pack Qty |
|--------------------|--------------------|--------------|-----|-----------------|-----|-----------------|-----------|---------------|
| UL94 V-2 Nylon 6/6 | UL94 V-0 Nylon 6/6 | in           | mm  | in              | mm  | in              | mm        |               |
| OFBLT-C1-5-01      | OFBLT-C1-5-19      | 0.17         | 4.3 | 0.25            | 6.4 | 0.031 - 0.078   | 0.8 - 2.0 | 1000          |

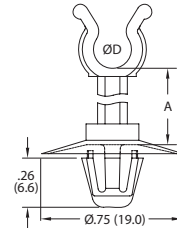
## TPCE Series Tube Clips

**Specifications:**

- Material: See Table
- Color: Natural

**Features:**

- Holds a 5mm diameter tube or pipe
- Excellent for above board routing requirements
- Cupped base provides stability and covers the entire hole



| Item No.           |                    | A     |      | Ø D Max Bundle |     | Ø Mounting Hole |     | Panel Thickness |           | Bulk Pack Qty |
|--------------------|--------------------|-------|------|----------------|-----|-----------------|-----|-----------------|-----------|---------------|
| UL94 V-2 Nylon 6/6 | UL94 V-0 Nylon 6/6 | in    | mm   | in             | mm  | in              | mm  | in              | mm        |               |
| TPCE5-51-4M-01     | TPCE5-51-4M-19     | 0.157 | 4.0  | 0.200          | 5.1 | 0.256           | 6.5 | 0.031 - 0.063   | 0.8 - 1.6 | 1000          |
| TPCE5-51-6M-01     | TPCE5-51-6M-19     | 0.236 | 6.0  | 0.200          | 5.1 | 0.256           | 6.5 | 0.031 - 0.063   | 0.8 - 1.6 | 1000          |
| TPCE5-51-10M-01    | TPCE5-51-10M-19    | 0.394 | 10.0 | 0.200          | 5.1 | 0.256           | 6.5 | 0.031 - 0.063   | 0.8 - 1.6 | 1000          |

## OFTGSP Series OFBLT Tubing Saddles

**Specifications:**

- Material: UL94 V-0 Nylon 6/6
- Color: Natural

**Features:**

- Holds the 5mm OFBLT (see above)
- The saddle is placed over the tubing and closed down to engage on the external grooves of the tube
- Secure attachment is completed by pressing the retaining feet through the location holes
- OFTGSP-2 has two sets of mounting prongs requiring two holes

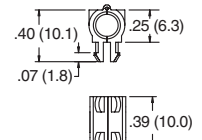
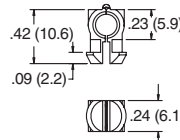
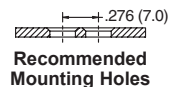


Figure 1

Figure 2



Recommended Mounting Hole



Recommended Mounting Holes

| Item No.       | Figure | Ø Mounting Hole |     | Panel Thickness |     | Bulk Pack Qty |
|----------------|--------|-----------------|-----|-----------------|-----|---------------|
|                |        | in              | mm  | in              | mm  |               |
| OFTGSP-1-05-19 | 1      | 0.250           | 6.4 | 0.095           | 2.4 | 100           |
| OFTGSP-2-05-19 | 2      | 0.197           | 5.0 | 0.071           | 1.8 | 100           |



# FIBER BEND LIMITING TUBING & SPLICE HOLDERS

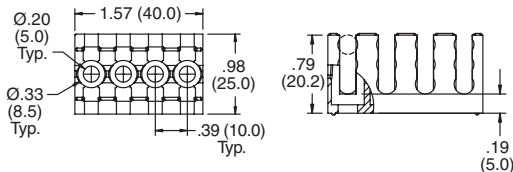
## OFSMB - OFBLT Series Slotted Multi Brackets

Specifications:

- Material: UL94 V-0 Glass-Filled Nylon
- Color: Black

Features:

- For use with 5mm OFBLT Tubing
- Mounts with #10 (M5) screws
- Optical Fiber Slotted Multi-Brackets are for use at distribution points where orderly fiber management, protection and strain relief is required
- An additional security feature allows fitting of a cable tie around OFSMBs which prevents removal of any retained tubes
- OFBLT retention: >70N
- Holds a maximum of 12 tubes



| Item No.       | Bulk Pack Qty |
|----------------|---------------|
| OFSMB-4-05GFBK | 10            |

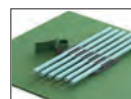
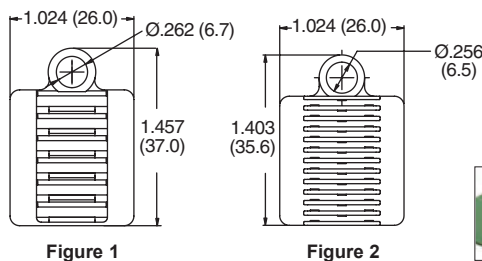
## OFSH-T Series Splice Holders

Specifications:

- Material: See Table
- Color: Black

Features:

- OFSH-T-6 holds up to 6 x 3mm fiber or components
- OFSH-T-12 holds up to 12 crimp splice protectors
- Splice Holders can be used with OFST Series Splice Trays



| Item No.        | Figure | Material               | Ø Component   |           | No. of Slots | Bulk Pack Qty |
|-----------------|--------|------------------------|---------------|-----------|--------------|---------------|
|                 |        |                        | in            | mm        |              |               |
| OFSH-T-6-GFBLK  | 1      | Glass-Filled Nylon 6/6 | 0.118         | 3.0       | 12           | 100           |
| OFSH-T-12-01BLK | 2      | UL94 V-2 Nylon 6/6     | 0.039 - 0.047 | 1.0 - 1.2 | 12           | 100           |
| OFSH-T-12-19BLK | 2      | UL94 V-0 Nylon 6/6     | 0.039 - 0.047 | 1.0 - 1.2 | 12           | 100           |

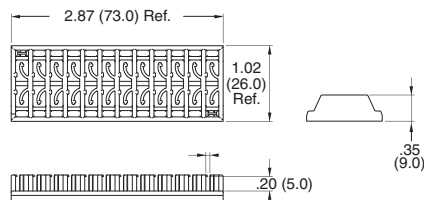
## OFSH2 Series Splice Holders

Specifications:

- Material: UL94 V-0 Nylon 6/6
- Color: Black

Features:

- Holds up to 24 components/splice protectors
- Flexible wings grip components up to .06 (1.6) in diameter
- Low profile to save space
- Two styles: one for mounting with an adhesive pad and one for mounting with a #4 or M3 screw
- Each slot holds up to two components



| Item No.   | Mounting Method | Ø Component |           | Bulk Pack Qty |
|------------|-----------------|-------------|-----------|---------------|
|            |                 | In          | mm        |               |
| OFSH2-24-1 | Adhesive        | Up to 0.060 | Up to 1.6 | 50            |
| OFSH2-24-2 | No Adhesive     | Up to 0.060 | Up to 1.6 | 50            |

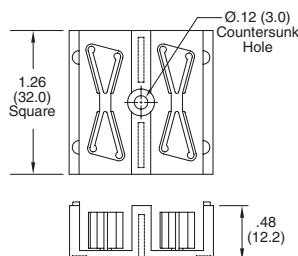
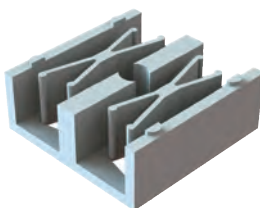
## OFSH-4 Series Splice Holders

Specifications:

- Material: See Table
- Color: Natural

Features:

- Holds 12 2.7mm splices or four 4.2mm splices
- Fastens with either an adhesive pad provided, or with a #4 screw or rivet
- Stackable



| Item No.      | Material           | Ø Component |     | No. of Positions | Bulk Pack Qty |
|---------------|--------------------|-------------|-----|------------------|---------------|
|               |                    | mm          | mm  |                  |               |
| OFSH-4-1-01LA | UL94 V-2 Nylon 6/6 | 2.7         | 4.2 | 12               | 50            |
| OFSH-4-1-01LA | UL94 V-0 Nylon 6/6 | 2.7         | 4.2 | 4                | 50            |



# FIBER CLIPS

## OFEB/OFHB Series Fiber Holders



**Specifications:**

- Material: UL94 V-0 Nylon 6/6
- Color: Natural

**Features:**

- Quickly mounted with adhesive base
- OFEB has side brackets that connect with each other to provide for additional cables

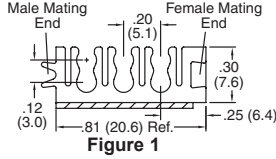


Figure 1

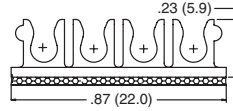


Figure 2

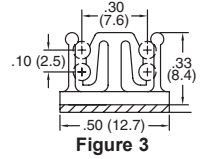


Figure 3

| Item No.        | Figure | Cable Ø |     | No. of Slots | No. of Cables | Depth |     | Bulk Pack Qty |
|-----------------|--------|---------|-----|--------------|---------------|-------|-----|---------------|
|                 |        | in      | mm  |              |               | in    | mm  |               |
| OFEB-3-19       | 1      | 0.118   | 3.0 | 3            | 6             | 0.300 | 7.6 | 1000          |
| OFHB3-4-19A-RT  | 2      | 0.118   | 3.0 | 4            | 4             | 0.375 | 9.5 | 1000          |
| OFHB2-4A1-RT-19 | 3      | 0.079   | 2.0 | 2            | 4             | 0.375 | 9.5 | 1000          |

## OFB-BH/OFB3P Series Fiber Holders

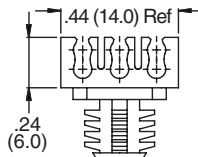


Figure 1

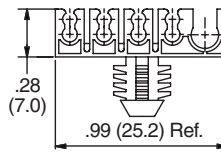


Figure 2

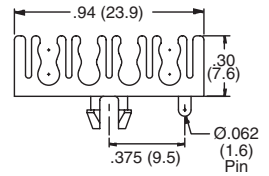


Figure 3

**Specifications:**

- Material: UL94 V-0 Nylon 6/6
- Color: Natural

**Features:**

- Holds multiple cable fibers



Recommended Mounting Holes

| Item No.    | Figure | Ø Mounting Hole |     | Panel Thickness |     | Ø Cable              |                  | No. of Slots | No. of Cables | Depth |     | Bulk Pack Qty |
|-------------|--------|-----------------|-----|-----------------|-----|----------------------|------------------|--------------|---------------|-------|-----|---------------|
|             |        | in              | mm  | in              | mm  | in                   | mm               |              |               | in    | mm  |               |
| OFB-BH-6-19 | 1      | 0.312           | 7.9 | 0.250           | 6.4 | 0.079                | 2.0              | 3            | 6             | 0.197 | 5.0 | 1000          |
| OFB-BH-9-19 | 2      | 0.312           | 7.9 | 0.250           | 6.4 | 8 x 0.086, 1 x 0.158 | 8 x 2.2, 1 x 4.0 | 5            | 9             | 0.236 | 6.0 | 1000          |
| OFB3P-4-19  | 3      | 0.187           | 4.7 | 0.064           | 1.6 | 0.118                | 3.0              | 4            | 8             | 0.200 | 5.1 | 1000          |

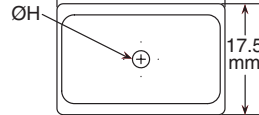
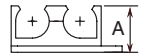
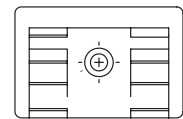
## EFA04-6X Series Fiber Clips

**Specifications:**

- Material: UL94 V-0 Nylon 6
- Color: See Table

**Features:**

- Holds two components parallel
- Available to hold three different diameters; 4.5mm, 5.5mm, 6mm
- Designed for use in the Splice Tray EFA04-25-001
- Can be mounted by screw, rivet, or with adhesive pad
- EFA04-61-001 has anti-rotation pins to securely mount with screw or rivet



| Clip Only    | Clip & Adhesive Pad | Color  | Ø Cable |     | No. of Slots | A     |      | Ø H   |     | Recommended Mounting Screw | Bulk Pack Qty |
|--------------|---------------------|--------|---------|-----|--------------|-------|------|-------|-----|----------------------------|---------------|
|              |                     |        | in      | mm  |              | in    | mm   | in    | mm  |                            |               |
| EFA04-61-001 | EFA04-61-ASS        | Red    | 0.236   | 6.0 | 2            | 0.315 | 8.0  | 0.126 | 3.2 | #4, #5 or M3               | 100           |
| EFA04-63-001 | EFA04-63-ASS        | Green  | 0.216   | 5.5 | 2            | 0.289 | 7.33 | 0.106 | 2.7 | #3 or M2.5                 | 100           |
| EFA04-64-001 | EFA04-64-ASS        | Yellow | 0.177   | 4.5 | 2            | 0.289 | 7.33 | 0.106 | 2.7 | #3 or M2.5                 | 100           |

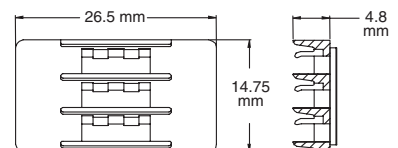
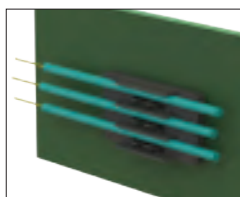
## EFA04-02 Series Fiber Clips

**Specifications:**

- Material: UL94 V-0 Nylon 6
- Color: Black

**Features:**

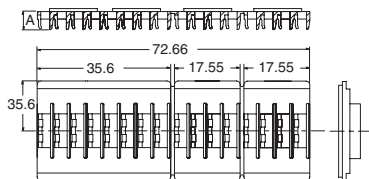
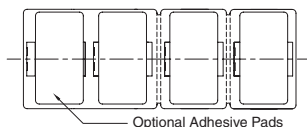
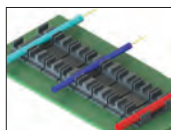
- Holds three 3mm diameter components
- Adhesive pad for easy application



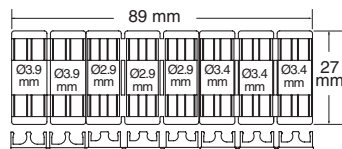
| Item No.     | Ø Cable |     | No. of Slots | Contents               | Bulk Pack Qty |
|--------------|---------|-----|--------------|------------------------|---------------|
|              | in      | mm  |              |                        |               |
| EFA04-02-ASS | 0.118   | 3.0 | 3            | Clip with Adhesive Pad | 100           |



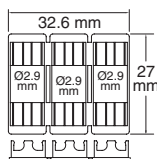
**EFA04 Series  
Fiber Clips**



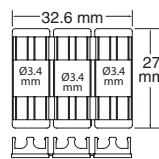
**Figure 1**



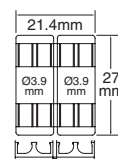
**Figure 2**



**Figure 3**



**Figure 4**



**Figure 5**

**Specifications:**

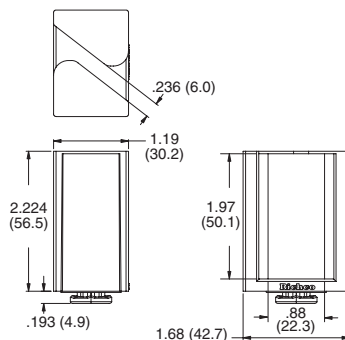
- Material: UL94 V-0 Nylon 6
- Color: See Table

**Features:**

- EFA04-06, EFA04-08, and EFA04-18 can be broken apart to form individual clips
- Various mounting options are available

| Item No.     |                           | Ø Cable          |               | Figure | Color | in |  | No. of Slots | Bulk Pack Qty |
|--------------|---------------------------|------------------|---------------|--------|-------|----|--|--------------|---------------|
| Clip Only    | Clip with Adhesive Pad(s) | mm               | mm            |        |       |    |  |              |               |
| EFA04-06-001 | EFA04-06-ASS              | 0.118            | 3.0           | 1      | Black |    |  | 16           | 100           |
| —            | EFA04-08-ASS              | 0.079            | 2.0           | 1      | Blue  |    |  | 16           | 100           |
| —            | EFA04-18-ASS              | .154, .134, .114 | 3.9, 3.4, 2.9 | 2      | Black |    |  | 4, 6, 6 = 16 | 100           |
| EFA04-71-001 | EFA04-71-P01              | 0.114            | 2.9           | 3      | Black |    |  | 6            | 100           |
| EFA04-71-002 | —                         | 0.134            | 3.4           | 4      | Black |    |  | 6            | 100           |
| EFA04-71-003 | EFA04-71-P03              | 0.154            | 3.9           | 5      | Black |    |  | 4            | 100           |

**OFRB Series  
Fiber Rack Brackets**



**Specifications:**

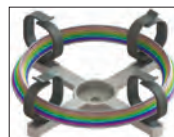
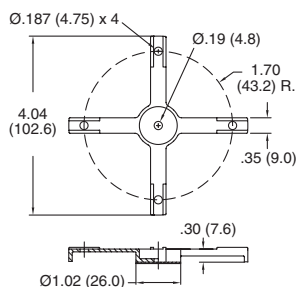
- Material: UL94 V-0 Nylon 6/6
- Color: Black

**Features:**

- Mounts into a standard 19" rack with a quarter turn
- Removable with a quarter turn
- No stress is applied to the fiber upon entry

| Item No. | Square Mounting Hole |             | Panel Thickness |           | Bulk Pack Qty |
|----------|----------------------|-------------|-----------------|-----------|---------------|
|          | in                   | mm          | in              | mm        |               |
| OFRB-1BK | 0.465 x 0.465        | 11.8 x 11.8 | 0.063 - 0.079   | 1.6 - 2.0 | 100           |
| OFRB-2BK | 0.374 x 0.374        | 9.5 x 9.5   | 0.063 - 0.079   | 1.6 - 2.0 | 100           |

**OFBSB Series  
Fiber Support Bases**



**Specifications:**

- Material: See Table
- Color: Natural

**Features:**

- Constructs a path for spooling fiber optic cables
- Designed for use in fiber optic patch panel applications
- Center hole is for mounting the base with a #8 screw or SR-5XXX rivet found on page 121
- Any Essentra wire routing device that is designed to snap into a 0.187 hole and a 0.062" panel can be mounted to this base; popular options are OFNS, STL, WS and LWS series

| Item No.           |                    | Mounting Method           | Bulk Pack Qty |
|--------------------|--------------------|---------------------------|---------------|
| UL94 V-2 Nylon 6/6 | UL94 V-0 Nylon 6/6 |                           |               |
| OFBSB-4-85-01A     | OFBSB-4-85-19A     | #8 Screw of SR-5XXX Rivet | 100           |
| OFBSB-4-85-01      | OFBSB-4-85-19      |                           | 100           |



# FIBER CLIPS & GUIDES

## OFCC/OFCG Series Fiber Coiling Clips



Figure 1



Figure 2

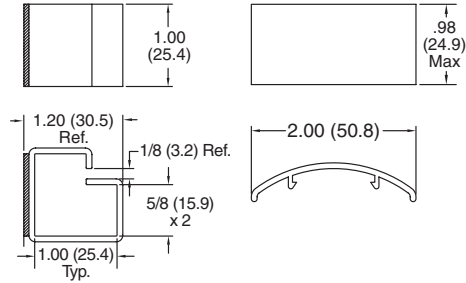


Figure 1

Figure 2



**Specifications:**

- Material: UL94 V-0 PVC
- Color: Black

**Features:**

- OFCG snaps onto OFCC to form a clip with a smooth, curved surface to accommodate fiber optic bundles
- OFCC and OFCG sold separately
- Limits the bend radius of the fiber

| Item No.    | Figure | Bulk Pack Qty |
|-------------|--------|---------------|
| OFCC-16A-RT | 1      | 100           |
| OFCG-16     | 2      | 100           |

## EFA04 Series Fiber Guides

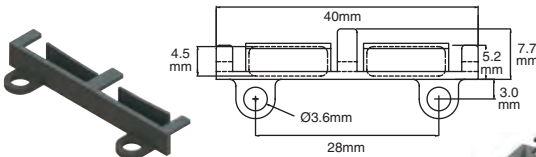


Figure 1

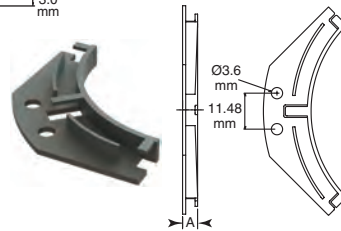


Figure 2

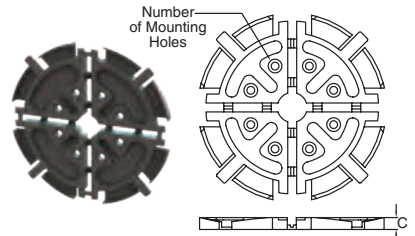


Figure 3

**Specifications:**

- Material: UL94 V-0 Nylon 6
- Color: Black

**Features:**

- Provide fiber storage as well as bend control
- Various mounting options are available
- The fiber reel screw mount holes are Ø2.8mm with a 90° countersink of Ø4.6mm (holes are spaced evenly on a 30mm diameter)
- Reel can be stacked or mounted above board using accessories below

| Item No.     | Guide with SRHR-3555 Rivets |                            | Figure | Guide Radius                              | Height |      | No. of Mounting Holes | Max Fiber Storage          | Bulk Pack Qty |
|--------------|-----------------------------|----------------------------|--------|-------------------------------------------|--------|------|-----------------------|----------------------------|---------------|
|              | Guide Only                  | Guide with Adhesive Pad(s) |        |                                           | in     | mm   |                       |                            |               |
| EFA04-60-001 | EFA04-60-P01                | EFA04-60-R01               | 1      | Straight                                  | 0.197  | 5.0  | 2                     | —                          | 100           |
| EFA04-34-001 | EFA04-34-P01                | EFA04-34-R01               | 2      | 30 mm Radius Corner Guide                 | 0.197  | 5.0  | 2                     | —                          | 100           |
| EFA04-34-010 | EFA04-34-P10                | EFA04-34-R10               | 2      | 30 mm Radius Corner Guide                 | 0.315  | 8.0  | 2                     | —                          | 100           |
| EFA04-34-004 | EFA04-34-P04                | EFA04-34-R04               | 2      | 30 mm Radius Corner Guide                 | 0.472  | 12.0 | 2                     | —                          | 100           |
| EFA04-34-002 | EFA04-34-P02                | EFA04-34-R02               | 2      | 35 mm Radius Corner Guide                 | 0.189  | 4.8  | 2                     | —                          | 100           |
| EFA04-34-005 | EFA04-34-P05                | EFA04-34-R05               | 2      | 35 mm Radius Corner Guide                 | 0.472  | 12.0 | 2                     | —                          | 100           |
| EFA04-34-003 | EFA04-34-P03                | EFA04-34-R03               | 2      | 40 mm Radius Corner Guide                 | 0.189  | 4.8  | 2                     | —                          | 100           |
| EFA04-34-006 | EFA04-34-P06                | —                          | 2      | 40 mm Radius Corner Guide                 | 0.472  | 12.0 | 2                     | —                          | 100           |
| EFA04-34-007 | EFA04-34-P07                | EFA04-34-R07               | 2      | 30-37 mm Radius Ribbon Fiber Corner Guide | 0.216  | 5.5  | 2                     | —                          | 100           |
| EFA04-04-001 | EFA04-04-ASS                | —                          | 3      | 25 mm Radius Fiber Reel                   | 0.157  | 4.0  | 8                     | 2.5 m of 900 Micron Fiber  | 100           |
| EFA04-21-001 | EFA04-21-ASS                | —                          | 3      | 25 mm Radius Fiber Reel                   | 0.250  | 6.4  | 8                     | 4.5 m of 900 Micron Fiber  | 100           |
| EFA04-10-001 | EFA04-10-ASS                | —                          | 3      | 30 mm Radius Fiber Reel                   | 0.153  | 3.9  | 8                     | 3.0 m of 900 Micron Fiber  | 100           |
| EFA04-14-001 | EFA04-14-ASS                | —                          | 3      | 30 mm Radius Fiber Reel                   | 0.488  | 12.4 | 8                     | 9.0 m of 900 Micron Fiber  | 100           |
| EFA04-76-001 | —                           | —                          | 3      | 35 mm Radius Fiber Reel                   | 0.315  | 8.0  | 8                     | 15.0 m of 900 Micron Fiber | 100           |
| EFA04-23-001 | —                           | —                          | 3      | 40 mm Radius Fiber Reel                   | 0.250  | 6.4  | 4                     | 7.0 m of 900 Micron Fiber  | 100           |

## EFA04-53/EFA04-27 Series Fiber Reel Stacking Pillars and Standoffs

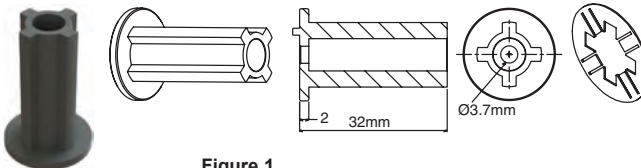


Figure 1

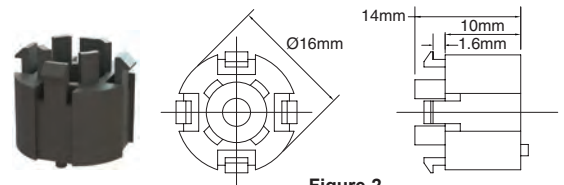


Figure 2

**Specifications:**

- Material: UL94 V-0 Nylon 6/6
- Color: Black

**Features:**

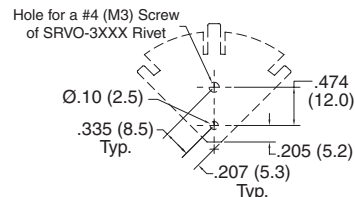
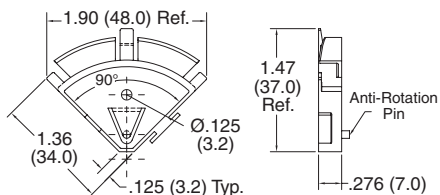
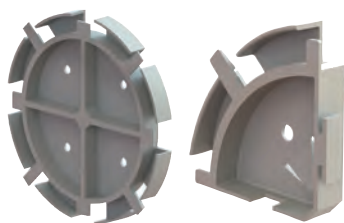
- EFA04-53-ASS is used to stack multiple EFA04 fiber reels, and retained with an included spring clip
- EFA04-27-ASS is used to space the EFA04 fiber reel off the PC Board (top of the standoff snaps into holes in the fiber reel)
- Mounted from the bottom of the board with included rivet

| Item No.     | Figure | Description                | Bulk Pack Qty |
|--------------|--------|----------------------------|---------------|
| EFA04-53-ASS | 1      | Fiber Reel Stacking Pillar | 100           |
| EFA04-27-ASS | 2      | Fiber Reel Standoff        | 100           |





**OFS Series**  
90°Fiber Segment, 30mm Radius



**Specifications:**

- Material: UL94 V-0 Nylon 6/6
- Color: Natural

**Features:**

- Provides a 90° bend control radius
- Assemble two pieces for bend control around a 180° turn
- Assemble four pieces for excess fiber spooling at 30mm radius
- In a four-piece assembled mode, stores approximately 60m of 900 micron fiber
- Mounts with a #4 (M3) screw or SRVO-30XX snap rivet

**Recommended Mounting Holes**

| Item No.  | Bulk Pack Qty |
|-----------|---------------|
| OFS90-30R | 100           |

**OFFG/OFFGSP Series**  
Flexible Fiber Guide System

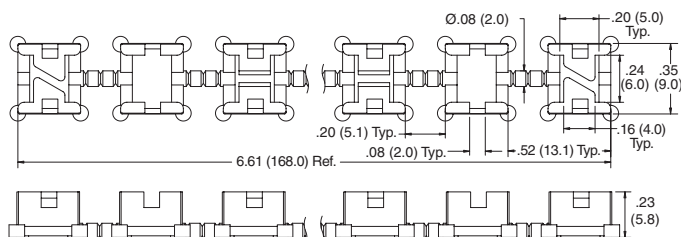
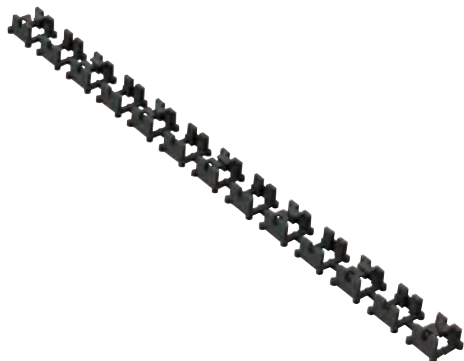


Figure 1

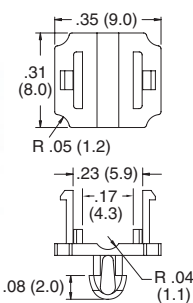


Figure 2

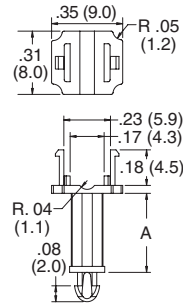


Figure 3

**Specifications:**

- Material: UL94 V-0 Nylon 6/6
- Color: Black

**Features:**

- Fully modular, flexible system giving complete fiber management and protection
- Unique spine allows the guide to be oriented in all planes
- For use with 250 and 900 micron fiber
- Fiber can enter and exit at any point, without risk of fiber snagging or kinking
- Angled and straight lugs located along the guide prevent the fiber from springing out
- 25mm maximum bend radius when flexed
- Guide can be cut to various lengths at flexible link sections
- Two types of support posts; OFFGSP-F for mounting flush to the panel, and OFFGSP-R that raises the guide 5mm
- Guide snaps easily into the support posts

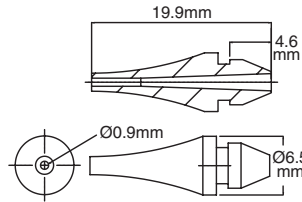


| Item No.        | Figure | Description              | Ø Mounting Hole |     | Panel Thickness |     | A     |     | Bulk Pack Qty |
|-----------------|--------|--------------------------|-----------------|-----|-----------------|-----|-------|-----|---------------|
|                 |        |                          | in              | mm  | in              | mm  | in    | mm  |               |
| OFFG-165M-19-BK | 1      | Fiber Guide              | —               | —   | —               | —   | —     | —   | 100           |
| OFFGSP-F-19-BK  | 2      | Flat Fiber Guide Support | 0.098           | 2.5 | 0.063           | 1.6 | —     | —   | 100           |
| OFFGSP-R-05-BK  | 3      | Fiber Guide Spacer       | 0.098           | 2.5 | 0.063           | 1.6 | 0.200 | 5.0 | 100           |



## FIBER MANAGEMENT & DUST CAPS

### EFA70-07 Series 900 Micron Strain Relief Boots



**Specifications:**

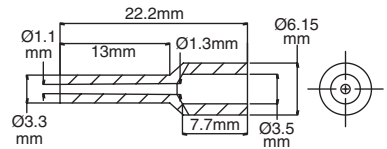
- Material: TPE
- Color: Black

**Features:**

- Provides added protection to 900 micron fiber while routing through a hole
- Limits the angle of the fiber preventing signal loss

| Item No.     | Ø Hole |     | Panel Thickness |     | Bulk Pack Qty |
|--------------|--------|-----|-----------------|-----|---------------|
|              | in     | mm  | in              | mm  |               |
| EFA70-07-001 | 0.157  | 4.0 | 0.063           | 1.6 | 500           |

### EFA70-01 Series 900 Micron Transition Boots



**Specifications:**

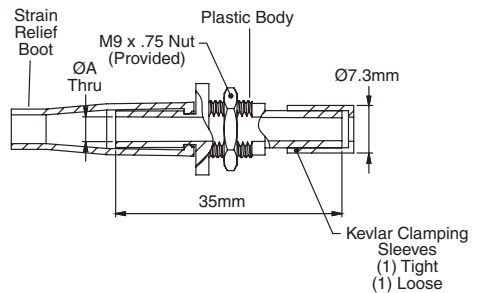
- Material: TPE
- Color: Black

**Features:**

- Transitions a 3mm jacketed fiber to a 900 micron fiber
- Limits the bend of the fiber, preventing signal loss

| Item No.     | Bulk Pack Qty |
|--------------|---------------|
| EFA70-01-001 | 500           |

### EFA52 Series Quick Panel Mount Strain Relief Gland Kit



**Specifications:**

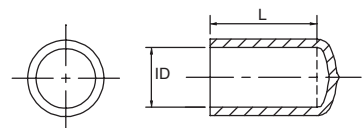
- Material: UL94 V-0 Nylon 6
- Color: Black

**Features:**

- Acts as a cable gland for jacketed fiber, preventing the cable from being pulled out of the device
- The plastic body mounts directly on the panel, and the jacketed cable is passed through the center hole
- On the inside of the panel, the cable's Kevlar strands are clamped to the plastic body using one of two clamping sleeves (whichever is appropriate)
- Secured in the panel with a mounting bolt
- On the outside of the panel, a flexible boot is attached to the plastic body, providing control over the bend-radius of the cable exiting the strain-relief assembly

| Item No.     | Ø Jacketed Fiber |     | A     |     | Bulk Pack Qty |
|--------------|------------------|-----|-------|-----|---------------|
|              | in               | mm  | in    | mm  |               |
| EFA52-02-ASS | 0.118            | 3.0 | 0.138 | 3.5 | 250           |
| EFA52-05-ASS | 0.079            | 2.0 | 0.098 | 2.5 | 250           |

### EFA02-43 Series Connector Adapter Dust Caps



**Specifications:**

- Material: PVC
- Color: Black

**Features:**

- Provides environmental protection for SMA, ST and FC connector adapters
- Made of flexible PVC to provide snug fit

| Item No.     | Contents                       | L     |      | ID    |     | Bulk Pack Qty |
|--------------|--------------------------------|-------|------|-------|-----|---------------|
|              |                                | in    | mm   | in    | mm  |               |
| EFA02-43-001 | SMA Connector Adapter Dust Cap | 0.500 | 12.7 | 0.120 | 3.0 | 500           |
| EFA02-43-002 | ST Connector Adapter Dust Cap  | 0.500 | 12.7 | 0.280 | 7.1 | 500           |
| EFA02-43-003 | FC Connector Adapter Dust Cap  | 0.310 | 8.0  | 0.280 | 7.1 | 500           |



**EFA02 Series  
Connector Dust Caps and Plugs**



Figure 1

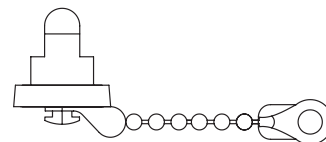


Figure 2

Specifications:

- Material: See Table
- Color: See Table

Features:

- The EFA02-14-001 plugs an SC connector and does not require a dust chain (other dust caps in this series require the retaining chain and cannot be sold separately)
- The steel caps are threaded onto the connector adapters
- Provides mechanical and environmental protection to adapters when unmated
- Stainless Steel construction suitable for harsh environments
- 2.5" long chain

| Item No.     | Material                                |                                                             | Bulk Pack Qty |
|--------------|-----------------------------------------|-------------------------------------------------------------|---------------|
|              | Figure 1<br>Stainless Steel Cap & Chain | Figure 2<br>Black TPE Plug & Optional Stainless Steel Chain |               |
| EFA02-04-ASS | SMA Adapter Dust Cap & Chain            | —                                                           | 100           |
| EFA02-07-ASS | DIN Adapter Dust Cap & Chain            | —                                                           | 100           |
| EFA02-09-ASS | FC Adapter Dust Cap & Chain             | —                                                           | 100           |
| EFA02-10-ASS | ST Adapter Dust Cap & Chain             | —                                                           | 100           |
| EFA02-14-001 | —                                       | SC Adapter Dust Plug                                        | 250           |
| EFA02-14-ASS | —                                       | EFA02-14-001 Dust Plug with Chain                           | 250           |

**EFA02-03 Series  
FC Connector Port Dust Caps**

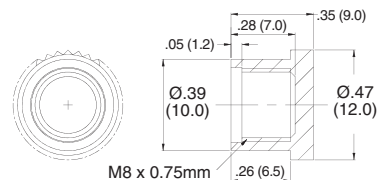


Specifications:

- Material: High-Density Polyethylene
- Color: See Table

Features:

- Dust caps are threaded onto the FC connector adapter providing protection from outside elements



| Item No.     | Color   | Bulk Pack Qty |
|--------------|---------|---------------|
| EFA02-03-001 | Natural | 500           |
| EFA02-03-002 | Black   | 500           |
| EFA02-03-003 | Green   | 500           |
| EFA02-03-004 | White   | 500           |
| EFA02-03-005 | Red     | 500           |

**EFA02-35 Series  
ST Connector Port Dust Caps and Lanyards**

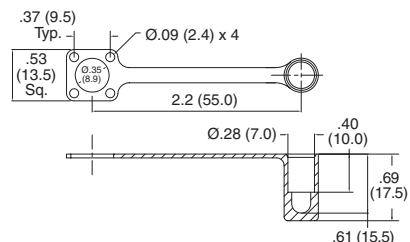


Specifications:

- Material: TPE
- Color: Black

Features:

- Provides environmental protection of ST connector ports
- Molded-on lanyard prevents the loss of the cap



| Item No.     | Bulk Pack Qty |
|--------------|---------------|
| EFA02-35-001 | 250           |

**EFA02 Series  
Connector Port Dust Caps and Lanyards**

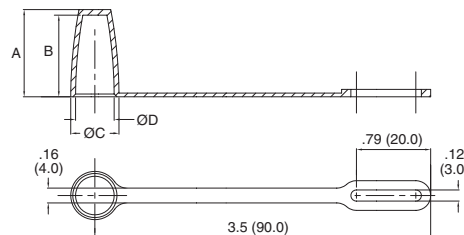


Specifications:

- Material: PVC
- Color: Black

Features:

- Provides environmental protection to various connectors
- Molded-on lanyard is attached to the connector to prevent loss of cover



| Item No.     | Contents              | A     |      | B     |      | C     |      | D     |      | Bulk Pack Qty |
|--------------|-----------------------|-------|------|-------|------|-------|------|-------|------|---------------|
|              |                       | in    | mm   | in    | mm   | in    | mm   | in    | mm   |               |
| EFA02-11-ASS | ST Connector Dust Cap | 0.730 | 18.5 | 0.670 | 17.0 | 0.470 | 12.0 | 0.340 | 8.7  | 250           |
| EFA02-13-ASS | FC Connector Dust Cap | 0.730 | 18.5 | 0.670 | 17.0 | 0.600 | 15.3 | 0.470 | 12.0 | 250           |



# CONNECTOR PLUGS & CAPS

## CP Series Connector Plugs

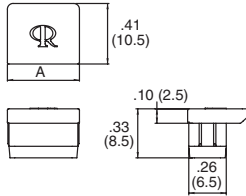
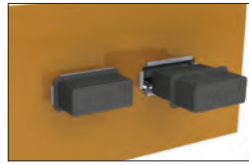


Figure 1

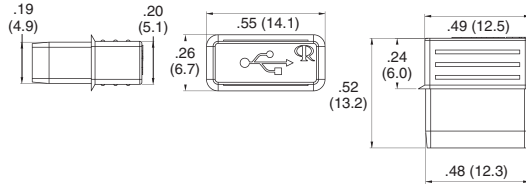


Figure 2

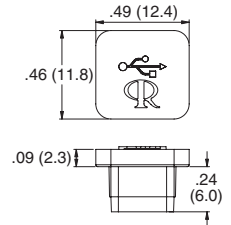


Figure 3

**Specifications:**

- Material: Silicone Rubber
- Color: Black

**Features:**

- No stress applied to the adapter's internal components upon entry
- Silicone material for high temperature applications up to 302°F (150°C)

| Item No. | Figure | Connector Port | A     |      | Bulk Pack Qty |
|----------|--------|----------------|-------|------|---------------|
|          |        |                | in    | mm   |               |
| CP-RJ11  | 1      | RJ11           | 0.410 | 10.5 | 1000          |
| CP-RJ45  | 1      | RJ45           | 0.490 | 12.5 | 1000          |
| CP-USB-A | 2      | USB-A          | —     | —    | 1000          |
| CP-USB-B | 3      | USB-B          | —     | —    | 1000          |

## USB-A Series USB Connector Caps

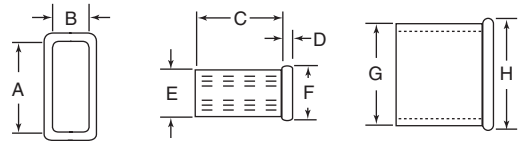


**Specifications:**

- Material: Polyethylene
- Color: Natural

**Features:**

- Protective dust cover for USB-A connectors



| Item No. | A     |      | B     |     | C     |      | D     |     | E     |     | F     |     | G     |      | H     |      | Bulk Pack Qty |
|----------|-------|------|-------|-----|-------|------|-------|-----|-------|-----|-------|-----|-------|------|-------|------|---------------|
|          | in    | mm   | in    | mm  | in    | mm   | in    | mm  | in    | mm  | in    | mm  | in    | mm   | in    | mm   |               |
| USB0A    | 0.504 | 12.8 | 0.185 | 4.7 | 0.484 | 12.3 | 0.043 | 1.1 | 0.256 | 6.5 | 0.299 | 7.6 | 0.575 | 14.6 | 0.610 | 15.5 | 100           |

## BPE Series Connector Port Plugs

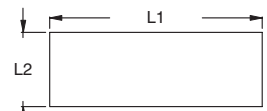
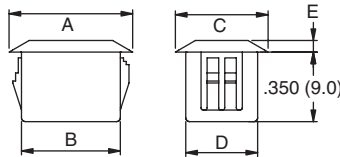


Figure 1

Figure 2

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: See Table

**Features:**

- Aesthetically pleasing, blanking off redundant connector parts
- Quick and easy installation; simply press fit in the designated hole
- ST Series covers Double-D, D or round holes

**Recommended Mounting Holes**

| Item No.      | Color | Mounting Hole Figure | L1            |             | L2    |      | A     |      | B     |      | C     |      | D     |      | E     |     | Bulk Pack Qty |
|---------------|-------|----------------------|---------------|-------------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|-----|---------------|
|               |       |                      | in            | mm          | in    | mm   | in    | mm   | in    | mm   | in    | mm   | in    | mm   | in    | mm  |               |
| BPE-SC-1-01   | Black | 1                    | 0.512         | 13.0        | 0.374 | 9.5  | 0.850 | 21.5 | 0.500 | 12.8 | 0.470 | 12.0 | 0.370 | 9.3  | 0.059 | 1.5 | 1000          |
| BPE-SC-2-01   | Black | 1                    | 0.512         | 13.0        | 0.374 | 9.5  | 0.630 | 16.0 | 0.500 | 12.8 | 0.470 | 12.0 | 0.370 | 9.3  | 0.059 | 1.5 | 1000          |
| BPE-SC-3-01   | Black | 1                    | 1.024         | 26.0        | 0.374 | 9.5  | 1.370 | 34.8 | 1.020 | 25.8 | 0.470 | 12.0 | 0.370 | 9.3  | 0.059 | 1.5 | 1000          |
| BPE-RJ45-01   | Grey  | 1                    | 0.760 - 0.790 | 19.3 - 20.0 | 0.590 | 15.0 | 0.870 | 22.0 | 0.580 | 14.7 | 0.700 | 17.7 | 0.750 | 19.1 | 0.059 | 1.5 | 1000          |
| BPE-LC-D-01BK | Black | 1                    | 0.532         | 13.5        | 0.532 | 13.5 | 0.590 | 15.0 | 0.520 | 13.2 | 0.590 | 15.0 | 0.520 | 13.2 | 0.078 | 2.0 | 1000          |
| BPE-ST-1-01   | Black | 2                    | 0.370         | 19.4        | 0.311 | 7.9  | ∅.470 | ∅12  | ∅.360 | ∅9.2 | ∅.470 | ∅12  | 0.300 | 7.7  | 0.059 | 1.5 | 1000          |

# SHEET METAL PLUGS



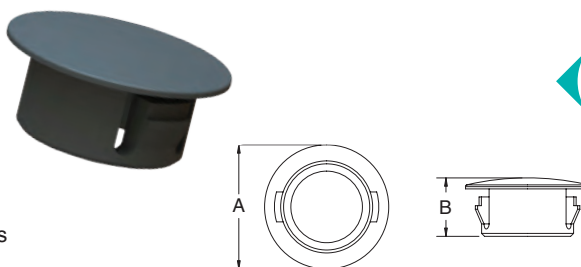
## PGM/62MP Series Standard Locking Hole Plugs

Specifications:

- Material: 62MP: UL94 V-2 Heat Stabilized Nylon 6  
Material: PGM: UL94 V-2 Nylon 6/6
- Color: See Table

Features:

- Each part fits multiple common sheet metal thicknesses
- Closes access sheet metal panel holes



| Item No.    |              |          | Ø Mounting Hole |       | Max Panel Thickness |     | OD A  |       | Overall Height B |      | Bulk Pack Qty |
|-------------|--------------|----------|-----------------|-------|---------------------|-----|-------|-------|------------------|------|---------------|
| Black       | White        | Approval | in              | mm    | in                  | mm  | in    | mm    | in               | mm   |               |
| • 62MP0187  | • 62MP0187W  | RU       | 0.187           | 4.8   | 0.062               | 1.6 | 0.250 | 6.4   | 0.234            | 5.9  | 1000          |
| • 62MP0250  | • 62MP0250W  | RU       | 0.250           | 6.4   | 0.062               | 1.6 | 0.312 | 7.9   | 0.312            | 7.9  | 1000          |
| PGM-6       | —            | —        | 0.252           | 6.4   | 0.067               | 1.7 | 0.299 | 7.6   | 0.221            | 5.6  | 1000          |
| PGM-7       | —            | —        | 0.278           | 7.1   | 0.063               | 1.6 | 0.433 | 11.0  | 0.276            | 7.0  | 1000          |
| PGM-8       | —            | —        | 0.307           | 7.8   | 0.063               | 1.6 | 0.375 | 9.5   | 0.236            | 6.0  | 1000          |
| • 62MP0312  | • 62MP0312W  | RU       | 0.312           | 7.9   | 0.062               | 1.6 | 0.375 | 9.5   | 0.312            | 7.9  | 1000          |
| • 62MP0375  | • 62MP0375W  | RU       | 0.375           | 9.5   | 0.125               | 3.2 | 0.468 | 11.9  | 0.406            | 6.4  | 1000          |
| PGM-9       | —            | —        | 0.376           | 9.6   | 0.047               | 1.2 | 0.511 | 13.0  | 0.256            | 6.5  | 1000          |
| PGM-10      | —            | —        | 0.386           | 9.8   | 0.055               | 1.4 | 0.511 | 13.0  | 0.236            | 6.0  | 1000          |
| • 62MP0437  | • 62MP0437W  | RU       | 0.437           | 11.1  | 0.125               | 3.2 | 0.531 | 13.5  | 0.406            | 10.3 | 1000          |
| PGM-3       | —            | —        | 0.468           | 11.9  | 0.062               | 1.6 | 0.531 | 13.5  | 0.250            | 6.4  | 1000          |
| • 62MP0500  | • 62MP0500W  | RU       | 0.500           | 12.7  | 0.125               | 3.2 | 0.578 | 14.7  | 0.406            | 10.3 | 1000          |
| PGM-5       | —            | —        | 0.500           | 12.7  | 0.062               | 1.6 | 0.562 | 14.3  | 0.250            | 6.4  | 1000          |
| PGM-13      | —            | —        | 0.506           | 12.8  | 0.083               | 2.1 | 0.669 | 17.0  | 0.315            | 8.0  | 1000          |
| PGM-11      | —            | —        | 0.531           | 13.5  | 0.062               | 1.6 | 0.593 | 15.1  | 0.250            | 6.4  | 500           |
| • 62MP0562  | • 62MP0562W  | RU       | 0.562           | 14.3  | 0.125               | 3.2 | 0.656 | 16.7  | 0.406            | 10.3 | 200           |
| 62MP0625    | • 62MP0625W  | RU       | 0.625           | 15.9  | 0.125               | 3.2 | 0.718 | 18.2  | 0.406            | 10.3 | 1000          |
| PGM-12      | —            | —        | 0.625           | 15.9  | 0.062               | 1.6 | 0.718 | 18.2  | 0.250            | 6.4  | 500           |
| PGM-16      | —            | —        | 0.628           | 16.0  | 0.079               | 2.0 | 0.787 | 20.0  | 0.315            | 8.0  | 500           |
| • 62MP0687  | • 62MP0687W  | RU       | 0.687           | 17.5  | 0.125               | 3.2 | 0.781 | 19.8  | 0.406            | 10.3 | 200           |
| • 62MP0750  | • 62MP0750W  | RU       | 0.746           | 19.0  | 0.125               | 3.2 | 0.925 | 23.5  | 0.413            | 10.5 | 500           |
| PGM-14      | —            | —        | 0.750           | 19.1  | 0.062               | 1.6 | 0.843 | 21.4  | 0.250            | 6.4  | 500           |
| PGM-15      | —            | —        | 0.781           | 19.8  | 0.062               | 1.6 | 0.890 | 22.6  | 0.250            | 6.4  | 500           |
| • 62MP0812  | • 62MP0812W  | RU       | 0.812           | 20.6  | 0.125               | 3.2 | 0.890 | 22.6  | 0.406            | 10.3 | 1000          |
| PGM-22      | —            | —        | 0.864           | 22.0  | 0.118               | 3.0 | 1.024 | 26.0  | 0.378            | 9.6  | 500           |
| PGM-17      | —            | —        | 0.875           | 22.2  | 0.062               | 1.6 | 0.968 | 24.6  | 0.250            | 6.5  | 500           |
| • 62MP0875  | • 62MP0875W  | RU       | 0.875           | 22.2  | 0.125               | 3.2 | 1.125 | 28.6  | 0.453            | 11.5 | 200           |
| • 62MP1000  | • 62MP1000W  | RU       | 1.004           | 25.5  | 0.125               | 3.2 | 1.102 | 28.0  | 0.500            | 12.7 | 200           |
| • 62MP1093  | • 62MP1093W  | RU       | 1.097           | 27.9  | 0.125               | 3.2 | 1.218 | 30.9  | 0.465            | 11.8 | 200           |
| • 62MP1187  | • 62MP1187W  | RU       | 1.187           | 30.1  | 0.125               | 3.2 | 1.315 | 33.4  | 0.453            | 11.5 | 500           |
| PGM-30      | —            | —        | 1.203           | 30.6  | 0.125               | 3.2 | 1.339 | 34.0  | 0.512            | 13.0 | 200           |
| • 62MP1250  | • 62MP1250W  | RU       | 1.250           | 31.8  | 0.125               | 3.2 | 1.375 | 34.9  | 0.465            | 11.8 | 200           |
| • 62MP1250A | • 62MP1250AW | RU       | 1.250           | 32.0  | 0.125               | 3.2 | 1.500 | 38.0  | 0.453            | 11.5 | 500           |
| • 62MP1375  | • 62MP1375W  | RU       | 1.375           | 35.0  | 0.125               | 3.2 | 1.500 | 38.1  | 0.465            | 11.8 | 200           |
| • 62MP1500  | • 62MP1500W  | RU       | 1.500           | 38.1  | 0.125               | 3.2 | 1.671 | 42.4  | 0.465            | 11.8 | 200           |
| • 62MP1750  | • 62MP1750W  | RU       | 1.750           | 44.5  | 0.125               | 3.2 | 1.906 | 48.4  | 0.465            | 11.8 | 100           |
| • 62MP2000  | • 62MP2000W  | RU       | 2.000           | 50.8  | 0.125               | 3.2 | 2.170 | 55.1  | 0.470            | 11.9 | 100           |
| • 62MP2250  | • 62MP2250W  | RU       | 2.250           | 57.1  | 0.250               | 6.3 | 2.422 | 61.5  | 0.750            | 19.0 | 100           |
| • 62MP2500  | • 62MP2500W  | RU       | 2.500           | 63.5  | 0.250               | 6.4 | 2.775 | 70.5  | 0.750            | 19.1 | 500           |
| • 62MP3000  | • 62MP3000W  | RU       | 3.000           | 76.2  | 0.250               | 6.3 | 3.171 | 80.5  | 0.720            | 18.2 | 100           |
| • 62MP3375  | • 62MP3375W  | RU       | 3.375           | 85.7  | 0.250               | 6.3 | 3.656 | 92.8  | 0.725            | 18.4 | 100           |
| • 62MP3500  | • 62MP3500W  | RU       | 3.500           | 88.9  | 0.250               | 6.3 | 3.660 | 92.9  | 0.750            | 19.0 | 100           |
| • 62MP4000  | • 62MP4000W  | RU       | 4.000           | 101.6 | 0.250               | 6.3 | 4.156 | 105.5 | 0.765            | 19.4 | 50            |

## 62MPS Series Mini Locking Hole Plugs

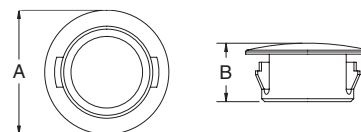


Specifications:

- Material: UL94 V-2 Heat Stabilized Nylon 6
- Color: See Table

Features:

- Used to close excess chassis holes, wiring outlets and production access holes
- Designed with multiple locks to positively snap in panel thickness of 1/16"
- Suitable for critical or elevated temperature applications

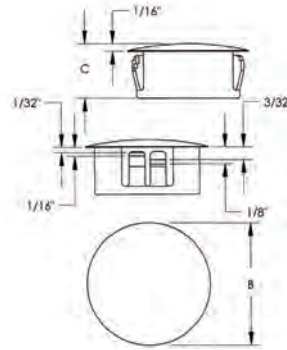


| Item No.  |            | Ø Mounting Hole |      | Panel Thickness |     | Ø A   |      | B     |     | Bulk Pack Qty |
|-----------|------------|-----------------|------|-----------------|-----|-------|------|-------|-----|---------------|
| Black     | White      | in              | mm   | in              | mm  | in    | mm   | in    | mm  |               |
| 62MPS0312 | 62MPS0312W | 0.312           | 7.9  | 0.062           | 1.6 | 0.375 | 9.5  | 0.234 | 5.9 | 1000          |
| 62MPS0343 | 62MPS0343W | 0.343           | 8.7  | 0.062           | 1.6 | 0.410 | 10.4 | 0.250 | 6.4 | 1000          |
| 62MPS0375 | 62MPS0375W | 0.375           | 9.5  | 0.062           | 1.6 | 0.468 | 11.9 | 0.250 | 6.4 | 1000          |
| 62MPS0500 | 62MPS0500W | 0.500           | 12.7 | 0.062           | 1.6 | 0.578 | 14.7 | 0.250 | 6.4 | 1000          |
| 62MPS0625 | 62MPS0625W | 0.625           | 15.9 | 0.062           | 1.6 | 0.718 | 18.2 | 0.250 | 6.4 | 1000          |
| 62MPS0750 | 62MPS0750W | 0.750           | 19.1 | 0.062           | 1.6 | 0.922 | 23.4 | 0.250 | 6.4 | 1000          |
| 62MPS0875 | 62MPS0875W | 0.875           | 22.2 | 0.062           | 1.6 | 1.016 | 25.8 | 0.250 | 6.4 | 1000          |



# SHEET METAL PLUGS

## 62MPKOP Series Knock Out Plugs



**Specifications:**

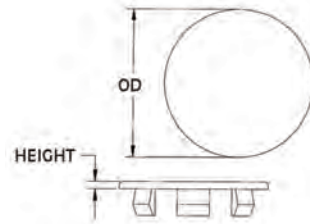
- Material: UL94 V-2 Heat Stabilized Nylon 6
- Color: Gray

**Features:**

- Molded in Gray Nylon to blend in with galvanized steel
- Economical plugs lock firmly into five trade size holes with panel thickness up to 1/8"
- No tools required, installs with fingertip pressure

| Item No.    | Ø Hole |      | Panel Thickness |     | Ø B   |      | C     |      | Bulk Pack Qty |
|-------------|--------|------|-----------------|-----|-------|------|-------|------|---------------|
|             | in     | mm   | in              | mm  | in    | mm   | in    | mm   |               |
| 62MP0875KOP | 0.875  | 22.2 | 0.125           | 3.2 | 1.016 | 25.8 | 0.453 | 11.5 | 1000          |
| 62MP1093KOP | 1.093  | 27.8 | 0.125           | 3.2 | 1.222 | 31.0 | 0.453 | 11.5 | 500           |
| 62MP1375KOP | 1.375  | 34.9 | 0.125           | 3.2 | 1.500 | 38.1 | 0.453 | 11.5 | 500           |
| 62MP1500KOP | 1.500  | 38.1 | 0.125           | 3.2 | 1.692 | 42.4 | 0.453 | 11.5 | 250           |
| 62MP1750KOP | 1.750  | 44.5 | 0.125           | 3.2 | 1.925 | 48.8 | 0.453 | 11.5 | 250           |
| 62MP2000KOP | 2.000  | 50.8 | 0.125           | 3.2 | 2.140 | 54.4 | 0.453 | 11.5 | 250           |

## 62PP Series Hole Plugs



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

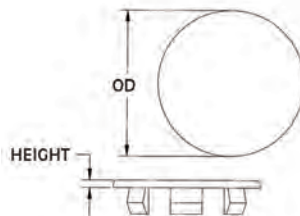
- Used to close excess chassis holes, wiring outlets and production access holes
- Resistant to corrosion, vibration and abrasion
- Designed with special flexible and tapered prongs which snugly lock in place with finger pressure
- Can be removed and reused when necessary

| Item No.    |              | Head Style | Finish | Ø Mounting Hole |      | Panel Thickness |           | Ø Head |      | Head Height |     | Bulk Pack Qty |
|-------------|--------------|------------|--------|-----------------|------|-----------------|-----------|--------|------|-------------|-----|---------------|
| Natural     | Black        |            |        | in              | mm   | in              | mm        | in     | mm   | in          | mm  |               |
| 62PP012BG09 | 62PP012BG09B | Binder     | Smooth | 0.125           | 3.2  | 0.031 - 0.094   | 0.8 - 2.4 | 0.203  | 5.2  | 0.040       | 1.0 | 1000          |
| 62PP015BG09 | 62PP015BG09B | Binder     | Smooth | 0.150           | 3.8  | 0.031 - 0.094   | 0.8 - 2.4 | 0.250  | 6.4  | 0.040       | 1.0 | 1000          |
| 62PP018BG10 | 62PP018BG10B | Binder     | Smooth | 0.187           | 4.8  | 0.031 - 0.100   | 0.8 - 2.5 | 0.344  | 8.7  | 0.040       | 1.0 | 1000          |
| 62PP018BG14 | 62PP018BG14B | Binder     | Smooth | 0.187           | 4.8  | 0.031 - 0.140   | 0.8 - 3.6 | 0.344  | 8.7  | 0.040       | 1.0 | 1000          |
| 62PP018BM08 | 62PP018BM08B | Binder     | Matte  | 0.187           | 4.8  | 0.031 - 0.050   | 0.8 - 1.3 | 0.344  | 8.7  | 0.040       | 1.0 | 1000          |
| 62PP018BM14 | 62PP018BM14B | Binder     | Matte  | 0.187           | 4.8  | 0.031 - 0.140   | 0.8 - 3.6 | 0.344  | 8.7  | 0.040       | 1.0 | 1000          |
| 62PP022RG06 | 62PP022RG06B | Dome       | Smooth | 0.218           | 5.5  | 0.031 - 0.062   | 0.8 - 1.6 | 0.375  | 9.5  | 0.250       | 6.4 | 1000          |
| 62PP022RG09 | 62PP022RG09B | Dome       | Smooth | 0.218           | 5.5  | 0.031 - 0.094   | 0.8 - 2.4 | 0.375  | 9.5  | 0.250       | 6.4 | 1000          |
| 62PP025BG06 | 62PP025BG06B | Binder     | Smooth | 0.250           | 6.4  | 0.031 - 0.062   | 0.8 - 1.6 | 0.422  | 10.7 | 0.040       | 1.0 | 1000          |
| 62PP025BM06 | 62PP025BM06B | Binder     | Matte  | 0.250           | 6.4  | 0.031 - 0.062   | 0.8 - 1.6 | 0.422  | 10.7 | 0.040       | 1.0 | 1000          |
| 62PP031BG14 | 62PP031BG14B | Binder     | Smooth | 0.312           | 7.9  | 0.031 - 0.140   | 0.8 - 3.6 | 0.453  | 11.5 | 0.055       | 1.4 | 1000          |
| 62PP031BM14 | 62PP031BM14B | Binder     | Matte  | 0.312           | 7.9  | 0.031 - 0.140   | 0.8 - 3.6 | 0.453  | 11.5 | 0.055       | 1.4 | 1000          |
| 62PP031BM15 | 62PP031BM15B | Binder     | Matte  | 0.315           | 8.0  | 0.047 - 0.156   | 1.2 - 4.1 | 0.500  | 12.7 | 0.080       | 2.0 | 500           |
| 62PP037BG14 | 62PP037BG14B | Binder     | Smooth | 0.375           | 9.5  | 0.031 - 0.140   | 0.8 - 3.6 | 0.672  | 17.1 | 0.062       | 1.6 | 500           |
| 62PP037BG31 | 62PP037BG31B | Binder     | Smooth | 0.375           | 9.5  | 0.031 - 0.140   | 0.8 - 3.6 | 0.578  | 14.7 | 0.055       | 1.4 | 1000          |
| 62PP037BM31 | 62PP037BM31B | Binder     | Matte  | 0.375           | 9.5  | 0.031 - 0.140   | 0.8 - 3.6 | 0.578  | 14.7 | 0.055       | 1.4 | 500           |
| 62PP043BG17 | 62PP043BG17B | Binder     | Smooth | 0.437           | 11.1 | 0.031 - 0.171   | 0.8 - 4.3 | 0.609  | 15.5 | 0.055       | 1.4 | 500           |
| 62PP043BM17 | 62PP043BM17B | Binder     | Matte  | 0.437           | 11.1 | 0.031 - 0.171   | 0.8 - 4.3 | 0.609  | 15.5 | 0.055       | 1.4 | 500           |
| 62PP048BM12 | 62PP048BM12B | Binder     | Matte  | 0.480           | 12.2 | 0.031 - 0.039   | 0.8 - 1.0 | 0.578  | 14.7 | 0.055       | 1.4 | 1000          |
| 62PP050BG14 | 62PP050BG14B | Binder     | Smooth | 0.500           | 12.7 | 0.031 - 0.140   | 0.8 - 3.6 | 0.672  | 17.1 | 0.062       | 1.6 | 500           |
| 62PP050BM14 | 62PP050BM14B | Binder     | Matte  | 0.500           | 12.7 | 0.031 - 0.140   | 0.8 - 3.6 | 0.672  | 17.1 | 0.062       | 1.6 | 500           |
| 62PP056BG14 | 62PP056BG14B | Binder     | Smooth | 0.562           | 14.3 | 0.031 - 0.140   | 0.8 - 3.6 | 0.734  | 18.6 | 0.062       | 1.6 | 1000          |
| 62PP056BM14 | 62PP056BM14B | Binder     | Matte  | 0.562           | 14.3 | 0.031 - 0.140   | 0.8 - 3.6 | 0.734  | 18.6 | 0.062       | 1.6 | 1000          |
| 62PP062BG07 | 62PP062BG07B | Binder     | Smooth | 0.625           | 15.9 | 0.031 - 0.072   | 0.8 - 1.8 | 0.797  | 20.2 | 0.062       | 1.6 | 500           |
| 62PP062BM07 | 62PP062BM07B | Binder     | Matte  | 0.625           | 15.9 | 0.031 - 0.072   | 0.8 - 1.8 | 0.797  | 20.2 | 0.062       | 1.6 | 500           |
| 62PP068BG10 | 62PP068BG10B | Binder     | Smooth | 0.687           | 17.5 | 0.031 - 0.109   | 0.8 - 2.8 | 0.891  | 22.6 | 0.062       | 1.6 | 1000          |
| 62PP068BM10 | 62PP068BM10B | Binder     | Matte  | 0.687           | 17.5 | 0.031 - 0.109   | 0.8 - 2.8 | 0.891  | 22.6 | 0.062       | 1.6 | 1000          |
| 62PP075BG11 | 62PP075BG11B | Binder     | Smooth | 0.750           | 19.1 | 0.031 - 0.109   | 0.8 - 2.8 | 0.984  | 25.0 | 0.062       | 1.6 | 1000          |
| 62PP075BM11 | 62PP075BM11B | Binder     | Matte  | 0.750           | 19.1 | 0.031 - 0.109   | 0.8 - 2.8 | 0.984  | 25.0 | 0.062       | 1.6 | 500           |
| 62PP078BG09 | 62PP078BG09B | Binder     | Smooth | 0.787           | 20.0 | 0.059 - 0.080   | 1.5 - 2.0 | 0.984  | 25.0 | 0.062       | 1.6 | 1000          |
| 62PP078BM09 | 62PP078BM09B | Binder     | Matte  | 0.787           | 20.0 | 0.059 - 0.080   | 1.5 - 2.0 | 0.984  | 25.0 | 0.062       | 1.6 | 1000          |
| 62PP081BG11 | 62PP081BG11B | Binder     | Smooth | 0.812           | 20.6 | 0.031 - 0.109   | 0.8 - 2.8 | 1.031  | 26.2 | 0.062       | 1.6 | 1000          |
| 62PP081BM11 | 62PP081BM11B | Binder     | Matte  | 0.812           | 20.6 | 0.031 - 0.109   | 0.8 - 2.8 | 1.031  | 26.2 | 0.062       | 1.6 | 1000          |
| 62PP087BG11 | 62PP087BG11B | Binder     | Smooth | 0.875           | 22.2 | 0.031 - 0.109   | 0.8 - 2.8 | 1.078  | 27.4 | 0.062       | 1.6 | 500           |
| 62PP087BM11 | 62PP087BM11B | Binder     | Matte  | 0.875           | 22.2 | 0.031 - 0.109   | 0.8 - 2.8 | 1.078  | 27.4 | 0.062       | 1.6 | 500           |
| 62PP100BG11 | 62PP100BG11B | Binder     | Smooth | 1.000           | 25.4 | 0.031 - 0.109   | 0.8 - 2.8 | 1.219  | 31.0 | 0.062       | 1.6 | 500           |
| 62PP100BM11 | 62PP100BM11B | Binder     | Matte  | 1.000           | 25.4 | 0.031 - 0.109   | 0.8 - 2.8 | 1.219  | 31.0 | 0.062       | 1.6 | 500           |

# SHEET METAL & HOLE PLUGS



## 62PPM Series Metric Hole Plugs



**Specifications:**

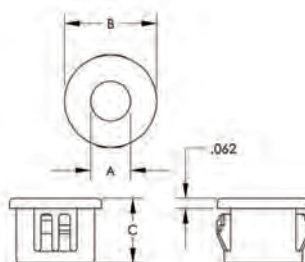
- Material: UL94 V-2 Nylon 6/6
- Color: See Table

**Features:**

- Used to close excess chassis holes, wiring outlets and production access holes
- Resistant to corrosion, vibration and abrasion
- Designed with special flexible and tapered prongs which snugly lock in place with finger pressure
- Can be removed and reused when necessary

| Item No.    |              | Ø Mounting Hole | Panel Thickness | OD   | Head Height | Bulk Pack Qty |
|-------------|--------------|-----------------|-----------------|------|-------------|---------------|
| Natural     | Black        | mm              | mm              | mm   | mm          |               |
| 62PPM06BM16 | 62PPM06BM16B | 6.0             | 0.8 - 1.6       | 10.0 | 2.0         | 1000          |
| 62PPM08BM35 | 62PPM08BM35B | 8.0             | 0.8 - 3.5       | 12.0 | 2.0         | 1000          |
| 62PPM10BM35 | 62PPM10BM35B | 10.0            | 0.8 - 3.5       | 14.0 | 2.0         | 1000          |
| 62PPM12BM35 | 62PPM12BM35B | 12.0            | 0.8 - 3.5       | 16.0 | 2.0         | 500           |
| 62PPM14BM35 | 62PPM14BM35B | 14.0            | 0.8 - 3.5       | 18.0 | 2.0         | 500           |
| 62PPM16BM35 | 62PPM16BM35B | 16.0            | 0.8 - 3.5       | 20.0 | 2.0         | 500           |
| 62PPM18BM40 | 62PPM18BM40B | 18.0            | 0.8 - 4.0       | 22.0 | 2.0         | 1000          |
| 62PPM20BM40 | 62PPM20BM40B | 20.0            | 0.8 - 4.0       | 26.0 | 2.0         | 1000          |
| 62PPM22BM40 | 62PPM22BM40B | 22.0            | 0.8 - 4.0       | 27.8 | 2.0         | 500           |
| 62PPM24BM40 | 62PPM24BM40B | 24.0            | 0.8 - 4.0       | 28.0 | 2.0         | 500           |
| 62PPM26BM40 | 62PPM26BM40B | 26.0            | 0.8 - 4.0       | 30.0 | 2.0         | 500           |

## 62WP Series Window Plugs



**Specifications:**

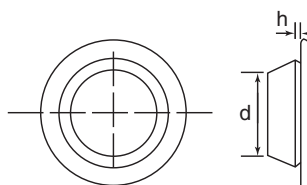
- Material: Copolyester
- Color: Clear

**Features:**

- Headstyle is flat to minimize distortion
- Resistant to corrosion, abrasion, oil and most chemicals

| Item No. | Ø Mounting Hole A |      | Panel Thickness |     | B     |      | C     |      | Bulk Pack Qty |
|----------|-------------------|------|-----------------|-----|-------|------|-------|------|---------------|
|          | in                | mm   | in              | mm  | in    | mm   | in    | mm   |               |
| 62WP0187 | 0.187             | 4.8  | 0.062           | 1.6 | 0.250 | 6.4  | 0.234 | 5.9  | 1000          |
| 62WP0250 | 0.250             | 6.4  | 0.062           | 1.6 | 0.312 | 8.0  | 0.312 | 8.0  | 1000          |
| 62WP0312 | 0.312             | 8.0  | 0.062           | 1.6 | 0.375 | 9.5  | 0.312 | 8.0  | 1000          |
| 62WP0375 | 0.375             | 9.5  | 0.125           | 3.2 | 0.468 | 12.0 | 0.406 | 10.3 | 500           |
| 62WP0437 | 0.437             | 11.0 | 0.125           | 3.2 | 0.531 | 13.5 | 0.406 | 10.3 | 1000          |
| 62WP0500 | 0.500             | 12.7 | 0.125           | 3.2 | 0.578 | 14.6 | 0.406 | 10.3 | 1000          |
| 62WP0625 | 0.625             | 15.9 | 0.125           | 3.2 | 0.718 | 18.2 | 0.406 | 10.3 | 1000          |

## BP Series Flexible Hole Plugs



**Specifications:**

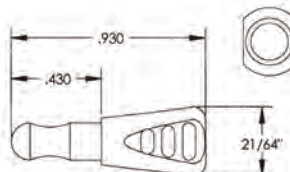
- Material: TPE
- Color: Black

**Features:**

- Each size covers a range of panel thicknesses
- Designed to fit standard metric holes
- Very resistant to oils, acids and alkalis

| Item No. | Panel Hole d |      | Panel Thickness h |           | OD   |      | Bulk Pack Qty |
|----------|--------------|------|-------------------|-----------|------|------|---------------|
|          | in           | mm   | in                | mm        | in   | mm   |               |
| BP-16230 | 0.394        | 10.0 | 0.032 - 0.079     | 0.8 - 2.0 | 0.76 | 19.3 | 1000          |
| BP-16231 | 0.472        | 12.0 | 0.032 - 0.079     | 0.8 - 2.0 | 0.83 | 21.0 | 1000          |
| BP-16232 | 0.551        | 14.0 | 0.032 - 0.079     | 0.8 - 2.0 | 0.91 | 23.0 | 1000          |
| BP-16233 | 0.630        | 16.0 | 0.032 - 0.079     | 0.8 - 2.0 | 0.98 | 25.0 | 1000          |
| BP-16234 | 0.709        | 18.0 | 0.032 - 0.079     | 0.8 - 2.0 | 1.06 | 27.0 | 1000          |
| BP-16236 | 0.866        | 22.0 | 0.032 - 0.079     | 0.8 - 2.0 | 1.23 | 31.2 | 1000          |
| BP-3     | 0.866        | 22.0 | 0.063 - 0.118     | 1.6 - 3.0 | 1.10 | 28.0 | 1000          |
| BP-4     | 1.043        | 26.5 | 0.063 - 0.118     | 1.6 - 3.0 | 1.28 | 32.5 | 1000          |
| BP-16238 | 1.181        | 30.0 | 0.032 - 0.079     | 0.8 - 2.0 | 1.55 | 39.4 | 1000          |

## DP Series Dummy Plugs



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Black

**Features:**

- Easy installation and removal for the addition of electrical accessories
- Prevents short circuits due to harness movement
- Resists corrosion, vibration and abrasion

| Item No. | Bulk Pack Qty |
|----------|---------------|
| DP401030 | 1000          |



# GROMMETS

## GRD/DG/DGB Series Diaphragm Grommets



Figure 1



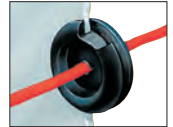
Figure 2

**Specifications:**

- Material: GRD/DG: Flexible PVC  
DGB: UL94 HB TPE
- Color: Black

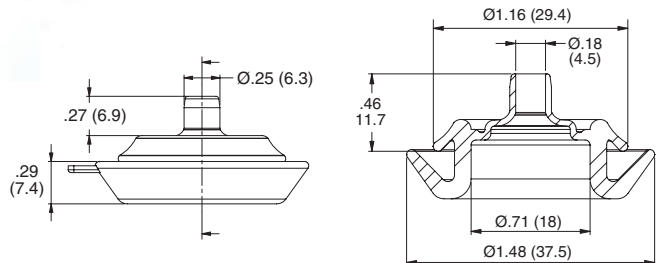
**Features:**

- Use as a blanking plugs to conceal access holes until wire are installed
- To install wires, pierce the central membrane film and insert wire
- Design allows for multiple ranges of wires to pass thru
- PVC material is non-staining; resistant to ozone, acids, and sunlight; with excellent aging qualities



| Item No.      | Figure | Ø Mounting Hole A |      | Panel Thickness |     | C Ref. |      | OD   |      | E    |      | Bulk Pack Qty |
|---------------|--------|-------------------|------|-----------------|-----|--------|------|------|------|------|------|---------------|
|               |        | in                | mm   | in              | mm  | in     | mm   | in   | mm   | in   | mm   |               |
| DGB-2.5       | 2      | 0.25              | 6.4  | 0.03            | 0.8 | 0.16   | 4.1  | 0.37 | 9.4  | 0.14 | 3.6  | 1000          |
| DGB-4         | 2      | 0.39              | 9.9  | 0.06            | 1.5 | 0.25   | 6.4  | 0.50 | 12.7 | 0.26 | 6.6  | 1000          |
| DGB-6         | 2      | 0.43              | 11.0 | 0.06            | 1.5 | 0.31   | 8.0  | 0.69 | 17.5 | 0.31 | 8.0  | 1000          |
| DGB-5         | 2      | 0.49              | 12.5 | 0.06            | 1.5 | 0.37   | 9.5  | 0.62 | 15.7 | 0.25 | 6.4  | 1000          |
| DG-19426      | 1      | 0.63              | 16.0 | 0.06            | 1.5 | 0.43   | 11.0 | 0.75 | 19.0 | 0.23 | 5.8  | 1000          |
| DGB-7         | 2      | 0.63              | 16.0 | 0.06            | 1.5 | 0.43   | 11.0 | 0.75 | 19.0 | 0.31 | 8.0  | 1000          |
| GRD1062091PA  | 1      | 0.63              | 16.0 | 0.09            | 2.4 | 0.49   | 12.5 | 0.87 | 22.0 | 0.32 | 8.0  | 5000          |
| GRD2075061PA  | 2      | 0.75              | 19.0 | 0.06            | 1.5 | 0.63   | 16.0 | 1.00 | 25.4 | 0.28 | 7.0  | 4000          |
| DGB-11        | 2      | 0.75              | 19.0 | 0.06            | 1.5 | 0.63   | 16.0 | 1.00 | 25.4 | 0.28 | 7.0  | 1000          |
| DG-15512      | 1      | 0.75              | 19.0 | 0.08            | 2.0 | 0.63   | 15.9 | 1.00 | 25.5 | 0.31 | 7.9  | 1000          |
| DG-10134      | 1      | 0.75              | 19.0 | 0.09            | 2.4 | 0.61   | 15.5 | 1.00 | 25.5 | 0.35 | 8.8  | 1000          |
| GRD1075121PA  | 1      | 0.75              | 19.0 | 0.12            | 3.0 | 0.61   | 15.5 | 1.00 | 25.5 | 0.37 | 9.5  | 2500          |
| DG-10187      | 1      | 0.79              | 20.0 | 0.06            | 1.5 | 0.61   | 15.5 | 1.00 | 25.5 | 0.32 | 8.0  | 1000          |
| DGB-10        | 2      | 0.87              | 22.0 | 0.06            | 1.5 | 0.72   | 18.4 | 1.00 | 25.5 | 0.31 | 8.0  | 1000          |
| GRD2087061PA  | 2      | 0.87              | 22.0 | 0.06            | 1.5 | 0.74   | 18.8 | 1.00 | 25.5 | 0.31 | 8.0  | 4000          |
| DGB-13        | 2      | 1.00              | 25.4 | 0.06            | 1.5 | 0.81   | 20.5 | 1.18 | 30.0 | 0.31 | 8.0  | 1000          |
| GRD2100061PA  | 2      | 1.00              | 25.4 | 0.06            | 1.5 | 0.81   | 20.5 | 1.18 | 30.0 | 0.31 | 8.0  | 2000          |
| GRD1100091PA  | 1      | 1.00              | 25.5 | 0.09            | 2.4 | 0.75   | 19.0 | 1.44 | 36.5 | 0.33 | 8.4  | 2000          |
| GRD1125091PA  | 1      | 1.26              | 32.0 | 0.09            | 2.4 | 0.98   | 25.0 | 1.54 | 39.0 | 0.32 | 8.0  | 1000          |
| GRD1125151PA  | 1      | 1.26              | 32.0 | 0.16            | 4.0 | 1.00   | 25.5 | 1.54 | 39.0 | 0.38 | 9.5  | 1000          |
| DG-20         | 1      | 1.46              | 37.1 | 0.08            | 2.0 | 1.14   | 29.0 | 1.73 | 44.0 | 0.35 | 9.0  | 1000          |
| GRD21625375PA | 2      | 1.63              | 42.0 | 0.09            | 2.4 | 1.22   | 31.0 | 1.93 | 49.0 | 0.40 | 10.1 | 1000          |

## AHG Series Angular Hole Grommets



**Specifications:**

- Materials: EPDM, 60 Shore A
- Color: Black

**Features:**

- Allows cables to pass through a panel at a maximum 45° angle

| Item No. | Ø Cable Size  |           | Panel Thickness D |           | Ø Mounting Hole |      | Bulk Pack Qty |
|----------|---------------|-----------|-------------------|-----------|-----------------|------|---------------|
|          | in            | mm        | in                | mm        | in              | mm   |               |
| AHG-1    | 0.197 - 0.276 | 5.0 - 7.0 | 0.079 - 0.098     | 2.0 - 2.5 | 0.945           | 24.0 | 500           |



# GROMMETS & GROMMET SLEEVES



## GRS/RGS Series Grommet Sleeves

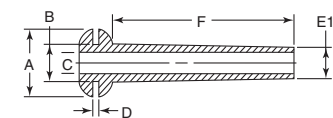


Figure 1

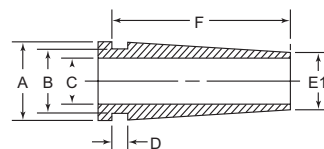


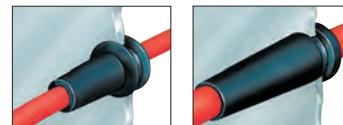
Figure 2

**Specifications:**

- Material: Flexible PVC
- Color: Black

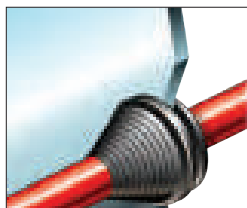
**Features:**

- Sleeve design provides additional support and protection for cables/wires passing through panel
- PVC is non-staining; resistant to ozone, acids, and sunlight; with excellent aging qualities



| Item No.    | Figure | Ø Hole B |      | Panel Thickness D |     | Ø A   |      | Ø C   |     | E1    |      | F     |      | Bulk Pack Qty |
|-------------|--------|----------|------|-------------------|-----|-------|------|-------|-----|-------|------|-------|------|---------------|
|             |        | in       | mm   | in                | mm  | in    | mm   | in    | mm  | in    | mm   | in    | mm   |               |
| GRS1030151A | 1      | 0.300    | 7.6  | 0.156             | 4.0 | 0.560 | 14.2 | 0.240 | 6.1 | 0.311 | 7.9  | 1.250 | 31.8 | 5000          |
| RGS1-60466  | 1      | 0.343    | 8.7  | 0.062             | 1.6 | 0.560 | 14.2 | 0.200 | 5.1 | 0.280 | 7.1  | 1.650 | 42.0 | 4000          |
| GRS1037091A | 1      | 0.374    | 9.5  | 0.094             | 2.4 | 0.560 | 14.2 | 0.250 | 6.4 | 0.311 | 7.9  | 0.562 | 14.3 | 10000         |
| RGS2-12462  | 2      | 0.500    | 12.7 | 0.125             | 3.2 | 0.595 | 15.1 | 0.375 | 9.5 | 0.468 | 11.9 | 1.398 | 35.5 | 1000          |
| GRS2050121A | 2      | 0.500    | 12.7 | 0.125             | 3.2 | 0.595 | 15.1 | 0.375 | 9.5 | 0.468 | 11.9 | 1.398 | 35.5 | 2000          |
| RGS2-51409  | 2      | 0.500    | 12.7 | 0.031             | 0.8 | 0.750 | 19.1 | 0.381 | 9.7 | 0.480 | 12.2 | 1.055 | 26.8 | 1000          |
| GRS2050031A | 2      | 0.500    | 12.7 | 0.031             | 0.8 | 0.750 | 19.1 | 0.381 | 9.7 | 0.480 | 12.2 | 1.055 | 26.8 | 4000          |

## GRC Series Stepped Grommets

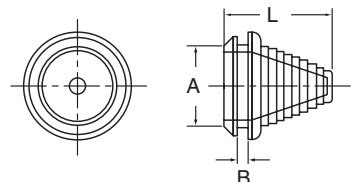


**Specifications:**

- Material: Flexible PVC
- Color: Black

**Features:**

- Protects wires, cables, tubing, hoses
- Accommodates a range of cable sizes
- Can be used as a blanking plug until cut



| Item No. | Panel Hole Size A |      | Panel Thickness B |     | Length L |      | Cable Range   |             | Bulk Pack Qty |
|----------|-------------------|------|-------------------|-----|----------|------|---------------|-------------|---------------|
|          | in                | mm   | in                | mm  | in       | mm   | in            | mm          |               |
| 1251347  | 0.500             | 12.7 | 0.120             | 3.0 | 1.270    | 32.5 | 0.200 - 0.350 | 5.0 - 9.0   | 1000          |
| 1251348  | 0.830             | 21.0 | 0.120             | 3.0 | 1.080    | 27.5 | 0.200 - 0.670 | 5.0 - 17.0  | 1000          |
| 1251349  | 1.020             | 26.0 | 0.120             | 3.0 | 1.160    | 29.5 | 0.390 - 0.870 | 10.0 - 22.0 | 1000          |

## HG Series TPE Flexible Hole Grommets

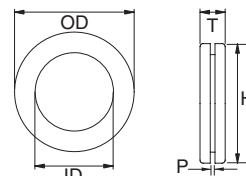


**Specifications:**

- Material: UL94 HB TPE
- Color: Black
- Temperature Range: -58°F to 203°F (-50°C - 95°C)

**Features:**

- Suitable for outdoor use in accordance with UL 746C

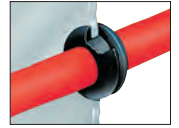
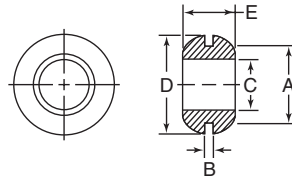


| Item No. | Mounting Hole H |      | Panel Thickness P |     | ID    |      | OD    |      | Thickness T |     | Bulk Pack Qty |
|----------|-----------------|------|-------------------|-----|-------|------|-------|------|-------------|-----|---------------|
|          | in              | mm   | in                | mm  | in    | mm   | in    | mm   | in          | mm  |               |
| HG-2     | 0.190           | 4.8  | 0.063             | 1.6 | 0.125 | 3.2  | 0.313 | 8.0  | 0.252       | 6.4 | 1000          |
| HG-2.5   | 0.252           | 6.4  | 0.063             | 1.6 | 0.156 | 4.0  | 0.375 | 9.5  | 0.248       | 6.3 | 1000          |
| HG-3     | 0.305           | 7.7  | 0.032             | 0.8 | 0.188 | 4.8  | 0.430 | 10.9 | 0.188       | 4.8 | 1000          |
| HG-3.5   | 0.315           | 8.0  | 0.063             | 1.6 | 0.219 | 5.5  | 0.430 | 10.9 | 0.217       | 5.5 | 1000          |
| HG-4     | 0.375           | 9.5  | 0.094             | 2.4 | 0.250 | 6.4  | 0.559 | 14.2 | 0.276       | 7.0 | 1000          |
| HG-5     | 0.430           | 10.9 | 0.063             | 1.6 | 0.313 | 8.0  | 0.562 | 14.3 | 0.188       | 4.8 | 1000          |
| HG-17    | 0.433           | 11.0 | 0.079             | 2.0 | 0.313 | 8.0  | 0.630 | 16.0 | 0.276       | 7.0 | 1000          |
| HG-6     | 0.492           | 12.5 | 0.063             | 1.6 | 0.375 | 9.5  | 0.669 | 17.0 | 0.276       | 7.0 | 1000          |
| HG-8     | 0.660           | 16.8 | 0.063             | 1.6 | 0.495 | 12.6 | 0.846 | 21.5 | 0.250       | 6.4 | 1000          |
| HG-9     | 0.675           | 17.1 | 0.063             | 1.6 | 0.558 | 14.2 | 0.875 | 22.2 | 0.188       | 4.8 | 1000          |
| HG-11    | 0.735           | 18.7 | 0.063             | 1.6 | 0.672 | 17.1 | 0.933 | 23.7 | 0.188       | 4.8 | 1000          |
| HG-10    | 0.742           | 18.8 | 0.063             | 1.6 | 0.610 | 15.5 | 0.875 | 22.2 | 0.219       | 5.6 | 1000          |
| HG-18    | 0.748           | 19.0 | 0.094             | 2.4 | 0.500 | 12.7 | 0.954 | 24.0 | 0.280       | 7.1 | 1000          |
| HG-12    | 0.976           | 24.8 | 0.063             | 1.6 | 0.734 | 18.6 | 1.234 | 31.3 | 0.313       | 8.0 | 1000          |
| HG-14    | 0.990           | 25.1 | 0.063             | 1.6 | 0.860 | 21.8 | 1.188 | 30.2 | 0.313       | 8.0 | 1000          |
| HG-16    | 1.240           | 31.5 | 0.063             | 1.6 | 0.970 | 24.6 | 1.500 | 38.1 | 0.313       | 8.0 | 1000          |



# GROMMETS

## GRO Series Flexible Hole Grommets



**Specifications:**

- Material: See Table
- Color: Black

**Features:**

- Standard PVC material is non-staining; resistant to ozone, acids, and sunlight; with excellent aging qualities

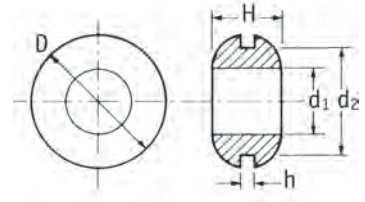
| Item No.   |       | Panel Hole Size A |      | Panel Thickness B |     | ID C  |      | OD D  |      | Overall Height E |      | PVC Shore A Rating | Bulk Pack Qty |
|------------|-------|-------------------|------|-------------------|-----|-------|------|-------|------|------------------|------|--------------------|---------------|
| PVC        | TPR   | in                | mm   | in                | mm  | in    | mm   | in    | mm   | in               | mm   |                    |               |
| GRO018031A | 15057 | 0.188             | 4.8  | 0.031             | 0.8 | 0.109 | 2.8  | 0.315 | 8.0  | 0.188            | 4.8  | 55                 | 10000         |
| GRO018061A | 15058 | 0.188             | 4.8  | 0.063             | 1.6 | 0.125 | 3.2  | 0.315 | 8.0  | 0.250            | 6.4  | 55                 | 10000         |
| GRO023041A | —     | 0.234             | 6.0  | 0.047             | 1.2 | 0.125 | 3.2  | 0.346 | 8.8  | 0.156            | 4.0  | 55                 | 10000         |
| GRO025031A | 15060 | 0.252             | 6.4  | 0.031             | 0.8 | 0.156 | 4.0  | 0.375 | 9.5  | 0.156            | 4.0  | 43                 | 10000         |
| GRO025061A | 15059 | 0.252             | 6.4  | 0.063             | 1.6 | 0.156 | 4.0  | 0.375 | 9.5  | 0.248            | 6.3  | 55                 | 10000         |
| —          | 15061 | 0.252             | 6.4  | 0.063             | 1.6 | 0.188 | 4.8  | 0.375 | 9.5  | 0.276            | 7.0  | —                  | 10000         |
| GRO025062A | —     | 0.252             | 6.4  | 0.063             | 1.6 | 0.188 | 4.8  | 0.375 | 9.5  | 0.281            | 7.1  | 55                 | 10000         |
| GRO025121A | 15062 | 0.252             | 6.4  | 0.118             | 3.0 | 0.156 | 4.0  | 0.375 | 9.5  | 0.315            | 8.0  | 43                 | 10000         |
| GRO028091A | —     | 0.281             | 7.1  | 0.094             | 2.4 | 0.188 | 4.8  | 0.438 | 11.1 | 0.281            | 7.1  | 55                 | 10000         |
| GRO031121A | —     | 0.313             | 7.9  | 0.063             | 1.6 | 0.118 | 3.0  | 0.433 | 11.0 | 0.315            | 8.0  | 55                 | 10000         |
| —          | 15064 | 0.315             | 8.0  | 0.031             | 0.8 | 0.188 | 4.8  | 0.433 | 11.0 | 0.188            | 4.8  | 55                 | 10000         |
| GRO031061A | —     | 0.315             | 8.0  | 0.031             | 0.8 | 0.216 | 5.5  | 0.433 | 11.0 | 0.216            | 5.5  | 43                 | 10000         |
| —          | 15065 | 0.315             | 8.0  | 0.063             | 1.6 | 0.216 | 5.5  | 0.433 | 11.0 | 0.216            | 5.5  | —                  | 10000         |
| GRO031031A | —     | 0.315             | 8.0  | 0.031             | 0.8 | 0.188 | 4.8  | 0.433 | 11.0 | 0.188            | 4.8  | 55                 | 10000         |
| —          | 15072 | 0.375             | 9.5  | 0.014             | 1.2 | 0.276 | 7.0  | 0.543 | 13.8 | 0.156            | 4.0  | —                  | 10000         |
| —          | 15067 | 0.375             | 9.5  | 0.063             | 1.6 | 0.188 | 4.8  | 0.492 | 12.5 | 0.268            | 6.8  | —                  | 10000         |
| GRO037061A | 15069 | 0.375             | 9.5  | 0.063             | 1.6 | 0.250 | 6.4  | 0.559 | 14.2 | 0.250            | 6.4  | 55                 | 10000         |
| GRO037091A | —     | 0.375             | 9.5  | 0.063             | 1.6 | 0.250 | 6.4  | 0.559 | 14.2 | 0.276            | 7.0  | 55                 | 10000         |
| —          | 15073 | 0.375             | 9.5  | 0.063             | 1.6 | 0.315 | 8.0  | 0.559 | 14.2 | 0.188            | 4.8  | —                  | 10000         |
| —          | 15074 | 0.375             | 9.5  | 0.063             | 1.6 | 0.315 | 8.0  | 0.559 | 14.2 | 0.315            | 8.0  | —                  | 10000         |
| GRO031041A | —     | 0.375             | 9.5  | 0.047             | 1.2 | 0.219 | 5.6  | 0.438 | 11.1 | 0.156            | 4.0  | 55                 | 10000         |
| —          | 15068 | 0.375             | 9.5  | 0.095             | 2.4 | 0.250 | 6.4  | 0.559 | 14.2 | 0.276            | 7.0  | —                  | 10000         |
| GRO037041A | —     | 0.375             | 9.5  | 0.047             | 1.2 | 0.281 | 7.1  | 0.563 | 14.3 | 0.188            | 4.8  | 55                 | 10000         |
| —          | 15071 | 0.402             | 10.2 | 0.047             | 1.2 | 0.276 | 7.0  | 0.543 | 13.8 | 0.177            | 4.5  | —                  | 10000         |
| GRO040061A | —     | 0.406             | 10.3 | 0.063             | 1.6 | 0.283 | 7.2  | 0.563 | 14.3 | 0.156            | 4.0  | 55                 | 10000         |
| GRO043061A | 15075 | 0.433             | 11.0 | 0.063             | 1.6 | 0.315 | 8.0  | 0.559 | 14.2 | 0.188            | 4.8  | 55                 | 10000         |
| —          | 15076 | 0.433             | 11.0 | 0.063             | 1.6 | 0.315 | 8.0  | 0.559 | 14.2 | 0.315            | 8.0  | —                  | 10000         |
| —          | 15078 | 0.433             | 11.0 | 0.063             | 1.6 | 0.315 | 8.0  | 0.630 | 16.0 | 0.250            | 6.4  | —                  | 10000         |
| GRO046071A | —     | 0.469             | 11.9 | 0.078             | 2.0 | 0.378 | 9.6  | 0.688 | 17.5 | 0.266            | 6.8  | 55                 | 10000         |
| —          | 15079 | 0.492             | 12.5 | 0.063             | 1.6 | 0.250 | 6.4  | 0.630 | 16.0 | 0.315            | 8.0  | —                  | 10000         |
| —          | 15080 | 0.492             | 12.5 | 0.063             | 1.6 | 0.315 | 8.0  | 0.630 | 16.0 | 0.250            | 6.4  | —                  | 10000         |
| GRO050061A | 15084 | 0.492             | 12.5 | 0.063             | 1.6 | 0.375 | 9.5  | 0.669 | 17.0 | 0.276            | 7.0  | 55                 | 10000         |
| —          | 15086 | 0.492             | 12.5 | 0.063             | 1.6 | 0.433 | 11.0 | 0.478 | 19.0 | 0.250            | 6.4  | —                  | 10000         |
| GRO050121A | 15081 | 0.492             | 12.5 | 0.118             | 3.0 | 0.315 | 8.0  | 0.630 | 16.0 | 0.315            | 8.0  | 55                 | 10000         |
| GRO050122A | 15083 | 0.492             | 12.5 | 0.118             | 3.0 | 0.375 | 9.5  | 0.669 | 17.0 | 0.346            | 8.8  | 55                 | 10000         |
| GRO050601A | 15087 | 0.559             | 14.2 | 0.063             | 1.6 | 0.433 | 11.0 | 0.748 | 19.0 | 0.250            | 6.4  | 55                 | 10000         |
| GRO062031A | —     | 0.625             | 15.9 | 0.031             | 0.8 | 0.438 | 11.1 | 0.748 | 19.0 | 0.375            | 9.5  | 55                 | 10000         |
| GRO062041A | 15089 | 0.629             | 16.0 | 0.047             | 1.2 | 0.493 | 12.5 | 0.807 | 20.5 | 0.276            | 7.0  | 55                 | 10000         |
| GRO068031A | —     | 0.688             | 17.5 | 0.031             | 0.8 | 0.563 | 14.3 | 0.875 | 22.2 | 0.281            | 7.1  | 55                 | 10000         |
| GRO068061A | 15090 | 0.688             | 17.5 | 0.063             | 1.6 | 0.493 | 12.5 | 0.866 | 22.0 | 0.250            | 6.4  | 55                 | 8000          |
| GRO068062A | —     | 0.688             | 17.5 | 0.063             | 1.6 | 0.559 | 14.2 | 0.866 | 22.0 | 0.188            | 4.8  | 55                 | 10000         |
| GRO068121A | —     | 0.688             | 17.5 | 0.125             | 3.2 | 0.500 | 12.7 | 0.875 | 22.2 | 0.313            | 7.9  | 55                 | 8000          |
| —          | 15096 | 0.748             | 19.0 | 0.063             | 1.6 | 0.492 | 12.5 | 1.004 | 25.5 | 0.250            | 6.4  | —                  | 2500          |
| GRO075061A | —     | 0.748             | 19.0 | 0.063             | 1.6 | 0.629 | 16.0 | 0.866 | 22.0 | 0.216            | 5.5  | 55                 | 10000         |
| —          | 15093 | 0.748             | 19.0 | 0.063             | 1.6 | 0.629 | 16.0 | 0.945 | 24.0 | 0.236            | 6.0  | —                  | 7000          |
| GRO075062A | —     | 0.748             | 19.0 | 0.063             | 1.6 | 0.689 | 17.5 | 0.945 | 24.0 | 0.188            | 4.8  | 55                 | 10000         |
| —          | 15095 | 0.787             | 20.0 | 0.063             | 1.6 | 0.630 | 16.0 | 0.945 | 24.0 | 0.256            | 6.5  | —                  | 7000          |
| GRO081041A | —     | 0.807             | 20.5 | 0.047             | 1.2 | 0.630 | 16.0 | 1.063 | 27.0 | 0.315            | 8.0  | 55                 | 4000          |
| —          | 15098 | 0.807             | 20.5 | 0.047             | 1.2 | 0.630 | 16.0 | 1.063 | 27.0 | 0.315            | 8.0  | —                  | 10000         |
| GRO087121A | —     | 0.875             | 22.3 | 0.125             | 3.2 | 0.625 | 15.9 | 1.063 | 27.0 | 0.375            | 9.5  | 55                 | 4000          |
| GRO100041A | —     | 1.000             | 25.4 | 0.047             | 1.2 | 0.728 | 18.5 | 1.236 | 31.4 | 0.297            | 7.5  | 55                 | 2000          |
| GRO100061A | 15099 | 1.000             | 25.4 | 0.063             | 1.6 | 0.728 | 18.5 | 1.236 | 31.4 | 0.315            | 8.0  | 55                 | 4000          |
| GRO100062A | —     | 1.000             | 25.2 | 0.063             | 1.6 | 0.866 | 22.0 | 1.181 | 30.0 | 0.315            | 8.0  | 55                 | 4000          |
| —          | 15101 | 1.000             | 25.5 | 0.063             | 1.6 | 0.866 | 22.0 | 1.181 | 30.0 | 0.315            | 8.0  | —                  | 10000         |
| GRO100121A | —     | 1.000             | 25.4 | 0.125             | 3.2 | 0.750 | 19.1 | 1.250 | 31.8 | 0.375            | 9.5  | 55                 | 2000          |
| GRO125061A | 15102 | 1.220             | 31.0 | 0.063             | 1.6 | 1.000 | 25.4 | 1.496 | 38.0 | 0.307            | 7.8  | 55                 | 2000          |
| GRO125031A | —     | 1.260             | 32.0 | 0.031             | 0.8 | 1.000 | 25.4 | 1.750 | 44.5 | 0.250            | 6.4  | 55                 | 2000          |
| GRO125121A | —     | 1.250             | 31.8 | 0.125             | 3.2 | 1.000 | 25.4 | 1.500 | 38.1 | 0.359            | 9.1  | 55                 | 2000          |
| GRO150061A | 15105 | 1.457             | 37.0 | 0.063             | 1.6 | 1.228 | 31.2 | 1.791 | 45.5 | 0.375            | 9.5  | 55                 | 1000          |
| GRO150121A | 15104 | 1.500             | 38.0 | 0.118             | 3.0 | 1.250 | 32.0 | 1.813 | 46.0 | 0.438            | 11.0 | 55                 | 1000          |
| GRO175061A | —     | 1.750             | 44.5 | 0.063             | 1.6 | 1.500 | 38.1 | 2.000 | 50.8 | 0.375            | 9.5  | 55                 | 1000          |
| GRO175121A | —     | 1.750             | 44.5 | 0.125             | 3.2 | 1.500 | 38.1 | 2.000 | 50.8 | 0.375            | 9.5  | 55                 | 1000          |
| GRO200061A | 15106 | 2.000             | 50.0 | 0.063             | 1.6 | 1.750 | 45.0 | 2.375 | 60.0 | 0.406            | 10.0 | 55                 | 500           |
| GRO200121A | —     | 2.000             | 50.8 | 0.125             | 3.2 | 1.750 | 44.5 | 2.375 | 60.3 | 0.469            | 11.9 | 55                 | 500           |





# GROMMETS

## Metric Hole Grommets



| Item No. |        | Mounting Hole d2 | Panel Hole Thickness h | d1   | D    | H    | Bulk Pack Qty |
|----------|--------|------------------|------------------------|------|------|------|---------------|
| PVC      | EPDM   | mm               | mm                     | mm   | mm   | mm   |               |
| 498021   | 498062 | 5.0              | 1.0                    | 2.0  | 8.0  | 4.0  | 1000          |
| 498022   | 498063 | 5.0              | 1.5                    | 2.0  | 8.0  | 4.5  | 1000          |
| 498023   | 498064 | 5.0              | 2.0                    | 2.0  | 8.0  | 5.0  | 1000          |
| 498024   | 498065 | 5.0              | 1.0                    | 3.0  | 8.0  | 4.0  | 1000          |
| 498025   | 498066 | 5.0              | 1.5                    | 3.0  | 8.0  | 4.5  | 1000          |
| 498026   | 498067 | 5.0              | 2.0                    | 3.0  | 8.0  | 5.0  | 1000          |
| 498027   | 498068 | 7.0              | 1.5                    | 3.0  | 10.0 | 6.0  | 500           |
| 498028   | 498070 | 8.0              | 1.0                    | 4.0  | 11.0 | 8.0  | 500           |
| 498029   | 498071 | 8.0              | 2.0                    | 4.0  | 11.0 | 6.0  | 500           |
| 498030   | 498072 | 8.0              | 3.0                    | 4.0  | 11.0 | 7.0  | 500           |
| 498031   | 498073 | 8.0              | 1.0                    | 6.0  | 11.0 | 5.0  | 500           |
| 498032   | 498074 | 8.0              | 2.0                    | 6.0  | 11.0 | 6.0  | 500           |
| —        | 498075 | 9.0              | 1.0                    | 6.0  | 12.0 | 5.0  | 500           |
| —        | 498076 | 9.0              | 1.5                    | 6.0  | 12.0 | 5.5  | 500           |
| —        | 498077 | 9.0              | 2.0                    | 6.0  | 12.0 | 6.0  | 500           |
| —        | 498078 | 9.0              | 3.0                    | 6.0  | 12.0 | 7.0  | 500           |
| —        | 498079 | 9.0              | 4.0                    | 6.0  | 12.0 | 8.0  | 500           |
| 498033   | 498080 | 10.0             | 1.0                    | 6.0  | 14.0 | 6.0  | 500           |
| 498034   | 498081 | 10.0             | 1.5                    | 6.0  | 14.0 | 6.5  | 500           |
| 498035   | 498082 | 10.0             | 2.0                    | 6.0  | 14.0 | 7.0  | 500           |
| 498036   | 498083 | 10.0             | 3.0                    | 6.0  | 14.0 | 8.0  | 500           |
| 498037   | 498084 | 10.0             | 1.0                    | 8.0  | 14.0 | 6.0  | 500           |
| 498038   | 498085 | 10.0             | 1.5                    | 8.0  | 14.0 | 6.5  | 500           |
| 498039   | 498086 | 10.0             | 2.0                    | 8.0  | 14.0 | 7.0  | 500           |
| 498040   | 498087 | 10.0             | 3.0                    | 8.0  | 14.0 | 8.0  | 500           |
| —        | 498088 | 11.0             | 1.0                    | 8.0  | 16.0 | 6.0  | 250           |
| —        | 498089 | 11.0             | 2.0                    | 8.0  | 16.0 | 7.0  | 250           |
| —        | 498090 | 11.0             | 3.0                    | 8.0  | 16.0 | 8.0  | 250           |
| —        | 498091 | 11.0             | 4.0                    | 8.0  | 16.0 | 9.0  | 250           |
| 498041   | 498092 | 12.0             | 1.0                    | 8.0  | 16.0 | 6.0  | 250           |
| 498042   | 498093 | 12.0             | 2.0                    | 8.0  | 16.0 | 7.0  | 250           |
| 498043   | 498094 | 12.0             | 3.0                    | 8.0  | 16.0 | 8.0  | 250           |
| 498044   | 498095 | 12.0             | 4.0                    | 8.0  | 16.0 | 9.0  | 250           |
| 498045   | 498096 | 12.0             | 1.0                    | 10.0 | 16.0 | 6.0  | 250           |
| 498046   | 498097 | 12.0             | 1.5                    | 10.0 | 16.0 | 6.5  | 250           |
| 498047   | 498098 | 12.0             | 2.0                    | 10.0 | 16.0 | 7.0  | 250           |
| 498048   | 498099 | 12.0             | 3.0                    | 10.0 | 16.0 | 8.0  | 250           |
| —        | 498100 | 14.0             | 1.0                    | 11.0 | 18.0 | 6.0  | 250           |
| —        | 498101 | 14.0             | 2.0                    | 11.0 | 18.0 | 7.0  | 250           |
| —        | 498102 | 14.0             | 3.0                    | 11.0 | 18.0 | 8.0  | 250           |
| 498049   | 498103 | 15.0             | 1.0                    | 11.0 | 20.0 | 6.0  | 250           |
| 498050   | 498104 | 15.0             | 2.0                    | 11.0 | 20.0 | 7.0  | 250           |
| 498051   | 498105 | 15.0             | 3.0                    | 11.0 | 20.0 | 8.0  | 250           |
| 498052   | 498106 | 15.0             | 4.0                    | 11.0 | 20.0 | 9.0  | 250           |
| 498053   | 498107 | 18.0             | 1.0                    | 12.0 | 22.0 | 6.0  | 250           |
| 498054   | 498108 | 18.0             | 2.0                    | 12.0 | 22.0 | 7.0  | 250           |
| 498055   | 498109 | 18.0             | 3.0                    | 12.0 | 22.0 | 8.0  | 250           |
| 498056   | 498110 | 18.0             | 4.0                    | 12.0 | 22.0 | 9.0  | 250           |
| 498057   | 498111 | 22.0             | 1.0                    | 16.0 | 27.0 | 7.0  | 100           |
| 498058   | 498112 | 22.0             | 1.5                    | 16.0 | 27.0 | 7.5  | 100           |
| 498059   | 498113 | 22.0             | 2.0                    | 16.0 | 27.0 | 8.0  | 100           |
| 498060   | 498114 | 22.0             | 3.0                    | 16.0 | 27.0 | 9.0  | 100           |
| 498061   | 498115 | 22.0             | 4.0                    | 16.0 | 27.0 | 10.0 | 100           |
| —        | 498116 | 27.0             | 1.0                    | 21.0 | 34.0 | 9.0  | 50            |
| —        | 498117 | 27.0             | 2.0                    | 21.0 | 34.0 | 10.0 | 50            |
| —        | 498118 | 27.0             | 3.0                    | 21.0 | 34.0 | 11.0 | 50            |
| —        | 498119 | 27.0             | 4.0                    | 21.0 | 34.0 | 12.0 | 50            |
| —        | 498120 | 40.0             | 1.0                    | 31.0 | 48.0 | 12.0 | 25            |
| —        | 498121 | 40.0             | 2.0                    | 31.0 | 48.0 | 13.0 | 25            |
| —        | 498122 | 40.0             | 3.0                    | 31.0 | 48.0 | 14.0 | 25            |
| —        | 498123 | 40.0             | 4.0                    | 31.0 | 48.0 | 15.0 | 25            |
| —        | 498124 | 52.0             | 1.0                    | 41.0 | 60.0 | 13.0 | 10            |
| —        | 498125 | 52.0             | 2.0                    | 41.0 | 60.0 | 14.0 | 10            |
| —        | 498126 | 52.0             | 3.0                    | 41.0 | 60.0 | 15.0 | 10            |
| —        | 498127 | 52.0             | 4.0                    | 41.0 | 60.0 | 16.0 | 10            |

**Specifications:**

- Material: See Table
- Color: Black

**Features:**

- Protects wires, cables, tubing, and hoses
- Installs instantly by simply snapping into hole
- Excellent adhesion, designed to fit standard sheet metal holes
- EPDM is a heat resistant material for use in extreme temperature environments: -40° - 257°F

# GROMMETS & BUSHINGS



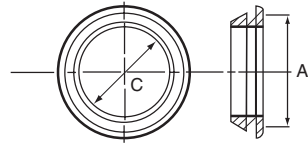
## GRQ/QFG Series Quick Fit Flexible Grommets

Specifications:

- Material: Elastomer
- Color: Black

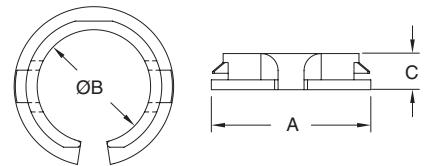
Features:

- Protects wires, cables, tubing and hoses
- Quickly snaps into hole



| Item No.                       |                                |                                |                                | Ø Mounting Hole A |           | C ID Ref. |      | Bulk Pack Qty |
|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------|-----------|-----------|------|---------------|
| Panel Thickness<br>0.059 (1.5) | Panel Thickness<br>0.079 (2.0) | Panel Thickness<br>0.118 (3.0) | Panel Thickness<br>0.138 (3.5) | in                | mm        | in        | mm   |               |
| 16200                          | 16210                          | 16220                          | —                              | 0.394             | 10.0      | 0.236     | 6.0  | 5000          |
| QFG-16200                      | —                              | QFG-16220                      | —                              | 0.394             | 10.0      | 0.236     | 6.0  | 1000          |
| 16201                          | 16211                          | 16221                          | —                              | 0.433             | 11.0      | 0.276     | 7.0  | 10000         |
| QFG-16201                      | —                              | —                              | —                              | 0.433             | 11.0      | 0.276     | 7.0  | 1000          |
| 16202                          | 16212                          | 16222                          | —                              | 0.472             | 12.0      | 0.315     | 8.0  | 10000         |
| —                              | —                              | QFG-16222                      | —                              | 0.472             | 12.0      | 0.315     | 8.0  | 1000          |
| 16203                          | 16213                          | 16223                          | —                              | 0.551             | 14.0      | 0.394     | 10.0 | 10000         |
| QFG-16203                      | —                              | QFG-16223                      | —                              | 0.551             | 14.0      | 0.394     | 10.0 | 1000          |
| 16204                          | 16214                          | 16224                          | —                              | 0.630             | 16.0      | 0.472     | 12.0 | 10000         |
| QFG-16204                      | —                              | QFG-16224                      | —                              | 0.630             | 16.0      | 0.472     | 12.0 | 1000          |
| 16205                          | 16215                          | 16225                          | —                              | 0.709             | 18.0      | 0.551     | 14.0 | 10000         |
| QFG-16205                      | —                              | —                              | —                              | 0.709             | 18.0      | 0.551     | 14.0 | 1000          |
| —                              | —                              | —                              | QFG-1                          | 0.728-0.787       | 18.5-20.0 | 0.512     | 13.0 | 1000          |
| 16206                          | 16216                          | 16226                          | —                              | 0.787             | 20.0      | 0.630     | 16.0 | 4000          |
| 16207                          | 16217                          | 16227                          | —                              | 0.866             | 22.0      | 0.709     | 18.0 | 4000          |
| QFG-16207                      | —                              | —                              | —                              | 0.866             | 22.0      | 0.709     | 18.0 | 1000          |
| —                              | —                              | —                              | QFG-2                          | 0.984-1.024       | 25.0-26.0 | 0.709     | 18.0 | 1000          |
| 16208                          | 16218                          | 16228                          | —                              | 1.024             | 26.0      | 0.866     | 22.0 | 4000          |
| —                              | —                              | QFG-16228                      | —                              | 1.024             | 26.0      | 0.866     | 22.0 | 1000          |
| 16209                          | 16219                          | 16229                          | —                              | 1.102             | 28.0      | 0.945     | 24.0 | 2000          |
| QFG-16209                      | —                              | QFG-16229                      | —                              | 1.102             | 28.0      | 0.945     | 24.0 | 1000          |

## PGSA Series Shallow Open Insulation Bushings



Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Black

Features:

- Molded with shallow overall height for applications with limited space
- Open design allows bushing to be assembled into holes that already contain a bundle
- Protects wires, cables, and tubing from sharp edges of sheet metal holes

| Item No.   | Approval | Ø Mounting Hole |      | Panel Thickness Range |           | OD A Ref. |      | ID B  |      | Overall Height C |     | Bulk Pack Qty |
|------------|----------|-----------------|------|-----------------------|-----------|-----------|------|-------|------|------------------|-----|---------------|
|            |          | in              | mm   | in                    | mm        | in        | mm   | in    | mm   | in               | mm  |               |
| PGSA-0407A | RU       | 0.276           | 7.0  | 0.016 - 0.039         | 0.4 - 1.0 | 0.410     | 10.4 | 0.190 | 4.8  | 0.200            | 5.0 | 1000          |
| PGSA-1013A | RU       | 0.512           | 13.0 | 0.039 - 0.059         | 1.0 - 1.5 | 0.640     | 16.2 | 0.360 | 9.2  | 0.210            | 5.3 | 500           |
| PGSA-1316A | RU       | 0.630           | 16.0 | 0.039 - 0.055         | 1.0 - 1.4 | 0.760     | 19.4 | 0.480 | 12.2 | 0.210            | 5.4 | 500           |
| PGSA-1519A | RU       | 0.748           | 19.0 | 0.039 - 0.059         | 1.0 - 1.5 | 0.890     | 22.7 | 0.560 | 14.3 | 0.220            | 5.7 | 500           |
| PGSA-1822A | RU       | 0.866           | 22.0 | 0.031 - 0.063         | 0.8 - 1.6 | 1.000     | 25.5 | 0.690 | 17.6 | 0.220            | 5.6 | 500           |
| PGSA-2024A | RU       | 0.945           | 24.0 | 0.039 - 0.063         | 1.0 - 1.6 | 1.060     | 27.0 | 0.770 | 19.5 | 0.210            | 5.3 | 500           |
| PGSA-2327A | RU       | 1.067           | 27.1 | 0.016 - 0.039         | 0.4 - 1.0 | 1.380     | 35.1 | 0.900 | 22.9 | 0.240            | 6.0 | 200           |
| PGSA-2529A | RU       | 1.142           | 29.0 | 0.016 - 0.043         | 0.4 - 1.1 | 1.380     | 35.1 | 0.970 | 24.5 | 0.280            | 7.0 | 200           |

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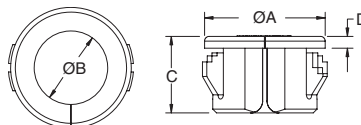
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**PGSB-A/NM22OCB Series**  
Standard Open Insulation Bushings

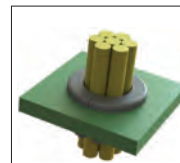


Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Black

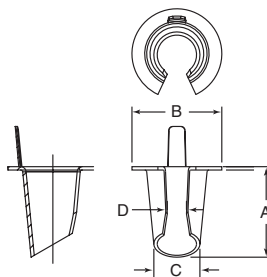
Features:

- Easy to push in design locks into place at common panel thicknesses
- Split design allows bushing to be assembled into holes that already contained a bundle
- Protects wires, cables, and tubing from sharp edges of sheet metal holes



| Item No.    | Approval | Ø Mounting Hole |      | Panel Thickness Range |           | Ø A Ref. |      | ID B  |      | Overall Height C |      | Head Height D |     | Bulk Pack Qty |
|-------------|----------|-----------------|------|-----------------------|-----------|----------|------|-------|------|------------------|------|---------------|-----|---------------|
|             |          | in              | mm   | in                    | mm        | in       | mm   | in    | mm   | in               | mm   | in            | mm  |               |
| PGSB-0609A  | UL       | 0.375           | 9.5  | 0.028 - 0.067         | 0.7 - 1.7 | 0.450    | 11.4 | 0.260 | 6.6  | 0.260            | 6.5  | 0.051         | 1.3 | 1000          |
| PGSB-1A     | UL       | 0.375           | 9.5  | 0.031 - 0.125         | 0.8 - 3.2 | 0.420    | 10.7 | 0.265 | 6.7  | 0.390            | 9.9  | 0.051         | 1.3 | 1000          |
| NM22OCB0375 | UL       | 0.375           | 9.5  | 0.031 - 0.125         | 0.8 - 3.2 | 0.484    | 12.3 | 0.264 | 6.7  | 0.406            | 10.3 | 0.062         | 1.6 | 100           |
| PGSB-2A     | UL       | 0.437           | 11.1 | 0.031 - 0.125         | 0.8 - 3.2 | 0.500    | 12.7 | 0.312 | 7.9  | 0.406            | 10.3 | 0.063         | 1.6 | 1000          |
| NM22OCB0500 | UL       | 0.500           | 12.7 | 0.031 - 0.125         | 0.8 - 3.2 | 0.610    | 15.5 | 0.315 | 8.0  | 0.406            | 10.3 | 0.062         | 1.6 | 100           |
| PGSB-1013A  | UL       | 0.512           | 13.0 | 0.031 - 0.138         | 0.8 - 3.5 | 0.590    | 14.9 | 0.350 | 9.0  | 0.410            | 10.5 | 0.059         | 1.5 | 500           |
| PGSB-3A     | UL       | 0.562           | 14.3 | 0.031 - 0.125         | 0.8 - 3.2 | 0.640    | 16.3 | 0.390 | 9.9  | 0.406            | 10.3 | 0.063         | 1.6 | 500           |
| NM22OCB0625 | UL       | 0.625           | 15.9 | 0.031 - 0.125         | 0.8 - 3.2 | 0.736    | 18.7 | 0.453 | 11.5 | 0.406            | 10.3 | 0.062         | 1.6 | 100           |
| PGSB-1216A  | UL       | 0.650           | 16.5 | 0.028 - 0.130         | 0.7 - 3.3 | 0.730    | 18.6 | 0.480 | 12.3 | 0.390            | 10.0 | 0.039         | 1.0 | 500           |
| PGSB-1316A  | UL       | 0.630           | 16.0 | 0.047 - 0.138         | 1.2 - 3.5 | 0.710    | 18.0 | 0.410 | 10.5 | 0.410            | 10.5 | 0.063         | 1.6 | 500           |
| PGSB-1519A  | UL       | 0.748           | 19.0 | 0.047 - 0.130         | 1.2 - 3.3 | 0.810    | 20.6 | 0.570 | 14.5 | 0.430            | 11.0 | 0.051         | 1.3 | 200           |
| NM22OCB0750 | UL       | 0.750           | 18.9 | 0.031 - 0.125         | 0.8 - 3.2 | 0.846    | 21.5 | 0.516 | 13.1 | 0.406            | 10.3 | 0.062         | 1.6 | 100           |
| PGSB-1822A  | UL       | 0.866           | 22.0 | 0.039 - 0.138         | 1.0 - 3.5 | 0.980    | 24.8 | 0.680 | 17.3 | 0.450            | 11.5 | 0.063         | 1.6 | 200           |
| NM22OCB0875 | UL       | 0.875           | 22.2 | 0.031 - 0.125         | 0.8 - 3.2 | 0.976    | 24.8 | 0.669 | 17.0 | 0.406            | 10.3 | 0.062         | 1.6 | 100           |
| PGSB-9A     | UL       | 0.984           | 25.0 | 0.031 - 0.118         | 0.8 - 3.0 | 1.039    | 26.4 | 0.803 | 20.4 | 0.406            | 10.3 | 0.063         | 1.6 | 200           |
| NM22OCB1000 | UL       | 1.000           | 25.4 | 0.031 - 0.125         | 0.8 - 3.2 | 1.103    | 28.0 | 0.795 | 20.2 | 0.406            | 10.3 | 0.062         | 1.6 | 100           |
| PGSB-5A     | UL       | 1.093           | 27.8 | 0.031 - 0.125         | 0.8 - 3.2 | 1.156    | 29.4 | 0.875 | 22.2 | 0.406            | 10.3 | 0.063         | 1.6 | 200           |
| PGSB-6A     | UL       | 1.250           | 31.8 | 0.031 - 0.125         | 0.8 - 3.2 | 1.343    | 34.1 | 1.046 | 26.6 | 0.406            | 10.3 | 0.063         | 1.6 | 200           |
| PGSB-7A     | UL       | 1.375           | 34.9 | 0.031 - 0.125         | 0.8 - 3.2 | 1.468    | 37.3 | 1.171 | 29.7 | 0.406            | 10.3 | 0.063         | 1.6 | 200           |
| PGSB-8A     | UL       | 1.500           | 38.1 | 0.031 - 0.125         | 0.8 - 3.2 | 1.578    | 40.1 | 1.250 | 31.7 | 0.421            | 10.7 | 0.063         | 1.6 | 200           |

**ASB Series**  
Armor Bushings



Specifications:

- Material: Polypropylene
- Color: Red

Features:

- Fits armored cable and flexible metal conduit sizes
- Features high dielectric strength and assures insulation on all sharp edges



| Item No. | Approvals | Size | A     |       | B     |       | C     |       | D     |      | Cable Size                   | Trade Size | Bulk Pack Qty |
|----------|-----------|------|-------|-------|-------|-------|-------|-------|-------|------|------------------------------|------------|---------------|
|          |           |      | in    | mm    | in    | mm    | in    | mm    | in    | mm   |                              |            |               |
| ASB0A    | UL        | 0    | 0.560 | 14.22 | 0.671 | 17.04 | 0.380 | 9.650 | 0.312 | 7.92 | 14/2, 14/3, 12/2             | 5/16       | 30000         |
| ASB1A    | UL        | 1    | 0.650 | 16.51 | 0.671 | 17.04 | 0.450 | 11.43 | 0.312 | 7.92 | 14/4, 12/3, 6/1, 4/1         | 3/8        | 20000         |
| ASB2A    | UL        | 2    | 0.610 | 15.49 | 0.859 | 21.82 | 0.580 | 14.73 | 0.125 | 3.18 | 12/4, 10/2, 10/3, 2/1        | 7/16       | 15000         |
| ASB3A    | UL        | 3    | 0.670 | 17.02 | 1.046 | 26.57 | 0.790 | 20.07 | 0.109 | 2.77 | 10/4, 8/2, 8/3, 1/1          | 1/2        | 7500          |
| ASB4A    | UL        | 4    | 0.830 | 21.08 | 1.266 | 32.15 | 1.000 | 25.40 | 0.156 | 3.96 | 8/4, 6/4, 6/3, 6/2, 4/3, 4/2 | 3/4        | 4000          |



# BUSHINGS / GROMMETS

## PGSD/22AF Series Universal Bushings

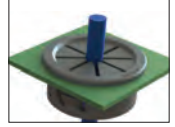
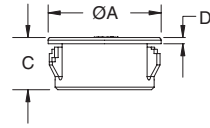


**Specifications:**

- Material: 22AF: UL94 V-2 Heat Stabilized Nylon 6
- Material: PGSD: UL94 V-2 Nylon 6/6
- Color: See Table

**Features:**

- Absorbs vibration and cushions and insulates bundles



| Item No.   | Ø Mounting Hole |       | Max Panel Thickness |      | OD A  |     | Max ID |      | Overall Height C |      | Head Height D |      | Bulk Pack Qty |     |      |
|------------|-----------------|-------|---------------------|------|-------|-----|--------|------|------------------|------|---------------|------|---------------|-----|------|
|            | Black           | White | in                  | mm   | in    | mm  | in     | mm   | in               | mm   | in            | mm   |               |     |      |
| PGSD-1     | —               | —     | 0.500               | 12.7 | 0.062 | 1.8 | 0.600  | 15.2 | 0.312            | 7.9  | 0.250         | 6.4  | 0.063         | 1.6 | 500  |
| PGSD-5     | —               | —     | 0.500               | 12.7 | 0.125 | 3.2 | 0.600  | 15.2 | 0.312            | 7.9  | 0.385         | 9.8  | 0.041         | 1.0 | 500  |
| PGSD-2     | —               | —     | 0.625               | 15.9 | 0.062 | 1.8 | 0.729  | 18.5 | 0.437            | 11.1 | 0.250         | 6.4  | 0.063         | 1.6 | 500  |
| • 22AF0625 | • 22AF0625W     | —     | 0.625               | 15.9 | 0.125 | 3.2 | 0.729  | 18.5 | 0.437            | 11.1 | 0.406         | 10.3 | 0.063         | 1.6 | 1000 |
| PGSD-3     | —               | —     | 0.750               | 19.1 | 0.062 | 1.8 | 0.844  | 21.4 | 0.500            | 12.7 | 0.250         | 6.4  | 0.063         | 1.6 | 200  |
| • 22AF0750 | • 22AF0750W     | —     | 0.750               | 19.1 | 0.125 | 3.2 | 0.844  | 21.4 | 0.500            | 12.7 | 0.390         | 9.9  | 0.047         | 1.2 | 1000 |
| • 22AF0812 | • 22AF0812W     | —     | 0.812               | 20.6 | 0.125 | 3.2 | 0.890  | 22.6 | 0.500            | 12.7 | 0.390         | 9.9  | 0.063         | 1.2 | 1000 |
| PGSD-4     | —               | —     | 0.875               | 22.2 | 0.062 | 1.8 | 0.937  | 23.8 | 0.560            | 14.2 | 0.250         | 6.4  | 0.063         | 1.6 | 200  |
| • 22AF0875 | • 22AF0875W     | —     | 0.875               | 22.2 | 0.125 | 3.2 | 0.937  | 23.8 | 0.560            | 14.2 | 0.453         | 11.5 | 0.063         | 1.6 | 1000 |
| • 22AF1000 | • 22AF1000W     | —     | 1.000               | 25.4 | 0.125 | 3.2 | 1.063  | 27.0 | 0.750            | 19.1 | 0.453         | 11.5 | 0.063         | 1.6 | 500  |
| • 22AF1093 | • 22AF1093W     | —     | 1.093               | 27.8 | 0.125 | 3.2 | 1.156  | 29.3 | 0.812            | 20.6 | 0.453         | 11.5 | 0.630         | 1.6 | 500  |
| • 22AF1250 | • 22AF1250W     | —     | 1.250               | 31.8 | 0.125 | 3.1 | 1.360  | 34.5 | 0.875            | 22.2 | 0.453         | 11.5 | 0.630         | 1.6 | 500  |
| PGSD-10    | —               | —     | 1.375               | 34.9 | 0.125 | 3.2 | 1.490  | 37.8 | 1.000            | 25.4 | 0.453         | 11.5 | 0.063         | 1.6 | 100  |
| PGSD-11    | —               | —     | 1.500               | 38.1 | 0.125 | 3.2 | 1.609  | 40.9 | 1.062            | 27.0 | 0.450         | 11.4 | 0.059         | 1.5 | 100  |

## PGSC Series Open Universal Bushings

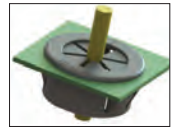
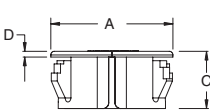
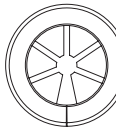


**Specifications:**

- Material: UL94V-2 Nylon 6/6
- Color: Black

**Features:**

- Easy to push in design locks into place at common panel thicknesses
- Open design allows bushing to be assembled into holes that already contain a bundle
- Adjust to accept various diameters and shapes



| Item No.   | Approval | Ø Mounting Hole |             | Max Panel Thickness |           | OD A  |      | Max ID |      | Overall Height C |      | Head Height D |     | Bulk Pack Qty |
|------------|----------|-----------------|-------------|---------------------|-----------|-------|------|--------|------|------------------|------|---------------|-----|---------------|
|            |          | in              | mm          | in                  | mm        | in    | mm   | in     | mm   | in               | mm   | in            | mm  |               |
| PGSC-1319A | —        | 0.748 - 0.752   | 19.0 - 19.1 | 0.031 - 0.118       | 0.8 - 3.0 | 0.858 | 21.8 | 0.500  | 12.7 | 0.390            | 9.9  | 0.039         | 1.0 | 500           |
| PGSC-1422A | —        | 0.874 - 0.882   | 22.2 - 22.4 | 0.031 - 0.118       | 0.8 - 3.0 | 0.937 | 23.8 | 0.563  | 14.3 | 0.453            | 11.5 | 0.039         | 1.0 | 200           |
| PGSC-1926A | —        | 1.000 - 1.004   | 25.4 - 25.5 | 0.031 - 0.118       | 0.8 - 3.0 | 1.063 | 27.0 | 0.748  | 19.0 | 0.453            | 11.5 | 0.039         | 1.0 | 200           |
| PGSC-2128A | —        | 1.095 - 1.102   | 27.8 - 28.0 | 0.031 - 0.118       | 0.8 - 3.0 | 1.161 | 29.5 | 0.815  | 20.7 | 0.453            | 11.5 | 0.039         | 1.0 | 200           |

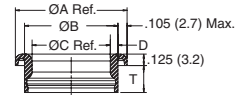
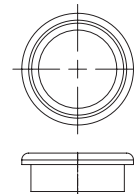
## GFA Series NAS1368 Flip Grommets

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Light Green

**Features:**

- Installed by inserting the “un-flipped” grommet into the hole (forming dies - not supplied by Essentra - on each side of the hole are pressed together until the grommet “flips” over itself, creating a flange on both sides of the hole)
- Dies can be attached to a toggle type clamp, a pneumatic tool, or a bolt and nut through the center
- Meets NAS 1368 Standard
- Protects wires, cable, and tubing passing through holes



| Item No. | NAS Part No. | Ø Mounting Hole |      | Max Recommended Panel Thickness |     | NAS1368 Panel Thickness Range |           | T     | A Ref. |       | B    |       | C Ref. |       | D    | Bulk Pack Qty |     |     |
|----------|--------------|-----------------|------|---------------------------------|-----|-------------------------------|-----------|-------|--------|-------|------|-------|--------|-------|------|---------------|-----|-----|
|          |              | in              | mm   | in                              | mm  | in                            | mm        |       | in     | mm    | in   | mm    | in     | mm    |      |               | in  | mm  |
| GFA-N4A  | NAS1368-N4A  | 0.375           | 9.5  | 0.030                           | 0.8 | 0.025 - 0.080                 | 0.6 - 2.0 | 0.235 | 6.0    | 0.567 | 14.4 | 0.367 | 9.3    | 0.251 | 6.4  | 0.058         | 1.5 | 100 |
| GFA-N4B  | NAS1368-N4B  | 0.375           | 9.5  | 0.100                           | 2.5 | 0.081 - 0.140                 | 2.1 - 3.6 | 0.295 | 7.5    | 0.567 | 14.4 | 0.367 | 9.3    | 0.251 | 6.4  | 0.058         | 1.5 | 100 |
| GFA-N6A  | NAS1368-N6A  | 0.500           | 12.7 | 0.030                           | 0.8 | 0.025 - 0.080                 | 0.6 - 2.0 | 0.235 | 6.0    | 0.692 | 17.6 | 0.492 | 12.5   | 0.376 | 9.6  | 0.058         | 1.5 | 100 |
| GFA-N6B  | NAS1368-N6B  | 0.500           | 12.7 | 0.090                           | 2.3 | 0.081 - 0.140                 | 2.1 - 3.6 | 0.295 | 7.5    | 0.692 | 17.6 | 0.492 | 12.5   | 0.376 | 9.6  | 0.058         | 1.5 | 100 |
| GFA-N6C  | NAS1368-N6C  | 0.500           | 12.7 | 0.160                           | 4.1 | 0.141 - 0.200                 | 3.6 - 5.1 | 0.360 | 9.1    | 0.692 | 17.6 | 0.492 | 12.5   | 0.376 | 9.6  | 0.058         | 1.5 | 100 |
| GFA-N8A  | NAS1368-N8A  | 0.625           | 15.9 | 0.030                           | 0.8 | 0.025 - 0.080                 | 0.6 - 2.0 | 0.235 | 6.0    | 0.815 | 20.7 | 0.615 | 15.6   | 0.499 | 12.7 | 0.058         | 1.5 | 100 |
| GFA-N8B  | NAS1368-N8B  | 0.625           | 15.9 | 0.090                           | 2.3 | 0.081 - 0.140                 | 2.1 - 3.6 | 0.295 | 7.5    | 0.815 | 20.7 | 0.615 | 15.6   | 0.499 | 12.7 | 0.058         | 1.5 | 100 |
| GFA-N10A | NAS1368-N10A | 0.781           | 19.8 | 0.030                           | 0.8 | 0.025 - 0.080                 | 0.6 - 2.0 | 0.235 | 6.0    | 0.971 | 24.7 | 0.771 | 19.6   | 0.605 | 15.4 | 0.083         | 2.1 | 100 |
| GFA-N10B | NAS1368-N10B | 0.781           | 19.8 | 0.080                           | 2.0 | 0.081 - 0.140                 | 2.1 - 3.6 | 0.295 | 7.5    | 0.971 | 24.7 | 0.771 | 19.6   | 0.605 | 15.4 | 0.083         | 2.1 | 100 |
| GFA-N10D | NAS1368-N10D | 0.781           | 19.8 | 0.210                           | 5.3 | 0.201 - 0.250                 | 5.1 - 6.4 | 0.420 | 10.7   | 0.971 | 24.7 | 0.771 | 19.6   | 0.605 | 15.4 | 0.083         | 2.1 | 100 |
| GFA-N12A | NAS1368-N12A | 0.906           | 23.0 | 0.020                           | 0.5 | 0.025 - 0.080                 | 0.6 - 2.0 | 0.235 | 6.0    | 1.096 | 27.8 | 0.896 | 22.8   | 0.730 | 18.5 | 0.083         | 2.1 | 100 |
| GFA-N12B | NAS1368-N12B | 0.906           | 23.0 | 0.070                           | 1.8 | 0.081 - 0.140                 | 2.1 - 3.6 | 0.295 | 7.5    | 1.096 | 27.8 | 0.896 | 22.8   | 0.730 | 18.5 | 0.083         | 2.1 | 100 |
| GFA-N14A | NAS1368-N14A | 1.031           | 26.2 | 0.020                           | 0.5 | 0.025 - 0.080                 | 0.6 - 2.0 | 0.235 | 6.0    | 1.221 | 31.0 | 1.021 | 25.9   | 0.855 | 21.7 | 0.083         | 2.1 | 100 |
| GFA-N14B | NAS1368-N14B | 1.031           | 26.2 | 0.070                           | 1.8 | 0.081 - 0.140                 | 2.1 - 3.6 | 0.295 | 7.5    | 1.221 | 31.0 | 1.021 | 25.9   | 0.855 | 21.7 | 0.083         | 2.1 | 100 |





**04MP Series  
Anti-Twist Bushings**

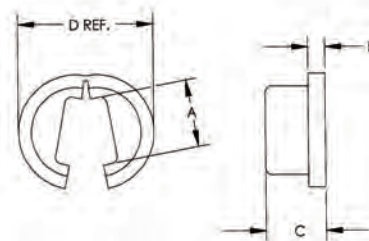


Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Black

Features:

- Designed to be used with our standard 1/8" and 1/4" Lamp Cord Bushing on previous page
- Prevents the electrical cord from twisting inside the lamp
- Convenient opening allows for the bushing to easily slip around the cord
- Resistant to corrosion, vibration and abrasion



| Item No.    | Description | A     |     | B     |     | C     |     | D     |      | Bulk Pack Qty |
|-------------|-------------|-------|-----|-------|-----|-------|-----|-------|------|---------------|
|             |             | in    | mm  | in    | mm  | in    | mm  | in    | mm   |               |
| 04MP0125ATB | 1/8"        | 0.195 | 5.0 | 0.050 | 1.3 | 0.175 | 4.4 | 0.390 | 9.9  | 1000          |
| 04MP0250ATB | 1/4"        | 0.195 | 5.0 | 0.050 | 1.3 | 0.175 | 4.4 | 0.500 | 12.7 | 1000          |

**04MP Series  
Threaded Lampcord Bushings**

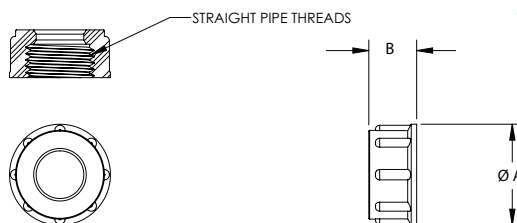


Specifications:

- Material: UL94 V-2 Heat Stabilized Nylon 6
- Color: Black

Features:

- Designed to protect the electrical lampcord from the knife-edge of the threaded pipe used in light fixtures
- Provides reliable, safe and insulated connections
- Easy installation
- Resists corrosion, vibration and abrasion



| Item No.    | Description | A     |      | B     |      | Bulk Pack Qty |
|-------------|-------------|-------|------|-------|------|---------------|
|             |             | in    | mm   | in    | mm   |               |
| 04MP0125TLB | 1/8 NPS     | 0.594 | 15.1 | 0.281 | 7.1  | 1000          |
| 04MP0250TLB | 1/4 NPS     | 0.719 | 18.3 | 0.375 | 9.5  | 1000          |
| 04MP0375TLB | 3/8 NPS     | 0.875 | 22.2 | 0.438 | 11.1 | 1000          |
| 04MP0500TLB | 1/2 NPS     | 1.063 | 27.0 | 0.375 | 9.5  | 500           |

**04MP Series  
Lamp Snap Bushings**

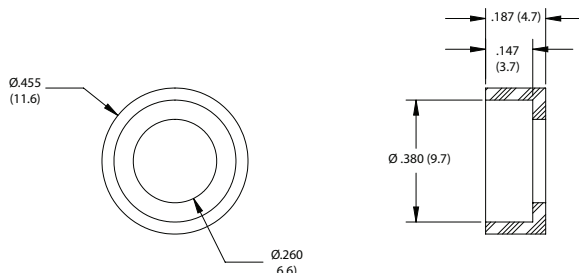


Specifications:

- Material: High Density Polyethylene
- Color: Black

Features:

- Easy installation
- Offers protection to lampcord insulation
- Durability for long lasting cord protection



| Item No.     | Bulk Pack Qty |
|--------------|---------------|
| 04MP0125SBOD | 1000          |



# BUSHINGS & PLUGS

## SB Series Snub Bushings

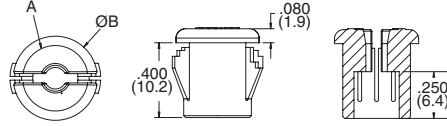


**Specifications:**

- Material: UL94V-2 Nylon 6/6
- Color: Black

**Features:**

- Bushing opens to accept cable then closes firmly when installed into hole
- Provides insulation and slight strain relief



| Item No. | Ø Mounting Hole |      | Max Panel Thickness |     | ID    |     | Ø A   |      | Overall OD B |      | Bulk Pack Qty |
|----------|-----------------|------|---------------------|-----|-------|-----|-------|------|--------------|------|---------------|
|          | in              | mm   | in                  | mm  | in    | mm  | in    | mm   | in           | mm   |               |
| SB-1     | 0.375           | 9.5  | 0.125               | 3.2 | 0.150 | 3.8 | 0.360 | 9.1  | 0.450        | 11.4 | 500           |
| SB-2     | 0.437           | 11.1 | 0.125               | 3.2 | 0.220 | 5.6 | 0.430 | 10.9 | 0.550        | 14.0 | 500           |
| SB-3     | 0.500           | 12.7 | 0.125               | 3.2 | 0.280 | 7.1 | 0.490 | 12.4 | 0.630        | 16.0 | 500           |

## 62MP Series Vented Locking Plugs

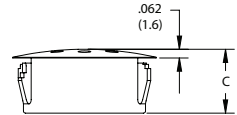
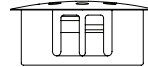
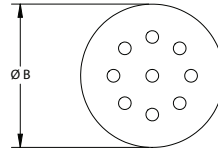


**Specifications:**

- Material: UL94 V-2 Heat Stabilized Nylon 6
- Color: See Table

**Features:**

- Each part is designed to lock into multiple standard sheet metal thicknesses (1/64 to 1/8)
- Provides a clean and easy way to close optional wiring or production access holes
- Vents allow heat and emissions to escape



| Item No.  | Ø Mounting Hole |       | Max Panel Thickness |       | Ø Head B |       | Thickness C |       | Bulk Pack Qty |       |      |      |
|-----------|-----------------|-------|---------------------|-------|----------|-------|-------------|-------|---------------|-------|------|------|
|           | Black           | White | Approvals           | in    | mm       | in    | mm          | in    |               | mm    |      |      |
| 62MP0750V | 62MP0750VW      |       |                     | 0.750 | 19.1     | 0.125 | 3.2         | 0.906 | 23.0          | 0.406 | 10.3 | 1000 |
| 62MP0875V | 62MP0875VW      |       |                     | 0.875 | 22.2     | 0.125 | 3.2         | 1.016 | 25.8          | 0.453 | 11.5 | 1000 |
| 62MP1000V | 62MP1000VW      |       |                     | 1.000 | 25.4     | 0.125 | 3.2         | 1.203 | 30.6          | 0.453 | 11.5 | 500  |

## 62VP Series Vent Plugs

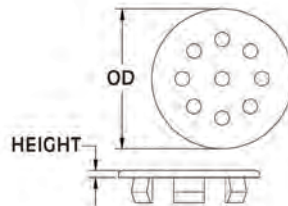


**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Used to close excess chassis holes, wiring outlets and production access holes
- Resistant to corrosion, vibration and abrasion
- Designed with special flexible and tapered prongs which snugly lock in place with finger pressure
- Can be removed and reused when necessary
- Vented to allow air flow



| Item No.    | Ø Mounting Hole |       | Panel Thickness |           | OD    |       | Head Height |      | Bulk Pack Qty |
|-------------|-----------------|-------|-----------------|-----------|-------|-------|-------------|------|---------------|
|             | in              | mm    | in              | mm        | in    | mm    | in          | mm   |               |
| 62VP087BM11 | 0.875           | 22.23 | 0.03 - 0.11     | 0.8 - 2.8 | 1.078 | 27.38 | 0.062       | 1.58 | 1000          |
| 62VP100BM11 | 1.000           | 25.40 | 0.03 - 0.11     | 0.8 - 2.8 | 1.219 | 30.96 | 0.062       | 1.58 | 500           |

GROMMETS



**GR67/LTG Series**  
**IP67 Liquid Tight Grommets**

Specifications:

- Material: EPDM
- Color: Grey (Black for LTG-199017)

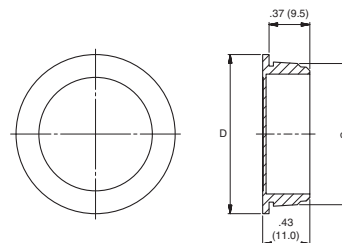
Features:

- Confirms to IP67 standard for watertight seal
- Acts as a blanking plug until cable is installed
- Designed to withstand vibration



| Item No.    | Fits  | Ø Mounting Hole |      | Panel Thickness |           | Cable Size    |             | Bulk Pack Qty |
|-------------|-------|-----------------|------|-----------------|-----------|---------------|-------------|---------------|
|             |       | in              | mm   | in              | mm        | in            | mm          |               |
| LTG-199017  | PG-7  | 0.492           | 12.5 | 0.020 - 0.079   | 0.5 - 2.0 | 0.138 - 0.197 | 3.5 - 5.0   | 1000          |
| GR67464121A | PG-7  | 0.492           | 12.5 | 0.020 - 0.079   | 0.5 - 2.0 | 0.138 - 0.197 | 3.5 - 5.0   | 1000          |
| GR6739897A  | PG-9  | 0.630           | 16.0 | 0.039 - 0.157   | 1.0 - 4.0 | 0.197 - 0.276 | 5.0 - 7.0   | 1000          |
| GR6734715A  | PG-11 | 0.748           | 19.0 | 0.039 - 0.157   | 1.0 - 4.0 | 0.276 - 0.394 | 7.0 - 10.0  | 1000          |
| GR6734716A  | PG-16 | 0.906           | 23.0 | 0.039 - 0.157   | 1.0 - 4.0 | 0.394 - 0.551 | 10.0 - 14.0 | 1000          |
| GR6743021A  | PG-21 | 1.142           | 29.0 | 0.039 - 0.157   | 1.0 - 4.0 | 0.551 - 0.787 | 14.0 - 20.0 | 1000          |
| GR67464122A | PG-29 | 1.496           | 38.0 | 0.039 - 0.157   | 1.0 - 4.0 | 0.787 - 1.024 | 20.0 - 26.0 | 250           |
| GR67464123A | PG-36 | 1.890           | 48.0 | 0.039 - 0.157   | 1.0 - 4.0 | 1.024 - 1.378 | 26.0 - 35.0 | 250           |
| GR67M16A    | M16   | 0.650           | 16.5 | 0.039 - 0.157   | 1.0 - 4.0 | 0.197 - 0.354 | 5.0 - 9.0   | 1000          |
| GR67M20A    | M20   | 0.807           | 20.5 | 0.039 - 0.157   | 1.0 - 4.0 | 0.276 - 0.512 | 7.0 - 13.0  | 1000          |
| GR67M25A    | M25   | 1.004           | 25.5 | 0.059 - 0.157   | 1.5 - 4.0 | 0.394 - 0.670 | 10.0 - 17.0 | 1000          |
| GR67M32A    | M32   | 1.280           | 32.5 | 0.039 - 0.157   | 1.0 - 4.0 | 0.551 - 0.787 | 14.0 - 20.0 | 500           |
| GR67M40A    | M40   | 1.594           | 40.5 | 0.059 - 0.157   | 1.5 - 4.0 | 0.750 - 1.024 | 19.0 - 26.0 | 250           |
| GR67M50A    | M50   | 1.988           | 50.5 | 0.039 - 0.157   | 1.0 - 4.0 | 1.024 - 1.338 | 26.0 - 34.0 | 250           |

**Push In Flexible Grommets**



Specifications:

- Material: Polyethylene and TPE
- Color: Grey

Features:

- Dust tight
- Quick and easy mounting
- For enclosures with more than .079 (2.0) thickness

| Item No. | Ø d Hole |      | D OD  |      | Ø Cable Range |            | Bulk Pack Qty |
|----------|----------|------|-------|------|---------------|------------|---------------|
|          | in       | mm   | in    | mm   | in            | mm         |               |
| 494632   | 0.630    | 16.0 | 0.835 | 21.2 | 0.039 - 0.354 | 1.0 - 9.0  | 100           |
| 494633   | 0.787    | 20.0 | 0.992 | 25.2 | 0.039 - 0.512 | 1.0 - 13.0 | 100           |
| 494634   | 0.984    | 25.0 | 1.189 | 30.2 | 0.039 - 0.709 | 1.0 - 18.0 | 100           |
| 494635   | 1.260    | 32.0 | 1.465 | 37.2 | 0.039 - 0.984 | 1.0 - 25.0 | 50            |

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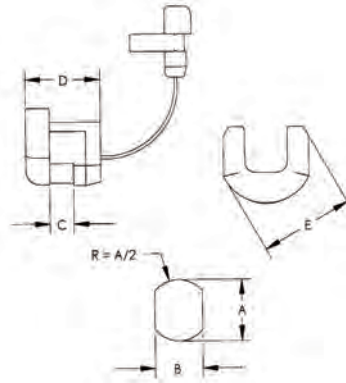






# STRAIN RELIEF BUSHINGS & TOOLS

## 23MP Series 90° Angle Strain Relief Bushings



**Specifications:**

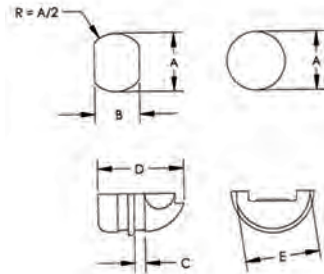
- Material: Heat Stabilized UL94 V-2 Nylon
- Color: Black

**Features:**

- Securely anchor, absorb and protect cables and wires
- Installs easily and quickly with our installation pliers or other hand or production tools
- Resists corrosion, vibration and abrasion

| Item No.  | Approvals | Cross Section | Cable Type | Gauge (AWG) | Cable Size |             | Ø A   |       | Flats B |       | Max Panel Thickness C |       | Length D |       | Width E |       | Bulk Pack Qty |      |
|-----------|-----------|---------------|------------|-------------|------------|-------------|-------|-------|---------|-------|-----------------------|-------|----------|-------|---------|-------|---------------|------|
|           |           |               |            |             | in         | mm          | in    | mm    | in      | mm    | in                    | mm    | in       | mm    | in      | mm    |               |      |
| 23MP13L10 | UL        | CSA           | Flat       | SPT-1       | 18/2       | 0.120-0.220 | 0.437 | 11.1  | 0.390   | 9.9   | 0.062                 | 1.6   | 0.500    | 12.7  | 0.510   | 12.9  | 500           |      |
| 23MP14L10 | UL        | CSA           | Flat       | SPT-2       | 18/2, 16/2 | 0.150-0.280 | Z     | 0.500 | 12.7    | 0.450 | 11.4                  | 0.100 | 2.5      | 0.687 | 17.5    | 0.550 | 13.9          | 1000 |
|           | UL        | CSA           | Flat       | HPN         | 16/2       | 0.160-0.300 | Z     | 0.500 | 12.7    | 0.450 | 11.4                  | 0.100 | 2.5      | 0.687 | 17.5    | 0.550 | 13.9          | 1000 |
| 23MP15L10 | UL        | CSA           | Round      | SV          | 18/2, 18/3 | 0.250-0.265 | Z     | 0.500 | 12.7    | 0.450 | 11.4                  | 0.100 | 2.5      | 0.687 | 17.5    | 0.562 | 14.3          | 1000 |
|           | UL        | CSA           | Flat       | SP-2        | 18/3       | 0.150-0.400 | Z     | 0.562 | 14.3    | 0.525 | 13.3                  | 0.125 | 3.2      | 0.875 | 22.2    | 0.625 | 15.9          | 500  |
| 23MP16L10 | UL        | CSA           | Flat       | HPN         | 16/3       | 0.160-0.370 | Z     | 0.562 | 14.3    | 0.525 | 13.3                  | 0.125 | 3.2      | 0.875 | 22.2    | 0.625 | 15.9          | 500  |
|           | UL        | CSA           | Flat       | SPT-3       | 18/2       | 0.190-0.350 | Z     | 0.562 | 14.3    | 0.525 | 13.3                  | 0.125 | 3.2      | 0.875 | 22.2    | 0.625 | 15.9          | 500  |
|           | UL        | CSA           | Flat       |             | 16/2       | 0.200-0.370 | Z     | 0.562 | 14.3    | 0.525 | 13.3                  | 0.125 | 3.2      | 0.875 | 22.2    | 0.625 | 15.9          | 500  |

## 23MP Series "EZ" Strain Relief Bushings



**Specifications:**

- Material: Heat Stabilized UL94 V-2 Nylon
- Color: Black

**Features:**

- Eliminates several costly and fatigue prone assembly steps
- Securely anchor, absorb and protect cables and wires
- Resists corrosion, vibration and abrasion

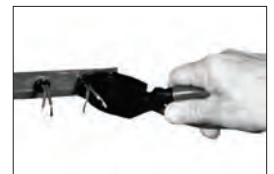
| Item No.    | Approvals | Cross Section | Cable Type | Gauge (AWG) | Cable Size    |           | Ø A   |      | Flats B |      | Max Panel Thickness C |     | Length D |      | Width E |      | Bulk Pack Qty |
|-------------|-----------|---------------|------------|-------------|---------------|-----------|-------|------|---------|------|-----------------------|-----|----------|------|---------|------|---------------|
|             |           |               |            |             | in            | mm        | in    | mm   | in      | mm   | in                    | mm  | in       | mm   |         |      |               |
| 23MP04KEZS  | MP4KEZS   | Flat          | SPT        | 18/2        | 0.150 X 0.280 | 3.8 X 7.1 | 0.500 | 12.7 | 0.465   | 11.8 | 0.100                 | 2.5 | 0.580    | 14.7 | 0.510   | 12.9 | 1000          |
|             | —         | Flat          | SPT        | 16/2        | 0.150 X 0.280 | 3.8 X 7.1 | 0.500 | 12.7 | 0.465   | 11.8 | 0.100                 | 2.5 | 0.580    | 14.7 | 0.510   | 12.9 | 1000          |
| 23MP04NEZS  | MP4NEZS   | Flat          | SPT        | 18/2        | 0.150 X 0.280 | 3.8 X 7.1 | 0.500 | 12.7 | 0.465   | 11.8 | 0.062                 | 1.6 | 0.570    | 14.4 | 0.500   | 12.7 | 1000          |
|             | —         | Flat          | SPT        | 16/2        | 0.160 X 0.300 | 4.1 X 7.6 | 0.500 | 12.7 | 0.465   | 11.8 | 0.062                 | 1.6 | 0.570    | 14.4 | 0.500   | 12.7 | 1000          |
| 23MP06N34EZ | MP6N34EZ  | Round         | SJT        | 16/3        | 0.300         | 7.2       | 0.625 | 15.9 | 0.550   | 14.0 | 0.062                 | 1.6 | 0.655    | 16.6 | 0.585   | 14.9 | 1000          |
|             | —         | Round         | SJ         | 16/3        | 0.355         | 9.0       | 0.625 | 15.9 | 0.550   | 14.0 | 0.062                 | 1.6 | 0.655    | 16.6 | 0.585   | 14.9 | 1000          |
|             | —         | Round         | SJT        | 18/3        | 0.405         | 10.2      | 0.625 | 15.9 | 0.550   | 14.0 | 0.062                 | 1.6 | 0.655    | 16.6 | 0.585   | 14.9 | 1000          |

## 23MPT/23MPET Series Strain Relief Tool



**Features:**

- Standard: An indispensable tool for fast, accurate assembly of bushings
- Ergonomic tool has been designed to help reduce wrist fatigue



| Item No.   | Thread Size | Pack Qty |
|------------|-------------|----------|
| 23MPT0100  | Standard    | 1        |
| 23MPET0100 | Ergonomic   | 1        |

# CABLE GLANDS

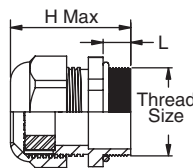


## CG-NPT Series NPT Cable Glands



### Specifications:

- Material: Body and Nut: UL94 V-2 Nylon 6  
Sealing Gland: CR/NBR  
O-Ring: NBR
- Color: Black
- Material: Optional CGLN Locking Nut: UL94 V-2 Glass-Filled Nylon 6
- Color: Black



### Features:

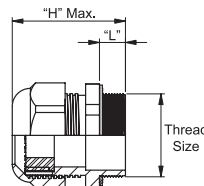
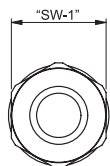
- Protection Class: IP68 - 5 Bar
- Designed for superior sealing; no O-Ring is needed for smaller sizes to meet IP68 rating
- Operating temperature: -4°F - 212°F (-20°C - 100°C)

### Optional Locknuts

| Item No.        | Thread Size | Locking Nuts |      |           |     | Bulk Pack Qty |
|-----------------|-------------|--------------|------|-----------|-----|---------------|
|                 |             | Across Flats |      | Thickness |     |               |
|                 |             | in           | mm   | in        | mm  |               |
| CGLN-NPT-3/8-BK | NPT-3/8     | 0.866        | 22.0 | 0.197     | 5.0 | 100           |
| CGLN-NPT-1/2-BK | NPT-1/2     | 1.063        | 27.0 | 0.236     | 6.0 | 100           |
| CGLN-NPT-3/4-BK | NPT-3/4     | 1.417        | 36.0 | 0.276     | 7.0 | 100           |
| CGLN-NPT-1-BK   | NPT-1       | 1.654        | 42.0 | 0.276     | 7.0 | 100           |

| Item No.        | Approval | Ø Cable Range Min |      | Ø Cable Range Max |      | Thread Size | Mounting Hole |      | L     |      | SW-1  |      | H Max Ref. |      | Bulk Pack Qty |
|-----------------|----------|-------------------|------|-------------------|------|-------------|---------------|------|-------|------|-------|------|------------|------|---------------|
|                 |          | in                | mm   | in                | mm   |             | in            | mm   | in    | mm   | in    | mm   |            |      |               |
| CG-NPT-1/4-1-BK | —        | 0.157             | 4.0  | 0.315             | 8.0  | NPT-1/4     | 0.524         | 13.3 | 0.354 | 9.0  | 0.748 | 19.0 | 1.378      | 35.0 | 100           |
| CG-NPT-3/8-1-BK | UL       | 0.118             | 3.0  | 0.276             | 7.0  | NPT-3/8     | 0.670         | 17.0 | 0.571 | 14.5 | 0.866 | 22.0 | 1.750      | 44.5 | 100           |
| CG-NPT-3/8-2-BK | UL       | 0.197             | 5.0  | 0.394             | 10.0 | NPT-3/8     | 0.670         | 17.0 | 0.571 | 14.5 | 0.866 | 22.0 | 1.750      | 44.5 | 100           |
| CG-NPT-1/2-1-BK | UL       | 0.197             | 5.0  | 0.236             | 9.0  | NPT-1/2     | 0.875         | 22.2 | 0.571 | 14.5 | 0.945 | 24.0 | 1.770      | 45.0 | 100           |
| CG-NPT-1/2-2-BK | UL       | 0.276             | 7.0  | 0.472             | 12.0 | NPT-1/2     | 0.875         | 22.2 | 0.591 | 15.0 | 1.063 | 27.0 | 1.870      | 47.5 | 100           |
| CG-NPT-1/2-3-BK | UL       | 0.394             | 10.0 | 0.551             | 14.0 | NPT-1/2     | 0.875         | 22.2 | 0.591 | 15.0 | 1.063 | 27.0 | 1.870      | 47.5 | 100           |
| CG-NPT-3/4-1-BK | UL       | 0.354             | 9.0  | 0.630             | 16.0 | NPT-3/4     | 1.068         | 27.1 | 0.591 | 15.0 | 1.299 | 33.0 | 2.050      | 52.0 | 50            |
| CG-NPT-3/4-2-BK | UL       | 0.551             | 14.0 | 0.709             | 18.0 | NPT-3/4     | 1.068         | 27.1 | 0.591 | 15.0 | 1.299 | 33.0 | 2.050      | 52.0 | 50            |
| CG-NPT-1-1-BK   | UL       | 0.472             | 12.0 | 0.787             | 20.0 | NPT-1       | 1.350         | 34.3 | 0.709 | 18.0 | 1.654 | 42.0 | 2.380      | 60.5 | 25            |
| CG-NPT-1-2-BK   | UL       | 0.748             | 19.0 | 0.984             | 25.0 | NPT-1       | 1.350         | 34.3 | 0.709 | 18.0 | 1.654 | 42.0 | 2.380      | 60.5 | 25            |

## CG-M Series Cable Glands – Metric Thread

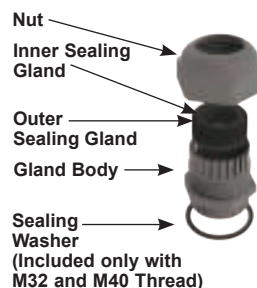


### Specifications:

- Material: Body and Nut: UL94 V-2 Nylon 6  
Sealing Gland: CR/NBR  
O-Ring: NBR
- Color: Black
- Material: Optional CGLN Locking Nut: UL94 V-2 Glass-Filled Nylon 6
- Color: Black

### Features:

- Protection Class: IP68 - 5 Bar
- Designed for superior sealing; no Sealing Washer is needed for smaller sizes to meet IP68 rating
- Two Sealing Glands are included with all but the M12 thread. Remove the inner sealing gland for larger cable diameters



| Item No.    | Approval | Ø Cable Range Min |     | Ø Cable Range Max |      | Thread Size | Mounting Hole |      | L     |      | SW-1  |      | H Max Ref. |      | Pack Qty | Bulk Pack Qty |
|-------------|----------|-------------------|-----|-------------------|------|-------------|---------------|------|-------|------|-------|------|------------|------|----------|---------------|
|             |          | in                | mm  | in                | mm   |             | in            | mm   | in    | mm   | in    | mm   |            |      |          |               |
| CG-M12-1-BK | UL       | 0.079             | 2.0 | 0.197             | 5.0  | M12         | 0.480         | 12.2 | 0.315 | 8.0  | 0.591 | 15.0 | 1.220      | 31.0 | 1        | 100           |
| CG-M16-1-BK | UL       | 0.118             | 3.0 | 0.394             | 10.0 | M16         | 0.638         | 16.2 | 0.315 | 8.0  | 0.787 | 20.0 | 1.398      | 35.5 | 1        | 100           |
| CG-M20-1-BK | UL       | 0.197             | 5.0 | 0.512             | 13.0 | M20         | 0.795         | 20.2 | 0.315 | 8.0  | 0.945 | 24.0 | 1.417      | 36.0 | 1        | 100           |
| CG-M25-1-BK | UL       | 0.315             | 8.0 | 0.669             | 17.0 | M25         | 0.992         | 25.2 | 0.315 | 8.0  | 1.142 | 29.0 | 1.623      | 43.0 | 1        | 50            |
| CG-M32-1-BK | UL       | 0.472             | 12  | 0.827             | 21.0 | M32         | 1.268         | 32.2 | 0.394 | 10.0 | 1.417 | 36.0 | 1.968      | 50.0 | 1        | 25            |
| CG-M40-1-BK | UL       | 0.630             | 16  | 1.102             | 28.0 | M40         | 1.583         | 40.2 | 0.394 | 10.0 | 1.811 | 46.0 | 2.008      | 51.0 | 1        | 10            |

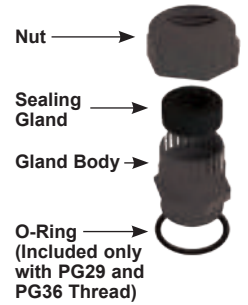
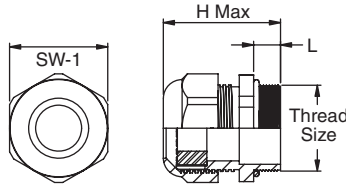
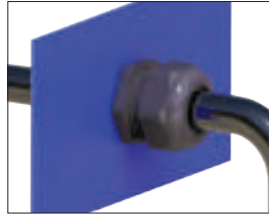
### Optional Locknuts

| Item No.    | Thread Size | Locking Nuts |      |           |     | Pack Qty | Bulk Pack Qty |
|-------------|-------------|--------------|------|-----------|-----|----------|---------------|
|             |             | Across Flats |      | Thickness |     |          |               |
|             |             | in           | mm   | in        | mm  |          |               |
| CGLN-M12-BK | M12         | 0.669        | 17.0 | 0.197     | 5.0 | 1        | 100           |
| CGLN-M16-BK | M16         | 0.866        | 22.0 | 0.197     | 5.0 | 1        | 100           |
| CGLN-M20-BK | M20         | 1.063        | 27.0 | 0.236     | 6.0 | 1        | 100           |
| CGLN-M25-BK | M25         | 1.260        | 32.0 | 0.236     | 6.0 | 1        | 100           |
| CGLN-M32-BK | M32         | 1.614        | 41.0 | 0.276     | 7.0 | 1        | 100           |
| CGLN-M40-BK | M40         | 1.969        | 50.0 | 0.276     | 7.0 | 1        | 50            |



# CABLE GLANDS

## CG-PG Series PG Cable Glands



**Specifications:**

- Material: Body and Nut: UL94 V-2 Nylon 6  
Sealing Gland: CR/NBR  
O-Ring: NBR
- Color: Black
- Material: Optional CGLN Locking Nut:  
UL94 V-2 Glass-Filled Nylon 6
- Color: Black
- Temperature Range: -4°F - 212°F (-20°C -100°C)

**Features:**

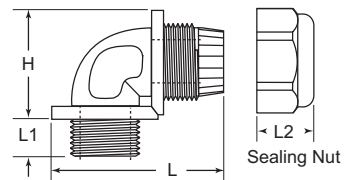
- Protection Class: IP68 - 5 Bar
- Designed for superior sealing; no O-Ring needed for smaller sizes to meet IP68 rating

**Optional Locknuts**

| Item No.       | Thread Size | Locking Nuts |           | Pack Qty | Bulk Pack Qty |
|----------------|-------------|--------------|-----------|----------|---------------|
|                |             | Across Flats | Thickness |          |               |
| CGLN-PG7-BK    | PG7         | 0.748        | 19.0      | 1        | 100           |
| CGLN-PG9-BK    | PG9         | 0.866        | 22.0      | 1        | 100           |
| CGLN-PG11-BK   | PG11        | 0.945        | 24.0      | 1        | 100           |
| CGLN-PG13.5-BK | PG13.5      | 1.063        | 27.0      | 1        | 100           |
| CGLN-PG16-BK   | PG16        | 1.181        | 30.0      | 1        | 100           |
| CGLN-PG21-BK   | PG21        | 1.417        | 36.0      | 1        | 100           |
| CGLN-PG29-BK   | PG29        | 1.811        | 46.0      | 1        | 100           |
| CGLN-PG36-BK   | PG36        | 2.362        | 60.0      | 1        | 50            |

| Item No.       | Approval | Ø Cable Range Min |      | Ø Cable Range Max |      | Thread Size | Mounting Hole |      | L     |      | SW-1  |      | H Max Ref. |      | Pack Qty | Bulk Pack Qty |
|----------------|----------|-------------------|------|-------------------|------|-------------|---------------|------|-------|------|-------|------|------------|------|----------|---------------|
|                |          | in                | mm   | in                | mm   |             | in            | mm   | in    | mm   | in    | mm   | in         | mm   |          |               |
| CG-PG7-1-BK    | UL       | 0.079             | 2.0  | 0.197             | 5.0  | PG7         | 0.500         | 12.7 | 0.315 | 8.0  | 0.591 | 15.0 | 1.201      | 30.5 | 1        | 100           |
| CG-PG7-2-BK    | UL       | 0.118             | 3.0  | 0.256             | 6.5  | PG7         | 0.500         | 12.7 | 0.315 | 8.0  | 0.591 | 15.0 | 1.201      | 30.5 | 1        | 100           |
| CG-PG9-1-BK    | UL       | 0.079             | 2.0  | 0.236             | 6.0  | PG9         | 0.606         | 15.4 | 0.315 | 8.0  | 0.748 | 19.0 | 1.339      | 34.0 | 1        | 100           |
| CG-PG9-2-BK    | UL       | 0.157             | 4.0  | 0.315             | 8.0  | PG9         | 0.606         | 15.4 | 0.315 | 8.0  | 0.748 | 19.0 | 1.339      | 34.0 | 1        | 100           |
| CG-PG11-1-BK   | UL       | 0.118             | 3.0  | 0.276             | 7.0  | PG11        | 0.740         | 18.8 | 0.315 | 8.0  | 0.866 | 22.0 | 1.457      | 37.0 | 1        | 100           |
| CG-PG11-2-BK   | UL       | 0.197             | 5.0  | 0.394             | 10.0 | PG11        | 0.740         | 18.8 | 0.315 | 8.0  | 0.866 | 22.0 | 1.457      | 37.0 | 1        | 100           |
| CG-PG13.5-1-BK | UL       | 0.236             | 6.0  | 0.472             | 12.0 | PG13.5      | 0.815         | 20.7 | 0.354 | 9.0  | 0.945 | 24.0 | 1.535      | 39.0 | 1        | 100           |
| CG-PG16-1-BK   | UL       | 0.394             | 10.0 | 0.551             | 14.0 | PG16        | 0.898         | 22.8 | 0.394 | 10.0 | 1.063 | 27.0 | 1.673      | 42.5 | 1        | 50            |
| CG-PG21-1-BK   | UL       | 0.236             | 9.0  | 0.630             | 16.0 | PG21        | 1.126         | 28.6 | 0.433 | 11.0 | 1.299 | 33.0 | 1.870      | 47.5 | 1        | 50            |
| CG-PG21-2-BK   | UL       | 0.512             | 13.0 | 0.709             | 18.0 | PG21        | 1.126         | 28.6 | 0.433 | 11.0 | 1.299 | 33.0 | 1.870      | 47.5 | 1        | 50            |
| CG-PG29-1-BK   | UL       | 0.472             | 12.0 | 0.787             | 20.0 | PG29        | 1.472         | 37.4 | 0.433 | 11.0 | 1.654 | 42.0 | 2.087      | 53.0 | 1        | 25            |
| CG-PG36-1-BK   | UL       | 0.787             | 20.0 | 1.024             | 26.0 | PG36        | 1.870         | 47.5 | 0.512 | 13.0 | 2.087 | 53.0 | 2.402      | 61.0 | 1        | 10            |
| CG-PG36-2-BK   | UL       | 0.866             | 22.0 | 1.260             | 32.0 | PG36        | 1.870         | 47.5 | 0.512 | 13.0 | 2.087 | 53.0 | 2.402      | 61.0 | 1        | 10            |

## CGRA Series 90° NPT Cable Glands



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Black
- Temperature Range: Working -40°F to 221°F (-40°C to 105°C)  
Intermittent up to 300°F (149°C)

**Features:**

- IP 68 rated protection: 5 bar
- Provides dust and water-tight performance and strain relief
- EPDM gasket and lock nut are sold separately

**Optional Parts**

| LNPT - NPT Locknuts |            |          |               |
|---------------------|------------|----------|---------------|
| Locknut Item No.    | NPT Thread | Pack Qty | Bulk Pack Qty |
| CGLN-NPT-3/8-BK     | 3/8"       | 1        | 50            |
| CGLN-NPT-1/2-BK     | 1/2"       | 1        | 50            |
| CGLN-NPT-3/4-BK     | 3/4"       | 1        | 50            |
| LNPT005B            | 1-1/4"     | 1        | 10            |

| Item No. | NPT Thread | Mounting Hole | Overall Length L |      | Mounting Thread L1 |      | Nut Length L2 |      | Overall Height H | Variable Clamping Range (Min/Max) |               | Pack Qty    | Bulk Pack Qty |    |
|----------|------------|---------------|------------------|------|--------------------|------|---------------|------|------------------|-----------------------------------|---------------|-------------|---------------|----|
|          |            |               | in               | mm   | in                 | mm   | in            | mm   |                  | in                                | mm            |             |               |    |
| CGRA011A | 3/8        | 0.687         | 1.909            | 48.5 | 0.461              | 11.7 | 0.657         | 16.7 | 1.181            | 30.0                              | 0.197 - 0.354 | 5.0 - 8.0   | 1             | 20 |
| CGRA015A | 1/2        | 0.875         | 2.031            | 51.6 | 0.579              | 14.7 | 0.724         | 18.4 | 1.228            | 31.2                              | 0.393 - 0.512 | 10.0 - 13.0 | 1             | 20 |
| CGRA018A | 3/4        | 1.0625        | 2.539            | 64.5 | 0.583              | 14.8 | 0.878         | 22.3 | 1.638            | 41.6                              | 0.512 - 0.630 | 13.0 - 16.0 | 1             | 20 |
| CGRA020A | 1-1/4      | 1.687         | 3.346            | 85.0 | 0.740              | 18.8 | 1.220         | 31.0 | 2.087            | 53.0                              | 0.866 - 1.412 | 22.0 - 29.0 | 1             | 10 |



# HOLE PLUGS & CABLE GROMMETS



## Metric & PG Threaded Rubber Plugs

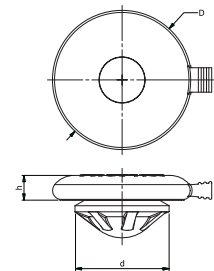


**Specifications:**

- Material: Silicone Rubber
- Color: Black

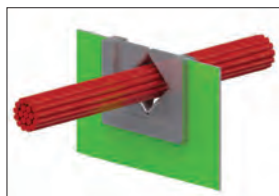
**Features:**

- Can be pushed into place using a blunt tipped tool
- Used to give water tight protection to spare holes that need to be closed off
- Pull tab for easy removal
- Fits standard Metric and PG sizes



| Item No. | Cable Gland Sizes | Ø Hole        |             | Panel Thickness Range |           | d     |      | D     |      | h     |     | Bulk Pack Qty |
|----------|-------------------|---------------|-------------|-----------------------|-----------|-------|------|-------|------|-------|-----|---------------|
|          |                   | in            | mm          | in                    | mm        | in    | mm   | in    | mm   | in    | mm  |               |
| 551846   | PG7/M12           | 0.480 - 0.492 | 12.2 - 12.5 | 0.039 - 0.079         | 1.0 - 2.0 | 0.571 | 14.5 | 0.968 | 24.6 | 0.189 | 4.8 | 1000          |
| 551847   | PG9/M16           | 0.606 - 0.638 | 15.4 - 16.2 | 0.039 - 0.079         | 1.0 - 2.0 | 0.689 | 17.5 | 1.087 | 27.6 | 0.197 | 5.0 | 500           |
| 551848   | PG11/PG13.5/M20   | 0.740 - 0.815 | 18.8 - 20.7 | 0.039 - 0.079         | 1.0 - 2.0 | 0.905 | 23.0 | 1.346 | 34.2 | 0.236 | 6.0 | 500           |
| 551849   | PG16              | 0.898         | 22.8        | 0.039 - 0.079         | 1.0 - 2.0 | 1.024 | 26.0 | 1.520 | 38.6 | 0.256 | 6.5 | 200           |
| 551850   | PG21/M25          | 0.992 - 1.126 | 25.2 - 28.6 | 0.039 - 0.079         | 1.0 - 2.0 | 1.220 | 31.0 | 1.732 | 44.0 | 0.295 | 7.5 | 100           |
| 551851   | M32               | 1.268 - 1.394 | 32.2 - 35.4 | 0.039 - 0.079         | 1.0 - 2.0 | 1.575 | 40.0 | 2.205 | 56.0 | 0.354 | 9.0 | 100           |

## CGA Series Cable Grommets

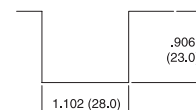
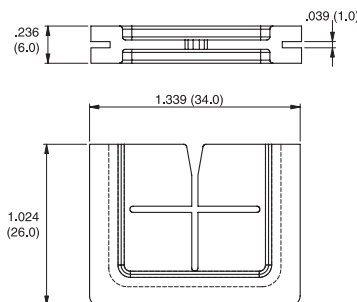


**Specifications:**

- Material: Silicone Rubber, 70 Shore A
- Color: Black

**Features:**

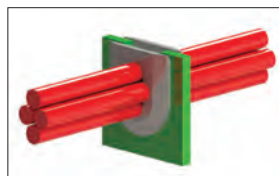
- Routes cables and protects wires from sharp edges
- "Wings" are flexible so it can accept various diameters and shapes
- Continuous working temperature of 300°F



**Recommended Panel Cut-Out**

| Item No. | Ø Maximum Bundle |      | Panel Thickness |     | Bulk Pack Qty |
|----------|------------------|------|-----------------|-----|---------------|
|          | in               | mm   | in              | mm  |               |
| 1258288  | 0.591            | 15.0 | 0.039           | 1.0 | 1000          |

## CGB Series Cable Grommets

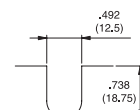
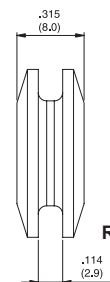
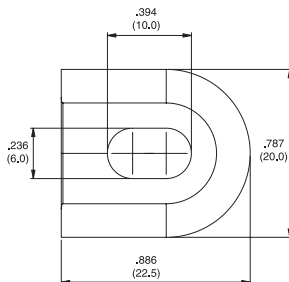


**Specifications:**

- Material: Silicone Rubber, 65 Shore A
- Color: Black

**Features:**

- Routes cables and protects wires from sharp edges
- "Wings" are flexible so it can accept various diameters and shapes
- Continuous working temperature of 350°F



**Recommended Panel Cut-Out**

| Item No. | Bundle Area   |            | Max Panel Thickness |     | Bulk Pack Qty |
|----------|---------------|------------|---------------------|-----|---------------|
|          | in            | mm         | in                  | mm  |               |
| 1342664  | 0.394 x 0.236 | 10.0 x 6.0 | 0.110               | 2.8 | 1000          |

## CGC Series Cable Grommets

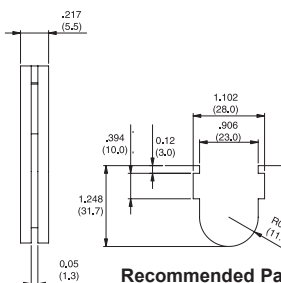
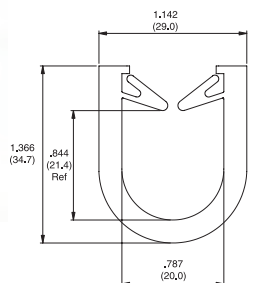


**Specifications:**

- Material: Nylon 6/6
- Color: Natural

**Features:**

- Routes cables and protects wires from sharp edges
- "Wings" are flexible so it can accept various diameters and shapes
- Cables may be inserted and removed



**Recommended Panel Cut-Out**

| Item No. | Bundle Area   |             | Max Panel Thickness |     | Bulk Pack Qty |
|----------|---------------|-------------|---------------------|-----|---------------|
|          | in            | mm          | in                  | mm  |               |
| CGC-1-01 | 0.844 x 0.787 | 21.4 x 20.0 | 0.047               | 1.2 | 250           |



# EDGE WIRE SADDLES

## EHWSE/EWSE/EWSJS Series Edge Wire Saddles

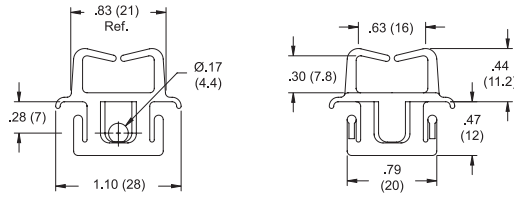
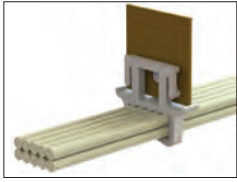
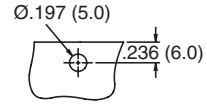


Figure 1



Recommended Mounting Hole

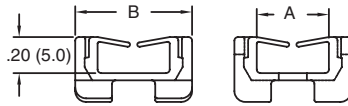
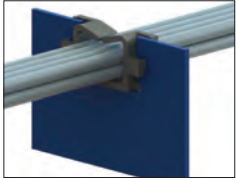
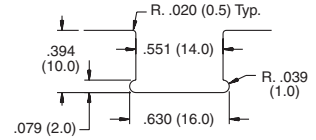


Figure 2



Recommended Panel Cut-Out

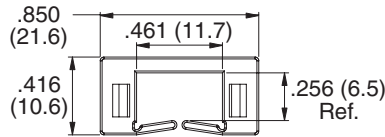
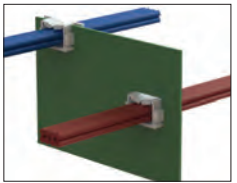
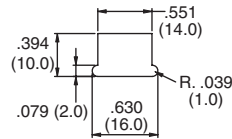
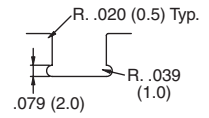


Figure 3



Thru Hole Panel Cut-Out



Edge Hole Panel Cut-Out

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: See Table

**Features:**

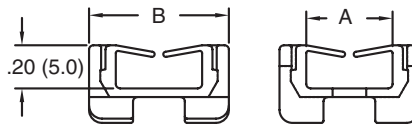
- Mounts vertically or horizontally
- Routes cables and protects wires from sharp edges

| Item No.   | Figure | Approval | Color   | Panel Thickness |           | Depth |     | Bulk Pack Qty |
|------------|--------|----------|---------|-----------------|-----------|-------|-----|---------------|
|            |        |          |         | in              | mm        | in    | mm  |               |
| EHWSE-1-01 | 1      |          | Natural | 0.039 - 0.079   | 1.0 - 2.0 | 0.240 | 6.2 | 1000          |
| EWSE-1-01  | 2      |          | Black   | 0.032 - 0.078   | 0.8 - 1.2 | 0.190 | 4.8 | 1000          |
| EWSE-2-01  | 2      |          | Natural | 0.047 - 0.063   | 1.2 - 1.6 | 0.190 | 4.8 | 1000          |
| EWSE-3-01  | 2      |          | Grey    | 0.063 - 0.079   | 1.6 - 2.0 | 0.190 | 4.8 | 1000          |
| EWSJS-1-01 | 3      | —        | Natural | 0.032 - 0.078   | 0.8 - 2.0 | 0.260 | 6.6 | 1000          |

## EWSE Series Edge Wire Saddles



EWSE-12.8-01

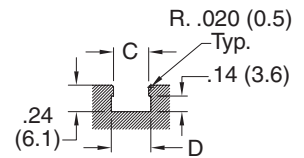


**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Snaps into cutout on the board
- Routes cables and protects wires from sharp edges



Recommended Panel Cut-Out

| Item No.     | Panel Thickness |           | A     |      | B     |      | C     |      | D     |      | Depth |     | Bulk Pack Qty |
|--------------|-----------------|-----------|-------|------|-------|------|-------|------|-------|------|-------|-----|---------------|
|              | in              | mm        | in    | mm   | in    | mm   | in    | mm   | in    | mm   | in    | mm  |               |
| EWSE-8.1-01  | 0.031 - 0.063   | 0.8 - 1.6 | 0.200 | 5.0  | 0.440 | 11.3 | 0.320 | 8.1  | 0.360 | 9.1  | 0.140 | 3.6 | 1000          |
| EWSE-12.8-01 | 0.031 - 0.063   | 0.8 - 1.6 | 0.390 | 10.0 | 0.640 | 16.2 | 0.500 | 12.8 | 0.540 | 13.8 | 0.140 | 3.6 | 1000          |

# EDGE WIRE SADDLES & GROMMET EDGING



## HEWSE Series Hinged Edge Wire Saddles

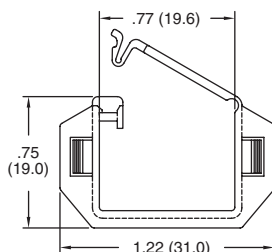


Figure 1

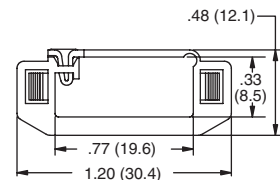


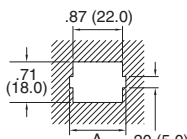
Figure 2

Specifications:

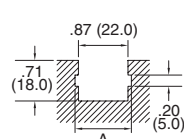
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

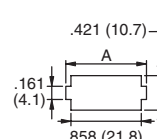
- Routes cables and protects them from sharp edges
- Installed in a mounting slot; edge or through-hole
- Hinged latch allows retrofitting into pre-existing applications



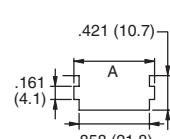
Thru Hole Panel Cut-Out



Edge Hole Panel Cut-Out



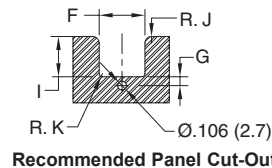
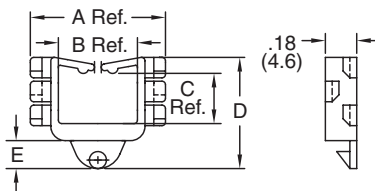
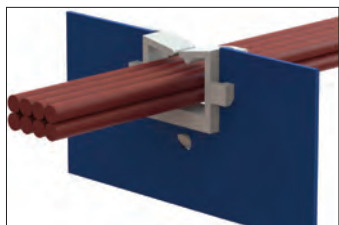
Thru Hole Panel Cut-Out



Edge Hole Panel Cut-Out

| Item No.    | Figure | Panel Thickness |           | A     |      | Depth |     | Bulk Pack Qty |
|-------------|--------|-----------------|-----------|-------|------|-------|-----|---------------|
|             |        | in              | mm        | in    | mm   | in    | mm  |               |
| HEWSE-22-01 | 1      | 0.020 - 0.063   | 0.5 - 1.6 | 0.980 | 25.0 | 0.260 | 6.6 | 1000          |
| HEWSE-25-01 | 2      | 0.031 - 0.063   | 0.8 - 1.6 | 0.980 | 25.0 | 0.260 | 6.6 | 1000          |
| HEWSE-25-01 | 2      | 0.079           | 2.0       | 1.020 | 26.0 | 0.260 | 6.6 | 1000          |

## LEWSE Series Edge Wire Saddles



Recommended Panel Cut-Out

Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Locking pin in mounting base provides firm grip to the board
- Protects wires from sharp edges
- Available in four different sizes

| Item No.    | Panel Thickness | A Ref. | B Ref. | C Ref. | D     | E     | F      | I     | G     | R. J  | R. K  | Bulk Pack Qty |
|-------------|-----------------|--------|--------|--------|-------|-------|--------|-------|-------|-------|-------|---------------|
|             |                 | in     | in     | in     | in    | in    | in     | in    | in    | in    | in    |               |
| LEWSE-14-01 | 0.031 - 0.063   | 0.780  | 0.460  | 0.290  | 0.640 | 0.160 | 0.551  | 0.484 | 0.106 | 0.079 | 0.039 | 1000          |
| LEWSE-19-01 | 0.031 - 0.063   | 1.060  | 0.660  | 0.590  | 0.980 | 0.150 | 0.756  | 0.831 | 0.100 | 0.079 | 0.039 | 1000          |
| LEWSE-21-01 | 0.031 - 0.063   | 1.130  | 0.660  | 0.580  | 0.980 | 0.150 | 0.827  | 0.827 | 0.100 | 0.079 | 0.060 | 1000          |
| LEWSE-27-01 | 0.031 - 0.063   | 1.370  | 0.900  | 0.910  | 1.310 | 0.120 | 10.630 | 1.140 | 0.106 | 0.079 | 0.060 | 1000          |

## MCCG Series Metal Cushioned Grommets

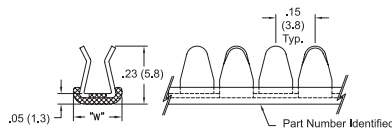


Figure 1

Specifications:

- Material: 304 Stainless Steel, Coated with Black Nylon 11
- Cushion: UL94 V-0 TPE (60 Shore D)
- Temperature Range: -40°F - 185°F (-40°C - 85°C)

Features:

- Dielectric Strength: 1500 volts @ 60Hz
- Flexible polymer cushion gives additional abrasion protection
- Sold in 100 foot reels that can be cut to length using metal shears
- The MCCGF is the more flexible of the two due to the design

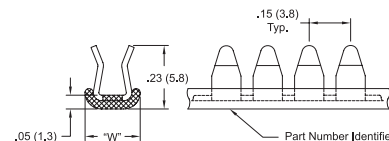


Figure 2

| Item No. | Figure   | Fits Panel Thickness |           | Width W |     | Roll Length ft | Pack Qty |
|----------|----------|----------------------|-----------|---------|-----|----------------|----------|
|          |          | in                   | mm        | in      | mm  |                |          |
| MCCG-1N  | MCCGF-1N | 0.029 - 0.045        | 0.7 - 1.1 | 0.190   | 4.8 | 100            | 1        |
| MCCG-2N  | MCCGF-2N | 0.044 - 0.056        | 1.1 - 1.4 | 0.190   | 4.8 | 100            | 1        |
| MCCG-3N  | MCCGF-3N | 0.055 - 0.069        | 1.4 - 1.7 | 0.190   | 4.8 | 100            | 1        |
| MCCG-4N  | —        | 0.069 - 0.090        | 1.7 - 2.3 | 0.230   | 5.8 | 100            | 1        |
| MCCG-6N  | —        | 0.113 - 0.130        | 2.9 - 3.3 | 0.230   | 5.8 | 100            | 1        |



# GROMMET EDGING

## MCG/MCGF Series Metal Grommets

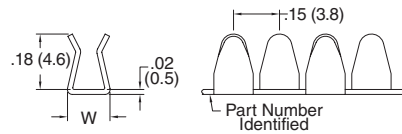


Figure 1

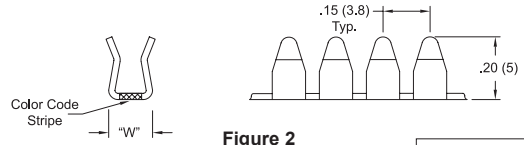


Figure 2



**Specifications:**

- Material: 304 Stainless Steel, Coated with Black Nylon 11 and a cushion of TPE 60 Shore D UL94V-0 rating
- Color: See Table
- Temperature Range: -40°F - 285°F (-40°C - 140°C)

**Features:**

- Dielectric Strength: 1000 Volts @ 60Hz
- Locks onto panel with finger pressure
- Sold in 100 foot reels that can be cut to length using metal shears
- The MCGF is the more flexible of the two due to the design

| Item No. |          | Fits Panel Thickness |           | Width W |     | Color Coded | Roll Length |   | Pack Qty |
|----------|----------|----------------------|-----------|---------|-----|-------------|-------------|---|----------|
| Figure 1 | Figure 2 | in                   | mm        | in      | mm  |             | ft          |   |          |
| MCG-1N   | —        | 0.029 - 0.045        | 0.7 - 1.1 | 0.140   | 3.6 | —           | 100         | 1 |          |
| MCG-2N   | —        | 0.044 - 0.056        | 1.1 - 1.4 | 0.140   | 3.6 | —           | 100         | 1 |          |
| MCG-3N   | —        | 0.055 - 0.069        | 1.4 - 1.7 | 0.140   | 3.6 | —           | 100         | 1 |          |
| MCG-4N   | —        | 0.069 - 0.090        | 1.7 - 2.3 | 0.180   | 4.6 | —           | 100         | 1 |          |
| MCG-6N   | —        | 0.113 - 0.130        | 2.9 - 3.3 | 0.180   | 4.6 | —           | 100         | 1 |          |
| —        | MCGF-1N  | 0.029 - 0.045        | 0.7 - 1.1 | 0.130   | 3.3 | White       | 100         | 1 |          |
| —        | MCGF-2N  | 0.044 - 0.056        | 1.1 - 1.4 | 0.130   | 3.3 | Pink        | 100         | 1 |          |
| —        | MCGF-3N  | 0.055 - 0.069        | 1.4 - 1.7 | 0.130   | 3.3 | Yellow      | 100         | 1 |          |

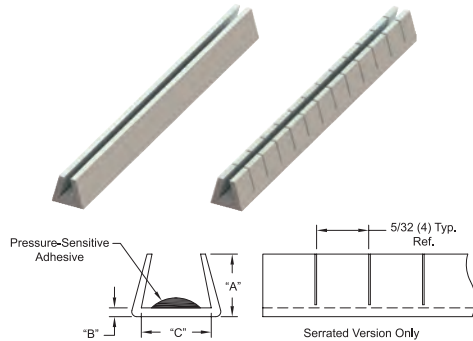
## NGSG/SNGSG/PGSG/SPGSG Series Continuous Grommet Edging with Adhesive

**Specifications:**

- Material Options:  
UL94 HB Nylon Temperature Range: -40°F - 149°F (-40°C - 65°C)  
Polyethylene: Temperature Range: 32°F - 149°F (0°C - 65°C)
- Color: See Table

**Features:**

- Adhesive provides self-retaining grip eliminating the need for epoxy
- Sizes 6, 7, and 8 are extra flexible
- Solid version is for straight edges
- Serrated version for round, square, and rectangular holes
- Polyethylene material is very flexible



| Solid Profile Item No. |           | Serrated Profile Item No. |            | Material      | Panel Thickness Range |           | A Ref. |     | B Ref. |     | C Ref. |     | Roll Length | Pack Qty |
|------------------------|-----------|---------------------------|------------|---------------|-----------------------|-----------|--------|-----|--------|-----|--------|-----|-------------|----------|
| Natural                | Black     | Natural                   | Black      |               | in                    | mm        | in     | mm  | in     | mm  | in     | mm  |             |          |
| NGSG-2                 | —         | SNGSG-2                   | SNGSG-2B   | UL94 HB Nylon | 0.037 - 0.071         | 0.9 - 1.8 | 0.172  | 4.4 | 0.031  | 0.8 | 0.109  | 2.8 | 100         | 1        |
| NGSG-2.5               | —         | SNGSG-2.5                 | —          | UL94 HB Nylon | 0.072 - 0.105         | 1.8 - 2.7 | 0.172  | 4.4 | 0.031  | 0.8 | 0.109  | 2.8 | 100         | 1        |
| NGSG-3                 | —         | SNGSG-3                   | —          | UL94 HB Nylon | 0.106 - 0.164         | 2.7 - 4.2 | 0.188  | 4.8 | 0.047  | 1.2 | 0.156  | 4.0 | 100         | 1        |
| PGSG-2                 | PGSG-2B   | SPGSG-2                   | SPGSG-2B   | Polyethylene  | 0.037 - 0.071         | 0.9 - 1.8 | 0.172  | 4.4 | 0.031  | 0.8 | 0.109  | 2.8 | 100         | 1        |
| PGSG-6                 | PGSG-6B   | SPGSG-6                   | —          | Polyethylene  | 0.037 - 0.071         | 0.9 - 1.8 | 0.160  | 4.1 | 0.025  | 0.6 | 0.060  | 1.5 | 100         | 1        |
| PGSG-2.5               | PGSG-2.5B | SPGSG-2.5                 | SPGSG-2.5B | Polyethylene  | 0.072 - 0.105         | 1.8 - 2.7 | 0.172  | 4.4 | 0.031  | 0.8 | 0.109  | 2.8 | 100         | 1        |
| —                      | —         | SPGSG-7                   | —          | Polyethylene  | 0.072 - 0.105         | 1.8 - 2.7 | 0.188  | 4.8 | 0.035  | 0.9 | 0.100  | 2.5 | 100         | 1        |
| PGSG-3                 | PGSG-3B   | SPGSG-3                   | SPGSG-3B   | Polyethylene  | 0.106 - 0.164         | 2.7 - 4.2 | 0.188  | 4.8 | 0.047  | 1.2 | 0.156  | 4.0 | 100         | 1        |
| —                      | —         | SPGSG-8                   | —          | Polyethylene  | 0.106 - 0.164         | 2.7 - 4.2 | 0.188  | 4.8 | 0.035  | 0.9 | 0.156  | 4.0 | 100         | 1        |

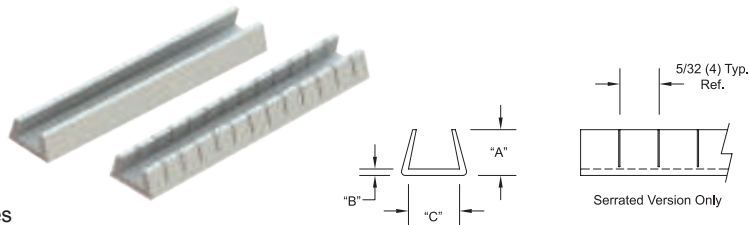
## NGS/PGS/SNGS/SPGS Series Continuous Grommet Edging

**Specifications:**

- Material: See Table
- Color: See Table

**Features:**

- Solid version is for straight edges
- Serrated version for round, square, and rectangular holes
- Polyethylene material is very flexible

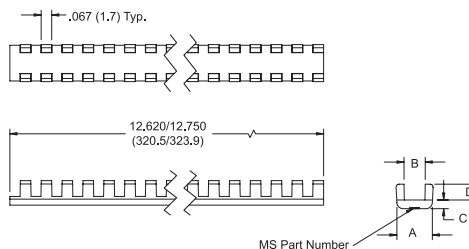
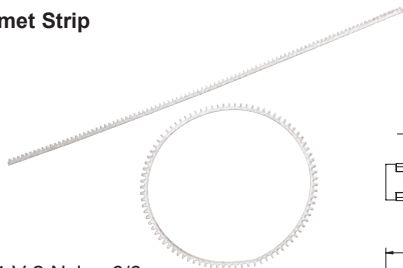


| Solid Profile Item No. |          | Serrated Profile Item No. |           | Material      | Panel Thickness Range |           | A Ref. |     | B Ref. |     | C Ref. |     | Roll Length | Pack Qty |
|------------------------|----------|---------------------------|-----------|---------------|-----------------------|-----------|--------|-----|--------|-----|--------|-----|-------------|----------|
| Natural                | Black    | Natural                   | Black     |               | in                    | mm        | in     | mm  | in     | mm  | in     | mm  |             |          |
| NGS-1                  | —        | SNGS-1                    | SNGS-1B   | UL94 HB Nylon | 0.026-0.036           | 0.7 - 0.9 | 0.125  | 3.2 | 0.031  | 0.8 | 0.031  | 0.8 | 100         | 1        |
| NGS-2                  | —        | SNGS-2                    | SNGS-2B   | UL94 HB Nylon | 0.037-0.071           | 0.9 - 1.8 | 0.172  | 4.4 | 0.031  | 0.8 | 0.109  | 2.8 | 100         | 1        |
| —                      | —        | SNGS-2.5                  | SNGS-2.5B | UL94 HB Nylon | 0.072-0.105           | 1.8 - 2.7 | 0.172  | 4.4 | 0.031  | 0.8 | 0.109  | 2.8 | 100         | 1        |
| —                      | —        | SNGS-3                    | SNGS-3B   | UL94 HB Nylon | 0.106-0.164           | 2.7 - 4.2 | 0.188  | 4.8 | 0.047  | 1.2 | 0.156  | 4.0 | 100         | 1        |
| —                      | —        | SNGS-4                    | SNGS-4B   | UL94 HB Nylon | 0.164-0.187           | 4.2 - 4.7 | 0.188  | 4.8 | 0.047  | 1.2 | 0.188  | 4.8 | 100         | 1        |
| —                      | —        | SNGS-5                    | —         | UL94 HB Nylon | 0.188-0.250           | 4.8 - 6.4 | 0.188  | 4.8 | 0.047  | 1.2 | 0.250  | 6.4 | 100         | 1        |
| PGS-1                  | PGS-1B   | SPGS-1                    | —         | Polyethylene  | 0.026-0.036           | 0.7 - 0.9 | 0.125  | 3.2 | 0.031  | 0.8 | 0.031  | 0.8 | 100         | 1        |
| PGS-2                  | PGS-2B   | SPGS-2                    | —         | Polyethylene  | 0.037-0.071           | 0.9 - 1.8 | 0.172  | 4.4 | 0.031  | 0.8 | 0.109  | 2.8 | 100         | 1        |
| PGS-2.5                | PGS-2.5B | SPGS-2.5                  | SPGS-2.5B | Polyethylene  | 0.072-0.105           | 1.8 - 2.7 | 0.172  | 4.4 | 0.031  | 0.8 | 0.109  | 2.8 | 100         | 1        |
| PGS-3                  | —        | SPGS-3                    | —         | Polyethylene  | 0.106-0.164           | 2.7 - 4.2 | 0.188  | 4.8 | 0.047  | 1.2 | 0.156  | 4.0 | 100         | 1        |

# GROMMET EDGING



## MGS Series MS21266 Grommet Strip

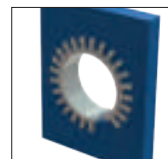


**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Ideally suited to cover normal and irregular shaped holes in sheet metal
- Complies with NASM21266
- Minimum hole diameter is 1"



| Item No. | Military Part Number | Panel Thickness | A     |       | B     |       | C     |      | D     |      | Bulk Pack Qty |
|----------|----------------------|-----------------|-------|-------|-------|-------|-------|------|-------|------|---------------|
|          |                      |                 | in    | mm    | in    | mm    | in    | mm   | in    | mm   |               |
| MGS-1-01 | MS21266-1N           | 0.015 - 0.052   | 0.150 | 3.81  | 0.056 | 1.42  | 0.055 | 1.39 | 0.100 | 2.54 | 100           |
| MGS-2-01 | MS21266-2N           | 0.052 - 0.085   | 0.175 | 4.43  | 0.090 | 2.29  | 0.055 | 1.39 | 0.100 | 2.54 | 100           |
| MGS-3-01 | MS21266-3N           | 0.085 - 0.128   | 0.220 | 5.59  | 0.131 | 3.33  | 0.055 | 1.39 | 0.100 | 2.54 | 100           |
| MGS-4-01 | MS21266-4N           | 0.128 - 0.192   | 0.325 | 8.28  | 0.195 | 4.93  | 0.070 | 1.78 | 0.160 | 4.06 | 100           |
| MGS-5-01 | MS21266-5N           | 0.192 - 0.255   | 0.385 | 9.78  | 0.260 | 6.60  | 0.070 | 1.78 | 0.170 | 4.27 | 100           |
| MGS-6-01 | MS21266-6N           | 0.255 - 0.318   | 0.445 | 11.29 | 0.320 | 8.13  | 0.075 | 1.90 | 0.180 | 4.57 | 100           |
| MGS-8-01 | MS21266-8N           | 0.380 - 0.510   | 0.640 | 16.26 | 0.515 | 13.07 | 0.075 | 1.90 | 0.180 | 4.57 | 50            |

## RG Series Rubber Grommet Edging

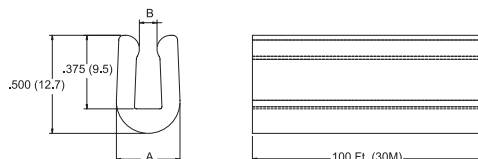


**Specifications:**

- Material: TPE
- Color: Black

**Features:**

- Supplied in rolls that can be cut to required length
- Prevents wires and cables from chafing against sharp edges



| Item No. | Fits Panel Thickness |     | A Ref |     | B Max |     | Roll Length |    | Pack Qty |
|----------|----------------------|-----|-------|-----|-------|-----|-------------|----|----------|
|          | in                   | mm  | in    | mm  | in    | mm  | ft          | m  |          |
| RG-1     | 0.063                | 1.6 | 0.264 | 6.7 | 0.030 | 0.8 | 100         | 30 | 1        |
| RG-2     | 0.093                | 2.4 | 0.293 | 7.4 | 0.060 | 1.5 | 100         | 30 | 1        |
| RG-3     | 0.125                | 3.2 | 0.324 | 8.2 | 0.090 | 2.3 | 100         | 30 | 1        |

## GRE Series PVC Grommet Edging

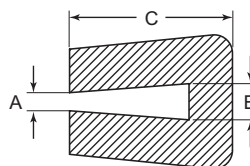


**Specifications:**

- Material: Soft PVC
- Color: Black

**Features:**

- Protects sharp or delicate edges
- Fits irregular shapes and a range of panel thicknesses
- PVC material is non-staining; resistant to ozone, acids, and sunlight; with excellent aging qualities

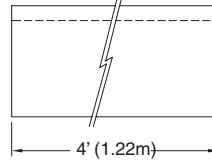
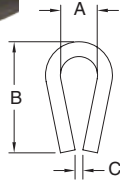


| Item No.  | Panel Thickness A |      | Panel Thickness B |      | Overall Width C |       | Roll Length |    | Pack Qty |
|-----------|-------------------|------|-------------------|------|-----------------|-------|-------------|----|----------|
|           | in                | mm   | in                | mm   | in              | mm    | ft          | m  |          |
| GRE32343A | 0.031             | 0.78 | 0.047             | 1.19 | 0.276           | 7.01  | 164         | 50 | 1        |
| GRE34074A | 0.039             | 0.99 | 0.079             | 2.00 | 0.315           | 8.00  | 164         | 50 | 1        |
| GRE34075A | 0.059             | 1.49 | 0.110             | 2.79 | 0.374           | 9.50  | 164         | 50 | 1        |
| GRE34076A | 0.106             | 2.69 | 0.149             | 3.78 | 0.413           | 10.49 | 164         | 50 | 1        |
| GRE34077A | 0.146             | 3.70 | 0.204             | 5.18 | 0.433           | 11.00 | 164         | 50 | 1        |
| GRE34078A | 0.209             | 5.30 | 0.267             | 6.78 | 0.512           | 13.00 | 164         | 50 | 1        |



# GROMMET EDGING, CHANNELS & INSULATORS

## DSC Series Nylon Grommet Edging

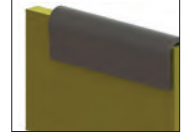


**Specifications:**

- Material: UL94 HB MDS Filled Nylon
- Color: Gray

**Features:**

- Used as wear strips, non-abrasive edging, noise-reducing conveyor strips, framing, binding, or to protect from sharp edges
- Built-in lubricant for reduced friction and longer part life
- Resistant to ordinary solvents, mild acids and alkalis or fungus growth
- Comes in 4 foot lengths that can be cut to desired length



| Item No. | A Fits Panel Thickness |     | B     |      | C Ref |     | Wall Thickness |     | Length |      | Packaged | Pack Qty |
|----------|------------------------|-----|-------|------|-------|-----|----------------|-----|--------|------|----------|----------|
|          | in                     | mm  | in    | mm   | in    | mm  | in             | mm  | ft     | m    |          |          |
| DSC-5-48 | 0.062                  | 1.6 | 0.300 | 7.6  | 0.031 | 0.8 | 0.031          | 0.8 | 4      | 1.22 | 100 Ft   | 1        |
| DSC-1-48 | 0.125                  | 3.2 | 0.375 | 9.5  | 0.020 | 0.5 | 0.047          | 1.2 | 4      | 1.22 | 100 Ft   | 1        |
| DSC-2-48 | 0.188                  | 4.8 | 0.500 | 12.7 | 0.031 | 0.8 | 0.047          | 1.2 | 4      | 1.22 | 100 Ft   | 1        |
| DSC-3-48 | 0.250                  | 6.4 | 0.625 | 15.9 | 0.045 | 1.1 | 0.063          | 1.6 | 4      | 1.22 | 100 Ft   | 1        |

## CH Series Polystyrene Channel



**Specifications:**

- Material: ULB94 HB Polystyrene
- Color: White

**Features:**

- Protects from sharp edges
- Binds and frames
- Sold in 4 foot lengths that can be cut to desired length



Fig. 1

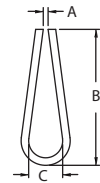
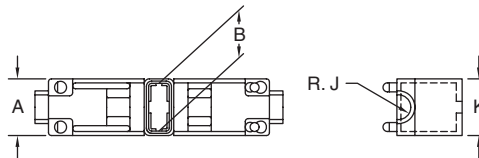


Fig. 2

| Item No.     | Fits Panel Thickness |     | A Ref |     | B Ref |      | C Min. |     | Figure | Length |      | Packaged | Pack Qty |
|--------------|----------------------|-----|-------|-----|-------|------|--------|-----|--------|--------|------|----------|----------|
|              | in                   | mm  | in    | mm  | in    | mm   | in     | mm  |        | ft     | m    |          |          |
| CH200X250-48 | 0.250                | 6.4 | 0.200 | 5.1 | 0.375 | 9.5  | 0.25   | 6.4 | 1      | 4      | 1.22 | 100 ft   | 1        |
| CH15X50-48   | 0.050                | 1.3 | 0.015 | 0.4 | 0.437 | 11.1 | 0.05   | 1.3 | 1      | 4      | 1.22 | 100 ft   | 1        |
| CH20X141-48  | 0.140                | 3.6 | 0.020 | 0.5 | 0.562 | 14.3 | 0.14   | 3.6 | 2      | 4      | 1.22 | 100 ft   | 1        |

## OS Series Straight Terminal Insulators



**Specifications:**

- Material: UL94 V-2 Nylon 6
- Color: Natural

**Features:**

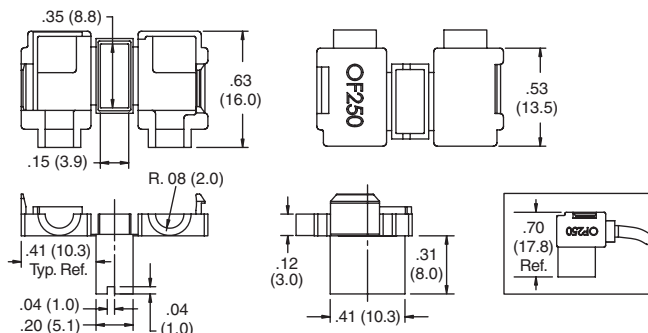
- Insulating sleeve for straight type receptacles
- Installs easily by hand; slip the sleeve onto receptacle and snap shut with fingers
- For pre-assembled wire and receptacle



| Item No. | Approval | Terminal Type            | Ø Wire |     | A     |     | B     |     | C     |     | D     |     | E     |     | F     |     | G     |     | H     |      | R.J   |     | K     |     | Bulk Pack Qty |
|----------|----------|--------------------------|--------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|------|-------|-----|-------|-----|---------------|
|          |          |                          | in     | mm  | in    | mm  | in    | mm  | in    | mm  | in    | mm  | in    | mm  | in    | mm  | in    | mm  | in    | mm   | in    | mm  | in    | mm  |               |
| OS-187   | UL       | Straight Type 187 Series | 9/64   | 3.6 | 0.346 | 8.8 | 0.240 | 6.1 | 0.106 | 2.7 | 0.102 | 2.6 | 0.268 | 6.8 | 0.039 | 1.0 | 0.154 | 3.9 | 0.594 | 15.1 | 0.071 | 1.8 | 0.295 | 7.5 | 500           |
| OS-250   | UL       | Straight Type 187 Series | 5/32   | 3.8 | 0.386 | 9.8 | 0.311 | 7.9 | 0.164 | 3.4 | 0.110 | 2.8 | 0.315 | 8.0 | 0.039 | 1.0 | 0.185 | 4.7 | 0.728 | 18.5 | 0.081 | 2.1 | 0.358 | 9.1 | 500           |



OF Series  
Flag Terminal Insulators



Specifications:

- Material: UL94 V-2 Nylon 6
- Color: Natural

Features:

- Insulating sleeve for flag type receptacles
- Installs easily by hand; slip the sleeve onto receptacle and snap shut with fingers
- For pre-assembled wire and receptacle

| Item No. | Approval | Terminal Type        | Wire Ø |     | Bulk Pack Qty |
|----------|----------|----------------------|--------|-----|---------------|
|          |          |                      | in     | mm  |               |
| OF-250   |          | Flag Type 250 Series | 0.150  | 3.9 | 500           |

Quick Fit Straight Terminal Insulators

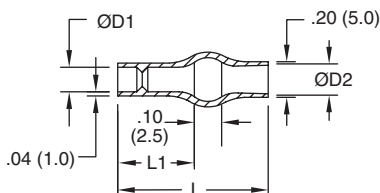
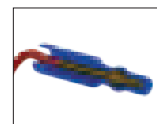


Figure 1

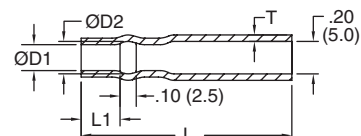


Figure 2

Specifications:

- Material: UL94 V-0 Soft PVC
- Color: Transparent Blue
- UL Temperature Range: 221°F (105°C)
- UL Voltage: 600V

Features:

- Replaces heat shrink tubing
- Made from a specially formulated soft PVC for fast, flexible installation
- Transparent for visual inspection
- No corrosion when exposed to copper

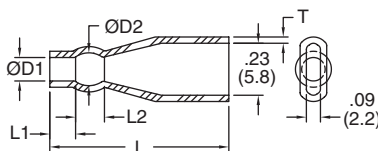


Figure 3

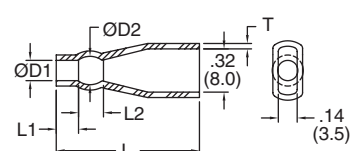


Figure 4

| Item No. | Figure | Wire OD Range |           | Wire Gauge | Ø D1  |     | Ø D2  |     | L1    |     | L2    |     | L     |      | T     | Bulk Pack Qty |
|----------|--------|---------------|-----------|------------|-------|-----|-------|-----|-------|-----|-------|-----|-------|------|-------|---------------|
|          |        | in            | mm        |            | in    | mm  | in    | mm  | in    | mm  | in    | mm  |       |      |       |               |
| 224225   | 1      | 0.580 - 0.091 | 1.5 - 2.3 | 22 - 18    | 0.100 | 2.5 | 0.160 | 4.1 | 0.240 | 6.1 | —     | —   | 0.510 | 13.0 | —     | 1000          |
| 224230   | 1      | 0.068 - 0.113 | 1.7 - 2.9 | 20 - 18    | 0.120 | 3.0 | 0.160 | 4.1 | 0.240 | 6.1 | —     | —   | 0.510 | 13.0 | —     | 1000          |
| 215025   | 2      | 0.580 - 0.091 | 1.5 - 2.3 | 22 - 18    | 0.100 | 2.5 | 0.160 | 4.1 | 0.240 | 6.1 | —     | —   | 1.300 | 33.0 | 0.040 | 1.0           |
| 215032   | 2      | 0.071 - 0.126 | 1.8 - 3.2 | 18 - 16    | 0.130 | 3.3 | 0.180 | 4.6 | 0.280 | 7.1 | —     | —   | 1.340 | 34.0 | 0.040 | 1.0           |
| 235830   | 3      | 0.580 - 0.091 | 1.5 - 2.3 | 20 - 18    | 0.120 | 3.0 | 0.160 | 4.0 | 0.200 | 5.0 | 0.100 | 2.5 | 0.910 | 23.0 | 0.030 | .08           |
| 235835   | 3      | 0.071 - 0.140 | 1.8 - 3.6 | 18 - 14    | 0.140 | 3.5 | 0.180 | 4.5 | 0.200 | 5.0 | 0.120 | 3.0 | 0.910 | 23.0 | 0.030 | .08           |
| 238032   | 4      | 0.071 - 0.126 | 1.8 - 3.2 | 18 - 16    | 0.130 | 3.3 | 0.190 | 4.8 | 0.200 | 5.1 | 0.100 | 2.5 | 0.950 | 24.1 | 0.040 | 1.0           |
| 238035   | 4      | 0.071 - 0.140 | 1.8 - 3.6 | 18 - 14    | 0.140 | 3.6 | 0.180 | 4.6 | 0.200 | 5.1 | 0.120 | 3.0 | 0.950 | 24.1 | 0.040 | 1.0           |
| 238040   | 4      | 0.091 - 0.140 | 2.3 - 3.6 | 16 - 14    | 0.160 | 4.1 | 0.200 | 5.1 | 0.200 | 5.1 | 0.120 | 3.0 | 0.970 | 24.6 | 0.040 | 1.0           |
| 238048   | 4      | 0.113 - 0.190 | 2.9 - 4.8 | 14 - 12    | 0.190 | 4.8 | 0.250 | 6.3 | 0.200 | 5.1 | 0.100 | 2.5 | 0.980 | 24.6 | 0.040 | 1.0           |



# INSULATORS & CONNECTORS

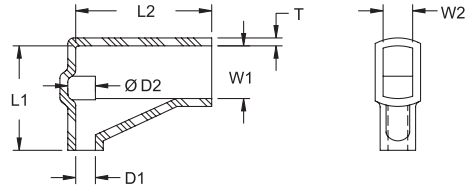
## Quick Fit Flag Terminal Insulators

**Specifications:**

- Material: UL94 V-0 Soft PVC
- Color: Transparent Blue
- UL Temperature Range: 221°F (105°C)
- UL Voltage: 600V

**Features:**

- Replaces heat shrink tubing
- Made from a specially formulated soft PVC for fast, flexible installation
- Transparent for visual inspection
- No corrosion when exposed to copper



| Item No. | Wire OD Range |           | Wire Gauge | Ø D1  |     | Ø D2  |     | L1    |      | L2    |      | W1    |     | W2    |     | T     |     | Bulk Pack Qty |
|----------|---------------|-----------|------------|-------|-----|-------|-----|-------|------|-------|------|-------|-----|-------|-----|-------|-----|---------------|
|          | in            | mm        |            | in    | mm  | in    | mm  | in    | mm   | in    | mm   | in    | mm  | in    | mm  |       |     |               |
| 248532   | 0.071 - 0.126 | 1.8 - 3.2 | 18 - 16    | 0.130 | 3.2 | 0.170 | 4.2 | 0.530 | 13.5 | 0.690 | 17.5 | 0.340 | 8.5 | 0.180 | 4.5 | 0.040 | 1.0 | 1000          |
| 248548   | 0.133 - 0.190 | 2.9 - 4.8 | 14 - 12    | 0.190 | 4.8 | 0.230 | 5.8 | 0.530 | 13.5 | 0.690 | 17.5 | 0.340 | 8.5 | 0.180 | 4.5 | 0.040 | 1.0 | 1000          |

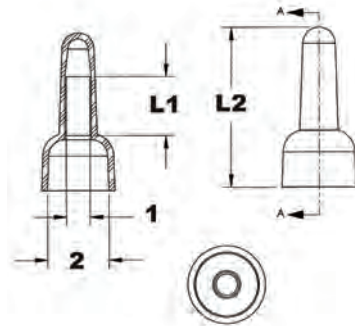
## NM Series Closed End Wire Connectors

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Material: Insert: Tin Plated Copper
- Color: Natural

**Features:**

- Nylon insulated and UL approved
- Easy installation, simply insert pre-stripped wires into connector tube and crimp with a crimping tool to hold wires firmly, even in vibration



| Item No. | Approval | Wire Gauge | L1    |     | L2    |      | 1     |     | 2     |      | Bulk Pack Qty |
|----------|----------|------------|-------|-----|-------|------|-------|-----|-------|------|---------------|
|          |          |            | in    | mm  | in    | mm   | in    | mm  | in    | mm   |               |
| NM22WC01 | UL       | 22 - 16    | 0.275 | 6.9 | 0.787 | 20.0 | 0.094 | 2.4 | 0.307 | 7.8  | 100           |
| NM22WC02 | UL       | 16 - 14    | 0.295 | 7.5 | 0.787 | 20.0 | 0.118 | 3.0 | 0.307 | 7.8  | 100           |
| NM22WC05 | UL       | 12 - 10    | 0.335 | 8.5 | 1.004 | 25.5 | 0.165 | 4.1 | 0.409 | 10.3 | 100           |
| NM22WC08 | —        | 8          | 0.374 | 9.5 | 1.071 | 27.2 | 0.165 | 4.7 | 0.472 | 12.0 | 100           |

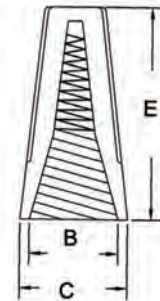
## NM Series Screw On Wire Connectors

**Specifications:**

- Material: PVC with Spring Inserted
- Color: See Table

**Features:**

- Easy to use, simply strip wires and screw on connector
- Maximum Temperature of 221°F (105°C)
- Shell is made from durable PVC with a spring inserted



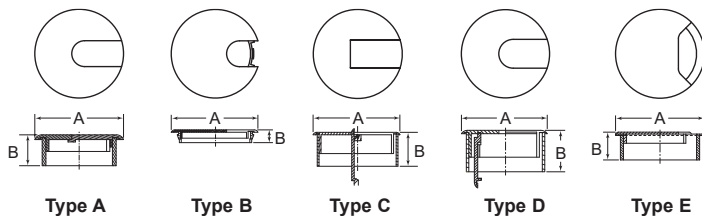
| Item No.  | Color  | Ø B   |      | Ø C   |      | E     |      | Wire Combination              | Bulk Pack Qty |
|-----------|--------|-------|------|-------|------|-------|------|-------------------------------|---------------|
|           |        | in    | mm   | in    | mm   | in    | mm   |                               |               |
| NM22SWC71 | GRAY   | 0.256 | 6.5  | 0.338 | 8.6  | 0.598 | 15.2 | MIN#20X1+#22X1 MAX#16X2       | 100           |
| NM22SWC72 | BLUE   | 0.280 | 7.1  | 0.390 | 9.9  | 0.697 | 17.7 | MIN#20X3 MAX#16X3             | 100           |
| NM22SWC73 | ORANGE | 0.382 | 9.7  | 0.496 | 12.6 | 0.866 | 22.0 | MIN#20X3 MAX#16X3+#18X1       | 100           |
| NM22SWC74 | YELLOW | 0.433 | 11.0 | 0.551 | 14.0 | 0.961 | 24.4 | MIN#14X1+#18X1 MAX#14X4+#18X1 | 100           |
| NM22SWC76 | RED    | 0.516 | 13.1 | 0.645 | 16.3 | 1.043 | 26.5 | MIN#14X2 MAX#10X2+#12X2       | 100           |



**DESK GROMMETS**



**WMRG Series  
Round Desk Grommets**



Specifications:

- Material: See Table
- Color: Black
- Surface Finish: See Table

Features:

- Used extensively on office furniture and computer desks to eliminate the clutter of wires and cables
- Several shapes and styles; most can be coordinated to match the color of your desk surface
- Layer packed for your convenience and to protect the surface during shipping



| Item No. | Type | Style   | A     |       | B     |     | Ø To Fit Hole |      | Material | Surface Finish | Bulk Pack Qty |
|----------|------|---------|-------|-------|-------|-----|---------------|------|----------|----------------|---------------|
|          |      |         | in    | in    | in    | in  | in            | in   |          |                |               |
| WMRG100A | A    | 3-PIECE | 1.500 | 0.469 | 1.250 | ABS | Textured      | 1000 |          |                |               |
| WMRG110B | D    | 3-PIECE | 2.250 | 1.000 | 2.000 | ABS | Polished      | 400  |          |                |               |
| WMRG130A | D    | 3-PIECE | 2.250 | 1.000 | 2.000 | ABS | Textured      | 600  |          |                |               |
| WMRG140A | B    | 2-PIECE | 3.000 | 0.540 | 2.500 | ABS | Textured      | 750  |          |                |               |
| WMRG160A | C    | 3-PIECE | 3.000 | 1.050 | 2.750 | ABS | Textured      | 400  |          |                |               |
| WMRG170C | A    | 3-PIECE | 3.000 | 1.050 | 2.750 | ABS | Polished      | 300  |          |                |               |
| WMRG180B | E    | 2-PIECE | 3.625 | 1.100 | 3.250 | PS  | Textured      | 240  |          |                |               |
| WMRG190B | D    | 3-PIECE | 2.250 | 1.000 | 2.000 | ABS | Textured      | 400  |          |                |               |

**WMUG Series  
Round Umbrella Table Grommets**

Specifications:

- Material: K-Resin
- Color: Clear

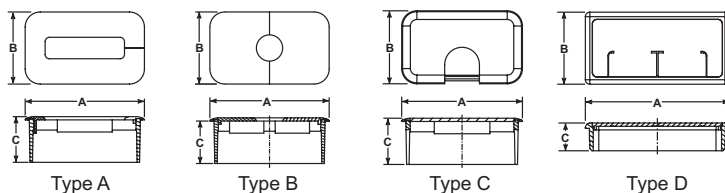


Features:

- Umbrella grommets are used on patio and casual furniture to protect tables from umbrella damage
- The plug finishes the table when the umbrella is not present

| Item No. | Ø To Fit Hole      |  | Type         | Pack Qty | Bulk Pack Qty |
|----------|--------------------|--|--------------|----------|---------------|
|          | in                 |  |              |          |               |
| WMUG100C | 2.000              |  | Bushing/Ring | 1        | 900           |
| WMUG110D | fits into WMUG100C |  | Cover/Lid    | 1        | 900           |

**WMTG Series  
Rectangular Table Grommets**



Specifications:

- Material: See Table
- Color: Black
- Surface Finish: Textured

Features:

- Wire management grommets are used extensively on office furniture and computer desks to eliminate the clutter of wires and cables

| Item No. | Type | Style   | A     |       |       | B             |               |          | C   |    |    | Ø To Fit Hole | Material | Surface Finish | Bulk Pack Qty |
|----------|------|---------|-------|-------|-------|---------------|---------------|----------|-----|----|----|---------------|----------|----------------|---------------|
|          |      |         | in    | in    | in    | in            | in            | in       | in  | in | in |               |          |                |               |
| WMTG100A | B    | 3-Piece | 3.500 | 2.125 | 0.700 | 3.250 x 1.875 | ABS           | Textured | 525 |    |    |               |          |                |               |
| WMTG110A | B    | 3-Piece | 3.500 | 2.125 | 1.250 | 3.230 x 1.865 | ABS           | Textured | 315 |    |    |               |          |                |               |
| WMTG120A | A    | 2-Piece | 3.475 | 2.102 | 1.250 | 3.250 x 1.865 | ABS           | Textured | 189 |    |    |               |          |                |               |
| WMTG150A | B    | 2-Piece | 3.500 | 2.134 | 1.287 | 3.250 x 1.865 | ABS           | Textured | 320 |    |    |               |          |                |               |
| WMTG170A | C    | 2-Piece | 3.365 | 2.245 | 1.750 | 3.125 x 2.000 | ABS           | Textured | 204 |    |    |               |          |                |               |
| WMTG180A | D    | 2-Piece | 4.020 | 2.010 | 0.775 | 3.770 x 1.750 | Polypropylene | Textured | 288 |    |    |               |          |                |               |

# TUBE GLIDES, FEET, BUMPERS & CASTERS





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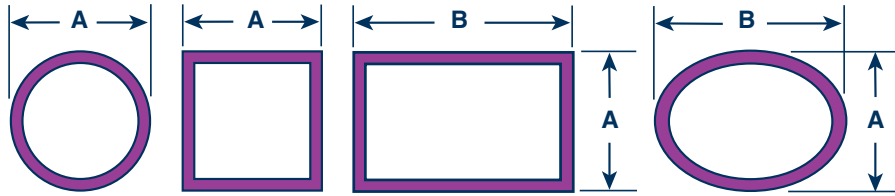
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# TUBE GLIDES, FEET, BUMPERS & CASTERS

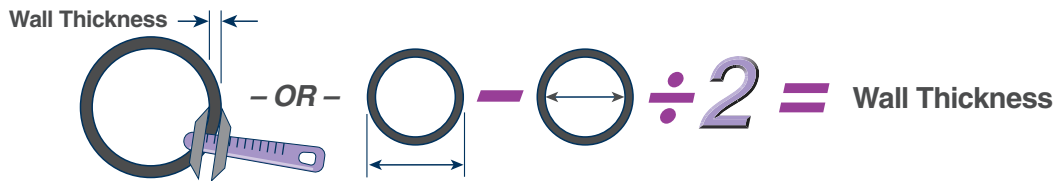


# TUBE INSERT & GLIDE SELECTOR GUIDE

## Step 1: Determine Tube Size = Actual OD of Tubing



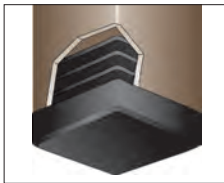
## Step 2: Determine the Wall Thickness to Determine Tube Gauge



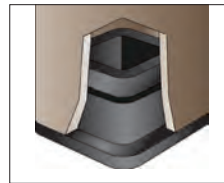
|                         |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Wall Thickness (inches) | 0.239 | 0.224 | 0.209 | 0.194 | 0.179 | 0.164 | 0.149 | 0.134 | 0.120 | 0.109 | 0.095 | 0.083 | 0.072 | 0.065 | 0.058 | 0.049 | 0.042 | 0.035 | 0.028 |
| (mm)                    | 6.1   | 5.7   | 5.3   | 4.9   | 4.5   | 4.2   | 3.8   | 3.4   | 3     | 2.8   | 2.4   | 2.1   | 1.8   | 1.7   | 1.5   | 1.2   | 1.1   | 0.9   | 0.7   |
| Tube Gauge              | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 22    |

## Step 3: Select your desired...

### Style:



**Ribbed Design – Fits Multiple Gauges Non-Load Bearing**



**Straight Wall Design – Fits Single Gauge Load Bearing**

### Shape & Finish:

**Flat, Rounded, Angled, or Articulating**



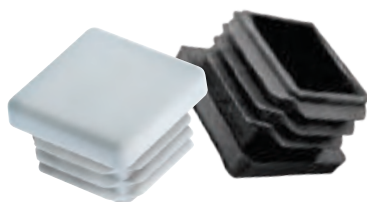
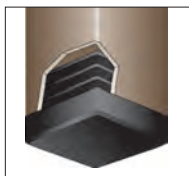
**Polished, Textured (Matte), or Chromed**





# SQUARE INSERT GLIDES

## SQR Series Square Multi-Gauge Ribbed Tube Inserts



**Specifications:**

- Material: Low-Density Polyethylene
- Surface Finish: Polished and Textured
- Color: See Table

**Features:**

- Ideal for aesthetic or light-duty load bearing applications
- Perimeter rib design allows for easy assembly and a secure fit
- Used on a wide range of furniture and metal tubing applications

**Imperial**

| Black Item No. |            | White Item No. |            | Tube OD |            | Wall Thickness |       | Bulk Pack Qty |
|----------------|------------|----------------|------------|---------|------------|----------------|-------|---------------|
| Polished       | Textured   | Polished       | Textured   | in      | Tube Gauge | in             |       |               |
| SQR051620A     | —          | —              | —          | 0.500   | 16-20      | 0.035-0.065    | 10000 |               |
| SQR111193A     | SQR111211A | SQR111229A     | —          | 0.500   | 14-20      | 0.035-0.083    | 2500  |               |
| SQR061620C     | —          | —              | —          | 0.625   | 16-20      | 0.035-0.065    | 5000  |               |
| SQR111195A     | SQR111213A | —              | —          | 0.625   | 12-20      | 0.035-0.109    | 2500  |               |
| SQR111196A     | SQR111214A | SQR111232A     | —          | 0.750   | 12-20      | 0.035-0.109    | 2500  |               |
| SQR071620C     | —          | —              | —          | 0.750   | 16-20      | 0.035-0.065    | 5000  |               |
| SQR081618A     | —          | —              | —          | 0.875   | 16-18      | 0.049-0.065    | 4000  |               |
| SQR101014A     | —          | SQR101014D     | —          | 1.000   | 10-14      | 0.083-0.134    | 2000  |               |
| SQR101420D     | —          | —              | —          | 1.000   | 14-20      | 0.035-0.083    | 2500  |               |
| SQR111200A     | SQR111218A | SQR111235A     | —          | 1.000   | 11-19      | 0.042-0.120    | 2500  |               |
| SQR111620A     | —          | —              | —          | 1.125   | 16-20      | 0.035-0.065    | 2000  |               |
| —              | —          | SQR199150A     | —          | 1.125   | 14-20      | 0.035-0.083    | 2000  |               |
| SQR121014A     | —          | —              | —          | 1.250   | 10-14      | 0.083-0.134    | 2000  |               |
| SQR121420A     | —          | —              | —          | 1.250   | 14-20      | 0.035-0.083    | 2000  |               |
| —              | —          | —              | SQR111616A | 1.250   | 11-19      | 0.042-0.120    | 1500  |               |
| SQR131016A     | —          | —              | —          | 1.375   | 10-16      | 0.065-0.134    | 900   |               |
| SQR111202A     | SQR111220A | SQR111238A     | —          | 1.375   | 11-19      | 0.042-0.120    | 1500  |               |
| SQR151014A     | —          | —              | —          | 1.500   | 10-12      | 0.083-0.109    | 1000  |               |
| SQR111503A     | SQR111541A | SQR111617A     | —          | 1.500   | 12-19      | 0.042-0.120    | 1000  |               |
| SQR151418A     | —          | —              | —          | 1.500   | 14-18      | 0.049-0.083    | 1000  |               |
| SQR171014A     | —          | SQR171014C     | —          | 1.750   | 10-14      | 0.083-0.134    | 500   |               |
| SQR171418A     | SQR171418B | SQR171418C     | —          | 1.750   | 14-18      | 0.049-0.083    | 500   |               |
| —              | SQR200508A | —              | —          | 2.000   | 5-8        | 0.164-0.209    | 500   |               |
| SQR201014A     | —          | —              | —          | 2.000   | 10-14      | 0.083-0.134    | 350   |               |
| SQR201418A     | —          | —              | —          | 2.000   | 14-18      | 0.049-0.083    | 500   |               |
| SQR111206A     | SQR111224A | SQR111242A     | —          | 2.000   | 11-19      | 0.042-0.120    | 500   |               |
| —              | SQR251014A | —              | —          | 2.500   | 10-14      | 0.083-0.134    | 250   |               |
| SQR111504A     | SQR111542A | —              | —          | 2.500   | 11-19      | 0.042-0.120    | 250   |               |
| —              | SQR300508A | —              | —          | 3.000   | 5-8        | 0.164-0.209    | 200   |               |
| —              | SQR301014A | —              | —          | 3.000   | 10-14      | 0.083-0.134    | 200   |               |
| SQR111507A     | SQR111545A | —              | SQR111621A | 3.000   | 8-14       | 0.083-0.164    | 200   |               |
| SQR3511B       | —          | —              | —          | 3.500   | 8-11       | 0.120-0.164    | 70    |               |
| —              | SQR400408A | —              | —          | 4.000   | 4-8        | 0.164-0.224    | 75    |               |
| —              | SQR400711B | —              | —          | 4.000   | 7-11       | 0.120-0.179    | 70    |               |
| —              | SQR500711A | —              | —          | 5.000   | 7-11       | 0.120-0.179    | 48    |               |
| —              | SQR60188A  | —              | —          | 6.000   | 10-14      | 0.083-0.134    | 26    |               |

**Metric**

| Black Item No. |            | Tube OD | Tube Gauge | Wall Thickness | Bulk Pack Qty |
|----------------|------------|---------|------------|----------------|---------------|
| Polished       | Textured   | In      |            | In             |               |
| SQR111197A     | SQR111215A | 20.00   | 12-20      | 0.035-0.109    | 2500          |
| SQR111198A     | SQR111216A | 22.00   | 12-20      | 0.035-0.109    | 2500          |
| SQR111199A     | SQR111217A | 25.00   | 12-20      | 0.035-0.109    | 2500          |
| SQR111502A     | SQR111540A | 32.00   | 11-19      | 0.042-0.120    | 1500          |
| SQR111203A     | SQR111221A | 40.00   | 11-19      | 0.042-0.120    | 500           |
| SQR111204A     | SQR111222A | 45.00   | 11-19      | 0.042-0.120    | 500           |

| Black Item No. |            | Tube OD | Tube Gauge | Wall Thickness | Bulk Pack Qty |
|----------------|------------|---------|------------|----------------|---------------|
| Polished       | Textured   | In      |            | In             |               |
| SQR111205A     | SQR111223A | 50.00   | 11-19      | 0.042-0.120    | 500           |
| SQR111207A     | SQR111225A | 60.00   | 11-19      | 0.042-0.120    | 250           |
| SQR111810A     | SQR111811A | 60.00   | 9-14       | 0.083-0.149    | 250           |
| SQR111506A     | SQR111544A | 75.00   | 8-14       | 0.083-0.164    | 200           |
| SQR111209A     | SQR111227A | 80.00   | 8-14       | 0.083-0.164    | 150           |
| SQR111210A     | SQR111228A | 100.00  | 8-14       | 0.083-0.164    | 100           |

## LSQR Series Square Ribbed Tube Inserts



**Specifications:**

- Material: High-Density Polyethylene
- Color: Black with Textured Finish

**Features:**

- Not recommended for load-bearing applications

| Item No.    | Tube Size |       | Tube Gauge | Wall Thickness In | Bulk Pack Qty |
|-------------|-----------|-------|------------|-------------------|---------------|
|             | In        | mm    |            |                   |               |
| LSQR061620A | 0.625     | 15.87 | 16-20      | 0.035-0.065       | 6000          |
| LSQR071620A | 0.750     | 19.05 | 16-20      | 0.035-0.065       | 4000          |
| LSQR101420A | 1.000     | 25.40 | 14-20      | 0.035-0.083       | 2000          |
| LSQR111620A | 1.125     | 28.32 | 16-20      | 0.035-0.065       | 3000          |
| LSQR121420A | 1.250     | 31.75 | 14-20      | 0.035-0.083       | 1300          |



# SQUARE INSERT GLIDES

## SIG Series Square Load Bearing Glides



**Specifications:**

- Material: See Table
- Color: See Table

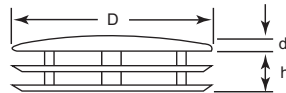
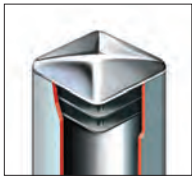
**Features:**

- Suitable for light and heavy-duty applications
- Step lead provides easy installation
- Press fit assures a secure hold in tubing

| Item No. | Tube Size |            | Material | Wall Thickness |       | Bulk Pack Qty |
|----------|-----------|------------|----------|----------------|-------|---------------|
|          | in        | Tube Gauge |          | in             | Color |               |
| SIG1100A | 0.375     | 16         | ABS      | 0.065          | Black | 5000          |
| SIG1105A | 0.375     | 19         | ABS      | 0.042          | Black | 5000          |
| SIG1108A | 0.500     | 14         | ABS      | 0.083          | Black | 4000          |
| SIG1110A | 0.500     | 16         | ABS      | 0.065          | Black | 15000         |
| SIG1115A | 0.500     | 18         | ABS      | 0.049          | Black | 15000         |
| SIG1120A | 0.625     | 16         | ABS      | 0.065          | Black | 8000          |
| SIG1125A | 0.625     | 17         | ABS      | 0.058          | Black | 8000          |
| SIG1130A | 0.625     | 18         | ABS      | 0.049          | Black | 8000          |
| SIG1135A | 0.625     | 20         | ABS      | 0.035          | Black | 8000          |
| SIG1140A | 0.695     | 18         | ABS      | 0.049          | Black | 5000          |
| SIG1145A | 0.715     | 18         | ABS      | 0.049          | Black | 5000          |
| SIG1150A | 0.725     | 11         | ABS      | 0.120          | Black | 5000          |
| SIG1155A | 0.725     | 16         | ABS      | 0.065          | Black | 5000          |
| SIG1160A | 0.750     | 11         | ABS      | 0.120          | Black | 5800          |
| SIG1165A | 0.750     | 13         | ABS      | 0.095          | Black | 6000          |
| SIG1170A | 0.750     | 15         | ABS      | 0.072          | Black | 4000          |
| SIG1175A | 0.750     | 16         | ABS      | 0.065          | Black | 5500          |
| SIG1180A | 0.750     | 18         | ABS      | 0.049          | Black | 5500          |
| SIG1185A | 0.750     | 19         | ABS      | 0.042          | Black | 5500          |
| SIG1190A | 0.750     | 20         | ABS      | 0.035          | Black | 5500          |
| SIG1200A | 0.812     | 14         | ABS      | 0.083          | Black | 4500          |
| SIG1205A | 0.812     | 16         | ABS      | 0.065          | Black | 4500          |
| SIG1210A | 0.812     | 18         | ABS      | 0.049          | Black | 4500          |
| SIG1215A | 0.875     | 11         | ABS      | 0.120          | Black | 5000          |
| SIG1220C | 0.875     | 16         | ABS      | 0.065          | Black | 4000          |
| SIG1225A | 0.875     | 18         | ABS      | 0.049          | Black | 4000          |
| SIG1235A | 1.000     | 11         | ABS      | 0.120          | Black | 3200          |
| SIG1240A | 1.000     | 14         | ABS      | 0.083          | Black | 3000          |
| SIG1244C | 1.000     | 16         | Butyrate | 0.065          | Clear | 2800          |

| Item No. | Tube Size |            | Material | Wall Thickness |       | Bulk Pack Qty |
|----------|-----------|------------|----------|----------------|-------|---------------|
|          | in        | Tube Gauge |          | in             | Color |               |
| SIG1245A | 1.000     | 16         | ABS      | 0.065          | Black | 2800          |
| SIG1250A | 1.000     | 17         | ABS      | 0.058          | Black | 2800          |
| SIG1255A | 1.000     | 18         | ABS      | 0.049          | Black | 2800          |
| SIG1260A | 1.000     | 20         | ABS      | 0.035          | Black | 3200          |
| SIG1265A | 1.000     | 22         | ABS      | 0.035          | Black | 3200          |
| SIG1270A | 1.125     | 16         | ABS      | 0.065          | Black | 2200          |
| SIG1275A | 1.125     | 18         | ABS      | 0.049          | Black | 2200          |
| SIG1280A | 1.250     | 11         | ABS      | 0.120          | Black | 2200          |
| SIG1285A | 1.250     | 12         | ABS      | 0.109          | Black | 2000          |
| SIG1290A | 1.250     | 14         | ABS      | 0.083          | Black | 1500          |
| SIG1295A | 1.250     | 16         | ABS      | 0.065          | Black | 1700          |
| SIG1300A | 1.250     | 18         | ABS      | 0.049          | Black | 1800          |
| SIG1305A | 1.500     | 10         | ABS      | 0.134          | Black | 1800          |
| SIG1310A | 1.500     | 11         | ABS      | 0.120          | Black | 1200          |
| SIG1315A | 1.500     | 12         | ABS      | 0.109          | Black | 1200          |
| SIG1320C | 1.500     | 14         | ABS      | 0.083          | Black | 1300          |
| SIG1325A | 1.500     | 16         | ABS      | 0.065          | Black | 1100          |
| SIG1330A | 1.500     | 18         | ABS      | 0.049          | Black | 1200          |
| SIG1335A | 1.500     | 20         | ABS      | 0.035          | Black | 1200          |
| SIG1340A | 1.750     | 11         | ABS      | 0.120          | Black | 1000          |
| SIG1345A | 1.750     | 14         | ABS      | 0.083          | Black | 1000          |
| SIG1350A | 1.750     | 16         | ABS      | 0.065          | Black | 900           |
| SIG1353C | 2.000     | 11         | ABS      | 0.120          | Black | 1000          |
| SIG1365A | 2.000     | 12         | ABS      | 0.109          | Black | 1000          |
| SIG1370A | 2.000     | 14         | ABS      | 0.083          | Black | 1000          |
| SIG1375A | 2.000     | 16         | ABS      | 0.065          | Black | 1000          |
| SIG1380A | 2.000     | 18         | ABS      | 0.049          | Black | 1000          |
| SIG1385A | 2.500     | 11         | ABS      | 0.120          | Black | 500           |
| SIG1390A | 3.000     | 11         | ABS      | 0.120          | Black | 500           |

## SQP Series Square Ribbed Tube Inserts Chrome Finish



**Specifications:**

- Material: Low-Density Polyethylene
- Color: Black with High-Polished Metal-Finish Shell

**Features:**

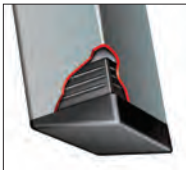
- Polished metallic finish provides enhanced aesthetic appearance
- Horizontal ribbing allows for built-in flexibility to fit multiple tube gauges

| Item No.   | D     |       | d     |      | h     |       | Wall Thickness        |           | Bulk Pack Qty |
|------------|-------|-------|-------|------|-------|-------|-----------------------|-----------|---------------|
|            | in    | mm    | in    | mm   | in    | mm    | Tube Gauge (in)       | mm        |               |
| SQP465341A | 0.625 | 15.88 | 0.079 | 2.00 | 0.354 | 9.00  | 14-19 (0.040 - 0.080) | 1.0 - 2.0 | 1000          |
| SQP460959A | 0.709 | 18.00 | 0.079 | 2.00 | 0.354 | 9.00  | 14-19 (0.040 - 0.080) | 1.0 - 2.0 | 1000          |
| SQP465340A | 0.750 | 19.05 | 0.079 | 2.00 | 0.394 | 10.00 | 14-19 (0.040 - 0.080) | 1.0 - 2.0 | 1000          |
| SQP465343A | 1.000 | 25.40 | 0.079 | 2.00 | 0.394 | 10.00 | 14-19 (0.040 - 0.080) | 1.0 - 2.0 | 1000          |
| SQP465342A | 1.181 | 30.00 | 0.118 | 3.00 | 0.394 | 10.00 | 14-19 (0.040 - 0.080) | 1.0 - 2.0 | 1000          |
| SQP460964A | 1.375 | 35.00 | 0.118 | 3.00 | 0.472 | 12.00 | 14-19 (0.040 - 0.080) | 1.0 - 2.0 | 1000          |
| SQP465344A | 1.575 | 40.00 | 0.118 | 3.00 | 0.472 | 12.00 | 14-19 (0.040 - 0.080) | 1.0 - 2.0 | 1000          |

## SQUARE INSERT GLIDES



### AFSQ Series Square Angled Tube Inserts



**Specifications:**

- Material: Low-Density Polyethylene
- Color: Black

**Features:**

- These angled feet are ideal for stacking chairs, children's play equipment and step ladders

| Item No.       | Tube Size |       | Tube Gauge | Wall Thickness |        | Bulk Pack Qty |
|----------------|-----------|-------|------------|----------------|--------|---------------|
|                | in        | mm    |            | in             | Degree |               |
| AFSQ07161805A* | 0.750     | 19.05 | 16-18      | 0.049-0.065    | 5°     | 2500          |
| AFSQ07161825A* | 0.750     | 19.05 | 16-18      | 0.049-0.065    | 25°    | 2500          |
| AFSQ10162015A  | 1.000     | 25.40 | 16-20      | 0.035-0.065    | 15°    | 1000          |

\* Has a built-in bumper

### SRG Series Square Domed Tube Glides



**Specifications:**

- Material: ABS
- Color: Black

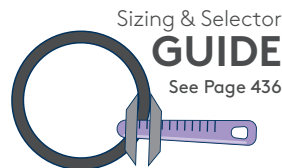
**Features:**

- Ideal for applications with variable leg angles
- Square rocker glides fit flush with tubing outer dimensions for a clean, finished look

| Item No. | Tube Size<br>in | Tube Gauge | Wall Thickness<br>in | Bulk Pack Qty |
|----------|-----------------|------------|----------------------|---------------|
| SRG1010A | 0.750           | 16         | 0.065                | 4000          |
| SRG1020A | 0.750           | 18         | 0.049                | 4000          |
| SRG1030A | 0.813           | 16         | 0.065                | 3000          |
| SRG1115A | 0.813           | 17         | 0.058                | 4000          |
| SRG1120A | 0.813           | 18         | 0.049                | 700           |
| SRG1045A | 0.875           | 16         | 0.065                | 3000          |
| SRG1055A | 0.875           | 18         | 0.049                | 2700          |

| Item No. | Tube Size<br>in | Tube Gauge | Wall Thickness<br>in | Bulk Pack Qty |
|----------|-----------------|------------|----------------------|---------------|
| SRG1075A | 0.940           | 18         | 0.049                | 2700          |
| SRG1080A | 1.000           | 16         | 0.065                | 2000          |
| SRG1100A | 1.000           | 18         | 0.049                | 2000          |
| SRG1125A | 1.250           | 16         | 0.065                | 1100          |
| SRG1135A | 1.250           | 18         | 0.049                | 1100          |
| SRG1145A | 1.500           | 18         | 0.049                | 1000          |

### DFSQ Series Square Domed Tube Inserts



**Specifications:**

- Material: Low-Density Polyethylene
- Color: Black

**Features:**

- Can accommodate any degree of leg angle, while the horizontal ribbed design has built-in flexibility to fit multiple tube gauge sizes

| Item No.    | Tube Size |       | Tube Gauge | Bulk Pack Qty |
|-------------|-----------|-------|------------|---------------|
|             | in        | mm    |            |               |
| DFSQ111525A | 0.787     | 20.00 | 18-25      | 2500          |
| DFSQ081620A | 0.875     | 22.22 | 16-20      | 1750          |
| DFSQ101620A | 1.000     | 25.40 | 16-20      | 1250          |



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# THREADED INSERT GLIDES

## STI Series Square Plastic Threaded Inserts



**Specifications:**

- Material: Nylon
- Color: See Table

**Features:**

- Can be used with either adjustable feet or tilt glides

| Item No. | Color   | Ø Tube<br>in | Tube Gauge | Thread Size | Bulk Pack Qty |
|----------|---------|--------------|------------|-------------|---------------|
| STI1200B | Black   | 0.750        | 16         | 1/4 - 20    | 5000          |
| STI1215A | Natural | 0.875        | 16         | 1/4 - 20    | 1900          |
| STI1215B | Black   | 0.875        | 16         | 1/4 - 20    | 1900          |
| STI1220A | Natural | 1.000        | 16         | 1/4 - 20    | 3000          |
| STI1240A | Natural | 1.000        | 18         | 1/4 - 20    | 2700          |
| STI1260A | Natural | 1.000        | 18         | 5/16 - 18   | 2700          |
| STI1260B | Black   | 1.000        | 18         | 5/16 - 18   | 2700          |
| STI1270A | Natural | 1.250        | 16         | 5/16 - 18   | 1800          |

## TAS Series Square Threaded All Metal Inserts



**Specifications:**

- Material: Steel with Zinc Plated Finish

**Features:**

- Metal ribs lock onto inside of square tube

**Imperial**

| Item No. | Fits Tube |           | Fits Tube Gauge | Bulk Pack Qty |
|----------|-----------|-----------|-----------------|---------------|
|          | in        | Thread    |                 |               |
| TAS240A  | 1         | 5/16 - 18 | 16 - 18         | 1000          |
| TAS260A  | 1 - 1/4   | 5/16 - 18 | 16 - 18         | 500           |
| TAS460A  | 1 - 1/4   | 3/8 - 16  | 16 - 18         | 500           |
| TAS270A  | 1 - 1/2   | 5/16 - 18 | 16 - 18         | 500           |
| TAS470A  | 1 - 1/2   | 3/8 - 16  | 16 - 18         | 500           |

**Metric**

| Item No. | Fits Tube |             | Tube Gauge | Std Pack Qty |
|----------|-----------|-------------|------------|--------------|
|          | mm        | Thread Size |            |              |
| 499465   | 19        | M6          | 1.0        | 200          |
| 499466   | 22        | M6          | 1.0        | 200          |
| 499467   | 25        | M6          | 1.0        | 200          |
| 551845   | 25        | M8          | 1.2        | 200          |
| 499470   | 32        | M8          | 1.2        | 200          |
| 499471   | 38        | M8          | 1.2        | 200          |
| 551842   | 22        | M10         | 1.5        | 200          |
| 551843   | 25        | M10         | 1.5        | 200          |
| 499473   | 32        | M10         | 1.5        | 200          |
| 499474   | 38        | M10         | 1.5        | 200          |

## SQM Series Square Metal Threaded Inserts

**Specifications:**

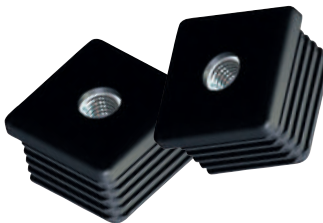
- Material: HDPE with Zinc-Plated Steel-Threaded Insert
- Color: Black

**Features:**

- Tube inserts with internal threads to accommodate adjustable leveling mounts and feet
- Ribbed to accommodate multiple gauges

**Imperial**

| Item No. | Tube Size | Thread Size | Tube Gauge | Wall Thickness | Bulk Pack Qty |
|----------|-----------|-------------|------------|----------------|---------------|
|          |           |             |            | in             |               |
| SQM0150A | 0.750     | 1/4 - 20    | 16 - 18    | 0.049 - 0.065  | 1000          |
| SQM0200A | 0.875     | 1/4 - 20    | 16 - 18    | 0.049 - 0.065  | 1000          |
| SQM0300A | 1.000     | 1/4 - 20    | 16 - 18    | 0.049 - 0.065  | 1000          |
| SQM0350A | 1.000     | 5/16 - 18   | 16 - 18    | 0.049 - 0.065  | 1000          |
| SQM0400A | 1.000     | 1/4 - 20    | 12 - 14    | 0.083 - 0.109  | 1000          |
| SQM0450A | 1.000     | 5/16 - 18   | 12 - 14    | 0.083 - 0.109  | 1000          |
| SQM0500A | 1.000     | 1/4 - 20    | 10 - 11    | 0.120 - 0.134  | 1000          |
| SQM0550A | 1.000     | 5/16 - 18   | 10 - 11    | 0.120 - 0.134  | 1000          |
| SQM0600A | 1.250     | 5/16 - 18   | 16 - 18    | 0.049 - 0.065  | 500           |
| SQM0650A | 1.250     | 3/8 - 16    | 16 - 18    | 0.049 - 0.065  | 500           |
| SQM0700A | 1.250     | 5/16 - 18   | 12 - 14    | 0.083 - 0.109  | 500           |
| SQM0750A | 1.250     | 3/8 - 16    | 12 - 14    | 0.083 - 0.109  | 500           |
| SQM0800A | 1.250     | 5/16 - 18   | 10 - 11    | 0.120 - 0.134  | 500           |
| SQM0850A | 1.250     | 3/8 - 16    | 10 - 11    | 0.120 - 0.134  | 500           |
| SQM0900A | 1.375     | 3/8 - 16    | 16 - 18    | 0.049 - 0.065  | 500           |
| SQM1000A | 1.500     | 3/8 - 16    | 16 - 18    | 0.049 - 0.065  | 500           |



**Metric**

| Item No. | Tube Size | Thread Size | Tube Gauge | Wall Thickness | Bulk Pack Qty |
|----------|-----------|-------------|------------|----------------|---------------|
|          | mm        | mm          | mm         | mm             |               |
| 498583   | 19        | M6          | 17 - 19    | 1.1 - 1.5      | 1000          |
| 498584   | 20        | M6          | 17 - 19    | 1.1 - 1.5      | 1000          |
| 498585   | 20        | M8          | 17 - 19    | 1.1 - 1.5      | 1000          |
| 498586   | 25        | M6          | 17 - 19    | 1.1 - 1.5      | 500           |
| 498587   | 25        | M8          | 17 - 19    | 1.1 - 1.5      | 500           |
| 498588   | 30        | M8          | 17 - 19    | 1.1 - 1.5      | 1000          |
| 498589   | 30        | M10         | 17 - 19    | 1.1 - 1.5      | 250           |
| 498590   | 35        | M8          | 17 - 19    | 1.1 - 1.5      | 500           |
| 498591   | 35        | M10         | 17 - 19    | 1.1 - 1.5      | 500           |
| 498592   | 40        | M8          | 17 - 19    | 1.1 - 1.5      | 200           |
| 498593   | 40        | M10         | 17 - 19    | 1.1 - 1.5      | 500           |
| 498594   | 40        | M12         | 17 - 19    | 1.1 - 1.5      | 500           |
| 498595   | 50        | M8          | 17 - 19    | 1.1 - 1.5      | 100           |
| 498596   | 50        | M10         | 17 - 19    | 1.1 - 1.5      | 250           |
| 498597   | 50        | M12         | 17 - 19    | 1.1 - 1.5      | 250           |



# HEAVY DUTY THREADED INSERT GLIDES



## SQH Series Square Heavy Duty Threaded Inserts



**Specifications:**

- Material: Glass-Filled Nylon with Brass Threaded Insert
- Color: Black

**Features:**

- Threaded brass insert for indoor and outdoor use
- High load rating is ideal for machinery use

**Imperial**

| Item No. | Tube Size in | Thread Size | Tube Gauge | Wall Thickness in | Max Static Load lbs. | Bulk Pack Qty |
|----------|--------------|-------------|------------|-------------------|----------------------|---------------|
| SQH0100A | 1.5          | 3/8-16      | 16         | 0.065             | 1350                 | 48            |
| SQH0150A | 1.5          | 1/2-13      | 16         | 0.065             | 1350                 | 48            |
| SQH0200A | 1.5          | 5/8-11      | 16         | 0.065             | 1350                 | 48            |
| SQH0250A | 1.5          | 3/4-10      | 16         | 0.065             | 1800                 | 48            |
| SQH0300A | 1.5          | 3/8-16      | 11         | 0.12              | 1350                 | 48            |
| SQH0350A | 1.5          | 1/2-13      | 11         | 0.12              | 1350                 | 48            |
| SQH0400A | 1.5          | 5/8-11      | 11         | 0.12              | 1350                 | 48            |
| SQH0450A | 1.5          | 3/4-10      | 11         | 0.12              | 1800                 | 48            |
| SQH0500A | 2            | 3/8-16      | 16         | 0.065             | 1350                 | 24            |
| SQH0550A | 2            | 1/2-13      | 16         | 0.065             | 1350                 | 24            |
| SQH0600A | 2            | 5/8-11      | 16         | 0.065             | 1350                 | 24            |
| SQH0650A | 2            | 3/4-10      | 16         | 0.065             | 2000                 | 24            |
| SQH0700A | 2            | 3/8-16      | 12         | 0.109             | 1350                 | 24            |
| SQH0750A | 2            | 1/2-13      | 12         | 0.109             | 1350                 | 24            |
| SQH0800A | 2            | 5/8-11      | 12         | 0.109             | 1350                 | 24            |
| SQH0850A | 2            | 3/4-10      | 12         | 0.109             | 2000                 | 24            |

**Metric**

| Item No. | Tube Size mm | Thread Size mm | Tube Gauge mm | Max Static Load N | Bulk Pack Qty |
|----------|--------------|----------------|---------------|-------------------|---------------|
| 1286358  | 30           | M10            | 1.5           | 4500              | 48            |
| 1286359  | 30           | M12            | 1.5           | 4500              | 48            |
| 1286360  | 30           | M16            | 1.5           | 4500              | 48            |
| 1286361  | 40           | M10            | 1.5           | 6000              | 48            |
| 1286362  | 40           | M12            | 1.5           | 6000              | 48            |
| 1286363  | 40           | M16            | 1.5           | 6000              | 48            |
| 1286364  | 40           | M20            | 1.5           | 8000              | 48            |
| 1286365  | 40           | M10            | 2             | 6000              | 48            |
| 1286366  | 40           | M12            | 2             | 6000              | 48            |
| 1286367  | 40           | M16            | 2             | 6000              | 48            |
| 1286368  | 40           | M20            | 2             | 8000              | 48            |
| 1286369  | 50           | M12            | 1.5           | 6000              | 24            |
| 1286370  | 50           | M16            | 1.5           | 6000              | 24            |
| 1286371  | 50           | M20            | 1.5           | 8500              | 24            |
| 1286372  | 50           | M12            | 2             | 6000              | 24            |
| 1286373  | 50           | M16            | 2             | 6000              | 24            |
| 1286374  | 50           | M20            | 2             | 8500              | 24            |

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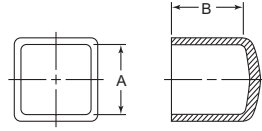
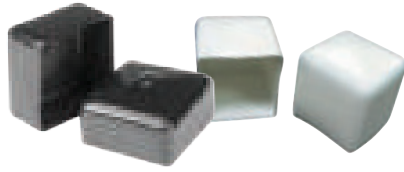
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# SQUARE AND ANGLE IRON CAPS

## DMSQ Series Square Vinyl End Caps



**Specifications:**

- Material: PVC
- Color: See Table

**Features:**

- Designed to fit the most popular sizes of square tubular steel
- Material flexibility will stretch to fit normal tube diameter tolerance variations
- Glossy and attractive finish makes this part ideal for use as a decorative end cap



| Black Item No.  | Bulk Pack Qty | Black Item No. | Bulk Pack Qty | White Item No. | Bulk Pack Qty | A     |       |
|-----------------|---------------|----------------|---------------|----------------|---------------|-------|-------|
| 1/2" Length (B) |               | 1" Length (B)  |               | 1" Length (B)  |               | in    | mm    |
| DMSQ0250-1/2A   | 5000          | DMSQ0250-1A    | 6500          | —              | —             | 0.250 | 6.35  |
| DMSQ0312-1/2A   | 5000          | DMSQ0312-1A    | 5000          | —              | —             | 0.312 | 7.92  |
| DMSQ0375-1/2A   | 5000          | DMSQ0375-1A    | 5000          | —              | —             | 0.375 | 9.52  |
| DMSQ0437-1/2A   | 5000          | DMSQ0437-1A    | 5000          | —              | —             | 0.437 | 11.09 |
| DMSQ0500-1/2A   | 5000          | DMSQ0500-1A    | 4000          | —              | —             | 0.500 | 12.70 |
| DMSQ0625-1/2A   | 3500          | DMSQ0625-1A    | 2000          | —              | —             | 0.625 | 15.87 |
| DMSQ0750-1/2A   | 3500          | DMSQ0750-1A    | 2000          | DMSQ0750-1C    | 2000          | 0.750 | 19.05 |
| DMSQ1000-1/2A   | 2000          | DMSQ1000-1A    | 1500          | DMSQ1000-1C    | 1500          | 1.000 | 25.40 |
| DMSQ1250-1/2A   | 2000          | DMSQ1250-1A    | 1000          | —              | —             | 1.250 | 31.75 |
| DMSQ1500-1/2A   | 1500          | DMSQ1500-1A    | 500           | —              | —             | 1.500 | 38.10 |
| DMSQ2000-1/2A   | 500           | DMSQ2000-1A    | 325           | —              | —             | 2.000 | 50.80 |

## SQC Series Square Heavy Duty End Caps

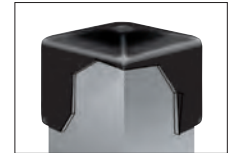


**Specifications:**

- Material: See Table
- Color: Black

**Features:**

- End cap style design fits most popular sizes of square tubular steel



| Item No.  | Tube Size |       | Material | Bulk Pack Qty |
|-----------|-----------|-------|----------|---------------|
|           | in        | mm    |          |               |
| SQC0500A  | 0.500     | 12.70 | LDPE     | 5000          |
| SQC1000A* | 1.000     | 25.40 | ABS      | 1700          |
| SQC1250A  | 1.250     | 31.75 | LDPE     | 1200          |
| SQC3000A  | 3.000     | 76.20 | LDPE     | 100           |

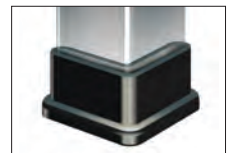
## AIC Series Angle Iron Caps

**Specifications:**

- Material: Low-Density Polyethylene
- Color: Black

**Features:**

- Angle iron caps are an affordable answer to the problem of protecting floors from the sharp edges of angle iron furniture
- Angle iron caps are also used as caps on metal bed frames and shelves and will not rust while also eliminating the cost of welding steel closures



| Item No. | Leg Length |       | Leg Gauge |      | Bulk Pack Qty |
|----------|------------|-------|-----------|------|---------------|
|          | in         | mm    | in        | mm   |               |
| AIC1000A | 1.000      | 25.40 | 0.125     | 3.18 | 2200          |
| AIC1125A | 1.250      | 31.74 | 0.125     | 3.18 | 1400          |
| AIC1128A | 1.500      | 38.10 | 0.125     | 3.18 | 1000          |
| AIC2000A | 1.290      | 32.78 | 0.125     | 3.18 | 600           |

# ROUND TUBE INSERT GLIDES



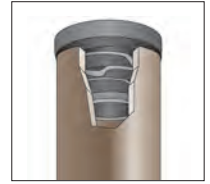
## RDR Series Round Multi-Gauge Ribbed Tube Inserts

**Specifications:**

- Material: Low-Density Polyethylene
- Surface Finish: See Table
- Color: See Table

**Features:**

- Ideal for aesthetic or light-duty load bearing applications
- Perimeter rib design allows for easy assembly and a secure fit
- Used on a wide range of furniture and metal tubing applications



See page 436 for Sizing and Selector Guide

### Imperial

| Black Item No. |            | White Item No. |            | Tube OD |            | Bulk Pack Qty |
|----------------|------------|----------------|------------|---------|------------|---------------|
| Polished       | Textured   | Polished       | Textured   | in      | Tube Gauge |               |
| RDR111033A     | RDR111053A | RDR111073A     | —          | 0.500   | 16 - 20    | 2500          |
| RDR111036A     | RDR111056A | RDR111076A     | —          | 0.750   | 14 - 20    | 1500          |
| —              | RDR081012A | —              | RDR081012D | 0.875   | 10 - 12    | 5000          |
| RDR081420D     | —          | RDR111078A     | —          | 0.875   | 14 - 20    | 5000          |
| —              | RDR101111A | —              | —          | 1.000   | 10 - 12    | 2000          |
| RDR101420D     | RDR101420F | —              | —          | 1.000   | 14 - 20    | 4000          |
| RDR111040A     | RDR111060A | RDR111080A     | —          | 1.000   | 11 - 19    | 1000          |
| RDR111042A     | RDR111062A | RDR111082A     | —          | 1.125   | 11 - 19    | 1000          |
| RDR121014B     | —          | —              | —          | 1.250   | 10 - 14    | 2500          |
| RDR111044A     | RDR111064A | RDR111084A     | —          | 1.250   | 11 - 19    | 1000          |
| RDR131418A     | —          | —              | —          | 1.375   | 14 - 18    | 1200          |
| RDR111492A     | RDR111530A | —              | —          | 1.375   | 11 - 19    | 1500          |
| RDR150812A     | —          | —              | —          | 1.500   | 8 - 12     | 1500          |
| —              | RDR151012A | —              | —          | 1.500   | 10 - 12    | 1500          |
| RDR111046A     | RDR111066A | —              | —          | 1.500   | 11 - 19    | 1000          |
| RDR111495A     | RDR111533A | RDR111571A     | RDR111609A | 1.625   | 11 - 19    | 1000          |
| —              | RDR171012A | —              | —          | 1.750   | 10 - 12    | 1000          |
| RDR111497A     | RDR111535A | —              | RDR111611A | 1.750   | 11 - 19    | 1000          |
| RDR111498A     | RDR111536A | —              | RDR111612A | 1.875   | 11 - 19    | 800           |
| RDR201014A     | —          | —              | —          | 2.000   | 10 - 14    | 500           |
| —              | RDR201420A | —              | —          | 2.000   | 14 - 18    | 500           |
| RDR111049A     | RDR111069A | RDR111089A     | —          | 2.000   | 11 - 19    | 500           |
| RDR230508B     | RDR230508A | —              | —          | 2.375   | 5 - 8      | 400           |
| —              | RDR231014A | —              | —          | 2.375   | 10 - 14    | 400           |
| —              | RDR250812A | —              | —          | 2.500   | 8 - 12     | 400           |
| RDR111500A     | RDR111538A | —              | RDR111614A | 2.500   | 11 - 19    | 250           |
| RDR460674A     | RDR465601A | —              | —          | 2.750   | 8 - 14     | 500           |
| —              | RDR280407A | —              | —          | 2.875   | 4 - 7      | 300           |
| —              | RDR300812A | —              | —          | 3.000   | 8 - 12     | 250           |
| —              | RDR301418A | —              | —          | 3.000   | 14 - 18    | 250           |
| RDR111052A     | RDR111072A | RDR111092A     | —          | 3.000   | 8 - 14     | 250           |
| RDR400511A     | —          | —              | —          | 4.000   | 5 - 11     | 150           |
| RDR450711A     | —          | —              | —          | 4.500   | 7 - 11     | 100           |

### Metric

| Black Item No. |            | White Item No. | Tube OD |            | Bulk Pack Qty |
|----------------|------------|----------------|---------|------------|---------------|
| Polished       | Textured   | Textured       | mm      | Tube Gauge |               |
| —              | RDR111527A | —              | 10.00   | 11 - 19    | 2500          |
| RDR111490A     | RDR111528A | RDR111603A     | 12.00   | 14 - 20    | 2500          |
| RDR111034A     | —          | —              | 13.00   | 14 - 20    | 2500          |
| —              | RDR460660A | —              | 15.00   | 14 - 20    | 2500          |
| RDR111035A     | RDR111055A | —              | 16.00   | 14 - 20    | 5000          |
| RDR111037A     | RDR111057A | —              | 20.00   | 14 - 20    | 1500          |
| RDR111038A     | RDR111058A | —              | 22.00   | 14 - 20    | 1500          |
| RDR111043A     | RDR111063A | —              | 30.00   | 11 - 19    | 1000          |

| Black Item No. |            | White Item No. | Tube OD |            | Bulk Pack Qty |
|----------------|------------|----------------|---------|------------|---------------|
| Polished       | Textured   | Textured       | mm      | Tube Gauge |               |
| RDR111044A     | RDR111064A | RDR111084A     | 32.00   | 11 - 19    | 1000          |
| —              | RDR111795A | —              | 32.00   | 11 - 14    | 1000          |
| —              | RDR111067A | —              | 40.00   | 11 - 19    | 1000          |
| RDR111494A     | RDR111532A | —              | 42.00   | 11 - 19    | 1000          |
| RDR111496A     | —          | RDR111610A     | 45.00   | 11 - 19    | 1000          |
| —              | RDR465600A | —              | 55.00   | 11 - 19    | 600           |
| RDR111050A     | RDR111070A | —              | 60.00   | 11 - 19    | 400           |
| —              | RDR465596A | —              | 105.00  | 7 - 14     | 75            |

## LRDR Series Round Ribbed Tube Inserts

**Specifications:**

- Material: High-Density Polyethylene
- Color: Black with Matte Finish

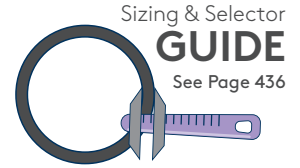
**Features:**

- Designed for light load-bearing applications or cosmetic finishing



| Item No.    | Tube OD |       | Tube Gauge | Wall Thickness |      | Bulk Pack Qty |
|-------------|---------|-------|------------|----------------|------|---------------|
|             | in      | mm    |            | in             | mm   |               |
| LRDR071620A | 0.750   | 19.05 | 16 - 20    | 0.035 - 0.065  | 5500 |               |
| LRDR081420A | 0.875   | 22.22 | 14 - 20    | 0.035 - 0.083  | 3500 |               |
| LRDR101420A | 1.000   | 25.40 | 14 - 20    | 0.035 - 0.083  | 2800 |               |

| Item No.    | Tube OD |       | Tube Gauge | Wall Thickness |      | Bulk Pack Qty |
|-------------|---------|-------|------------|----------------|------|---------------|
|             | in      | mm    |            | in             | mm   |               |
| LRDR111418A | 1.125   | 28.57 | 14 - 18    | 0.035 - 0.083  | 2200 |               |
| LRDR121620A | 1.250   | 31.75 | 16 - 20    | 0.035 - 0.065  | 1500 |               |

**ROUND TUBE INSERT GLIDES****RDG Series  
Round Load Bearing Glides**

Sizing &amp; Selector

**GUIDE**

See Page 436

## Specifications:

- Material: See Table
- Color: Black

## Features:

- Glides are designed for use as a glide or plug style closure
- A reduced diameter step-lead is provided for easy positioning and insertion
- Ideal for moderate to heavy-duty applications



| Item No. | Tube OD |            | Wall Thickness |  | Material | Bulk Pack Qty |
|----------|---------|------------|----------------|--|----------|---------------|
|          | in      | Tube Gauge | in             |  |          |               |
| RDG1100A | 0.375   | 19         | 0.042          |  | ABS      | 9000          |
| RDG1105A | 0.500   | 16         | 0.065          |  | ABS      | 10000         |
| RDG1110A | 0.500   | 18         | 0.049          |  | ABS      | 15000         |
| RDG1115A | 0.500   | 20         | 0.035          |  | ABS      | 15000         |
| RDG1120A | 0.500   | 21         | 0.032          |  | ABS      | 15000         |
| RDG1125A | 0.500   | 22         | 0.028          |  | ABS      | 13000         |
| RDG1127A | 0.563   | 19         | 0.042          |  | HDPE     | 10000         |
| RDG1130A | 0.563   | 20         | 0.035          |  | ABS      | 13000         |
| RDG1135A | 0.563   | 22         | 0.028          |  | ABS      | 6500          |
| RDG1140A | 0.625   | 11         | 0.120          |  | ABS      | 13000         |
| RDG1145A | 0.625   | 12         | 0.109          |  | ABS      | 13000         |
| RDG1150A | 0.625   | 13         | 0.095          |  | ABS      | 15000         |
| RDG1155D | 0.625   | 14         | 0.083          |  | ABS      | 3000          |
| RDG1160A | 0.625   | 15         | 0.072          |  | ABS      | 7000          |
| RDG1165A | 0.625   | 16         | 0.065          |  | ABS      | 7000          |
| RDG1168B | 0.625   | 17         | 0.058          |  | Butyrate | 10000         |
| RDG1170A | 0.625   | 17         | 0.058          |  | ABS      | 8000          |
| RDG1175A | 0.625   | 18         | 0.049          |  | ABS      | 8000          |
| RDG1180A | 0.625   | 20         | 0.035          |  | ABS      | 5000          |
| RDG1185A | 0.625   | 22         | 0.028          |  | ABS      | 8000          |
| RDG1190A | 0.750   | 13         | 0.095          |  | ABS      | 6500          |
| RDG1195C | 0.750   | 14         | 0.083          |  | ABS      | 1500          |
| RDG1200A | 0.750   | 16         | 0.065          |  | ABS      | 7000          |
| RDG1205A | 0.750   | 17         | 0.058          |  | ABS      | 8000          |
| RDG1210A | 0.750   | 18         | 0.049          |  | ABS      | 7000          |
| RDG1215A | 0.750   | 19         | 0.042          |  | ABS      | 6500          |
| RDG1220A | 0.750   | 20         | 0.035          |  | ABS      | 6500          |
| RDG1225A | 0.750   | 22         | 0.028          |  | ABS      | 3000          |
| RDG1228B | 0.875   | 13         | 0.095          |  | LDPE     | 4500          |
| RDG1230A | 0.875   | 14         | 0.083          |  | ABS      | 5000          |
| RDG1235A | 0.875   | 16         | 0.065          |  | ABS      | 5000          |
| RDG1240A | 0.875   | 18         | 0.049          |  | ABS      | 4500          |
| RDG1245A | 0.875   | 19         | 0.042          |  | ABS      | 5000          |
| RDG1250A | 0.875   | 20         | 0.035          |  | ABS      | 45000         |
| RDG1255A | 1.000   | 12         | 0.109          |  | ABS      | 4000          |
| RDG1264B | 1.000   | 14         | 0.083          |  | Butyrate | 4000          |
| RDG1265A | 1.000   | 14         | 0.083          |  | ABS      | 4000          |
| RDG1270A | 1.000   | 15         | 0.072          |  | ABS      | 4000          |
| RDG1273B | 1.000   | 16         | 0.065          |  | Butyrate | 4000          |
| RDG1274D | 1.000   | 16         | 0.065          |  | Nylon    | 3500          |
| RDG1275A | 1.000   | 16         | 0.065          |  | ABS      | 4000          |
| RDG1280A | 1.000   | 17         | 0.058          |  | ABS      | 3500          |
| RDG1285A | 1.000   | 18         | 0.049          |  | ABS      | 3500          |
| RDG1290A | 1.000   | 19         | 0.042          |  | ABS      | 3500          |
| RDG1295C | 1.000   | 20         | 0.035          |  | ABS      | 3500          |
| RDG1305C | 1.125   | 12         | 0.109          |  | ABS      | 2500          |
| RDG1310A | 1.125   | 14         | 0.083          |  | ABS      | 2800          |
| RDG1315A | 1.125   | 16         | 0.065          |  | ABS      | 2800          |
| RDG1320B | 1.125   | 18         | 0.049          |  | ABS      | 2800          |
| RDG1325A | 1.125   | 19         | 0.042          |  | ABS      | 2800          |
| RDG1327B | 1.130   | 20         | 0.035          |  | LDPE     | 2400          |
| RDG1330A | 1.250   | 11         | 0.120          |  | ABS      | 2500          |
| RDG1335C | 1.250   | 12         | 0.109          |  | ABS      | 2500          |
| RDG1340A | 1.250   | 14         | 0.083          |  | ABS      | 2300          |
| RDG1345A | 1.250   | 16         | 0.065          |  | ABS      | 2300          |
| RDG1350D | 1.250   | 18         | 0.049          |  | ABS      | 2300          |
| RDG1355A | 1.375   | 13         | 0.095          |  | ABS      | 1100          |
| RDG1360A | 1.375   | 14         | 0.083          |  | ABS      | 2000          |
| RDG1365A | 1.375   | 16         | 0.065          |  | ABS      | 2000          |
| RDG1370C | 1.375   | 18         | 0.049          |  | ABS      | 2000          |
| RDG1375A | 1.375   | 20         | 0.035          |  | ABS      | 1600          |
| RDG1380A | 1.500   | 12         | 0.109          |  | ABS      | 1200          |
| RDG1385A | 1.500   | 14         | 0.083          |  | ABS      | 1500          |
| RDG1390A | 1.500   | 16         | 0.065          |  | ABS      | 1500          |
| RDG1394B | 1.500   | 18         | 0.049          |  | Butyrate | 1400          |
| RDG1395D | 1.500   | 18         | 0.049          |  | ABS      | 1500          |
| RDG1400A | 1.500   | 19         | 0.042          |  | ABS      | 1500          |
| RDG1405A | 1.500   | 20         | 0.035          |  | ABS      | 1500          |
| RDG1408B | 1.625   | 16         | 0.065          |  | Nylon    | 1400          |
| RDG1410A | 1.625   | 18         | 0.049          |  | ABS      | 1000          |
| RDG1415A | 1.750   | 11         | 0.120          |  | ABS      | 1100          |
| RDG1420A | 1.750   | 14         | 0.083          |  | ABS      | 1100          |
| RDG1425A | 1.750   | 16         | 0.065          |  | ABS      | 1100          |
| RDG1430A | 1.750   | 18         | 0.049          |  | ABS      | 1100          |
| RDG1435A | 1.750   | 20         | 0.035          |  | ABS      | 1000          |
| RDG1445A | 2.000   | 11         | 0.120          |  | ABS      | 850           |
| RDG1455A | 2.000   | 16         | 0.065          |  | ABS      | 850           |
| RDG1460A | 2.000   | 18         | 0.049          |  | ABS      | 850           |
| RDG1465A | 2.000   | 20         | 0.035          |  | ABS      | 1000          |
| RDG1470A | 2.500   | 18         | 0.049          |  | ABS      | 500           |
| RDG1475A | 3.000   | 13         | 0.095          |  | ABS      | 500           |



## ROUND TUBE INSERT GLIDES

### RLI Series Round Low Profile Insert Glides

Specifications:

- Material: Low-Density Polyethylene
- Color: Black

Features:

- Lightweight insert glides present a low-cost option for neatly finishing steel tubes



| Item No. | Tube OD |       | Tube Gauge | Wall Thickness | Bulk Pack Qty |
|----------|---------|-------|------------|----------------|---------------|
|          | in      | mm    |            | in             |               |
| RLI0516A | 0.500   | 12.70 | 16         | 0.065          | 10000         |
| RLI0518A | 0.500   | 12.70 | 18         | 0.049          | 10000         |
| RLI0616A | 0.625   | 15.87 | 16         | 0.065          | 10000         |
| RLI0618A | 0.625   | 15.87 | 18         | 0.049          | 10000         |
| RLI0716A | 0.750   | 19.05 | 16         | 0.065          | 5000          |
| RLI0718A | 0.750   | 19.05 | 18         | 0.049          | 5000          |
| RLI0816A | 0.875   | 22.22 | 16         | 0.065          | 5000          |
| RLI0818A | 0.875   | 22.22 | 18         | 0.049          | 5000          |
| RLI1016A | 1.000   | 25.40 | 16         | 0.065          | 5000          |

| Item No. | Tube OD |       | Tube Gauge | Wall Thickness | Bulk Pack Qty |
|----------|---------|-------|------------|----------------|---------------|
|          | in      | mm    |            | in             |               |
| RLI1018A | 1.000   | 25.40 | 18         | 0.049          | 5000          |
| RLI1116A | 1.125   | 28.57 | 16         | 0.065          | 4000          |
| RLI1118A | 1.125   | 28.57 | 18         | 0.049          | 4000          |
| RLI1216A | 1.250   | 31.75 | 16         | 0.065          | 2500          |
| RLI1218A | 1.250   | 31.75 | 18         | 0.049          | 2500          |
| RLI1518A | 1.500   | 38.10 | 18         | 0.049          | 2000          |
| RLI1718A | 1.750   | 44.45 | 18         | 0.049          | 1500          |
| RLI2018A | 2.000   | 50.80 | 18         | 0.049          | 800           |

### Round Metric Low Profile Insert Glides

Specifications:

- Material: Low-Density Polyethylene
- Color: Black

Features:

- Low profile design allows for a finishing component with limited space



| Item No.   | Tube OD |  | Tube Gauge | Wall Thickness | Bulk Pack Qty |
|------------|---------|--|------------|----------------|---------------|
|            | mm      |  |            | mm             |               |
| 466562     | 10      |  | 16 - 20    | 0.80 - 1.50    | 5000          |
| 1298772    | 12      |  | 14 - 16    | 1.50 - 2.00    | 5000          |
| RDR466565A | 15      |  | 16 - 20    | 0.80 - 2.00    | 2000          |
| 466568     | 19      |  | 16 - 20    | 0.80 - 2.00    | 2000          |
| 1298776    | 20      |  | 13 - 20    | 0.80 - 2.50    | 2000          |
| 466570     | 22      |  | 13 - 20    | 1.00 - 2.50    | 2000          |
| 466571     | 24      |  | 13 - 20    | 1.00 - 2.50    | 2000          |
| 466572     | 25      |  | 13 - 20    | 1.00 - 2.50    | 3500          |
| 1339575    | 28      |  | 13 - 20    | 0.80 - 2.50    | 3000          |
| 1339577    | 30      |  | 13 - 20    | 0.80 - 2.50    | 2500          |
| 1339578    | 32      |  | 13 - 20    | 0.80 - 2.50    | 2250          |
| 466576     | 35      |  | 11 - 19    | 1.00 - 3.00    | 1750          |
| 466577     | 38      |  | 11 - 19    | 1.00 - 3.00    | 1500          |
| 1339576    | 40      |  | 11 - 19    | 1.00 - 3.00    | 1500          |
| 460789     | 42      |  | 13 - 20    | 0.80 - 2.50    | 1250          |
| 466579     | 45      |  | 11 - 19    | 1.00 - 3.00    | 1000          |
| 466580     | 50      |  | 13 - 20    | 1.00 - 2.50    | 800           |
| 466581     | 55      |  | 11 - 19    | 1.00 - 3.00    | 700           |
| 466582     | 60      |  | 11 - 16    | 1.50 - 3.00    | 500           |

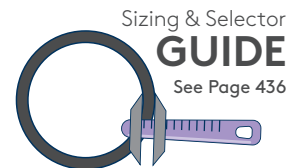
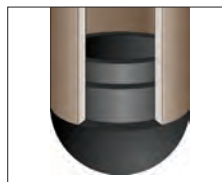
### BI & LBI Series Round Domed Tube Glides

Specifications:

- Material: See Table
- Color: Black

Features:

- Provides a neat finish for steel tubing



| Item No. | Material | Tube OD |       | Tube Gauge | Wall Thickness | Bulk Pack Qty |
|----------|----------|---------|-------|------------|----------------|---------------|
|          |          | In      | mm    |            | in             |               |
| BI1000A  | ABS      | 0.625   | 15.88 | 18         | 0.049          | 10000         |
| BI1100A  | ABS      | 0.750   | 19.05 | 15         | 0.072          | 3000          |
| LBI1130A | LDPE     | 0.750   | 19.05 | 16         | 0.065          | 5500          |
| LBI1132A | LDPE     | 0.750   | 19.05 | 16         | 0.065          | 5500          |
| BI1110A  | ABS      | 0.875   | 22.23 | 14         | 0.083          | 3500          |
| LBI1140A | LDPE     | 0.875   | 22.23 | 14         | 0.083          | 3500          |
| BI1120A  | ABS      | 0.875   | 22.23 | 16         | 0.065          | 3500          |
| BI1130A  | ABS      | 0.875   | 22.23 | 20         | 0.035          | 4000          |
| BI1140A  | ABS      | 1.000   | 25.40 | 14         | 0.083          | 2700          |
| BI1150A  | ABS      | 1.000   | 25.40 | 16         | 0.065          | 2500          |
| LBI1180A | LDPE     | 1.000   | 25.40 | 16         | 0.065          | 3000          |
| BI1160A  | ABS      | 1.000   | 25.40 | 18         | 0.049          | 2500          |

| Item No. | Material | Tube OD |       | Tube Gauge | Wall Thickness | Bulk Pack Qty |
|----------|----------|---------|-------|------------|----------------|---------------|
|          |          | In      | mm    |            | in             |               |
| LBI1190A | LDPE     | 1.000   | 25.40 | 18         | 0.049          | 3100          |
| BI1170A  | ABS      | 1.000   | 25.40 | 20         | 0.035          | 2600          |
| BI1180A  | ABS      | 1.125   | 28.58 | 12         | 0.109          | 2000          |
| BI1200A  | ABS      | 1.125   | 28.58 | 16         | 0.065          | 2500          |
| BI1210A  | ABS      | 1.125   | 28.58 | 18         | 0.049          | 1600          |
| BI1220A  | ABS      | 1.228   | 31.19 | 14         | 0.083          | 1600          |
| BI1230A  | ABS      | 1.250   | 31.75 | 16         | 0.065          | 1500          |
| BI1240A  | ABS      | 1.375   | 34.93 | 14         | 0.083          | 1200          |
| BI1250A  | ABS      | 1.500   | 38.10 | 11         | 0.120          | 1000          |
| BI1260A* | ABS      | 1.500   | 38.10 | 14         | 0.083          | 1000          |
| BI1270A  | ABS      | 1.500   | 38.10 | 16         | 0.065          | 1000          |

\* This part has a textured (not polished) finish



# ROUND TUBE INSERT GLIDES

## DFRD Series Round Domed Tube Inserts



**Specifications:**

- Material: Low-Density Polyethylene
- Color: Black

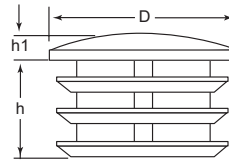
**Features:**

- Can accommodate any degree of leg angle, while the horizontal ribbed design has built-in flexibility to fit multiple tube gauge sizes



| Item No.    | Tube OD |       | Tube Gauge | Wall Thickness In | Bulk Pack Qty |
|-------------|---------|-------|------------|-------------------|---------------|
|             | in      | mm    |            |                   |               |
| DFRD111522A | 0.875   | 22.22 | 14 - 20    | 0.035 - 0.083     | 2000          |
| DFRD121620A | 1.250   | 31.75 | 14 - 18    | 0.049 - 0.083     | 2000          |

## RDP Series Round Ribbed Tube Inserts Chrome Finish



**Specifications:**

- Material: Low-Density Polyethylene
- Color: Black with High-Polished Metal-Finish Shell

**Features:**

- Polished metallic finish provides enhanced aesthetic appearance
- Horizontal ribbing allows for built-in flexibility to fit multiple tube gauges



| Item No.   | D     |       | h     |       | h1    |      | Wall Thickness<br>Tube Gauge |         | Bulk Pack Qty |
|------------|-------|-------|-------|-------|-------|------|------------------------------|---------|---------------|
|            | in    | mm    | in    | mm    | in    | mm   | in                           | mm      |               |
| RDP465335A | 0.512 | 13.00 | 0.315 | 8.00  | 0.079 | 2.00 | 14-19 (.040-.080)            | 1.0-2.0 | 1000          |
| RDP463586A | 0.630 | 16.00 | 0.394 | 10.00 | 0.079 | 2.00 | 14-19 (.040-.080)            | 1.0-2.0 | 2000          |
| RDP465333A | 0.709 | 18.00 | 0.394 | 10.00 | 0.079 | 2.00 | 14-19 (.040-.080)            | 1.0-2.0 | 2000          |
| RDP465336A | 0.750 | 19.05 | 0.394 | 10.00 | 0.079 | 2.00 | 14-19 (.040-.080)            | 1.0-2.0 | 1000          |
| RDP465338A | 0.787 | 20.00 | 0.394 | 10.00 | 0.118 | 3.00 | 14-19 (.040-.080)            | 1.0-2.0 | 3000          |
| RDP465334A | 0.866 | 22.00 | 0.433 | 11.00 | 0.118 | 3.00 | 14-19 (.040-.080)            | 1.0-2.0 | 3000          |
| RDP462994A | 0.984 | 25.00 | 0.591 | 15.00 | 0.118 | 3.00 | 14-19 (.040-.080)            | 1.0-2.0 | 2000          |
| RDP463587A | 1.102 | 28.00 | 0.591 | 15.00 | 0.118 | 3.00 | 14-19 (.040-.080)            | 1.0-2.0 | 500           |
| RDP463020A | 1.181 | 30.00 | 0.630 | 16.00 | 0.118 | 3.00 | 14-19 (.040-.080)            | 1.0-2.0 | 500           |
| RDP463588A | 1.260 | 32.00 | 0.630 | 16.00 | 0.118 | 3.00 | 14-19 (.040-.080)            | 1.0-2.0 | 250           |
| RDP463021A | 1.378 | 35.00 | 0.630 | 16.00 | 0.118 | 3.00 | 14-19 (.040-.080)            | 1.0-2.0 | 500           |
| RDP465337A | 1.496 | 38.00 | 0.630 | 16.00 | 0.118 | 3.00 | 14-19 (.040-.080)            | 1.0-2.0 | 250           |
| RDP463022A | 1.575 | 40.00 | 0.630 | 16.00 | 0.118 | 3.00 | 14-19 (.040-.080)            | 1.0-2.0 | 250           |
| RDP465339A | 1.772 | 45.00 | 0.630 | 16.00 | 0.118 | 3.00 | 14-19 (.040-.080)            | 1.0-2.0 | 250           |
| RDP463023A | 1.969 | 50.00 | 0.472 | 12.00 | 0.118 | 3.00 | 16-17 (.065 - 0.058)         | 1.50    | 200           |
| RDP465332A | 2.362 | 60.00 | 0.472 | 12.00 | 0.118 | 3.00 | 16-17 (.065 - 0.058)         | 1.50    | 200           |

## ROUND THREADED INSERT GLIDES



### TAR Series Round Threaded All Metal Inserts

Specifications:

- Material: Steel with Zinc plated finish

Features:

- Metal ribs lock onto inside of round tube



Imperial

| Item No. | Tube OD |  | Thread Size | Tube Gauge | Bulk Pack Qty |
|----------|---------|--|-------------|------------|---------------|
|          | in      |  |             |            |               |
| TAR010A  | 5/8     |  | 1/4 - 20    | 16 - 18    | 1000          |
| TAR020A  | 3/4     |  | 1/4 - 20    | 16 - 18    | 1000          |
| TAR030A  | 7/8     |  | 1/4 - 20    | 16 - 18    | 1000          |
| TAR230A  | 7/8     |  | 5/16 - 18   | 16 - 18    | 1000          |
| TAR040A  | 1       |  | 1/4 - 20    | 16 - 18    | 1000          |
| TAR240A  | 1       |  | 5/16 - 18   | 16 - 18    | 1000          |
| TAR260A  | 1-1/4   |  | 5/16 - 18   | 16 - 18    | 500           |
| TAR460A  | 1-1/4   |  | 3/8 - 16    | 16 - 18    | 500           |
| TAR270A  | 1-1/2   |  | 5/16 - 18   | 16 - 18    | 500           |
| TAR470A  | 1-1/2   |  | 3/8 - 16    | 16 - 18    | 500           |

Metric

| Item No. | Tube OD |  | Thread Size | Tube Gauge |  | Bulk Pack Qty |
|----------|---------|--|-------------|------------|--|---------------|
|          | mm      |  |             | mm         |  |               |
| 499455   | 19      |  | M6          | 1          |  | 200           |
| 499456   | 22      |  | M6          | 1          |  | 200           |
| 499457   | 25      |  | M6          | 1          |  | 200           |
| 551836   | 51      |  | M6          | 1.2        |  | 200           |
| 499458   | 25      |  | M8          | 1.2        |  | 200           |
| 499460   | 32      |  | M8          | 1.2        |  | 200           |
| 499461   | 38      |  | M8          | 1.2        |  | 200           |
| 551837   | 51      |  | M8          | 1.2        |  | 200           |
| 551838   | 25      |  | M10         | 1.2        |  | 200           |
| 499463   | 32      |  | M10         | 1.5        |  | 200           |
| 499464   | 38      |  | M10         | 1.5        |  | 200           |
| 551839   | 51      |  | M10         | 1.5        |  | 200           |

### LRT & RTI Series Round Plastic Threaded Inserts

Specifications:

- Material: See Table
- Color: See Table

Features:

- Accommodates adjustable leveling mounts and feet



| Item No. | Color   | Material | Tube OD |  | Tube Gauge | Thread Size | Bulk Pack Qty |
|----------|---------|----------|---------|--|------------|-------------|---------------|
|          |         |          | in      |  |            |             |               |
| LRT1100A | Natural | HDPE     | 0.625   |  | 18         | 1/4 - 20    | 4200          |
| LRT1100B | Black   | HDPE     | 0.625   |  | 18         | 1/4 - 20    | 4200          |
| RTI1100A | Natural | Nylon    | 0.750   |  | 17         | 1/4 - 20    | 4000          |
| RTI1100B | Black   | Nylon    | 0.750   |  | 17         | 1/4 - 20    | 4000          |
| LRT1110A | Natural | HDPE     | 0.750   |  | 18         | 1/4 - 20    | 4000          |
| LRT1120A | Natural | HDPE     | 0.875   |  | 18         | 1/4 - 20    | 3800          |
| LRT1130A | Natural | HDPE     | 1.000   |  | 16         | 1/4 - 20    | 3500          |
| RTI1210A | Natural | Nylon    | 1.000   |  | 16         | 1/4 - 20    | 2000          |
| LRT1140A | Natural | HDPE     | 1.000   |  | 18         | 1/4 - 20    | 3000          |

# END CAPS

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**ROUND THREADED INSERT GLIDES****RDH Series****Round Heavy Duty Threaded Inserts**

## Specifications:

- Material: Glass-Filled Nylon with Brass Threaded Insert
- Color: Black

## Features:

- Threaded brass insert for indoor and outdoor use
- High load rating is ideal for machinery use

**Imperial**

| Item No. | Tube Size<br>In | Thread Size | Tube Gauge | Wall Thickness<br>In | Max Static Load<br>N | Bulk Pack Qty |
|----------|-----------------|-------------|------------|----------------------|----------------------|---------------|
| RDH0100A | 1.500           | 3/8 - 16    | 16         | 0.065                | 1100                 | 48            |
| RDH0150A | 1.500           | 1/2 - 13    | 16         | 0.065                | 1100                 | 48            |
| RDH0200A | 1.500           | 5/8 - 11    | 16         | 0.065                | 1100                 | 48            |
| RDH0250A | 1.500           | 3/4 - 10    | 16         | 0.065                | 1100                 | 48            |
| RDH0300A | 2.000           | 3/8 - 16    | 16         | 0.065                | 1250                 | 24            |
| RDH0350A | 2.000           | 1/2 - 13    | 16         | 0.065                | 1250                 | 24            |
| RDH0400A | 2.000           | 5/8 - 11    | 16         | 0.065                | 1250                 | 24            |
| RDH0450A | 2.000           | 3/4 - 10    | 16         | 0.065                | 2000                 | 24            |
| RDH0500A | 2.000           | 3/8 - 16    | 12         | 0.109                | 1250                 | 24            |
| RDH0550A | 2.000           | 1/2 - 13    | 12         | 0.109                | 1250                 | 24            |
| RDH0600A | 2.000           | 5/8 - 11    | 12         | 0.109                | 1250                 | 24            |
| RDH0650A | 2.000           | 3/4 - 10    | 12         | 0.109                | 2000                 | 24            |

**Metric**

| Item No. | Tube Size<br>mm | Thread Size | Tube Gauge<br>mm | Max Static Load<br>N | Bulk Pack Qty |
|----------|-----------------|-------------|------------------|----------------------|---------------|
| 1286377  | 30              | M10         | 1                | 4500                 | 48            |
| 1286378  | 30              | M12         | 1                | 4500                 | 48            |
| 1286379  | 30              | M16         | 1                | 4500                 | 48            |
| 1286380  | 38              | M10         | 1.5              | 5000                 | 48            |
| 1286381  | 38              | M12         | 1.5              | 5000                 | 48            |
| 1286382  | 38              | M16         | 1.5              | 5000                 | 48            |
| 1286383  | 42              | M10         | 1.5              | 5000                 | 48            |
| 1286384  | 42              | M12         | 1.5              | 5000                 | 48            |
| 1286385  | 42              | M16         | 1.5              | 5000                 | 48            |
| 1286386  | 42              | M20         | 1.5              | 5000                 | 48            |
| 1286387  | 48              | M10         | 1.5              | 5500                 | 24            |
| 1286388  | 48              | M12         | 1.5              | 5500                 | 24            |
| 1286389  | 48              | M16         | 1.5              | 5500                 | 24            |
| 1286390  | 48              | M20         | 1.5              | 8500                 | 24            |
| 1286391  | 50              | M12         | 1.5              | 5500                 | 24            |
| 1286392  | 50              | M16         | 1.5              | 5500                 | 24            |
| 1286393  | 50              | M20         | 1.5              | 8500                 | 24            |

**RDM Series****Round Metal Threaded Inserts**

## Specifications:

- Material: High-Density Polyethylene with Zinc-Plated Steel-Threaded Insert
- Color: Black

## Features:

- Tube inserts with internal threads to accommodate adjustable leveling mounts and feet
- Ribbed to accommodate multiple gauges



Sizing &amp; Selector

**GUIDE**

See Page 436

**Imperial**

| Item No. | Tube Size | Thread Size | Gauge   | Wall Thickness<br>in | Bulk Pack Qty |
|----------|-----------|-------------|---------|----------------------|---------------|
| RDM0100A | 0.750     | 1/4 - 20    | 16 - 18 | 0.049 - 0.065        | 1000          |
| RDM0150A | 0.875     | 1/4 - 20    | 16 - 18 | 0.049 - 0.065        | 1000          |
| RDM0200A | 0.875     | 1/4 - 20    | 12 - 14 | 0.083 - 0.109        | 1000          |
| RDM0250A | 0.875     | 1/4 - 20    | 10 - 11 | 0.120 - 0.134        | 1000          |
| RDM0300A | 1.000     | 1/4 - 20    | 16 - 18 | 0.049 - 0.065        | 1000          |
| RDM0350A | 1.000     | 5/16 - 18   | 16 - 18 | 0.049 - 0.065        | 1000          |
| RDM0400A | 1.000     | 1/4 - 20    | 12 - 14 | 0.083 - 0.109        | 750           |
| RDM0450A | 1.000     | 5/16 - 18   | 12 - 14 | 0.083 - 0.109        | 750           |
| RDM0500A | 1.000     | 1/4 - 20    | 10 - 11 | 0.120 - 0.134        | 750           |
| RDM0550A | 1.000     | 5/16 - 20   | 10 - 11 | 0.120 - 0.134        | 750           |
| RDM0600A | 1.125     | 5/16 - 18   | 16 - 18 | 0.049 - 0.065        | 500           |
| RDM0650A | 1.125     | 3/8 - 16    | 16 - 18 | 0.049 - 0.065        | 500           |
| RDM0700A | 1.250     | 5/16 - 18   | 16 - 18 | 0.049 - 0.065        | 500           |
| RDM0750A | 1.250     | 3/8 - 16    | 16 - 18 | 0.049 - 0.065        | 500           |
| RDM0800A | 1.250     | 5/16 - 18   | 12 - 14 | 0.083 - 0.109        | 500           |
| RDM0950A | 1.375     | 3/8 - 16    | 16 - 18 | 0.049 - 0.065        | 500           |
| RDM1050A | 1.500     | 5/16 - 18   | 16 - 18 | 0.049 - 0.065        | 500           |
| RDM1100A | 1.500     | 3/8 - 16    | 16 - 18 | 0.049 - 0.065        | 500           |
| RDM1150A | 1.500     | 5/16 - 18   | 12 - 14 | 0.083 - 0.109        | 500           |
| RDM1200A | 1.500     | 3/8 - 16    | 12 - 14 | 0.083 - 0.109        | 500           |
| RDM2000A | 2.000     | 5/16 - 18   | 14 - 16 | 0.065 - 0.083        | 500           |
| RDM2050A | 2.000     | 3/8 - 16    | 14 - 16 | 0.065 - 0.083        | 500           |

**Metric**

| Item No. | Tube Size<br>mm | Thread Size | Gauge   | Wall Thickness<br>mm | Bulk Pack Qty |
|----------|-----------------|-------------|---------|----------------------|---------------|
| 498560   | 19              | M6          | 17 - 19 | 1.1 - 1.5            | 1000          |
| 498561   | 20              | M6          | 17 - 19 | 1.1 - 1.5            | 1000          |
| 498562   | 20              | M8          | 17 - 19 | 1.1 - 1.5            | 1000          |
| 498563   | 25              | M6          | 17 - 19 | 1.1 - 1.5            | 500           |
| 498564   | 25              | M8          | 17 - 19 | 1.1 - 1.5            | 1000          |
| 498565   | 30              | M8          | 17 - 19 | 1.1 - 1.5            | 500           |
| 498566   | 30              | M10         | 17 - 19 | 1.1 - 1.5            | 500           |
| 498567   | 32              | M8          | 17 - 19 | 1.1 - 1.5            | 500           |
| 498568   | 32              | M10         | 17 - 19 | 1.1 - 1.5            | 1000          |
| 498569   | 35              | M8          | 17 - 19 | 1.1 - 1.5            | 500           |
| 498570   | 35              | M10         | 17 - 19 | 1.1 - 1.5            | 250           |
| 498571   | 38              | M8          | 17 - 19 | 1.1 - 1.5            | 250           |
| 498572   | 38              | M10         | 17 - 19 | 1.1 - 1.5            | 500           |
| 498573   | 38              | M12         | 17 - 19 | 1.1 - 1.5            | 500           |
| 498574   | 40              | M8          | 17 - 19 | 1.1 - 1.5            | 250           |
| 498575   | 40              | M10         | 17 - 19 | 1.1 - 1.5            | 250           |
| 498576   | 40              | M12         | 17 - 19 | 1.1 - 1.5            | 500           |
| 498577   | 50              | M8          | 17 - 19 | 1.1 - 1.5            | 100           |
| 498578   | 50              | M10         | 17 - 19 | 1.1 - 1.5            | 500           |
| 498579   | 50              | M12         | 17 - 19 | 1.1 - 1.5            | 100           |
| 498580   | 60              | M8          | 17 - 19 | 1.1 - 1.5            | 250           |
| 498581   | 60              | M10         | 17 - 19 | 1.1 - 1.5            | 100           |
| 498582   | 60              | M12         | 17 - 19 | 1.1 - 1.5            | 100           |





# ROUND INSERT GLIDES / ROUND FERRULE CAPS

## RAG Series Round Angled Tube Inserts

**Specifications:**

- Material: Nylon
- Color: See Table

**Features:**

- Ideal for applications with fixed leg angles
- Round angle insert glides fit flush with tubing outer dimensions for a clean, finished look
- Ideal for load bearing applications



| Item No. |          | Tube OD | Tube Gauge | Wall Thickness | Degree | Bulk Pack Qty |
|----------|----------|---------|------------|----------------|--------|---------------|
| Black    | Natural  | in      |            | in             |        |               |
| RAG1220A | RAG1220B | 0.750   | 16         | 0.065          | 25.5°  | 2500          |
| RAG1240A | RAG1240B | 0.875   | 16         | 0.065          | 19°    | 3500          |
| RAG1260A | RAG1260B | 0.875   | 17         | 0.058          | 19°    | 3500          |
| RAG1270A | RAG1270B | 1.000   | 16         | 0.065          | 12°    | 3200          |
| —        | RAG1280B | 1.000   | 16         | 0.065          | 19°    | 3000          |
| RAG1310A | RAG1310B | 1.000   | 18         | 0.049          | 12°    | 3000          |

| Item No. |          | Tube OD | Tube Gauge | Wall Thickness | Degree | Bulk Pack Qty |
|----------|----------|---------|------------|----------------|--------|---------------|
| Black    | Natural  | in      |            | in             |        |               |
| —        | RAG1320B | 1.000   | 18         | 0.049          | 19°    | 3000          |
| RAG1325A | RAG1325B | 1.125   | 16         | 0.065          | 15°    | 2000          |
| RAG1340A | RAG1340B | 1.250   | 16         | 0.065          | 15°    | 1800          |
| RAG1350A | RAG1350B | 1.250   | 17         | 0.058          | 7°     | 900           |
| RAG1360A | RAG1360B | 1.250   | 18         | 0.049          | 15°    | 1200          |
| RAG1375A | RAG1375B | 1.500   | 16         | 0.065          | 19°    | 900           |

## HLD Series High Line Domed Ferrule Caps

**Specifications:**

- Material: Elastomeric Polyethylene
- Color: See Table

**Features:**

- High-line domed caps are tall and durable
- Ideal for non-skid applications
- Thinner wall section results in ease of installation



| Item No. |          | Tube OD |       | Bulk Pack Qty |
|----------|----------|---------|-------|---------------|
| Black    | White    | in      | mm    |               |
| HLD0750A | HLD0750C | 0.750   | 19.05 | 1100          |
| HLD0875A | HLD0875C | 0.875   | 22.22 | 1100          |
| HLD1000A | HLD1000C | 1.000   | 25.40 | 2000          |

## HDC Series Heavy Duty Ferrule Caps

**Specifications:**

- Material: Low-Density Polyethylene
- Color: Black

**Features:**

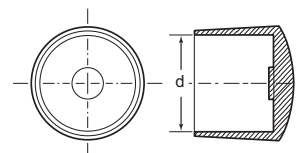
- Style A – Low-silhouette cap for general applications (1/2" height)
- Style B – High-line cap for heavy-duty applications (1" height)
- Style C – Heavy-duty caps, designed for institutional applications, incorporate a thick internal ledge to resist cut-thru by sharp tubing ends (1" height)



| Item No. | Tube OD |       | Style | Bulk Pack Qty |
|----------|---------|-------|-------|---------------|
|          | in      | mm    |       |               |
| HDC0375A | 0.375   | 9.53  | B     | 10000         |
| HDC0750A | 0.750   | 19.05 | A     | 6500          |
| HDC0875A | 0.875   | 22.23 | B     | 3000          |
| HDC1125A | 1.125   | 28.58 | C     | 650           |
| HDC1250A | 1.250   | 31.75 | A     | 1800          |
| HDC1500A | 1.500   | 38.10 | A     | 1300          |

## FRD Series Round Ferrule Caps

| Item No. | Tube OD (d) | Bulk Pack Qty |
|----------|-------------|---------------|
|          | in          |               |
| FRD0437A | 0.437       | 10000         |
| FRD0500A | 0.500       | 10000         |
| FRD0625A | 0.625       | 5000          |
| FRD0750A | 0.750       | 4000          |
| FRD0875A | 0.875       | 2500          |
| FRD1000A | 1.000       | 1500          |
| FRD1125A | 1.125       | 1000          |
| FRD1250A | 1.250       | 1000          |
| FRD1500A | 1.500       | 500           |
| FRD1750A | 1.750       | 500           |
| FRD2000A | 2.000       | 300           |
| FRD3000A | 3.000       | 150           |



**Specifications:**

- Material: Low-Density Polyethylene
- Color: Black

**Features:**

- Provides a neat finish to products manufactured from tubular steel



**ROUND TUBE CAPS****RSC/LLD Series  
Round End Caps**

## Specifications:

- Material: Low-Density Polyethylene (RSC)
- Elastomeric Polyethylene (LLD)
- Color: Black

## Features:

- An integrated step lead permits fast positioning and quick assembly for an economical and attractive way of finishing the end of a rod or tube
- The LLD caps have a thick rounded base for long wear and use on a wide range of leg angles



| Item No. | Tube OD |  | Bulk Pack Qty |
|----------|---------|--|---------------|
|          | in      |  |               |
| RSC0375A | 0.375   |  | 12000         |
| RSC0500A | 0.500   |  | 7000          |
| RSC0625A | 0.625   |  | 5000          |
| RSC0750A | 0.750   |  | 3000          |
| RSC0875A | 0.875   |  | 3000          |
| RSC1000A | 1.000   |  | 2500          |
| LLD1000A | 1.000   |  | 1500          |
| RSC1125A | 1.125   |  | 1600          |
| RSC1250A | 1.250   |  | 1800          |

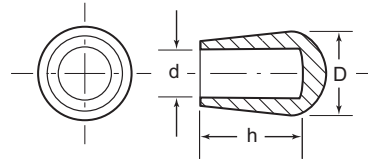
**FTP Series  
Round Tapered Ferrule Caps**

## Specifications:

- Material: See Table
- Color: Black

## Features:

- Tapered ferrules are often used as a safety cap on protruding steel rods or bars



| Item No.   | Tube OD (d) | h     | D     | Material | Bulk Pack Qty |
|------------|-------------|-------|-------|----------|---------------|
|            | in          | in    | in    |          |               |
| FTP0187A   | 0.187       | 0.468 | 0.406 | PVC      | 10000         |
| FTP0250A   | 0.250       | 0.468 | 0.406 | PVC      | 10000         |
| FTP0312A   | 0.312       | 0.562 | 0.500 | PVC      | 10000         |
| FTP0312LPA | 0.312       | 0.906 | 0.516 | LDPE     | 5000          |
| FTP0375A   | 0.375       | 0.625 | 0.594 | PVC      | 5000          |
| FTP0500LPA | 0.500       | 0.906 | 0.735 | LDPE     | 4000          |

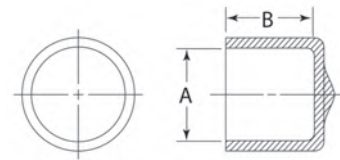
**DM Series  
Round Vinyl End Caps**

## Specifications:

- Material: PVC
- Color: White

## Features:

- Designed to fit standard tube dimension
- Glossy Finish



| Item No.  | Tube OD | B  | Bulk Pack Qty |
|-----------|---------|----|---------------|
|           | in      | in |               |
| DM0750-1H | 3/4     | 1  | 2500          |
| DM0875-1G | 7/8     | 1  | 2500          |
| DM1000-1C | 1       | 1  | 2000          |

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# RECTANGLE TUBE INSERT GLIDES



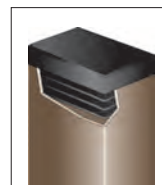
## RCR Series Rectangular Ribbed Tube Inserts

### Specifications:

- Material: Low-Density Polyethylene
- Surface Finish: See Table
- Color: See Table

### Features:

- Perimeter rib design allows for easy assembly and secure fit
- Tube inserts fit a wider gauge range



### Imperial

| Item No.     | Color | Surface Finish | Tube Size     |            | Bulk Pack Qty |
|--------------|-------|----------------|---------------|------------|---------------|
|              |       |                | in            | Tube Gauge |               |
| RCR111339A   | Black | Polished       | 1.000 x 0.500 | 16 - 20    | 1000          |
| RCR111356A   | Black | Textured       | 1.000 x 0.500 | 16 - 20    | 1000          |
| RCR111508A   | Black | Polished       | 1.375 x 0.625 | 11 - 19    | 2500          |
| RCR111546A   | Black | Textured       | 1.375 x 0.625 | 11 - 19    | 2500          |
| RCR111622A   | White | Textured       | 1.375 x 0.625 | 11 - 19    | 2500          |
| RCR111343A   | Black | Polished       | 1.500 x 0.750 | 11 - 19    | 1000          |
| RCR111360A   | Black | Textured       | 1.500 x 0.750 | 11 - 19    | 1000          |
| RCR111377A   | White | Polished       | 1.500 x 0.750 | 11 - 19    | 1000          |
| RCR111510A   | Black | Polished       | 1.500 x 1.000 | 11 - 19    | 2000          |
| RCR111548A   | Black | Textured       | 1.500 x 1.000 | 11 - 19    | 2000          |
| RCR111624A   | White | Textured       | 1.500 x 1.000 | 11 - 19    | 2000          |
| RCR111348A   | Black | Polished       | 2.000 x 1.000 | 11 - 19    | 1000          |
| RCR111365A   | Black | Textured       | 2.000 x 1.000 | 11 - 19    | 1000          |
| RCR111382A   | White | Polished       | 2.000 x 1.000 | 11 - 19    | 1000          |
| RCR111512A   | Black | Polished       | 2.000 x 1.250 | 11 - 19    | 1000          |
| RCR111550A   | Black | Textured       | 2.000 x 1.250 | 11 - 19    | 1000          |
| RCR111626A   | White | Textured       | 2.000 x 1.250 | 11 - 19    | 1000          |
| RCR25101618A | Black | Polished       | 2.500 x 1.000 | 16 - 18    | 1000          |
| RCR20101216A | Black | Textured       | 2.000 x 1.250 | 12 - 16    | 1000          |
| RCR25151216A | Black | Polished       | 2.500 x 1.500 | 12 - 16    | 500           |
| RCR111514A   | Black | Polished       | 3.000 x 1.500 | 8 - 14     | 250           |
| RCR111552A   | Black | Textured       | 3.000 x 1.500 | 8 - 14     | 250           |
| RCR111628A   | White | Textured       | 3.000 x 1.500 | 8 - 14     | 250           |
| RCR111516A   | Black | Polished       | 3.000 x 2.000 | 8 - 14     | 250           |
| RCR4030A     | Black | Textured       | 3.000 x 4.000 | 10-14      | 200           |
| RCR111554A   | Black | Polished       | 3.000 x 2.000 | 8 - 14     | 250           |
| RCR50201014A | Black | Textured       | 5.000 x 2.000 | 10 - 14    | 1000          |

### Metric

| Item No.      | Color | Finish   | Tube Size |            | Bulk Pack Qty |
|---------------|-------|----------|-----------|------------|---------------|
|               |       |          | mm        | Tube Gauge |               |
| RCR111338A    | Black | Polished | 25 x 10   | 16 - 20    | 2000          |
| RCR111355A    | Black | Textured | 25 x 10   | 16 - 20    | 2000          |
| RCR199254A    | Black | Polished | 30 x 10   | 17 - 20    | 5000          |
| RCR111340A    | Black | Polished | 30 x 15   | 11 - 19    | 1000          |
| RCR111357A    | Black | Textured | 30 x 15   | 11 - 19    | 1000          |
| RCR111341A    | Black | Polished | 30 x 20   | 11 - 19    | 1000          |
| RCR111358A    | Black | Textured | 30 x 20   | 11 - 19    | 1000          |
| RCR111509A    | Black | Polished | 35 x 20   | 11 - 19    | 2000          |
| RCR111547A    | Black | Textured | 35 x 20   | 11 - 19    | 2000          |
| RCR466544A    | Black | Textured | 40 x 15   | 14 - 17    | 1000          |
| RCR111344A    | Black | Polished | 40 x 20   | 11 - 19    | 1000          |
| RCR111361A    | Black | Textured | 40 x 20   | 11 - 19    | 1000          |
| RCR111511A    | Black | Polished | 40 x 25   | 8 - 14     | 1500          |
| RCR111549A    | Black | Textured | 40 x 25   | 8 - 14     | 1500          |
| RCR111481A    | Black | Polished | 60 x 30   | 11 - 19    | 500           |
| RCR111482A    | Black | Textured | 60 x 30   | 11 - 19    | 500           |
| RCR111802A    | Black | Polished | 60 x 40   | 11 - 19    | 500           |
| RCR111803A    | Black | Textured | 60 x 40   | 11 - 19    | 500           |
| RCR111351A    | Black | Polished | 60 x 40   | 8 - 14     | 500           |
| RCR111368A    | Black | Textured | 60 x 40   | 8 - 14     | 500           |
| 498707        | Black | Textured | 70 x 25   | 14 - 19    | 500           |
| RCR199283A    | Black | Textured | 75 x 25   | 14 - 16    | 500           |
| RCR111515A    | Black | Polished | 75 x 50   | 8 - 14     | 250           |
| RCR111553A    | Black | Textured | 75 x 50   | 8 - 14     | 250           |
| RCR111474A    | Black | Textured | 80 x 40   | 11 - 19    | 250           |
| RCR111353A    | Black | Polished | 80 x 50   | 8 - 14     | 250           |
| RCR111370A    | Black | Textured | 80 x 50   | 8 - 14     | 250           |
| RCR460736A    | Black | Textured | 90 x 40   | 8 - 14     | 300           |
| RCR199231A    | Black | Textured | 100 x 40  | 8 - 14     | 250           |
| RCRM10502040A | Black | Textured | 100 x 50  | 10 - 14    | 200           |
| RCR460743A    | Black | Textured | 120 x 30  | 13 - 19    | 300           |
| RCR460749A    | Black | Textured | 150 x 50  | 8 - 14     | 100           |

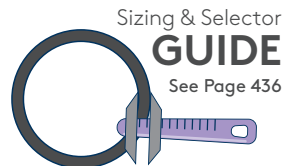
## RTG Series Rectangular Load Bearing Glides

### Specifications:

- Material: ABS
- Color: Black

### Features:

- Suitable for heavy-duty applications
- Step lead provides for easy installation
- Press fit assures a secure hold in tubing



See Page 436

| Item No. | Tube Size     |            | Wall Thickness |  | Bulk Pack Qty |
|----------|---------------|------------|----------------|--|---------------|
|          | in            | Tube Gauge | in             |  |               |
| RTG1100A | 0.500 x 1.000 | 16         | 0.065          |  | 6000          |
| RTG1110A | 0.500 x 1.000 | 18         | 0.049          |  | 3800          |
| RTG1120A | 0.500 x 1.250 | 16         | 0.065          |  | 5000          |
| RTG1150A | 0.500 x 1.500 | 16         | 0.065          |  | 4000          |
| RTG1160A | 0.500 x 1.500 | 18         | 0.049          |  | 4000          |
| RTG1190A | 0.750 x 1.250 | 18         | 0.049          |  | 2800          |
| RTG1210A | 0.750 x 1.500 | 14         | 0.083          |  | 2500          |
| RTG1220A | 0.750 x 1.500 | 16         | 0.065          |  | 2200          |
| RTG1230A | 0.750 x 1.500 | 18         | 0.049          |  | 2200          |
| RTG1240A | 0.750 x 2.000 | 16         | 0.065          |  | 2000          |
| RTG1250A | 1.000 x 1.500 | 11         | 0.120          |  | 2000          |
| RTG1270A | 1.000 x 1.500 | 14         | 0.083          |  | 2000          |
| RTG1280A | 1.000 x 1.500 | 16         | 0.065          |  | 1800          |
| RTG1290A | 1.000 x 1.500 | 18         | 0.049          |  | 2100          |
| RTG1310A | 1.000 x 2.000 | 11         | 0.120          |  | 1400          |
| RTG1340A | 1.000 x 2.000 | 14         | 0.083          |  | 1400          |
| RTG1350A | 1.000 x 2.000 | 16         | 0.065          |  | 1200          |
| RTG1359B | 1.000 X 2.000 | 17         | 0.058          |  | 1400          |
| RTG1370A | 1.000 x 2.000 | 18         | 0.049          |  | 1400          |
| RTG1390A | 1.000 x 3.000 | 11         | 0.120          |  | 1300          |
| RTG1400A | 1.000 x 3.000 | 14         | 0.083          |  | 1300          |

| Item No. | Tube Size     |            | Wall Thickness |  | Bulk Pack Qty |
|----------|---------------|------------|----------------|--|---------------|
|          | in            | Tube Gauge | in             |  |               |
| RTG1410A | 1.000 x 3.000 | 16         | 0.065          |  | 1300          |
| RTG1420A | 1.250 x 2.000 | 12         | 0.109          |  | 1200          |
| RTG1430A | 1.250 x 2.000 | 14         | 0.083          |  | 800           |
| RTG1440A | 1.250 x 2.000 | 16         | 0.065          |  | 800           |
| RTG1450A | 1.500 x 2.000 | 11         | 0.120          |  | 900           |
| RTG1460A | 1.500 x 2.000 | 14         | 0.083          |  | 900           |
| RTG1470A | 1.500 x 2.000 | 15         | 0.072          |  | 900           |
| RTG1480A | 1.500 x 2.000 | 16         | 0.065          |  | 900           |
| RTG1490A | 1.500 x 2.500 | 11         | 0.120          |  | 500           |
| RTG1500A | 1.500 x 2.500 | 12         | 0.109          |  | 600           |
| RTG1510A | 1.500 x 2.500 | 16         | 0.065          |  | 900           |
| RTG1521A | 1.500 x 3.000 | 11         | 0.120          |  | 900           |
| RTG1530A | 1.500 x 3.000 | 14         | 0.083          |  | 1000          |
| RTG1540A | 1.500 x 3.000 | 16         | 0.065          |  | 500           |
| RTG1550A | 1.500 x 4.000 | 16         | 0.065          |  | 500           |
| RTG1560A | 2.000 x 3.000 | 11         | 0.120          |  | 700           |
| RTG1570A | 2.000 x 3.000 | 14         | 0.083          |  | 700           |
| RTG1580B | 2.000 x 4.000 | 11         | 0.120          |  | 350           |
| RTG1590B | 2.000 x 4.000 | 13         | 0.095          |  | 350           |
| RTG1600B | 2.000 x 4.000 | 16         | 0.065          |  | 350           |



# THREADED INSERTS

## RCM Series

### Rectangular Metal Threaded Inserts

Specifications:

- Material: High-Density Polyethylene with Zinc-Plated Steel-Threaded Insert
- Color: Black

Features:

- Tube inserts with internal threads to accommodate adjustable leveling mounts and feet
- Ribbed to accommodate multiple gauges



#### Imperial

| Item No. | Tube Size<br>in | Thread Size<br>in | Tube Gauge<br>in | Wall Thickness<br>in | Bulk Pack Qty |
|----------|-----------------|-------------------|------------------|----------------------|---------------|
| RCM0150A | 0.75 x 1.50     | 1/4 - 20          | 16 - 18          | 0.049 - 0.065        | 500           |
| RCM0250A | 1.00 x 1.50     | 1/4 - 20          | 16 - 18          | 0.049 - 0.065        | 500           |
| RCM0300A | 1.00 x 1.50     | 5/16 - 18         | 16 - 18          | 0.049 - 0.065        | 500           |
| RCM0350A | 2.00 x 1.00     | 5/16 - 18         | 16 - 18          | 0.049 - 0.065        | 250           |
| RCM0400A | 2.00 x 1.00     | 5/16 - 18         | 14 - 16          | 0.065 - 0.083        | 250           |
| RCM0600A | 3.00 x 1.50     | 3/8 - 16          | 14 - 16          | 0.065 - 0.083        | 250           |

#### Metric

| Item No. | Tube Size<br>mm | Thread Size<br>mm | Tube Gauge<br>mm | Wall Thickness<br>mm | Bulk Pack Qty |
|----------|-----------------|-------------------|------------------|----------------------|---------------|
| 498598   | 30 x 20         | M8                | 17 - 19          | 1.1 - 1.5            | 500           |
| 498599   | 30 x 20         | M10               | 17 - 19          | 1.1 - 1.5            | 1000          |
| 498600   | 40 x 20         | M8                | 17 - 19          | 1.1 - 1.5            | 250           |
| 498601   | 40 x 20         | M10               | 17 - 19          | 1.1 - 1.5            | 500           |
| 498602   | 40 x 30         | M8                | 17 - 19          | 1.1 - 1.5            | 500           |
| 498603   | 40 x 30         | M10               | 17 - 19          | 1.1 - 1.5            | 500           |
| 498604   | 50 x 25         | M8                | 17 - 19          | 1.1 - 1.5            | 250           |
| 498605   | 50 x 25         | M10               | 17 - 19          | 1.1 - 1.5            | 500           |
| 498606   | 50 x 30         | M8                | 17 - 19          | 1.1 - 1.5            | 200           |
| 498607   | 50 x 30         | M10               | 17 - 19          | 1.1 - 1.5            | 500           |
| 498608   | 60 x 30         | M8                | 17 - 19          | 1.1 - 1.5            | 250           |
| 498609   | 60 x 30         | M10               | 17 - 19          | 1.1 - 1.5            | 250           |

## SAI Series

### Square Ribbed Inserts with Adjustable Feet

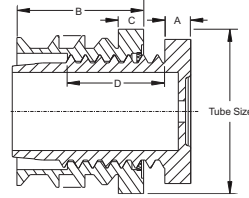


Specifications:

- Material: Nylon
- Color: Black

Features:

- Rugged, durable, heavy duty
- Resists lateral stresses
- Threaded insert and height adjuster in one piece



| Item No. | Square Tube Size |       | Fits       |           | Reference Dimensions |       |       |       | Axial Load | Bulk Pack Qty |
|----------|------------------|-------|------------|-----------|----------------------|-------|-------|-------|------------|---------------|
|          | in               | mm    | Tube Gauge | mm        | A                    | B     | C     | D     | lbs        |               |
| SAI100A  | 0.750            | 20.00 | 14 - 18    | 1.5 - 2.0 | 0.158                | 0.866 | 0.197 | 0.945 | 220        | 100           |
| SAI200A  | 0.875            | 22.00 | 14 - 18    | 1.5 - 2.0 | 0.158                | 0.866 | 0.197 | 0.945 | 220        | 200           |
| SAI300A  | 1.000            | 25.00 | 14 - 18    | 1.5 - 2.0 | 0.197                | 0.985 | 0.197 | 0.906 | 330        | 300           |
| SAI400A  | 1.181            | 30.00 | 14 - 18    | 1.5 - 2.0 | 0.197                | 0.985 | 0.197 | 0.787 | 660        | 100           |
| SAI500A  | 1.375            | 35.00 | 14 - 18    | 1.5 - 2.0 | 0.197                | 1.358 | 0.197 | 0.787 | 660        | 100           |
| SAI600A  | 1.500            | 40.00 | 14 - 18    | 1.5 - 2.0 | 0.197                | 1.358 | 0.197 | 0.787 | 660        | 100           |
| SAI700A  | 1.750            | 45.00 | 14 - 18    | 1.5 - 2.0 | 0.197                | 1.358 | 0.197 | 1.102 | 660        | 100           |
| SAI800A  | 2.000            | 50.00 | 14 - 18    | 1.5 - 2.0 | 0.197                | 1.358 | 0.197 | 1.142 | 660        | 100           |

## RAI Series

### Round Ribbed Inserts with Adjustable Feet

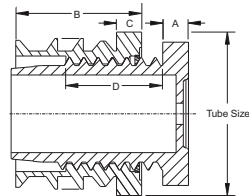


Specifications:

- Material: Nylon
- Color: Black

Features:

- Rugged, durable, heavy duty
- Resists lateral stresses
- Threaded insert and height adjuster in one piece



| Item No. | Tube Size |    | Fits       |         | Reference Dimensions |       |       |       | Axial Load | Bulk Pack Qty |
|----------|-----------|----|------------|---------|----------------------|-------|-------|-------|------------|---------------|
|          | in        | mm | Tube Gauge | mm      | A Ref                | B Ref | C Ref | D Ref | lbs        |               |
| RAI100A  | 1.250     | 32 | 14 - 18    | 1.5-2.0 | 0.197                | 0.985 | 0.197 | 0.787 | 660        | 800           |
| RAI200A  | 1.375     | 35 | 14 - 18    | 1.5-2.0 | 0.197                | 1.358 | 0.197 | 0.787 | 660        | 100           |
| RAI300A  | 1.500     | 40 | 14 - 18    | 1.5-2.0 | 0.197                | 1.358 | 0.197 | 0.787 | 660        | 100           |
| RAI400A  | 1.750     | 45 | 14 - 18    | 1.5-2.0 | 0.197                | 1.358 | 0.197 | 1.102 | 660        | 100           |
| RAI500A  | 2.000     | 50 | 14 - 18    | 1.5-2.0 | 0.197                | 1.358 | 0.197 | 1.181 | 660        | 100           |
| RAI600A  | 2.375     | 60 | 14 - 18    | 1.5-2.0 | 0.394                | 1.595 | 0.236 | 1.457 | 660        | 100           |
| RAI700A  | 3.125     | 80 | 14 - 18    | 1.5-2.0 | 0.394                | 1.595 | 0.236 | 1.457 | 660        | 100           |



# TACK, SCREW-IN & ADHESIVE GLIDES

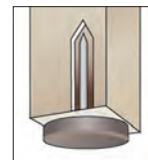
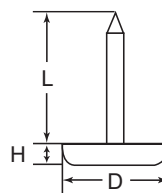
## TKG Series Tack Glides

**Specifications:**

- Material: High-Density Polyethylene with Nickel Plated Nail
- Color: See Table

**Features:**

- Ideal for wooden furniture



| Item No. |          | D     |       | H     |      | L     |       | Bulk Pack Qty |
|----------|----------|-------|-------|-------|------|-------|-------|---------------|
| Natural  | Brown    | in    | mm    | in    | mm   | in    | mm    |               |
| TKG1010A | TKG1010B | 0.625 | 15.88 | 0.250 | 6.35 | 0.719 | 18.26 | 6000          |
| TKG1020A | TKG1020B | 0.750 | 19.05 | 0.250 | 6.35 | 0.719 | 18.26 | 4500          |
| TKG1030A | TKG1030B | 0.875 | 22.23 | 0.250 | 6.35 | 0.719 | 18.26 | 4000          |
| TKG1040A | TKG1040B | 1.000 | 25.40 | 0.250 | 6.35 | 0.719 | 18.26 | 3000          |

## TKT Series PTFE Based Glide

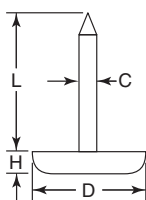


**Specifications:**

- Material: PTFE
- Color: Natural

**Features:**

- Ideal when easy movement is essential



| Item No. | D     | H     | L     | C     | Bulk Pack Qty |
|----------|-------|-------|-------|-------|---------------|
| 499499   | 0.750 | 0.393 | 0.709 | 0.102 | 200           |
| 499500   | 0.870 | 0.393 | 0.709 | 0.102 | 200           |
| 499501   | 0.980 | 0.393 | 0.709 | 0.102 | 200           |
| 499502   | 1.180 | 0.393 | 0.709 | 0.102 | 200           |
| 499503   | 1.460 | 0.393 | 0.709 | 0.102 | 200           |

## Screw-In Glides

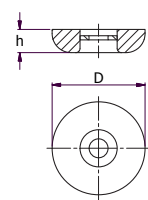


**Specifications:**

- Material: Glide: PTFE  
Material: Washer: Steel
- Color: Natural

**Features:**

- Includes metal screw
- Easy assembly



| Item No. | D in  | H in  | Bulk Pack Qty |
|----------|-------|-------|---------------|
| 499482   | 0.750 | 0.219 | 1000          |
| 499483   | 0.875 | 0.219 | 200           |
| 499484   | 1.000 | 0.203 | 200           |
| 499485   | 1.188 | 0.203 | 200           |
| 499486   | 1.500 | 0.220 | 200           |
| 499487   | 2.000 | 0.219 | 200           |

## Adhesive Glides

**Specifications:**

- Material: PTFE with adhesive backing
- Color: Natural

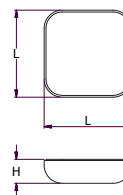
**Features:**

- Easy to apply
- Smooth glide action
- Protects surfaces



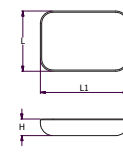
### Square

| Item No. | L in  | H in  | Std Pack Qty |
|----------|-------|-------|--------------|
| 499488   | 1.000 | 0.250 | 200          |
| 499490   | 1.188 | 0.250 | 200          |
| 499494   | 1.500 | 0.281 | 200          |
| 499495   | 1.750 | 0.281 | 200          |
| 499496   | 2.000 | 0.250 | 200          |



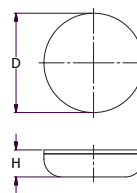
### Rectangular

| Item No. | L in  | L1 in | H in  | Std Pack Qty |
|----------|-------|-------|-------|--------------|
| 499489   | 1.000 | 1.375 | 0.267 | 200          |
| 499497   | 0.750 | 2.750 | 0.250 | 200          |
| 499492   | 1.000 | 4.000 | 0.250 | 200          |



### Round

| Item No. | D in  | H in  | Std Pack Qty |
|----------|-------|-------|--------------|
| 499475   | 0.750 | 0.172 | 200          |
| 499476   | 0.875 | 0.250 | 200          |
| 499477   | 1.000 | 0.172 | 200          |
| 499478   | 1.188 | 0.172 | 200          |
| 499479   | 1.500 | 0.250 | 200          |
| 499480   | 2.000 | 0.250 | 200          |
| 499481   | 2.500 | 0.250 | 200          |





# PLASTIC BASED LEVELERS

## AFP & AFPM Series Articulating Adjustable Feet

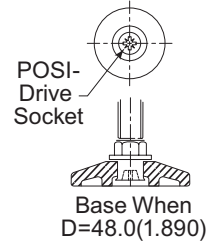
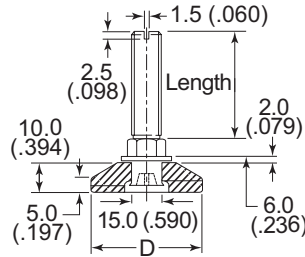


**Specifications:**

- Material: Polypropylene, Low-Carbon Steel Stud with Zinc-Plated Finish
- Color: Black

**Features:**

- Allows adjustment under load with base remaining stationary



**Imperial**

| Item No.  | D (Base) |             | Stud Length | Bulk Pack Qty |
|-----------|----------|-------------|-------------|---------------|
|           | in       | Thread Size |             |               |
| AFP25100A | 0.984    | 1/4 - 20    | 0.750       | 100           |
| AFP25110A | 0.984    | 5/16 - 18   | 1.000       | 100           |
| AFP25120A | 0.984    | 5/16 - 18   | 1.500       | 100           |
| AFP25130A | 0.984    | 5/16 - 18   | 2.000       | 100           |
| AFP25140A | 0.984    | 5/16 - 18   | 2.750       | 100           |
| AFP25150A | 0.984    | 5/16 - 18   | 4.000       | 100           |
| AFP30100A | 1.181    | 5/16 - 18   | 1.000       | 100           |
| AFP30110A | 1.181    | 5/16 - 18   | 1.500       | 100           |
| AFP30120A | 1.181    | 5/16 - 18   | 2.000       | 100           |
| AFP30130A | 1.181    | 5/16 - 18   | 2.750       | 100           |
| AFP30140A | 1.181    | 5/16 - 18   | 3.000       | 100           |
| AFP30150A | 1.181    | 5/16 - 18   | 4.000       | 100           |
| AFP30160A | 1.181    | 3/8 - 16    | 1.000       | 100           |
| AFP30180A | 1.181    | 3/8 - 16    | 1.500       | 100           |
| AFP30200A | 1.181    | 3/8 - 16    | 2.000       | 100           |
| AFP30210A | 1.181    | 3/8 - 16    | 2.750       | 100           |
| AFP30220A | 1.181    | 3/8 - 16    | 4.000       | 100           |
| AFP38100A | 1.500    | 5/16 - 18   | 1.000       | 100           |
| AFP38120A | 1.500    | 5/16 - 18   | 1.500       | 100           |
| AFP38130A | 1.500    | 5/16 - 18   | 2.000       | 100           |
| AFP38140A | 1.500    | 5/16 - 18   | 2.750       | 100           |
| AFP38150A | 1.500    | 5/16 - 18   | 3.000       | 100           |
| AFP38160A | 1.500    | 5/16 - 18   | 4.000       | 100           |
| AFP38170A | 1.500    | 3/8 - 16    | 1.000       | 100           |
| AFP38180A | 1.500    | 3/8 - 16    | 1.500       | 100           |
| AFP38200A | 1.500    | 3/8 - 16    | 2.000       | 100           |
| AFP38210A | 1.500    | 3/8 - 16    | 2.750       | 100           |
| AFP38220A | 1.500    | 3/8 - 16    | 3.000       | 100           |
| AFP38230A | 1.500    | 3/8 - 16    | 4.000       | 100           |
| AFP38240A | 1.500    | 1/2 - 13    | 1.000       | 100           |
| AFP38250A | 1.500    | 1/2 - 13    | 1.500       | 100           |
| AFP38260A | 1.500    | 1/2 - 13    | 2.000       | 100           |
| AFP38280A | 1.500    | 1/2 - 13    | 2.750       | 100           |
| AFP38290A | 1.500    | 1/2 - 13    | 4.000       | 100           |
| AFP48100A | 1.890    | 5/16 - 18   | 1.000       | 100           |
| AFP48110A | 1.890    | 5/16 - 18   | 1.500       | 100           |
| AFP48130A | 1.890    | 5/16 - 18   | 2.000       | 100           |
| AFP48140A | 1.890    | 5/16 - 18   | 2.750       | 100           |
| AFP48150A | 1.890    | 5/16 - 18   | 4.000       | 100           |
| AFP48170A | 1.890    | 3/8 - 16    | 1.000       | 100           |
| AFP48180A | 1.890    | 3/8 - 16    | 1.500       | 100           |
| AFP48200A | 1.890    | 3/8 - 16    | 2.000       | 100           |
| AFP48210A | 1.890    | 3/8 - 16    | 2.375       | 100           |
| AFP48220A | 1.890    | 3/8 - 16    | 2.750       | 100           |
| AFP48240A | 1.890    | 3/8 - 16    | 4.000       | 100           |
| AFP48250A | 1.890    | 1/2 - 13    | 1.000       | 100           |
| AFP48260A | 1.890    | 1/2 - 13    | 1.500       | 100           |
| AFP48270A | 1.890    | 1/2 - 13    | 2.000       | 100           |
| AFP48280A | 1.890    | 1/2 - 13    | 2.750       | 100           |
| AFP48290A | 1.890    | 1/2 - 13    | 4.000       | 100           |

**Metric**

| Item No. | D (Base) |             | Stud Length | Bulk Pack Qty |
|----------|----------|-------------|-------------|---------------|
|          | mm       | Thread Size |             |               |
| 466212   | 25       | M6          | 20          | 500           |
| 466167   | 25       | M8          | 25          | 500           |
| 466168   | 25       | M8          | 40          | 350           |
| 466169   | 25       | M8          | 55          | 250           |
| 466170   | 25       | M8          | 70          | 200           |
| 466171   | 25       | M8          | 100         | 150           |
| 466172   | 30       | M8          | 25          | 400           |
| 466173   | 30       | M6          | 40          | 300           |
| 466174   | 30       | M6          | 55          | 200           |
| 466175   | 30       | M6          | 70          | 150           |
| 466176   | 30       | M6          | 100         | 100           |
| 466177   | 30       | M10         | 25          | 300           |
| 466178   | 30       | M10         | 40          | 200           |
| 466179   | 30       | M10         | 55          | 100           |
| 466180   | 30       | M10         | 70          | 100           |
| 466181   | 30       | M10         | 100         | 50            |
| 466182   | 38       | M8          | 25          | 400           |
| 466183   | 38       | M8          | 40          | 300           |
| 466184   | 38       | M8          | 55          | 200           |
| 466185   | 38       | M8          | 70          | 150           |
| 466186   | 38       | M8          | 100         | 100           |
| 466187   | 38       | M10         | 25          | 300           |
| 466188   | 38       | M10         | 40          | 200           |
| 466189   | 38       | M10         | 55          | 100           |
| 466190   | 38       | M10         | 70          | 100           |
| 466191   | 38       | M10         | 100         | 50            |
| 466192   | 38       | M12         | 25          | 200           |
| 466193   | 38       | M12         | 40          | 150           |
| 466194   | 38       | M12         | 55          | 150           |
| 466195   | 38       | M12         | 70          | 50            |
| 466196   | 38       | M12         | 100         | 100           |
| 466197   | 48       | M8          | 25          | 200           |
| 466198   | 48       | M8          | 40          | 150           |
| 466199   | 48       | M8          | 55          | 150           |
| 466200   | 48       | M8          | 70          | 100           |
| 466201   | 48       | M8          | 100         | 100           |
| 466202   | 48       | M10         | 25          | 150           |
| 466203   | 48       | M10         | 40          | 100           |
| 466204   | 48       | M10         | 55          | 100           |
| 466205   | 48       | M10         | 70          | 50            |
| 466206   | 48       | M10         | 100         | 100           |
| 466207   | 48       | M12         | 25          | 100           |
| 466208   | 48       | M12         | 40          | 100           |
| 466209   | 48       | M12         | 55          | 100           |
| 466211   | 48       | M12         | 100         | 50            |

## PLASTIC BASED LEVELERS

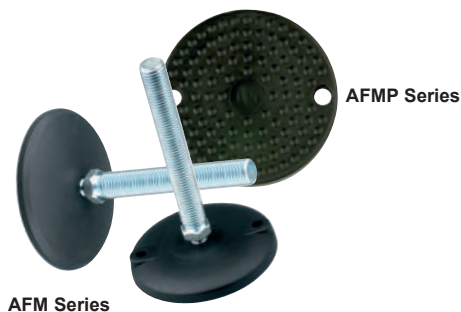

**AFM & AFMP Series**  
**Swivel/Tilting Adjustable Machinery Feet**

## Specifications:

- Material: Nylon Base with Zinc Plated Steel Stud
- Color: Black

## Features:

- Ideal for mounting machines or conveyers
- High Load bearing of 2000lbs (900kg) per foot
- Tilting & swiveling design (20° Max)



AFM Series

## AFM Series

| Item No.   |                |           |                   |             |               |  |
|------------|----------------|-----------|-------------------|-------------|---------------|--|
| Plain Base | Bolt-Down Base | Thread    | Stud Length<br>In | Base Dia In | Bulk Pack Qty |  |
| AFM1100A   | —              | 5/16 - 18 | 2.5               | 1.57        | 40            |  |
| AFM1200A   | —              | 5/16 - 18 | 2.5               | 1.97        | 40            |  |
| —          | AFM1300B       | 5/16 - 18 | 2.5               | 2.36        | 40            |  |
| AFM1400A   | —              | 5/16 - 18 | 3.5               | 1.57        | 40            |  |
| AFM1500A   | —              | 5/16 - 18 | 3.5               | 1.97        | 40            |  |
| —          | AFM1600B       | 5/16 - 18 | 3.5               | 2.36        | 40            |  |
| AFM2050A   | —              | 3/8 - 16  | 3.0               | 1.97        | 40            |  |
| —          | AFM2100B       | 3/8 - 16  | 3.0               | 2.36        | 40            |  |
| AFM2150A   | —              | 3/8 - 16  | 3.0               | 3.15        | 40            |  |
| AFM2200A   | —              | 3/8 - 16  | 4.0               | 1.97        | 40            |  |
| —          | AFM2250B       | 3/8 - 16  | 4.0               | 2.36        | 40            |  |
| AFM2300A   | —              | 3/8 - 16  | 4.0               | 3.15        | 40            |  |
| AFM3100A   | —              | 1/2 - 13  | 3.0               | 1.97        | 24            |  |
| —          | AFM3150B       | 1/2 - 13  | 3.0               | 2.36        | 24            |  |
| AFM3200A   | AFM3200B       | 1/2 - 13  | 3.0               | 3.15        | 24            |  |
| AFM3300A   | —              | 1/2 - 13  | 4.0               | 1.97        | 24            |  |
| AFM3400A   | AFM3400B       | 1/2 - 13  | 4.0               | 3.15        | 24            |  |
| —          | AFM3450B       | 1/2 - 13  | 4.0               | 3.94        | 24            |  |
| AFM3500A   | —              | 1/2 - 13  | 5.0               | 2.36        | 24            |  |
| AFM3600A   | AFM3600B       | 1/2 - 13  | 5.0               | 3.15        | 24            |  |
| —          | AFM3700B       | 1/2 - 13  | 5.0               | 3.94        | 24            |  |
| AFM4100A   | —              | 5/8 - 11  | 3.0               | 1.97        | 20            |  |
| —          | AFM4150B       | 5/8 - 11  | 3.0               | 2.36        | 20            |  |
| AFM4200A   | —              | 5/8 - 11  | 3.0               | 3.15        | 20            |  |
| AFM4250A   | —              | 5/8 - 11  | 4.0               | 1.97        | 20            |  |
| AFM4300A   | AFM4300B       | 5/8 - 11  | 4.0               | 3.15        | 20            |  |
| —          | AFM4400B       | 5/8 - 11  | 4.0               | 3.94        | 20            |  |
| AFM4450A   | —              | 5/8 - 11  | 6.0               | 3.15        | 20            |  |
| AFM4500A   | AFM4500B       | 5/8 - 11  | 6.0               | 3.94        | 20            |  |
| AFM4600A   | —              | 5/8 - 11  | 6.0               | 4.72        | 20            |  |
| AFM4650A   | —              | 5/8 - 11  | 8.0               | 3.15        | 20            |  |
| AFM4700A   | —              | 5/8 - 11  | 8.0               | 3.94        | 20            |  |
| AFM4800A   | AFM4800B       | 5/8 - 11  | 8.0               | 4.72        | 20            |  |
| AFM5400A   | —              | 3/4 - 10  | 6.0               | 3.15        | 20            |  |
| AFM5450A   | —              | 3/4 - 10  | 6.0               | 3.94        | 20            |  |
| AFM5500A   | AFM5500B       | 3/4 - 10  | 6.0               | 4.72        | 12            |  |
| AFM5600A   | —              | 3/4 - 10  | 8.0               | 3.15        | 12            |  |
| AFM5650A   | —              | 3/4 - 10  | 8.0               | 3.94        | 12            |  |
| AFM5700A   | AFM5700B       | 3/4 - 10  | 8.0               | 4.72        | 12            |  |

## AFMP Series - Optional Non-Slip Pad

- Material: Rubber

| Item No.   |                |  |             |               |
|------------|----------------|--|-------------|---------------|
| Plain Base | Bolt-Down Base |  | Base Dia In | Bulk Pack Qty |
| AFMP040A   | —              |  | 1.57        | 40            |
| AFMP050A   | —              |  | 1.97        | 40            |
| AFMP060A   | AFMP060B       |  | 2.36        | 24            |
| AFMP080A   | AFMP080B       |  | 3.15        | 20            |
| AFMP100A   | AFMP100B       |  | 3.94        | 20            |
| AFMP120A   | AFMP120B       |  | 4.72        | 12            |



# METRIC SIZES ALSO AVAILABLE

Shop metric options for leveling feet & glides  
at [www.essentracomponents.com](http://www.essentracomponents.com)



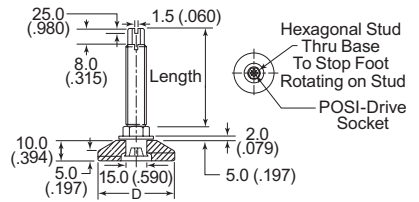
# PLASTIC BASED LEVELERS

## AFS & AFSM Series Rigid Adjustable Feet



**Specifications:**

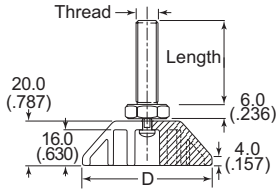
- Material: Polypropylene, Low-Carbon Steel Stud with Zinc-Plated Finish
- Color: Black



**Imperial**

| Item No.  | D (Base) |             | Stud Length | Bulk Pack Qty |
|-----------|----------|-------------|-------------|---------------|
|           | in       | Thread Size |             |               |
| AFS48410A | 1.890    | 5/16-18     | 1.000       | 100           |
| AFS48420A | 1.890    | 5/16-18     | 1.500       | 100           |
| AFS48430A | 1.890    | 5/16-18     | 2.000       | 100           |
| AFS48440A | 1.890    | 5/16-18     | 2.750       | 100           |
| AFS48450A | 1.890    | 5/16-18     | 4.000       | 100           |
| AFS48460A | 1.890    | 3/8-16      | 1.000       | 100           |
| AFS48470A | 1.890    | 3/8-16      | 1.500       | 100           |
| AFS48480A | 1.890    | 3/8-16      | 2.000       | 100           |
| AFS48490A | 1.890    | 3/8-16      | 2.750       | 100           |
| AFS48500A | 1.890    | 3/8-16      | 4.000       | 100           |
| AFS48510A | 1.890    | 1/2-13      | 1.000       | 100           |
| AFS48520A | 1.890    | 1/2-13      | 1.500       | 100           |
| AFS48530A | 1.890    | 1/2-13      | 2.000       | 100           |
| AFS48540A | 1.890    | 1/2-13      | 2.750       | 100           |
| AFS48550A | 1.890    | 1/2-13      | 4.000       | 100           |

## AFT & AFTM Series Swivel Tilting Adjustable Feet



**Specifications:**

- Material: Polypropylene Zinc-Plated Steel Tilt Ball and Stud
- Color: Black

**Features:**

- Max 25° tilt



**Imperial**

| Item No.  | D (Base) |           | Thread Size | Stud Length | Bulk Pack Qty |
|-----------|----------|-----------|-------------|-------------|---------------|
|           | in       |           |             |             |               |
| AFT25100A | 0.984    | 1/4 - 20  | 1.000       | 100         |               |
| AFT25110A | 0.984    | 5/16 - 18 | 0.500       | 100         |               |
| AFT25120A | 0.984    | 5/16 - 18 | 1.000       | 100         |               |
| AFT25130A | 0.984    | 3/8 - 16  | 0.500       | 100         |               |
| AFT25140A | 0.984    | 3/8 - 16  | 1.500       | 100         |               |
| AFT25150A | 0.984    | 3/8 - 16  | 2.000       | 100         |               |
| AFT32160A | 1.260    | 1/4 - 20  | 1.000       | 100         |               |
| AFT32170A | 1.260    | 5/16 - 18 | 1.000       | 100         |               |
| AFT32180A | 1.260    | 5/16 - 18 | 1.500       | 100         |               |
| AFT32190A | 1.260    | 3/8 - 16  | 1.000       | 100         |               |
| AFT32200A | 1.260    | 3/8 - 16  | 2.000       | 100         |               |
| AFT32210A | 1.260    | 3/8 - 16  | 3.000       | 100         |               |
| AFT38220A | 1.496    | 5/16 - 18 | 1.000       | 100         |               |
| AFT38230A | 1.496    | 5/16 - 18 | 1.500       | 100         |               |
| AFT38240A | 1.496    | 3/8 - 16  | 1.000       | 100         |               |
| AFT38250A | 1.496    | 3/8 - 16  | 2.000       | 100         |               |
| AFT38260A | 1.496    | 3/8 - 16  | 3.000       | 100         |               |
| AFT47270A | 1.850    | 5/16 - 18 | 1.000       | 100         |               |
| AFT47280A | 1.850    | 5/16 - 18 | 2.000       | 100         |               |
| AFT47290A | 1.850    | 3/8 - 16  | 1.000       | 100         |               |
| AFT47300A | 1.850    | 3/8 - 16  | 2.000       | 100         |               |
| AFT47310A | 1.850    | 3/8 - 16  | 3.000       | 100         |               |

**AFSM Metric**

| Item No. | D (Base) |     | Thread Size | Stud Length | Bulk Pack Qty |
|----------|----------|-----|-------------|-------------|---------------|
|          | mm       |     |             |             |               |
| 466121   | 25       | M6  | 20          | 500         |               |
| 466122   | 25       | M8  | 25          | 500         |               |
| 466123   | 25       | M8  | 40          | 350         |               |
| 466124   | 25       | M8  | 55          | 250         |               |
| 466125   | 25       | M8  | 70          | 200         |               |
| 466126   | 25       | M8  | 100         | 150         |               |
| 466127   | 30       | M8  | 25          | 400         |               |
| 466128   | 30       | M8  | 40          | 300         |               |
| 466129   | 30       | M8  | 55          | 200         |               |
| 466130   | 30       | M8  | 70          | 150         |               |
| 466131   | 30       | M8  | 100         | 100         |               |
| 466132   | 30       | M10 | 25          | 300         |               |
| 466133   | 30       | M10 | 40          | 200         |               |
| 466134   | 30       | M10 | 55          | 100         |               |
| 466135   | 30       | M10 | 70          | 100         |               |
| 466136   | 30       | M10 | 100         | 50          |               |
| 466137   | 38       | M8  | 25          | 400         |               |
| 466138   | 38       | M8  | 40          | 300         |               |
| 466139   | 38       | M8  | 55          | 200         |               |
| 466140   | 38       | M8  | 70          | 150         |               |
| 466141   | 38       | M8  | 100         | 100         |               |
| 466142   | 38       | M10 | 25          | 300         |               |
| 466143   | 38       | M10 | 40          | 200         |               |
| 466144   | 38       | M10 | 55          | 100         |               |
| 466145   | 38       | M10 | 70          | 100         |               |
| 466146   | 38       | M10 | 100         | 50          |               |
| 466147   | 38       | M12 | 25          | 200         |               |
| 466148   | 38       | M12 | 40          | 150         |               |
| 466149   | 38       | M12 | 55          | 150         |               |
| 466150   | 38       | M12 | 70          | 100         |               |
| 466151   | 38       | M12 | 100         | 50          |               |
| 466152   | 48       | M8  | 25          | 200         |               |
| 466153   | 48       | M8  | 40          | 200         |               |
| 466154   | 48       | M8  | 55          | 150         |               |
| 466155   | 48       | M8  | 70          | 150         |               |
| 466156   | 48       | M8  | 100         | 100         |               |
| 466157   | 48       | M10 | 25          | 200         |               |
| 466158   | 48       | M10 | 40          | 150         |               |
| 466159   | 48       | M10 | 55          | 100         |               |
| 466160   | 48       | M10 | 70          | 100         |               |
| 466161   | 48       | M10 | 100         | 50          |               |
| 466162   | 48       | M12 | 25          | 150         |               |
| 466163   | 48       | M12 | 40          | 100         |               |
| 466164   | 48       | M12 | 55          | 100         |               |
| 466165   | 48       | M12 | 70          | 50          |               |
| 466166   | 48       | M12 | 100         | 50          |               |

**Metric**

| Item No. | Thread | Ø Base | Stud Length | Bulk Pack Qty |
|----------|--------|--------|-------------|---------------|
|          |        |        |             |               |
| 462184   | M6     | 32.5   | 25.0        | 500           |
| 110728   | M8     | 25.0   | 12.0        | 100           |
| 110732   | M8     | 25.0   | 25.0        | 100           |
| 110729   | M8     | 32.0   | 12.0        | 100           |
| 110733   | M8     | 32.0   | 25.0        | 100           |
| 110730   | M8     | 38.0   | 12.0        | 100           |
| 110734   | M8     | 38.0   | 25.0        | 100           |
| 110731   | M8     | 47.5   | 12.0        | 100           |
| 110735   | M8     | 47.5   | 25.0        | 100           |
| 110736   | M10    | 25.0   | 15.0        | 100           |
| 110740   | M10    | 25.0   | 38.0        | 100           |
| 110744   | M10    | 25.0   | 50.0        | 100           |
| 110737   | M10    | 32.0   | 15.0        | 100           |
| 110741   | M10    | 32.0   | 38.0        | 100           |
| 110745   | M10    | 32.0   | 50.0        | 100           |
| 110738   | M10    | 38.0   | 15.0        | 100           |
| 110742   | M10    | 38.0   | 38.0        | 100           |
| 110746   | M10    | 38.0   | 50.0        | 100           |
| 110739   | M10    | 47.5   | 15.0        | 100           |
| 110743   | M10    | 47.5   | 38.0        | 100           |
| 110747   | M10    | 47.5   | 50.0        | 100           |



# ADJUSTABLE FEET & BASE CAPS



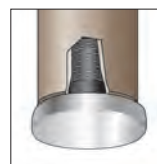
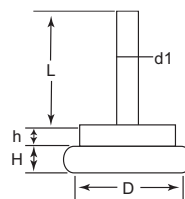
## AFH Series Steel Based Adjustable Feet

**Specifications:**

- Material: Low-Carbon Steel Stud with Zinc-Plated Finish and Nickel-Plated Shell

**Features:**

- Economic leveler ideal for uneven surfaces
- Steel shell base provides a smooth non-skid surface
- Excellent for leveling cabinets, office furniture and light-duty machines
- Polymer cushion provided shock absorption
- Attractive chrome finish



| Item No. | D (Base) |       | H (Height) |      | L     |       | d1 (Thread) | Bulk Pack Qty |
|----------|----------|-------|------------|------|-------|-------|-------------|---------------|
|          | in       | mm    | in         | mm   | in    | mm    |             |               |
| AFH1010A | 0.748    | 19.00 | 0.236      | 5.94 | 0.650 | 16.51 | 1/4 - 20    | 400           |
| AFH1015A | 0.748    | 19.00 | 0.236      | 5.94 | 1.000 | 25.40 | 1/4 - 20    | 360           |
| AFH1020A | 0.866    | 21.99 | 0.236      | 5.94 | 0.650 | 16.51 | 1/4 - 20    | 320           |
| AFH1025A | 0.866    | 21.99 | 0.236      | 5.94 | 1.500 | 38.10 | 1/4 - 20    | 300           |
| AFH1030A | 0.945    | 24.03 | 0.236      | 5.94 | 0.650 | 16.51 | 1/4 - 20    | 240           |
| AFH1035A | 0.945    | 24.03 | 0.236      | 5.94 | 1.500 | 38.10 | 1/4 - 20    | 220           |
| AFH1040A | 1.063    | 27.00 | 0.236      | 5.94 | 1.000 | 25.40 | 1/4 - 20    | 192           |
| AFH1045A | 1.063    | 27.00 | 0.236      | 5.94 | 2.000 | 50.80 | 1/4 - 20    | 172           |

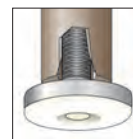
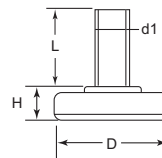
## AFB Series Nylon Based Adjustable Feet

**Specifications:**

- Material: Nylon Base, Low-Carbon Steel Stud with Zinc-Plated Finish and Nickel-Plated Shell
- Color: Natural Nylon Base with Nickel-Plated Shell

**Features:**

- Economic leveler ideal for uneven surfaces
- Nylon base provides a smooth non-abrasive surface
- Excellent for leveling cabinets, office furniture and light-duty machines



| Item No. | D (Base) |       | H (Height) |       | L     |       | d1 (Thread) | Bulk Pack Qty |
|----------|----------|-------|------------|-------|-------|-------|-------------|---------------|
|          | in       | mm    | in         | mm    | in    | mm    |             |               |
| AFB1010A | 1.000    | 25.40 | 0.438      | 11.11 | 1.000 | 25.40 | 1/4 - 20    | 400           |
| AFB1015A | 1.000    | 25.40 | 0.438      | 11.11 | 2.000 | 50.80 | 1/4 - 20    | 360           |
| AFB1020A | 1.375    | 34.93 | 0.594      | 15.08 | 1.000 | 25.40 | 3/8 - 16    | 200           |
| AFB1025A | 1.375    | 34.93 | 0.594      | 15.08 | 2.000 | 50.80 | 3/8 - 16    | 180           |

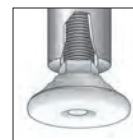
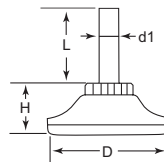
## AFD Series Nylon Based With Hex Adjustable Feet

**Specifications:**

- Material: Nylon Base, Low-Carbon Steel Stud with Zinc-Plated Finish and Nickel-Plated Shell
- Color: Natural Nylon Base with Nickel-Plated Shell

**Features:**

- Integral hexagonal nut allows adjustment under load
- Nylon base provides a smooth non-abrasive surface
- Excellent for leveling cabinets, office furniture and light-duty machines
- Attractive nickel finish



| Item No. | D (Base) |       | H (Height) |       | L     |       | d1 (Thread) | Bulk Pack Qty |
|----------|----------|-------|------------|-------|-------|-------|-------------|---------------|
|          | in       | mm    | in         | mm    | in    | mm    |             |               |
| AFD1010A | 1.300    | 33.02 | 0.625      | 15.88 | 1.000 | 25.40 | 3/8 - 16    | 300           |
| AFD1020A | 1.750    | 44.45 | 0.688      | 17.46 | 1.000 | 25.40 | 3/8 - 16    | 300           |
| AFD1025A | 1.750    | 44.45 | 0.688      | 17.46 | 2.000 | 50.80 | 3/8 - 16    | 280           |

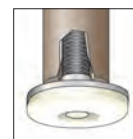
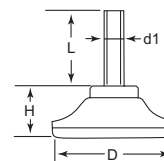
## AFR Series Nylon Based Adjustable Feet

**Specifications:**

- Material: Nylon Base, Low-Carbon Steel Stud With Zinc-Plated Finish and Nickel-Plated Shell
- Color: Natural Nylon Base with Nickel-Plated Shell

**Features:**

- Economic leveler ideal for uneven surfaces
- Nylon base provides a smooth non-abrasive surface
- Excellent for leveling cabinets, office furniture and light-duty machines



| Item No. | D (Base) |       | H (Height) |       | L     |       | d1 (Thread) | Bulk Pack Qty |
|----------|----------|-------|------------|-------|-------|-------|-------------|---------------|
|          | in       | mm    | in         | mm    | in    | mm    |             |               |
| AFR1010A | 1.125    | 28.58 | 0.438      | 11.11 | 1.000 | 25.40 | 1/4 - 20    | 400           |
| AFR1015A | 1.125    | 28.58 | 0.438      | 11.11 | 2.000 | 50.80 | 1/4 - 20    | 360           |
| AFR1020A | 1.125    | 28.58 | 0.438      | 11.11 | 1.000 | 25.40 | 5/16 - 18   | 300           |
| AFR1025A | 1.125    | 28.58 | 0.438      | 11.11 | 2.000 | 50.80 | 5/16 - 18   | 280           |

| Item No. | D (Base) |       | H (Height) |       | L     |       | d1 (Thread) | Bulk Pack Qty |
|----------|----------|-------|------------|-------|-------|-------|-------------|---------------|
|          | in       | mm    | in         | mm    | in    | mm    |             |               |
| AFR1030A | 1.300    | 33.02 | 0.500      | 12.70 | 1.000 | 25.40 | 3/8 - 16    | 240           |
| AFR1035A | 1.300    | 33.02 | 0.500      | 12.70 | 2.000 | 50.80 | 3/8 - 16    | 220           |
| AFR1040A | 1.750    | 44.45 | 0.531      | 13.49 | 1.000 | 25.40 | 3/8 - 16    | 200           |
| AFR1045A | 1.750    | 44.45 | 0.531      | 13.49 | 2.000 | 50.80 | 3/8 - 16    | 180           |



## BASE CAPS / RIVET FEET

### MBC Series Glide Base Caps



**Specifications:**

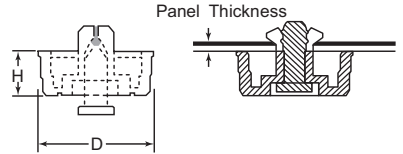
- Material: See Table
- Color: Natural

**Features:**

- Low profile
- Effectively encapsulates standard metal base glides

| Item No. | Fits Base Cap OD |        | Material | Bulk Pack Qty |
|----------|------------------|--------|----------|---------------|
|          | in               | mm     |          |               |
| MBC1200A | 0.875            | 22.238 | Nylon    | 5000          |
| MBC1210A | 1.000            | 25.400 | LDPE     | 4000          |
| MBC1220A | 1.062            | 27.000 | Nylon    | 4000          |
| MBC1230A | 1.200            | 30.480 | LDPE     | 3000          |
| MBC1240A | 1.218            | 31.000 | Nylon    | 3000          |
| MBC1250A | 1.250            | 31.750 | LDPE     | 2500          |
| MBC1260A | 1.250            | 31.750 | Nylon    | 2500          |

### FF Series Fast Foot



**Specifications:**

- Material: TPR over Nylon
- Flame Class: UL94 HB
- Color: Black

| Item No.        | Ø Hole |     | Panel Thickness |           | D     |      | H     |      | Bulk Pack Qty |
|-----------------|--------|-----|-----------------|-----------|-------|------|-------|------|---------------|
|                 | in     | mm  | in              | mm        | in    | mm   | in    | mm   |               |
| FF-001B         | 0.199  | 5.1 | 0.039 - 0.091   | 1.0 - 2.3 | 0.950 | 24.0 | 0.551 | 14.0 | 100           |
| FF-003-P3X5.5B  | 0.124  | 3.2 | 0.031 - 0.071   | 0.8 - 1.8 | 0.560 | 14.2 | 0.217 | 5.5  | 100           |
| FF-004B         | 0.199  | 5.1 | 0.039 - 0.091   | 1.0 - 2.3 | 0.790 | 20.0 | 0.394 | 10.0 | 100           |
| FF-005-P4X5B    | 0.163  | 4.2 | 0.039 - 0.091   | 0.8 - 1.8 | 0.830 | 21.0 | 0.165 | 4.2  | 100           |
| FF-005-P4X6B    | 0.163  | 4.2 | 0.071 - 0.111   | 1.8 - 2.8 | 0.830 | 21.0 | 0.165 | 4.2  | 100           |
| FF-005-P4X7B    | 0.163  | 4.2 | 0.114 - 0.146   | 2.9 - 3.7 | 0.830 | 21.0 | 0.165 | 4.2  | 100           |
| FF-005-P4X8B    | 0.163  | 4.2 | 0.150 - 0.189   | 3.8 - 4.8 | 0.830 | 21.0 | 0.165 | 4.2  | 100           |
| FF-006-P4X6B    | 0.163  | 4.2 | 0.024 - 0.039   | 0.6 - 1.0 | 0.590 | 15.0 | 0.236 | 6.0  | 100           |
| FF-006-P4X7B    | 0.163  | 4.2 | 0.039 - 0.079   | 1.0 - 2.0 | 0.590 | 15.0 | 0.236 | 6.0  | 100           |
| FF-006-P4X8B    | 0.163  | 4.2 | 0.079 - 0.118   | 2.0 - 3.1 | 0.590 | 15.0 | 0.236 | 6.0  | 100           |
| FF-006-P5X6.5B  | 0.203  | 5.2 | 0.031 - 0.047   | 0.8 - 1.2 | 0.590 | 15.0 | 0.236 | 6.0  | 100           |
| FF-006-P5X7.5B  | 0.203  | 5.2 | 0.051 - 0.091   | 1.3 - 2.3 | 0.590 | 15.0 | 0.236 | 6.0  | 100           |
| FF-008-P4X6B    | 0.163  | 4.2 | 0.031 - 0.071   | 0.8 - 1.8 | 0.830 | 21.0 | 0.236 | 6.0  | 100           |
| FF-008-P4X7B    | 0.163  | 4.2 | 0.075 - 0.110   | 1.9 - 2.8 | 0.830 | 21.0 | 0.236 | 6.0  | 100           |
| FF-008-P4X8B    | 0.163  | 4.2 | 0.114 - 0.157   | 2.9 - 4.0 | 0.830 | 21.0 | 0.236 | 6.0  | 100           |
| FF-009-P4X6B    | 0.163  | 4.2 | 0.000 - 0.031   | 0.0 - 0.8 | 0.830 | 21.0 | 0.315 | 8.0  | 100           |
| FF-009-P4X7B    | 0.163  | 4.2 | 0.031 - 0.079   | 0.8 - 2.0 | 0.830 | 21.0 | 0.315 | 8.0  | 100           |
| FF-009-P4X8B    | 0.163  | 4.2 | 0.083 - 0.118   | 2.1 - 3.0 | 0.830 | 21.0 | 0.315 | 8.0  | 100           |
| FF-010-P4X7B    | 0.163  | 4.2 | 0.039 - 0.079   | 1.0 - 2.0 | 0.590 | 15.0 | 0.354 | 9.0  | 100           |
| FF-010-P4X8B    | 0.163  | 4.2 | 0.079 - 0.118   | 2.0 - 3.1 | 0.590 | 15.0 | 0.354 | 9.0  | 100           |
| FF-13-P3.5X4.5B | 0.144  | 3.7 | 0.020 - 0.047   | 0.5 - 1.2 | 0.430 | 10.8 | 0.157 | 4.0  | 100           |
| FF-13-P3.5X5.5B | 0.144  | 3.7 | 0.047 - 0.079   | 1.2 - 2.0 | 0.430 | 10.8 | 0.157 | 4.0  | 100           |
| FF-13-P3.5X6.0B | 0.144  | 3.7 | 0.059 - 0.087   | 1.5 - 2.2 | 0.430 | 10.8 | 0.157 | 4.0  | 100           |
| FF-13-P3.5X7.0B | 0.144  | 3.7 | 0.098 - 0.126   | 2.5 - 3.2 | 0.430 | 10.8 | 0.157 | 4.0  | 100           |

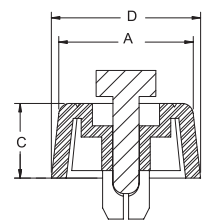
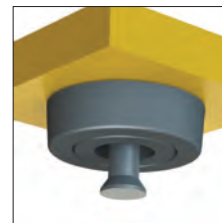
### SFF Series Soft Fast Foot

**Specifications:**

- Material: Foot: UL94 HB TPE, 86 Shore A
- Pin: Polypropylene
- Color: Black

**Features:**

- Rivet is pushed in, locking foot in place
- Prevents surface damage with anti-skid and scratch resistant properties
- Made of abrasion resistant rubber to help cushion and provide vibration control
- High shear strength



| Item No. | Hole Ø |      | Panel Thickness |           | A Ref |      | C Ref |      | D     |      | Bulk Pack Qty |
|----------|--------|------|-----------------|-----------|-------|------|-------|------|-------|------|---------------|
|          | in     | mm   | in              | mm        | in    | mm   | in    | mm   | in    | mm   |               |
| SFF-018  | 0.305  | 7.75 | 0.031 - 0.059   | 0.8 - 1.5 | 0.710 | 18.0 | 0.390 | 10.0 | 0.790 | 20.0 | 100           |
| SFF-021  | 0.305  | 7.75 | 0.197 - 0.315   | 5.0 - 8.0 | 0.790 | 20.0 | 0.240 | 6.0  | 0.830 | 21.0 | 100           |
| SFF-023  | 0.305  | 7.75 | 0.031 - 0.059   | 0.8 - 1.5 | 0.910 | 23.0 | 0.200 | 5.0  | 0.980 | 25.0 | 100           |
| SFF-028  | 0.305  | 7.75 | 0.031 - 0.059   | 0.8 - 1.5 | 0.710 | 18.0 | 0.590 | 15.0 | 0.790 | 20.0 | 100           |

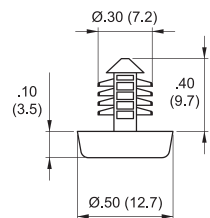
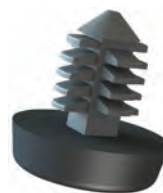
### FBR Series Foot, Fir-Tree Mount

**Specifications:**

- Material: Rivet: UL94 V-2 Nylon 6/6
- Foot: TPE
- Color: Black

**Features:**

- Rigid nylon fir-tree mount provides exceptional retention strength
- Rubber foot provides skid resistance and vibration control



| Item No. | Hole Ø |     | Min. Panel Thickness |      | Bulk Pack Qty |
|----------|--------|-----|----------------------|------|---------------|
|          | in     | mm  | in                   | mm   |               |
| FBR-1    | 0.268  | 6.8 | 0.394                | 10.0 | 1000          |



## STEM BUMPERS

### BPM Series Pull Mount Bumper

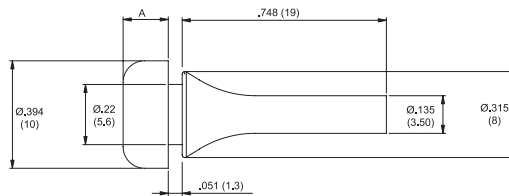


**Specifications:**

- Material: Silicone Rubber, 65 Shore A
- Color: Black

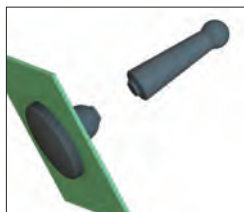
**Features:**

- Pulled from the inside of chassis
- High temperature silicone helps to cushion and prevent skidding



| Item No. | Hole Ø        |             | Panel Thickness |     | A     |     | Bulk Pack Qty |
|----------|---------------|-------------|-----------------|-----|-------|-----|---------------|
|          | in            | mm          | in              | mm  | in    | mm  |               |
| BPM-2    | 0.240 - 0.250 | 6.00 - 6.35 | 0.059           | 1.5 | 0.165 | 4.2 | 1000          |
| BPM-3    | 0.240 - 0.250 | 6.00 - 6.35 | 0.059           | 1.5 | 0.196 | 5.0 | 1000          |

### BAB Series Break-Away Bumper

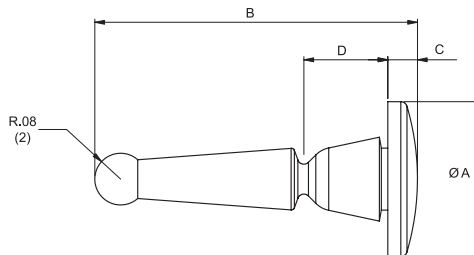


**Specifications:**

- Material: See Table
- Color: Black

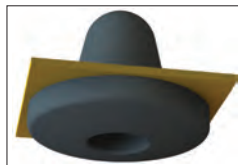
**Features:**

- Designed to be pulled from the inside of the chassis
- Mounting tab designed to break away after assembly to save space
- Silicone is good for high temperature applications



| Item No. | Hole Ø        |           | Panel Thickness |           | A Ø   |      | B     |      | C     |     | D     |     | Material                    | Bulk Pack Qty |
|----------|---------------|-----------|-----------------|-----------|-------|------|-------|------|-------|-----|-------|-----|-----------------------------|---------------|
|          | in            | mm        | in              | mm        | in    | mm   | in    | mm   | in    | mm  | in    | mm  |                             |               |
| BAB-1    | 0.197 - 0.212 | 5.0 - 5.4 | 0.024 - 0.031   | 0.6 - 0.8 | 0.470 | 12.0 | 0.980 | 25.0 | 0.090 | 2.3 | 0.260 | 6.5 | Silicone Rubber, 40 Shore A | 1000          |
| BAB-2    | 0.197 - 0.212 | 5.0 - 5.4 | 0.024 - 0.031   | 0.6 - 0.8 | 0.470 | 12.0 | 0.980 | 25.0 | 0.090 | 2.3 | 0.260 | 6.5 | Silicone Rubber, 50 Shore A | 1000          |
| BAB-3    | 0.185 - 0.197 | 4.7 - 5.0 | 0.020           | 0.5       | 0.390 | 10.0 | 0.790 | 20.0 | 0.080 | 2.0 | 0.160 | 4.3 | Silicone Rubber, 50 Shore A | 1000          |

### BIB Series Blind Install Bumper

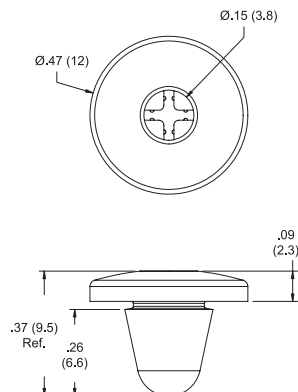


**Specifications:**

- Material: Silicone Rubber, 45 Shore A
- Color: Black

**Features:**

- Installed from the outside of the chassis
- Cross that is molded into the head allows quick installation with a #1 phillips head screwdriver or 1/8 (3.2) Ø or smaller blunt end rod
- May be used as an alternate to the BAB series seen above

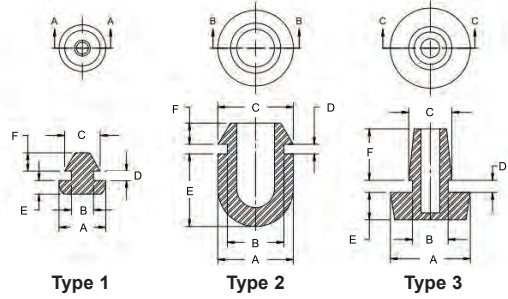


| Item No. | Hole Ø        |           | Panel Thickness |           | Bulk Pack Qty |
|----------|---------------|-----------|-----------------|-----------|---------------|
|          | in            | mm        | in              | mm        |               |
| BIB-1    | 0.197 - 0.212 | 5.0 - 5.4 | 0.024 - 0.031   | 1.6 - 0.8 | 1000          |



# STEM BUMPERS

## POF Push On Feet



Specifications:

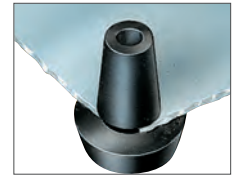
- Material: UL94 HB TPE
- Color: Black

Features:

- Easily mounted by pushing into chassis

| Item No.  | Hole Ø |       | Panel Thickness |     | A Ø   |     | B Ø  |      | C Ø   |     | D    |      | E    |     | F Ref |      | Bulk Pack Qty |      |   |     |
|-----------|--------|-------|-----------------|-----|-------|-----|------|------|-------|-----|------|------|------|-----|-------|------|---------------|------|---|-----|
|           | in     | mm    | in              | mm  | in    | mm  | in   | mm   | in    | mm  | in   | mm   | in   | mm  | in    | mm   |               | Type |   |     |
| POF-40022 | 0.146  | 0.150 | 3.7             | 3.8 | 0.126 | 3.2 | 0.31 | 7.9  | 0.126 | 3.2 | 0.17 | 4.4  | 0.13 | 3.3 | 0.06  | 1.6  | 0.13          | 3.3  | 1 | 100 |
| POF-40048 | 0.177  | 0.181 | 4.5             | 4.6 | 0.059 | 1.5 | 0.31 | 7.9  | 0.146 | 3.7 | 0.24 | 6.1  | 0.06 | 1.6 | 0.09  | 2.3  | 0.12          | 3.0  | 1 | 100 |
| POF-40059 | 0.374  | 0.378 | 9.5             | 9.6 | 0.059 | 1.5 | 0.50 | 12.7 | 0.374 | 9.5 | 0.50 | 12.7 | 0.06 | 1.6 | 0.48  | 12.2 | 0.14          | 3.6  | 2 | 100 |
| POF-50185 | 0.236  | 0.240 | 6               | 6.1 | 0.075 | 1.9 | 0.53 | 13.4 | 0.236 | 6.0 | 0.29 | 7.3  | 0.08 | 2.0 | 0.18  | 4.6  | 0.34          | 8.6  | 3 | 100 |
| POF-12664 | 0.276  | 0.280 | 7               | 7.1 | 0.047 | 1.2 | 0.62 | 15.7 | 0.276 | 7.0 | 0.34 | 8.6  | 0.05 | 1.3 | 0.20  | 5.1  | 0.16          | 4.1  | 3 | 100 |

## GRF Series Add Push-On Feet

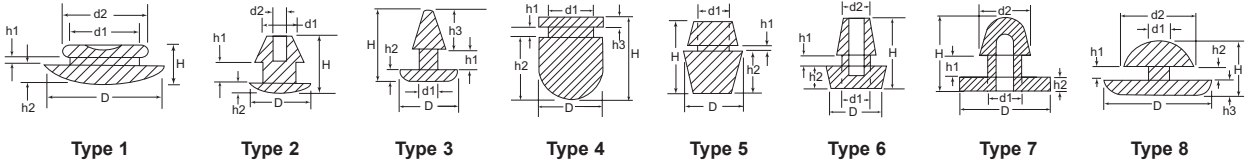


Specifications:

- Material: Flexible PVC
- Color: Black

Features:

- Designed for use on metal or plastic housings and cases
- Simply push into punched or drilled holes



| Item No.  | Type | Ø D   |       | Ø d1  |       | Ø d2  |       | H     |       | h1    |      | h2    |       | h3    |      | Bulk Pack Qty |
|-----------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|------|---------------|
|           |      | in    | mm    | in    | mm    | in    | mm    | in    | mm    | in    | mm   | in    | mm    | in    | mm   |               |
| GRF16010A | 1    | 0.606 | 15.39 | 0.386 | 9.80  | 0.500 | 12.70 | 0.276 | 7.01  | 0.063 | 1.60 | 0.106 | 2.69  | —     | —    | 10000         |
| GRF17409A | 1    | 0.748 | 19.00 | 0.472 | 12.00 | 0.516 | 13.11 | 0.256 | 6.50  | 0.031 | 0.79 | 0.126 | 3.20  | —     | —    | 10000         |
| GRF17412A | 1    | 0.748 | 19.00 | 0.504 | 12.80 | 0.626 | 15.90 | 0.295 | 7.49  | 0.063 | 1.60 | 0.126 | 3.20  | —     | —    | 7000          |
| GRF24006A | 2    | 0.406 | 10.31 | 0.177 | 4.50  | 0.087 | 2.21  | 0.299 | 7.59  | 0.063 | 1.60 | 0.079 | 2.01  | —     | —    | 5000          |
| GRF33106A | 3    | 0.311 | 7.90  | 0.126 | 3.20  | —     | —     | 0.327 | 8.31  | 0.126 | 3.20 | 0.063 | 1.60  | 0.138 | 3.51 | 10000         |
| GRF45050A | 4    | 0.492 | 12.50 | 0.374 | 9.50  | —     | —     | 0.669 | 16.99 | 0.063 | 1.60 | 0.472 | 12.00 | 0.138 | 3.51 | 10000         |
| GRF54131A | 5    | 0.429 | 10.90 | 0.272 | 6.91  | —     | —     | 0.504 | 12.80 | 0.028 | 0.71 | 0.319 | 8.10  | —     | —    | 10000         |
| GRF64718A | 6    | 0.472 | 12.00 | 0.236 | 6.00  | 0.228 | 5.79  | 0.598 | 15.19 | 0.083 | 2.11 | 0.181 | 4.60  | —     | —    | 10000         |
| GRF65919A | 2    | 0.622 | 15.80 | 0.268 | 6.81  | 0.157 | 3.99  | 0.382 | 9.70  | 0.059 | 1.50 | 0.197 | 5.00  | —     | —    | 10000         |
| 1347530   | 7    | 0.996 | 25.30 | 0.492 | 12.50 | 0.602 | 15.29 | 0.787 | 19.99 | 0.197 | 5.00 | 0.157 | 3.99  | —     | —    | 2000          |
| GRF86713A | 8    | 0.689 | 17.50 | 0.437 | 11.10 | 0.524 | 13.31 | 0.394 | 10.01 | 0.102 | 2.59 | 0.157 | 3.99  | 0.157 | 3.99 | 10000         |

## BDH Series Domed Split Stem Bumper

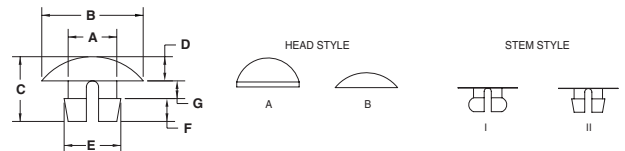


Specifications:

- Material: Nylon 6
- Color: Natural

Features:

- Domed head split bumpers are produced with a split-stem portion to make insertion easy and removal difficult
- The domed head makes them ideal for use as bumpers



| Item No. | Ø A   |      | Ø B   |      | C     |      | D     |      | E     |      | F     |      | G     |      | Stem Style | Head Style | Bulk Pack Qty |
|----------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|------------|------------|---------------|
|          | in    | mm   | in    | mm   | in    | mm   | in    | mm   | in    | mm   | in    | mm   | in    | mm   |            |            |               |
| BDH005A  | 0.109 | 2.77 | 0.250 | 6.35 | 0.203 | 5.16 | 0.093 | 2.36 | 0.125 | 3.18 | 0.046 | 1.17 | 0.063 | 1.60 | I          | A          | 40000         |
| BDH010A  | 0.125 | 3.18 | 0.375 | 9.53 | 0.307 | 7.80 | 0.046 | 1.17 | 0.150 | 3.81 | 0.130 | 3.30 | 0.130 | 3.30 | II         | A          | 30000         |
| BDH020A  | 0.156 | 3.96 | 0.375 | 9.53 | 0.265 | 6.73 | 0.093 | 2.36 | 0.173 | 4.39 | 0.093 | 2.36 | 0.093 | 2.36 | II         | B          | 20000         |
| BDH025A  | 0.187 | 4.75 | 0.344 | 8.73 | 0.203 | 5.16 | 0.050 | 1.27 | 0.218 | 5.54 | 0.083 | 2.11 | 0.070 | 1.78 | II         | B          | 35000         |
| BDH030A  | 0.187 | 4.75 | 0.390 | 9.91 | 0.250 | 6.35 | 0.093 | 2.36 | 0.218 | 5.54 | 0.088 | 2.24 | 0.068 | 1.73 | II         | B          | 24000         |
| BDH040A  | 0.210 | 5.33 | 0.375 | 9.53 | 0.343 | 8.71 | 0.063 | 1.60 | 0.243 | 6.17 | 0.125 | 3.18 | 0.156 | 3.96 | II         | B          | 20000         |

# STEM BUMPERS



## SOF Series Screw Mount Feet

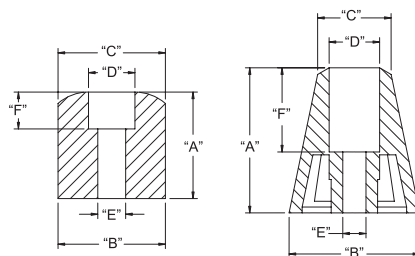
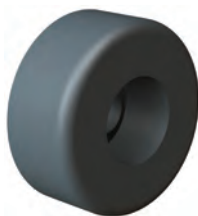


Fig. 1

Fig. 2

**Specifications:**

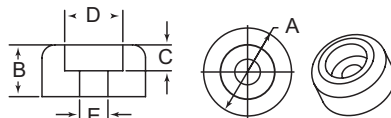
- Material: Neoprene Rubber
- Color: Black

**Features:**

- Securely mounted with a screw
- Provides excellent skid resistance

| Item No.  | Ø A   |       | Ø B   |      | Ø C Ref. |      | Ø D   |      | Ø E   |     | Ø F   |      | Figure | Bulk Pack Qty |
|-----------|-------|-------|-------|------|----------|------|-------|------|-------|-----|-------|------|--------|---------------|
|           | in    | mm    | in    | mm   | in       | mm   | in    | mm   | in    | mm  | in    | mm   |        |               |
| SOF-15129 | 0.280 | 7.1   | 0.630 | 15.9 | 0.540    | 13.8 | 0.310 | 8.0  | 0.130 | 3.2 | 0.160 | 4.0  | 1      | 100           |
| SOF-15140 | 0.370 | 9.5   | 0.690 | 17.5 | —        | —    | 0.310 | 8.0  | 0.160 | 4.0 | 0.200 | 5.2  | 2      | 100           |
| SOF-15125 | 0.450 | 11.5  | 0.750 | 19.1 | 0.710    | 18.0 | 0.400 | 10.2 | 0.200 | 5.0 | 0.250 | 6.35 | 1      | 100           |
| SOF-15111 | 0.600 | 15.25 | 0.750 | 19.1 | 0.500    | 12.7 | 0.310 | 8.0  | 0.160 | 4.0 | 0.190 | 4.0  | 2      | 100           |
| SOF-15127 | 0.720 | 18.35 | 0.730 | 18.5 | —        | —    | 0.310 | 8.0  | 0.190 | 4.8 | 0.250 | 6.35 | 1      | 100           |
| SOF-15126 | 0.980 | 25.0  | 0.890 | 22.5 | 0.500    | 12.7 | 0.340 | 8.7  | 0.160 | 4.0 | 0.570 | 14.5 | 2      | 100           |

## BRR Series Screw on Bumper Feet

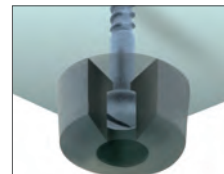


**Specifications:**

- Material: See Table
- Color: See Table

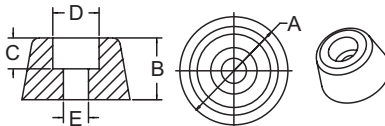
**Features:**

- Recessed bumpers are ideally suited for use as feet on radios, TV sets, house wares, small appliances and many other products
- They are fastened by means of a screw, bolt or rivet
- Can also be used as spacers or door stops
- Available in round, coved and tapered configurations



| Item No. | Material | Color   | Ø A   |       | B     |       | C     |      | Ø D   |       | E     |      | Bulk Pack Qty |
|----------|----------|---------|-------|-------|-------|-------|-------|------|-------|-------|-------|------|---------------|
|          |          |         | In    | mm    | In    | mm    | In    | mm   | In    | mm    | In    | mm   |               |
| BRR015A  | Nylon    | Natural | 0.500 | 12.70 | 0.375 | 9.53  | 0.063 | 1.59 | 0.391 | 9.92  | 0.190 | 4.83 | 12000         |
| BRR015B  | Nylon    | Black   | 0.500 | 12.70 | 0.375 | 9.53  | 0.063 | 1.59 | 0.391 | 9.92  | 0.190 | 4.83 | 12000         |
| BRR015C  | LDPE     | Black   | 0.500 | 12.70 | 0.375 | 9.53  | 0.063 | 1.59 | 0.391 | 9.92  | 0.190 | 4.83 | 12000         |
| BRR025A  | Nylon    | Natural | 0.625 | 15.88 | 0.500 | 12.70 | 0.250 | 6.35 | 0.343 | 8.71  | 0.187 | 4.75 | 5000          |
| BRR025B  | Nylon    | Black   | 0.625 | 15.88 | 0.500 | 12.70 | 0.250 | 6.35 | 0.343 | 8.71  | 0.187 | 4.75 | 5000          |
| BRR025C  | LDPE     | Black   | 0.625 | 15.88 | 0.500 | 12.70 | 0.250 | 6.35 | 0.343 | 8.71  | 0.187 | 4.75 | 5000          |
| BRR030A  | Nylon    | Natural | 0.750 | 19.05 | 0.312 | 7.92  | 0.130 | 3.30 | 0.437 | 11.10 | 0.280 | 7.11 | 5000          |
| BRR030B  | Nylon    | Black   | 0.750 | 19.05 | 0.312 | 7.92  | 0.130 | 3.30 | 0.437 | 11.10 | 0.280 | 7.11 | 5000          |
| BRR030C  | LDPE     | Black   | 0.750 | 19.05 | 0.312 | 7.92  | 0.130 | 3.30 | 0.437 | 11.10 | 0.280 | 7.11 | 5000          |
| BRR055A  | Nylon    | Natural | 1.000 | 25.40 | 0.500 | 12.70 | 0.250 | 6.35 | 0.563 | 14.29 | 0.266 | 6.75 | 3200          |
| BRR055B  | Nylon    | Black   | 1.000 | 25.40 | 0.500 | 12.70 | 0.250 | 6.35 | 0.563 | 14.29 | 0.266 | 6.75 | 3200          |
| BRR055C  | LDPE     | Black   | 1.000 | 25.40 | 0.500 | 12.70 | 0.250 | 6.35 | 0.563 | 14.29 | 0.266 | 6.75 | 3200          |

## BTR Series Heavy Duty Screw on Bumper Feet



**Specifications:**

- Material: See Table
- Color: See Table

**Features:**

- They are fastened by means of a screw, bolt or rivet

| Item No. | Material | Color   | Ø A   |       | B     |       | C     |       | Ø D   |       | E     |      | Bulk Pack Qty |
|----------|----------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|---------------|
|          |          |         | In    | mm    | In    | mm    | In    | mm    | In    | mm    | In    | mm   |               |
| BTR020A  | Nylon    | Natural | 0.750 | 19.05 | 0.625 | 15.88 | 0.437 | 11.10 | 0.375 | 9.53  | 0.156 | 3.96 | 5000          |
| BTR020B  | Nylon    | Black   | 0.750 | 19.05 | 0.625 | 15.88 | 0.437 | 11.10 | 0.375 | 9.53  | 0.156 | 3.96 | 5000          |
| BTR020C  | LDPE     | Natural | 0.750 | 19.05 | 0.625 | 15.88 | 0.437 | 11.10 | 0.375 | 9.53  | 0.156 | 3.96 | 5000          |
| BTR020D  | LDPE     | Black   | 0.750 | 19.05 | 0.625 | 15.88 | 0.437 | 11.10 | 0.375 | 9.53  | 0.156 | 3.96 | 5000          |
| BTR040A  | Nylon    | Natural | 0.750 | 19.05 | 0.750 | 19.05 | 0.470 | 11.94 | 0.440 | 11.18 | 0.196 | 4.98 | 5000          |
| BTR040B  | Nylon    | Black   | 0.750 | 19.05 | 0.750 | 19.05 | 0.470 | 11.94 | 0.440 | 11.18 | 0.196 | 4.98 | 5000          |
| BTR040C  | LDPE     | Natural | 0.750 | 19.05 | 0.750 | 19.05 | 0.470 | 11.94 | 0.440 | 11.18 | 0.196 | 4.98 | 5000          |
| BTR040D  | LDPE     | Black   | 0.750 | 19.05 | 0.750 | 19.05 | 0.470 | 11.94 | 0.440 | 11.18 | 0.196 | 4.98 | 5000          |



## STEM BUMPERS

### BST & BCS Series Standard & Coved Stem Bumpers

Specifications:

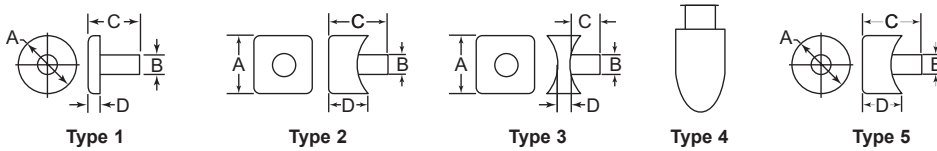
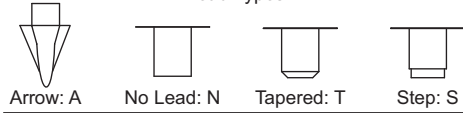
- Material: Nylon
- Color: Natural

Features:

- Used to protect surfaces from contact
- Ideal for sheet metal, wood and tubing



Lead Types



| Item No. | Style | A (Base Size) |               | Ø B   |      | C     |       | D     |       | Bulk Pack Qty |
|----------|-------|---------------|---------------|-------|------|-------|-------|-------|-------|---------------|
|          |       | in            | mm            | in    | mm   | in    | mm    | in    | mm    |               |
| BST015A  | 1A    | 0.437         | 1.1           | 0.125 | 3.18 | 0.546 | 13.87 | 0.125 | 3.18  | 29000         |
| BST027A  | 1A    | 0.500         | 2.70          | 0.200 | 5.08 | 0.607 | 15.42 | 0.063 | 1.6   | 20000         |
| BST005A  | 1N    | 0.362         | 0.19          | 0.200 | 5.08 | 0.250 | 6.35  | 0.150 | 3.81  | 16000         |
| BST025A  | 1N    | 0.500         | 12.70         | 0.190 | 4.83 | 0.325 | 8.26  | 0.150 | 3.81  | 8000          |
| BST010A  | 1S    | 0.375         | 9.53          | 0.187 | 4.75 | 0.600 | 15.24 | 0.060 | 7.62  | 15000         |
| BST020A  | 1S    | 0.500         | 12.70         | 0.225 | 4.75 | 0.781 | 19.84 | 0.296 | 7.52  | 8000          |
| BST030A  | 1S    | 0.500         | 12.70         | 0.250 | 6.35 | 0.640 | 16.26 | 0.188 | 4.78  | 5000          |
| BST040A  | 1S    | 0.500         | 12.70         | 0.335 | 8.51 | 0.858 | 21.79 | 0.435 | 11.05 | 6500          |
| BST072A  | 1S    | 0.750         | 19.05         | 0.255 | 6.48 | 0.400 | 10.16 | 0.187 | 4.75  | 7000          |
| BST100A  | 1S    | 0.125         | 28.58         | 0.320 | 8.13 | 0.495 | 12.57 | 0.165 | 4.19  | 5000          |
| BST140A  | 1S    | 0.250         | 31.75         | 0.375 | 9.53 | 0.840 | 21.37 | 0.380 | 9.65  | 2300          |
| BST075C  | 1T    | 0.750         | 19.05         | 0.250 | 6.35 | 0.687 | 17.45 | 0.187 | 4.75  | 10000         |
| BST095A  | 1T    | 1.000         | 25.40         | 0.250 | 6.35 | 0.656 | 16.66 | 0.156 | 3.96  | 7000          |
| BST115A  | 2S    | 0.750 x 1.00  | 19.05 x 25.40 | 0.250 | 6.35 | 0.570 | 14.48 | 0.120 | 3.05  | 5500          |
| BST110A  | 3S    | 0.750 x 0.750 | 19.05 x 19.05 | 0.268 | 6.81 | 0.490 | 12.45 | 0.090 | 2.28  | 5000          |
| BST135A  | 3S    | 0.620 x 0.620 | 15.75 x 15.75 | 0.250 | 6.35 | 0.450 | 11.43 | 0.128 | 3.05  | 5500          |
| BST012A  | 4N    | 0.375         | 9.53          | 0.260 | 6.6  | 0.880 | 22.35 | 0.635 | 16.13 | 10000         |
| BCS030C  | 5S    | 0.750         | 19.05         | 0.255 | 6.48 | 0.360 | 9.14  | 0.187 | 4.75  | 8000          |
| BST070A  | 5S    | 0.980         | 24.89         | 0.250 | 6.35 | 0.750 | 19.05 | 0.500 | 12.7  | 35000         |
| BST150A  | 5T    | 0.750         | 19.05         | 0.268 | 6.81 | 0.710 | 18.03 | 0.187 | 4.75  | 8000          |

### BCR Series Coved Screw On Bumper Feet

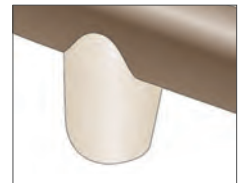
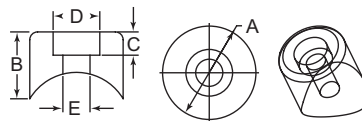


Specifications:

- Material: See Table
- Color: See Table

Features:

- Coved surface fits matching round tubing
- Can be used as a glide, bumper or spacer

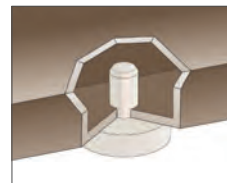


| Item No. | Material | Color   | Tube Ø | Ø A   | B     | C     | Ø D   | Ø E   | Bulk Pack Qty |
|----------|----------|---------|--------|-------|-------|-------|-------|-------|---------------|
|          |          |         | in     | in    | in    | in    | in    | in    |               |
| BCR010A  | Nylon    | Natural | 0.750  | 0.805 | 1.000 | 0.250 | 0.370 | 0.215 | 1500          |
| BCR020A  | Nylon    | Natural | 1.000  | 0.835 | 0.675 | 0.280 | 0.645 | 0.270 | 5000          |
| BCR040A  | Nylon    | Natural | 1.000  | 0.990 | 0.850 | 0.260 | 0.515 | 0.240 | 2800          |
| BCR040B  | Nylon    | Black   | 1.000  | 0.990 | 0.850 | 0.260 | 0.515 | 0.240 | 2800          |
| BCR050A  | Nylon    | Natural | 1.000  | 1.000 | 0.812 | 0.312 | 0.500 | 0.218 | 3000          |
| BCR050B  | Nylon    | Black   | 1.000  | 1.000 | 0.812 | 0.312 | 0.500 | 0.218 | 3000          |
| BCR050C  | LDPE     | Black   | 1.000  | 1.000 | 0.812 | 0.312 | 0.500 | 0.218 | 3000          |
| BCR060A  | Nylon    | Natural | 1.000  | 1.000 | 0.828 | 0.265 | 0.484 | 0.305 | 3000          |
| BCR060B  | Nylon    | Black   | 1.000  | 1.000 | 0.828 | 0.265 | 0.484 | 0.305 | 3000          |
| BCR060C  | LDPE     | Black   | 1.000  | 1.000 | 0.828 | 0.265 | 0.484 | 0.305 | 3000          |

# STEM BUMPERS & WELD CUPS



## BFS, BFA & SCP Series Flat Headed Stem Bumpers

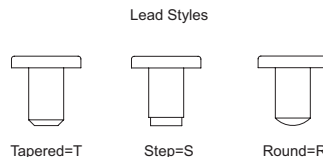
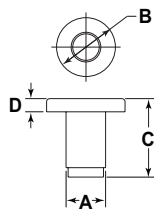


**Specifications:**

- Material: See Table
- Color: See Table

**Features:**

- Flat head stem bumpers are designed to rest against a flat or tangent surface
- The step-type or tapered lead on the stem makes insertion easy, and the press fit on the shank holds the bumper securely
- Applications include use as glides, bumpers, closures, slides and stops on many products



| Item No. | Material | Color   | Ø A   |      | Ø B   |       | C     |       | D     |      | Lead Style | Bulk Pack Qty |
|----------|----------|---------|-------|------|-------|-------|-------|-------|-------|------|------------|---------------|
|          |          |         | in    | mm   | in    | mm    | in    | mm    | in    | mm   |            |               |
| BFS010A  | Nylon    | Natural | 0.125 | 3.18 | 0.406 | 10.31 | 0.297 | 7.54  | 0.063 | 1.60 | T          | 15000         |
| BFS015A  | Nylon    | Natural | 0.250 | 6.35 | 0.500 | 12.70 | 0.594 | 15.09 | 0.250 | 6.35 | S          | 11000         |
| BFS020A  | Nylon    | Natural | 0.156 | 3.96 | 0.307 | 7.80  | 0.173 | 4.39  | 0.042 | 1.07 | R          | 10000         |
| BFS035A  | Nylon    | Natural | 0.187 | 4.70 | 0.500 | 12.70 | 0.313 | 7.95  | 0.125 | 3.18 | T          | 9000          |
| BFS060A  | Nylon    | Natural | 0.250 | 6.35 | 0.500 | 12.70 | 0.438 | 11.13 | 0.156 | 3.96 | R          | 15000         |
| BFS080A  | Nylon    | Natural | 0.260 | 6.60 | 0.750 | 19.05 | 0.437 | 11.10 | 0.094 | 2.39 | S          | 9000          |
| BFS100A  | Nylon    | Natural | 0.320 | 8.13 | 1.000 | 25.40 | 0.415 | 10.54 | 0.180 | 4.57 | S          | 7000          |
| BFS110A  | Nylon    | Natural | 0.380 | 9.65 | 1.490 | 37.08 | 0.415 | 10.54 | 0.180 | 4.57 | S          | 3000          |
| BFA010A  | LDPE     | Black   | 0.125 | 3.18 | 0.406 | 10.31 | 0.297 | 7.54  | 0.063 | 1.60 | T          | 15000         |
| BFA015A  | LDPE     | Black   | 0.250 | 6.35 | 0.500 | 12.70 | 0.594 | 15.09 | 0.250 | 6.35 | S          | 11000         |
| BFA035A  | LDPE     | Black   | 0.187 | 4.70 | 0.500 | 12.70 | 0.313 | 7.95  | 0.125 | 3.18 | T          | 9000          |
| BFA060A  | LDPE     | Black   | 0.250 | 6.35 | 0.500 | 12.70 | 0.438 | 11.13 | 0.156 | 3.96 | R          | 15000         |
| BFA080A  | LDPE     | Black   | 0.260 | 6.60 | 0.750 | 19.05 | 0.437 | 11.10 | 0.094 | 2.39 | S          | 9000          |
| BFA100A  | LDPE     | Black   | 0.320 | 8.13 | 1.000 | 25.40 | 0.415 | 10.54 | 0.180 | 4.57 | S          | 7000          |
| BFA110A  | LDPE     | Black   | 0.380 | 9.65 | 1.490 | 37.08 | 0.415 | 10.54 | 0.180 | 4.57 | S          | 3000          |
| SCP2520B | HDPE     | Black   | 0.252 | 6.40 | 0.748 | 19.00 | 0.710 | 18.00 | 0.150 | 3.81 | N          | 5000          |

## WCG Series Weld Cups for Wrought Iron

**Specifications:**

- Material: High-Density Polyethylene
- Color: Natural

**Features:**

- Center air hole
- Fits standard steel weld cups



Style 1



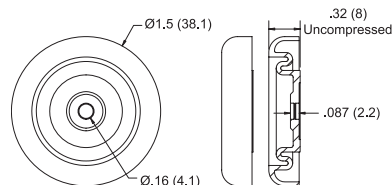
Style 2

| Item No. | OD of Weld Cup |       | Style | Bulk Pack Qty |
|----------|----------------|-------|-------|---------------|
|          | in             | mm    |       |               |
| WCG1000A | 1.415          | 35.95 | 1     | 1800          |
| WCG1100A | 1.250          | 31.80 | 1     | 2500          |
| WCG1200A | 1.420          | 36.09 | 2     | 1800          |
| WCG1300B | 1.250          | 31.80 | 2     | 2800          |

## SVF Series Shock & Vibration Dampening Foot



- Mounted with a #6 or #8 (M4) screw or an SR-40XX rivet (See page 120)
- Provides excellent shock and vibration control
- SVF-1 Material: UL94 HB TPE 75 Shore A
- SVF-2 Material: UL94 HB TPE 64 Shore A
- Color: Black

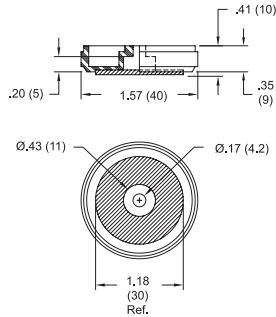


| Item No. | Item No. | Bulk Pack Qty |
|----------|----------|---------------|
| SVF-1    | SVF-2    | 400           |

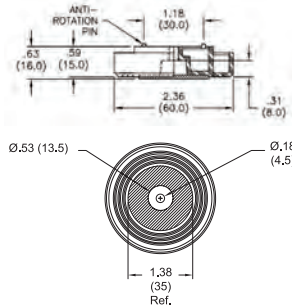


# BUMPERS

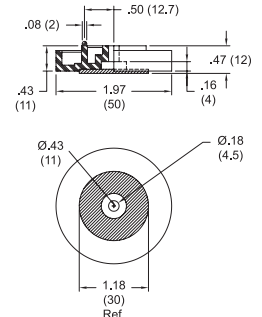
## BF Series Big Screw Mount Foot



**BF-1001**



**BF-1002**



**BF-1005**

**Specifications:**

- Foot Material: UL94 HB ABS
- Pad Material: Nylon Fiber
- Color: Black

**Features:**

- Ideal for heavy duty applications
- Mounted securely with a #8 (M4) pan head screw
- Nylon fiber pad material helps prevent abrasion

| Item No.       | Load Capacity |    |  | Bulk Pack Qty |
|----------------|---------------|----|--|---------------|
|                | lbs           | kg |  |               |
| <b>BF-1001</b> | 22            | 10 |  | 100           |
| <b>BF-1002</b> | 22            | 10 |  | 100           |
| <b>BF-1005</b> | 22            | 10 |  | 100           |

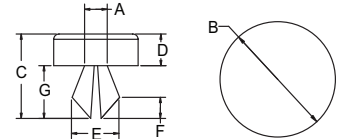
## BSS Series Flat Head Split Stem Bumpers

**Specifications:**

- Material: Nylon
- Color: Natural

**Features:**

- Produced with a split stem portion and undercut to make insertion easy and removal difficult
- Used as panel plugs and bumpers



| Item No.       | Hole Ø |      | Ø A   |      | B     |       | C     |       | D     |      | E     |      | F     |      | G     |      | Bulk Pack Qty |
|----------------|--------|------|-------|------|-------|-------|-------|-------|-------|------|-------|------|-------|------|-------|------|---------------|
|                | in     | mm   | in    | mm   | in    | mm    | in    | mm    | in    | mm   | in    | mm   | in    | mm   | in    | mm   |               |
| <b>BSS010A</b> | 0.156  | 3.96 | 0.152 | 3.86 | 0.500 | 12.70 | 0.312 | 7.92  | 0.063 | 1.60 | 0.166 | 4.22 | 0.063 | 1.60 | 0.187 | 4.75 | 14000         |
| <b>BSS015A</b> | 0.265  | 6.73 | 0.260 | 6.60 | 0.750 | 19.00 | 0.625 | 15.88 | 0.187 | 4.75 | 0.290 | 7.37 | 0.125 | 3.18 | 0.312 | 7.92 | 10500         |

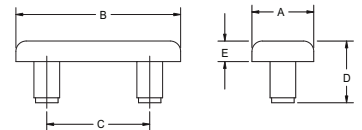
## BDS Series Double Stem Bumpers

**Specifications:**

- Material: Nylon 6
- Color: Natural

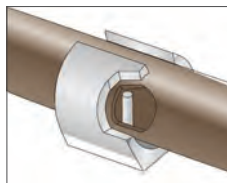
**Features:**

- Designed for applications requiring a bumper with a large head area



| Item No.       | Hole Ø |      | A     |      | B     |       | C     |       | D     |       | E     |      | Bulk Pack Qty |
|----------------|--------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|------|---------------|
|                | in     | mm   | in    | mm   | in    | mm    | in    | mm    | in    | mm    | in    | mm   |               |
| <b>BDS010A</b> | 0.187  | 4.75 | 0.375 | 9.53 | 1.000 | 25.40 | 0.625 | 15.88 | 0.500 | 12.70 | 0.125 | 3.18 | 3500          |

## SG Series Snap-In Saddle Glides and Feet



**Specifications:**

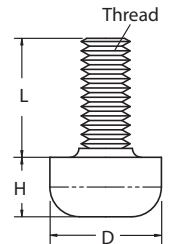
- Materials: See Table
- Color: See Table

**Features:**

- Designed to snap onto horizontal legs of chairs, tables and stands

| Item No.       | Tube Size |    | Material | Color | Bulk Pack Qty |
|----------------|-----------|----|----------|-------|---------------|
|                | in        | mm |          |       |               |
| <b>SG1000B</b> | 0.625     |    | K-Resin  | Clear | 4000          |
| <b>SG1050A</b> | 0.875     |    | ABS      | Black | 2500          |
| <b>SG1100A</b> | 1.000     |    | ABS      | Black | 1400          |

## TB Series Threaded Insert Bumper



**Specifications:**

- Material: IIR; 40-50 Shore A
- Stem: Brass

**Features:**

- Can be used as a leveling device or bumper for small equipment
- Non-corrosive stud

| Item No.    | Thread | H     |     | L     |      | D     |     | Bulk Pack Qty |
|-------------|--------|-------|-----|-------|------|-------|-----|---------------|
|             |        | in    | mm  | in    | mm   | in    | mm  |               |
| <b>TB-1</b> | #6-32  | 0.200 | 5.1 | 0.400 | 10.2 | 0.380 | 9.5 | 100           |
| <b>TB-2</b> | #8-32  | 0.200 | 5.1 | 0.400 | 10.2 | 0.380 | 9.5 | 100           |
| <b>TB-3</b> | M3     | 0.200 | 5.1 | 0.400 | 10.2 | 0.380 | 9.5 | 100           |
| <b>TB-4</b> | M4     | 0.200 | 5.1 | 0.400 | 10.2 | 0.380 | 9.5 | 100           |



## BUMPERS &amp; STICK-ON FEET


**RBS/STF Series  
Bumpers/Stick-On Feet**

## Specifications:

- Material: Polyurethane
- Adhesive: Rubber
- Color: See Table
- Application Temperature: 65°F to 150°F

## Features:

- Will not tarnish, scratch, or discolor any surface
- Easy to use - simply peel & stick
- Adhesion works best on a smooth, clean & dry surface
- Commonly used as rubber feet, cabinet stoppers, door stops & surface protectors

**Cylindrical  
On A Pad**


| Item No. |          | Ø     |      | Height |      | Pieces/Pad | Pack Qty |
|----------|----------|-------|------|--------|------|------------|----------|
| Clear    | Black    | in    | mm   | in     | mm   |            |          |
| RBS-34   | RBS-34BK | 0.375 | 9.5  | 0.125  | 3.2  | 300        | 300      |
| RBS-35   | RBS-35BK | 0.375 | 9.5  | 0.190  | 4.8  | 200        | 200      |
| RBS-5    | RBS-5BK  | 0.500 | 12.7 | 0.060  | 1.5  | 200        | 200      |
| RBS-1    | RBS-1BK  | 0.500 | 12.7 | 0.140  | 3.6  | 200        | 200      |
| RBS-6    | RBS-6BK  | 0.500 | 12.7 | 0.250  | 6.4  | 200        | 200      |
| RBS-11   | RBS-11BK | 0.650 | 15.7 | 0.400  | 10.2 | 128        | 128      |
| RBS-44   | RBS-44BK | 0.750 | 19.1 | 0.160  | 4.1  | 98         | 98       |
| RBS-41   | RBS-41BK | 0.780 | 19.8 | 0.200  | 5.1  | 84         | 84       |
| RBS-24   | RBS-24BK | 0.810 | 20.6 | 0.120  | 3.0  | 72         | 72       |
| RBS-72   | RBS-72BK | 1.230 | 31.2 | 0.100  | 2.5  | 32         | 32       |

**Hemisphere  
On A Pad**


| Item No.      |               | Ø     |      | Height |      | Pieces/Pad | Pack Qty |
|---------------|---------------|-------|------|--------|------|------------|----------|
| Clear         | Black         | in    | mm   | in     | mm   |            |          |
| RBS-40        | RBS-40BK      | 0.250 | 6.4  | 0.062  | 1.6  | 578        | 578      |
| STFHEM250087A | STFHEM250087B | 0.250 | 6.4  | 0.087  | 2.2  | 450        | 450      |
| RBS-27        | RBS-27BK      | 0.312 | 7.9  | 0.085  | 2.2  | 450        | 450      |
| RBS-7         | RBS-7BK       | 0.335 | 8.5  | 0.085  | 2.2  | 450        | 450      |
| RBS-12        | RBS-12BK      | 0.375 | 9.5  | 0.150  | 3.8  | 72         | 72       |
| RBS-22        | RBS-22BK      | 0.375 | 9.5  | 0.211  | 5.4  | 300        | 300      |
| RBS-10        | —             | 0.394 | 10.0 | 0.118  | 3.0  | 288        | 288      |
| RBS-2         | RBS-2BK       | 0.440 | 11.2 | 0.200  | 5.1  | 242        | 242      |
| RBS-15        | RBS-15BK      | 0.620 | 15.7 | 0.310  | 7.9  | 128        | 128      |
| RBS-8         | RBS-8BK       | 0.700 | 17.8 | 0.380  | 9.7  | 98         | 98       |
| RBS-37        | RBS-37BK      | 0.720 | 18.3 | 0.560  | 14.2 | 100        | 100      |
| RBS-39        | RBS-39BK      | 0.750 | 19.1 | 0.075  | 1.9  | 84         | 84       |

**Square  
On A Pad**


| Item No. |           | L x W |      | Height |     | Pieces/Pad | Pack Qty |
|----------|-----------|-------|------|--------|-----|------------|----------|
| Clear    | Black     | in    | mm   | in     | mm  |            |          |
| RBS-20   | RBS-20BK  | 0.400 | 10.2 | 0.100  | 2.5 | 242        | 242      |
| RBS-32R  | RBS-32RBK | 0.500 | 12.7 | 0.120  | 3.0 | 200        | 200      |
| RBS-3R   | RBS-3RBK  | 0.500 | 12.7 | 0.230  | 5.8 | 200        | 200      |
| RBS-4    | RBS-4BK   | 0.780 | 19.8 | 0.380  | 9.7 | 100        | 100      |
| RBS-29   | RBS-29BK  | 0.780 | 19.8 | 0.250  | 6.4 | 98         | 98       |
| RBS-19   | RBS-19BK  | 0.810 | 20.6 | 0.300  | 7.6 | 98         | 98       |
| RBS-36   | RBS-36BK  | 1.000 | 25.4 | 0.180  | 4.6 | 55         | 55       |

**BUMPERS & STICK ON FEET / STAINLESS STEEL CASTERS****RBS Series  
Bumpers/Stick-On Feet (continued)****Round Recessed  
On A Pad**

| Item No. |          | Ø     |      | Height |      | Pieces/Pad | Pack Qty |
|----------|----------|-------|------|--------|------|------------|----------|
| Clear    | Black    | in    | mm   | in     | mm   |            |          |
| RBS-18   | RBS-18BK | 0.500 | 12.7 | 0.140  | 3.6  | 200        | 200      |
| RBS-17   | RBS-17BK | 0.880 | 22.4 | 0.400  | 10.2 | 72         | 72       |
| RBS-30   | RBS-30BK | 1.810 | 46.0 | 0.600  | 15.2 | 100        | 100      |

**Stainless Steel with Swivel Plate**

Guidelines to Help  
You Select the  
Correct Caster  
See Page 471



Poly / Polypropylene Core



Polypropylene



TPR

**Specifications:**

- Housing Material: Stainless Steel
- Wheel Material: See Table

**Features:**

- Resistant to corrosion and rust
- Typical applications include medical, autoclave operations or where wash down of equipment is required

| Item No. | Wheel Diameter x Width<br>in | Wheel Type              | Wheel Specifications |           |                  |                          | Swivel Radius<br>in | Plate Specifications     |                   |    | Bulk Pack Qty |
|----------|------------------------------|-------------------------|----------------------|-----------|------------------|--------------------------|---------------------|--------------------------|-------------------|----|---------------|
|          |                              |                         | Capacity<br>lbs      | OAH<br>in | Bearing          | Overall Size L x W<br>in |                     | Mouting Hole Width<br>in | Ø Bolt Hole<br>in |    |               |
| 1256091  | 3.5 x 1.25                   | Poly/Polypropylene Core | 300                  | 4.688     | Two Piece Delrin | 2.5                      | 3.625 x 2.5         | 1.75                     | 0.313             | 16 |               |
| 1256093  | 3.5 x 1.25                   | Poly/Polypropylene Core | 350                  | 4.688     | Delrin           | 2.5                      | 3.625 x 2.5         | 1.75                     | 0.313             | 16 |               |
| 1256094  | 3.5 x 1.25                   | TPR                     | 250                  | 4.688     | Two Piece Delrin | 2.5                      | 3.625 x 2.5         | 1.75                     | 0.313             | 16 |               |
| 1256096  | 4 x 1.25                     | Poly/Polypropylene Core | 350                  | 5.125     | Two Piece Delrin | 2.5                      | 3.625 x 2.5         | 1.75                     | 0.313             | 16 |               |
| 1256098  | 4 x 1.25                     | Poly/Polypropylene Core | 350                  | 5.125     | Two Piece Delrin | 2.5                      | 3.625 x 2.5         | 1.75                     | 0.313             | 16 |               |
| 1256099  | 4 x 1.25                     | TPR                     | 300                  | 5.125     | Two Piece Delrin | 2.5                      | 3.625 x 2.5         | 1.75                     | 0.313             | 16 |               |
| 1256111  | 5 x 1.25                     | Polypropylene           | 350                  | 6.188     | Two Piece Delrin | 3.0                      | 3.625 x 2.5         | 1.75                     | 0.313             | 16 |               |
| 1256113  | 5 x 1.25                     | Poly/Polypropylene Core | 350                  | 6.188     | Two Piece Delrin | 3.0                      | 3.625 x 2.5         | 1.75                     | 0.313             | 16 |               |
| 1256114  | 5 x 1.25                     | Poly/Polypropylene Core | 325                  | 6.188     | Two Piece Delrin | 3.0                      | 3.625 x 2.5         | 1.75                     | 0.313             | 16 |               |



# END CAPS

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# STAINLESS STEEL CASTERS



## Stainless Steel Swivel Plate with Brake



**Specifications:**

- Housing Material: Stainless Steel
- Wheel Material: See Table

**Features:**

- Resistant to corrosion and rust
- Typical applications include medical, autoclave operations or where wash down of equipment is required



Urethane



Polyolefin

Guidelines to Help You Select the Correct Caster See Page 471

| Item No. | Wheel Specifications      |            |              |        |                  | Plate Specifications |                       |                       |                |               |
|----------|---------------------------|------------|--------------|--------|------------------|----------------------|-----------------------|-----------------------|----------------|---------------|
|          | Wheel Diameter x Width in | Wheel Type | Capacity lbs | OAH in | Bearing          | Swivel Radius in     | Overall Size L x W in | Mouting Hole Width in | Ø Bolt Hole in | Bulk Pack Qty |
| 1256107  | 4 x 2                     | Polyolefin | 900          | 5.625  | Two Piece Delrin | 1.438                | 4 x 4.5               | 2.625 to 3.000        | 0.375          | 8             |
| 1256108  | 4 x 2                     | Urethane   | 600          | 5.625  | Two Piece Delrin | 1.438                | 4 x 4.5               | 2.625 to 3.000        | 0.375          | 8             |
| 1256109  | 6 x 2                     | Urethane   | 375          | 5.625  | Two Piece Delrin | 1.438                | 4 x 4.5               | 2.625 to 3.000        | 0.375          | 8             |
| 1256116  | 5 x 2                     | Polyolefin | 900          | 6.500  | Two Piece Delrin | 1.625                | 4 x 4.5               | 2.625 to 3.000        | 0.375          | 8             |
| 1256117  | 5 x 2                     | Urethane   | 900          | 6.500  | Two Piece Delrin | 1.625                | 4 x 4.5               | 2.625 to 3.000        | 0.375          | 8             |
| 1256118  | 5 x 2                     | Urethane   | 375          | 6.500  | Two Piece Delrin | 1.625                | 4 x 4.5               | 2.625 to 3.000        | 0.375          | 8             |
| 1256138  | 6 x 2                     | Urethane   | 900          | 7.500  | Two Piece Delrin | 1.875                | 4 x 4.5               | 2.625 to 3.000        | 0.375          | 8             |
| 1256139  | 6 x 2                     | Urethane   | 600          | 7.500  | Two Piece Delrin | 1.875                | 4 x 4.5               | 2.625 to 3.000        | 0.375          | 8             |
| 1256141  | 6 x 2                     | Polyolefin | 900          | 7.500  | Two Piece Delrin | 1.875                | 4 x 4.5               | 2.625 to 3.000        | 0.375          | 8             |
| 1256169  | 8 x 2                     | Polyolefin | 1200         | 9.500  | Two Piece Delrin | 2.375                | 4 x 4.5               | 2.625 to 3.000        | 0.375          | 8             |
| 1256170  | 8 x 2                     | Urethane   | 1000         | 9.500  | Two Piece Delrin | 2.375                | 4 x 4.5               | 2.625 to 3.000        | 0.375          | 8             |
| 1256171  | 6 x 2                     | Urethane   | 600          | 9.500  | Two Piece Delrin | 2.375                | 4 x 4.5               | 2.625 to 3.000        | 0.375          | 8             |

## Stainless Steel Rigid Plate



Polypropylene



Poly / Polypropylene Core



TPR



Urethane



Soft Rubber



Polyolefin

| Item No. | Wheel Specifications      |                         |              |        |                  | Plate Specifications  |                       |                |               |  |
|----------|---------------------------|-------------------------|--------------|--------|------------------|-----------------------|-----------------------|----------------|---------------|--|
|          | Wheel Diameter x Width in | Wheel Type              | Capacity lbs | OAH in | Bearing          | Overall Size L x W in | Mouting Hole Width in | Ø Bolt Hole in | Bulk Pack Qty |  |
| 1256192  | 3.5 x 1.25                | Polypropylene           | 300          | 4.688  | Two Piece Delrin | 3 x 2.5               | 1.750                 | 0.313          | 16            |  |
| 1256194  | 3.5 x 1.25                | Poly/Polypropylene Core | 350          | 4.688  | Delrin           | 3 x 2.5               | 1.750                 | 0.313          | 16            |  |
| 1256195  | 3.5 x 1.25                | TPR                     | 250          | 4.688  | Two Piece Delrin | 3 x 2.5               | 1.750                 | 0.313          | 16            |  |
| 1256198  | 4 x 1.25                  | Polypropylene           | 350          | 5.125  | Two Piece Delrin | 3.625 x 2.5           | 1.750                 | 0.313          | 16            |  |
| 1256200  | 4 x 1.25                  | Poly/Polypropylene Core | 350          | 5.125  | Two Piece Delrin | 3.625 x 2.5           | 1.750                 | 0.313          | 16            |  |
| 1256201  | 4 x 1.25                  | TPR                     | 300          | 5.125  | Two Piece Delrin | 3.625 x 2.5           | 1.750                 | 0.313          | 16            |  |
| 1256204  | 5 x 1.25                  | Polypropylene           | 350          | 6.188  | Two Piece Delrin | 3.625 x 2.5           | 1.750                 | 0.313          | 16            |  |
| 1256206  | 5 x 1.25                  | Polypropylene           | 350          | 6.188  | Two Piece Delrin | 3.625 x 2.5           | 1.750                 | 0.313          | 16            |  |
| 1256207  | 5 x 1.25                  | TPR                     | 325          | 6.188  | Two Piece Delrin | 3.625 x 2.5           | 1.750                 | 0.313          | 16            |  |
| 1256213  | 4 x 2                     | Urethane                | 600          | 5.625  | Two Piece Delrin | 4 x 4.5               | 2.625 to 3.000        | 0.375          | 8             |  |
| 1256214  | 4 x 2                     | Soft Rubber             | 350          | 5.625  | Two Piece Delrin | 4 x 4.5               | 2.625 to 3.000        | 0.375          | 8             |  |
| 1256216  | 4 x 2                     | Polyolefin              | 900          | 5.625  | Two Piece Delrin | 4 x 4.5               | 2.625 to 3.000        | 0.375          | 8             |  |
| 1256219  | 5 x 2                     | Urethane                | 900          | 6.500  | Two Piece Delrin | 4 x 4.5               | 2.625 to 3.000        | 0.375          | 8             |  |
| 1256220  | 5 x 2                     | Soft Rubber             | 375          | 6.500  | Two Piece Delrin | 4 x 4.5               | 2.625 to 3.000        | 0.375          | 8             |  |
| 1256222  | 5 x 2                     | Polyolefin              | 900          | 6.500  | Two Piece Delrin | 4 x 4.5               | 2.625 to 3.000        | 0.375          | 8             |  |
| 1256223  | 6 x 2                     | Urethane                | 900          | 7.500  | Two Piece Delrin | 4 x 4.5               | 2.625 to 3.000        | 0.375          | 8             |  |
| 1256226  | 6 x 2                     | Soft Rubber             | 600          | 7.500  | Two Piece Delrin | 4 x 4.5               | 2.625 to 3.000        | 0.375          | 8             |  |
| 1256227  | 6 x 2                     | Polyolefin              | 900          | 7.500  | Two Piece Delrin | 4 x 4.5               | 2.625 to 3.000        | 0.375          | 8             |  |
| 1256228  | 6 x 2                     | Polyolefin              | 900          | 9.500  | Two Piece Delrin | 4 x 4.5               | 2.625 to 3.000        | 0.375          | 8             |  |
| 1256230  | 8 x 2                     | Urethane                | 1000         | 5.625  | Two Piece Delrin | 4 x 4.5               | 2.625 to 3.000        | 0.375          | 8             |  |
| 1256231  | 8 x 2                     | Soft Rubber             | 900          | 8.500  | Two Piece Delrin | 4 x 4.5               | 2.625 to 3.000        | 0.375          | 8             |  |

**STAINLESS STEEL HIGH TEMPERATURE CASTERS****Stainless Steel Swivel Plate**

## Specifications:

- Housing Material: Stainless Steel
- Wheel Material: See Table

## Features:

- Suitable for high temperature operating environments
- Temperature range up to 500°F
- Resistant to corrosion and rust
- Ideal for Powder Coating, all types of ovens and other applications that require resistance to high temperatures



Nylon



Polypropylene Retort

| Item No. | Wheel Specifications         |                      |                 |           |            | Plate Specifications |                          |                          |                         | Bulk Pack Qty |
|----------|------------------------------|----------------------|-----------------|-----------|------------|----------------------|--------------------------|--------------------------|-------------------------|---------------|
|          | Wheel Diameter x Width<br>in | Wheel Type           | Capacity<br>lbs | OAH<br>in | Bearing    | Swivel Radius<br>in  | Overall Size L x W<br>in | Mouting Hole Width<br>in | Ø Plate Bolt Hole<br>in |               |
| 1256090  | 3.5 x 1.25                   | Nylon                | 300             | 4.688     | Plain Bore | 2.5                  | 3.625 x 2.5              | 1.75                     | 0.313                   | 16            |
| 1256092  | 3.5 x 1.25                   | Polypropylene Retort | 300             | 4.688     | Plain Bore | 2.5                  | 3.625 x 2.5              | 1.75                     | 0.313                   | 16            |
| 1256095  | 4.0 x 1.25                   | Nylon                | 350             | 5.125     | Plain Bore | 2.5                  | 3.625 x 2.5              | 1.75                     | 0.313                   | 16            |
| 1256097  | 4.0 x 1.25                   | Polypropylene Retort | 150             | 5.125     | Plain Bore | 2.5                  | 3.625 x 2.5              | 1.75                     | 0.313                   | 16            |
| 1256112  | 5.0 x 1.25                   | Polypropylene Retort | 175             | 6.188     | Plain Bore | 3.0                  | 3.625 x 2.5              | 1.75                     | 0.313                   | 16            |

**Stainless Steel Swivel Plate with Brake**

Nylon

Guidelines to Help  
You Select the  
Correct Caster  
See Page 471

| Item No. | Wheel Specifications         |            |                 |           |         | Plate Specifications |                          |                          |                         | Bulk Pack Qty |
|----------|------------------------------|------------|-----------------|-----------|---------|----------------------|--------------------------|--------------------------|-------------------------|---------------|
|          | Wheel Diameter x Width<br>in | Wheel Type | Capacity<br>lbs | OAH<br>in | Bearing | Swivel Radius<br>in  | Overall Size L x W<br>in | Mouting Hole Width<br>in | Ø Plate Bolt Hole<br>in |               |
| 1256106  | 4.0 x 2.0                    | Nylon      | 900             | 5.625     | Roller  | 2.876                | 4 x 4.5                  | 2.625 to 3.000           | 0.375                   | 8             |
| 1256115  | 5.0 x 2.0                    | Nylon      | 900             | 6.500     | Roller  | 3.25                 | 4 x 4.5                  | 2.625 to 3.000           | 0.375                   | 8             |
| 1256140  | 6.0 x 2.0                    | Nylon      | 900             | 7.500     | Roller  | 3.75                 | 4 x 4.5                  | 2.625 to 3.000           | 0.375                   | 8             |

**Stainless Steel Rigid Plate**

Nylon Plain Bore



Polypropylene Retort



Nylon Roller Bore

| Item No. | Wheel Specifications         |                      |                 |           |            | Plate Specifications     |                          |                         | Bulk Pack Qty |
|----------|------------------------------|----------------------|-----------------|-----------|------------|--------------------------|--------------------------|-------------------------|---------------|
|          | Wheel Diameter x Width<br>in | Wheel Type           | Capacity<br>lbs | OAH<br>in | Bearing    | Overall Size L x W<br>in | Mouting Hole Width<br>in | Ø Plate Bolt Hole<br>in |               |
| 1256191  | 3.5 x 1.25                   | Nylon                | 300             | 4.688     | Plain Bore | 3.625 x 2.5              | 1.750                    | 0.313                   | 16            |
| 1256193  | 3.5 x 1.25                   | Polypropylene Retort | 300             | 4.688     | Plain Bore | 3.625 x 2.5              | 1.750                    | 0.313                   | 16            |
| 1256197  | 4.0 x 1.25                   | Nylon                | 350             | 5.125     | Plain Bore | 3.625 x 2.5              | 1.750                    | 0.313                   | 16            |
| 1256199  | 4.0 x 1.25                   | Polypropylene Retort | 150             | 5.125     | Plain Bore | 3.625 x 2.5              | 1.750                    | 0.313                   | 16            |
| 1256203  | 5.0 x 1.25                   | Nylon                | 350             | 6.188     | Plain Bore | 3.625 x 2.5              | 1.750                    | 0.313                   | 16            |
| 1256205  | 5.0 x 1.25                   | Polypropylene Retort | 175             | 6.188     | Plain Bore | 3.625 x 2.5              | 1.750                    | 0.313                   | 16            |
| 1256215  | 4.0 x 2.0                    | Nylon                | 900             | 5.625     | Roller     | 4.0 x 4.5                | 2.625 to 3.000           | 0.375                   | 8             |
| 1256221  | 5.0 x 2.0                    | Nylon                | 900             | 6.500     | Roller     | 4.0 x 4.5                | 2.625 to 3.000           | 0.375                   | 8             |
| 1256229  | 6.0 x 2.0                    | Nylon                | 900             | 7.500     | Roller     | 4.0 x 4.5                | 2.625 to 3.000           | 0.375                   | 8             |
| 1256232  | 8.0 x 2.0                    | Nylon                | 900             | 9.500     | Roller     | 4.0 x 4.5                | 2.625 to 3.000           | 0.375                   | 8             |

**RIGID CASTERS**



**Steel Rigid Plate Casters**



TPR



Rubber



Steel



Polyurethane



Polyolefin



Phenolic

Specifications:

- Housing Material: Zinc Plated Steel
- Wheel Material: See Table

Features:

- Economical solution for general applications

Guidelines to Help  
You Select the  
Correct Caster  
See Page 471

| Item No. | Wheel Specifications      |              |              |        |                 | Plate Specifications  |                       |                      |     | Bulk Pack Qty |
|----------|---------------------------|--------------|--------------|--------|-----------------|-----------------------|-----------------------|----------------------|-----|---------------|
|          | Wheel Diameter x Width in | Wheel Type   | Capacity lbs | OAH in | Bearing         | Overall Size L x W in | Mouting Hole Width in | Ø Plate Bolt Hole in |     |               |
| 1256086  | 3 x .813                  | Soft Rubber  | 110          | 3.500  | Plain Bore      | 2.625 x 3.750         | 1.750                 | 0.313                | 40  |               |
| 1256087  | 3 x .813                  | TPR          | 110          | 3.500  | Plain Bore      | 2.625 x 3.750         | 1.750                 | 0.313                | 40  |               |
| 1256088  | 3 x .813                  | Hard Rubber  | 125          | 3.500  | Plain Bore      | 2.625 x 3.750         | 1.750                 | 0.313                | 40  |               |
| 1256089  | 3 x .813                  | Polyolefin   | 125          | 3.500  | Plain Bore      | 2.625 x 3.750         | 1.750                 | 0.313                | 40  |               |
| 1256123  | 4 x .938                  | Soft Rubber  | 125          | 4.875  | Plain Bore      | 2.625 x 3.750         | 1.750                 | 0.313                | 20  |               |
| 1256124  | 4 x .938                  | TPR          | 125          | 4.875  | Plain Bore      | 2.625 x 3.750         | 1.750                 | 0.313                | 20  |               |
| 1256125  | 4 x .938                  | Hard Rubber  | 150          | 4.875  | Plain Bore      | 2.625 x 3.750         | 1.750                 | 0.313                | 20  |               |
| 1256126  | 4 x .938                  | Polyolefin   | 150          | 4.875  | Plain Bore      | 2.625 x 3.750         | 1.750                 | 0.313                | 20  |               |
| 1256147  | 5 x .938                  | Soft Rubber  | 130          | 5.875  | Plain Bore      | 2.625 x 3.750         | 1.750                 | 0.313                | 15  |               |
| 1256148  | 5 x .938                  | TPR          | 130          | 5.875  | Plain Bore      | 2.625 x 3.750         | 1.750                 | 0.313                | 15  |               |
| 1256149  | 5 x .938                  | Hard Rubber  | 150          | 5.875  | Plain Bore      | 2.625 x 3.750         | 1.750                 | 0.313                | 15  |               |
| 1256150  | 5 x .938                  | Polyolefin   | 150          | 5.875  | Plain Bore      | 2.625 x 3.750         | 1.750                 | 0.313                | 15  |               |
| 1256178  | 2 x .813                  | Soft Rubber  | 90           | 2.500  | Plain Bore      | 1.50 x 2.656          | 0.938                 | 0.25                 | 100 |               |
| 1256179  | 2 x .813                  | Polyolefin   | 125          | 2.500  | Plain Bore      | 1.50 x 2.656          | 0.938                 | 0.25                 | 100 |               |
| 1256180  | 2 x .813                  | Hard Rubber  | 125          | 2.500  | Plain Bore      | 1.50 x 2.656          | 0.938                 | 0.25                 | 100 |               |
| 1256181  | 2 x .813                  | Steel        | 125          | 2.500  | Plain Bore      | 1.50 x 2.656          | 0.938                 | 0.25                 | 48  |               |
| 1256182  | 2.5 x 1.125               | Soft Rubber  | 100          | 3.250  | Plain Bore      | 2.125 x 4.375         | 1.063                 | 0.313                | 40  |               |
| 1256183  | 2.5 x 1.125               | Polyolefin   | 175          | 3.250  | Plain Bore      | 2.125 x 4.375         | 1.063                 | 0.313                | 40  |               |
| 1256184  | 2.5 x 1.125               | Hard Rubber  | 175          | 3.250  | Plain Bore      | 2.125 x 4.375         | 1.063                 | 0.313                | 40  |               |
| 1256185  | 2.5 x 1.125               | Steel        | 175          | 3.250  | Plain Bore      | 2.125 x 4.375         | 1.063                 | 0.313                | 24  |               |
| 1256186  | 3 x 1.250                 | Polyurethane | 250          | 4.250  | Ball Bearings   | 1.750 x 2.813         | 2.750 to 3.000        | 0.313                | 20  |               |
| 1256187  | 2 x .813                  | Soft Rubber  | 90           | 3.813  | Plain Bore      | 2.313 x 4.875         | 1.188                 | 0.313                | 32  |               |
| 1256188  | 3 x 1.250                 | Polyolefin   | 210          | 3.813  | Plain Bore      | 2.313 x 4.875         | 1.188                 | 0.313                | 32  |               |
| 1256189  | 3 x 1.250                 | Hard Rubber  | 225          | 3.813  | Plain Bore      | 2.313 x 4.875         | 1.188                 | 0.313                | 32  |               |
| 1256190  | 3 x 1.250                 | Steel        | 225          | 3.813  | Plain Bore      | 2.313 x 4.875         | 1.188                 | 0.313                | 16  |               |
| 1256196  | 4 x 1.250                 | Polyurethane | 300          | 5.25   | Ball Bearings   | 1.750 x 2.813         | 2.750 to 3.000        | 0.313                | 20  |               |
| 1256202  | 5 x 1.250                 | Polyurethane | 350          | 6.25   | Ball Bearings   | 1.750 x 2.813         | 2.750 to 3.000        | 0.313                | 20  |               |
| 1256208  | 4 x 1.375                 | Soft Rubber  | 200          | 5.000  | Plain Bore      | 3.125 x 6.125         | 1.750                 | 0.375                | 18  |               |
| 1256209  | 4 x 1.375                 | Polyolefin   | 250          | 5.000  | Plain Bore      | 3.125 x 6.125         | 1.750                 | 0.375                | 18  |               |
| 1256210  | 4 x 1.375                 | Hard Rubber  | 300          | 5.000  | Plain Bore      | 3.125 x 6.125         | 1.750                 | 0.375                | 18  |               |
| 1256211  | 4 x 2                     | Polyurethane | 500          | 5.625  | Roller Bearings | 4 x 4.5               | 2.625 to 3.000        | 0.375                | 8   |               |
| 1256212  | 4 x 2                     | Phenolic     | 800          | 5.625  | Roller Bearings | 4 x 4.5               | 2.625 to 3.000        | 0.375                | 8   |               |
| 1256217  | 5 x 2                     | Polyurethane | 600          | 6.500  | Roller Bearings | 4 x 4.5               | 2.625 to 3.000        | 0.375                | 8   |               |
| 1256218  | 5 x 2                     | Phenolic     | 1000         | 6.500  | Roller Bearings | 4 x 4.5               | 2.625 to 3.000        | 0.375                | 8   |               |
| 1256224  | 6 x 2                     | Polyurethane | 800          | 7.500  | Roller Bearings | 4 x 4.5               | 2.625 to 3.000        | 0.375                | 8   |               |
| 1256225  | 6 x 2                     | Phenolic     | 1200         | 7.500  | Roller Bearings | 4 x 4.5               | 2.625 to 3.000        | 0.375                | 8   |               |



# SWIVEL CASTERS

## Steel Swivel Plate Casters



Soft Rubber



Steel



TPR



Polyolefin



Phenolic



Hard Rubber

**Specifications:**

- Housing Material: Zinc Plated Steel
- Wheel Material: See Table

**Features:**

- Provides 360° rotation
- Economical solution for general applications

Guidelines to Help You Select the Correct Caster  
See Page 471

| Item No. | Wheel Specifications         |              |                 |           |                    | Plate Specifications |                          |                          |                         |               |
|----------|------------------------------|--------------|-----------------|-----------|--------------------|----------------------|--------------------------|--------------------------|-------------------------|---------------|
|          | Wheel Diameter x Width<br>in | Wheel Type   | Capacity<br>lbs | OAH<br>in | Bearing            | Swivel Radius<br>in  | Overall Size L x W<br>in | Mouting Hole Width<br>in | Ø Plate Bolt Hole<br>in | Bulk Pack Qty |
| 1256054  | 2 x .813                     | Soft Rubber  | 90              | 2.500     | Plain Bore         | 1.813                | 1.938 x 2.563            | 0.938                    | 0.250                   | 100           |
| 1256055  | 2 x .813                     | Polyolefin   | 125             | 2.500     | Plain Bore         | 1.813                | 1.938 x 2.563            | 0.938                    | 0.250                   | 100           |
| 1256056  | 2 x .813                     | Hard Rubber  | 125             | 2.500     | Plain Bore         | 1.813                | 1.938 x 2.563            | 0.938                    | 0.250                   | 100           |
| 1256057  | 2 x .813                     | Steel        | 125             | 2.500     | Plain Bore         | 1.813                | 1.938 x 2.563            | 0.938                    | 0.250                   | 48            |
| 1256058  | 2 x .813                     | TPR          | 80              | 2.625     | Plain Bore         | 1.938                | 1.188 x 2                | 0.813                    | 0.188                   | 100           |
| 1256059  | 2 x .813                     | Hard Rubber  | 90              | 2.625     | Plain Bore         | 1.938                | 1.188 x 2                | 0.813                    | 0.188                   | 100           |
| 1256060  | 2 x .813                     | Polyolefin   | 90              | 2.625     | Plain Bore         | 1.938                | 1.188 x 2                | 0.813                    | 0.188                   | 100           |
| 1256065  | 2 x .813                     | Soft Rubber  | 80              | 2.625     | Plain Bore         | 1.938                | 1.188 x 2                | 0.813                    | 0.188                   | 100           |
| 1256066  | 2.5 x .813                   | Soft Rubber  | 80              | 3.125     | Plain Bore         | 2.125                | 1.188 x 2                | 0.813                    | 0.188                   | 80            |
| 1256067  | 2.5 x .813                   | TPR          | 80              | 3.125     | Plain Bore         | 2.125                | 1.188 x 2                | 0.813                    | 0.188                   | 80            |
| 1256068  | 2.5 x .813                   | Hard Rubber  | 95              | 3.125     | Plain Bore         | 2.125                | 1.188 x 2                | 0.813                    | 0.188                   | 80            |
| 1256069  | 2.5 x .813                   | Polyolefin   | 95              | 3.125     | Plain Bore         | 2.125                | 1.188 x 2                | 0.813                    | 0.188                   | 80            |
| 1256074  | 2.5 x 1.125                  | Soft Rubber  | 100             | 3.250     | Plain Bore         | 2.250                | 2.750 x 3.875            | 1.750                    | 0.313                   | 40            |
| 1256075  | 2.5 x 1.125                  | Polyolefin   | 175             | 3.250     | Plain Bore         | 2.250                | 2.750 x 3.875            | 1.750                    | 0.313                   | 40            |
| 1256076  | 2.5 x 1.125                  | Hard Rubber  | 175             | 3.250     | Plain Bore         | 2.250                | 2.750 x 3.875            | 1.750                    | 0.313                   | 40            |
| 1256077  | 2.5 x 1.125                  | Steel        | 175             | 3.250     | Plain Bore         | 2.250                | 2.750 x 3.875            | 1.750                    | 0.313                   | 24            |
| 1256078  | 3 x .813                     | Soft Rubber  | 110             | 3.500     | Plain Bore         | 2.500                | 2.625 x 3.750            | 1.750                    | 0.313                   | 40            |
| 1256079  | 3 x .813                     | TPR          | 110             | 3.500     | Plain Bore         | 2.500                | 2.625 x 3.750            | 1.750                    | 0.313                   | 40            |
| 1256080  | 3 x .813                     | Hard Rubber  | 120             | 3.500     | Plain Bore         | 2.500                | 2.625 x 3.750            | 1.750                    | 0.313                   | 40            |
| 1256081  | 3 x .813                     | Polyolefin   | 120             | 3.500     | Plain Bore         | 2.500                | 2.625 x 3.750            | 1.750                    | 0.313                   | 40            |
| 1256100  | 3 x 1.250                    | Soft Rubber  | 150             | 3.813     | Plain Bore         | 2.625                | 3.125 x 4.125            | 2.375                    | 0.313                   | 32            |
| 1256101  | 3 x 1.250                    | Polyolefin   | 210             | 3.813     | Plain Bore         | 2.625                | 3.125 x 4.125            | 2.375                    | 0.313                   | 32            |
| 1256102  | 3 x 1.250                    | Hard Rubber  | 225             | 3.813     | Plain Bore         | 2.625                | 3.125 x 4.125            | 2.375                    | 0.313                   | 32            |
| 1256103  | 3 x 1.250                    | Steel        | 225             | 3.813     | Plain Bore         | 2.625                | 3.125 x 4.125            | 2.375                    | 0.313                   | 16            |
| 1256127  | 4 x .938                     | Soft Rubber  | 125             | 4.875     | Plain Bore         | 3.438                | 2.625 x 3.750            | 1.750                    | 0.313                   | 20            |
| 1256128  | 4 x .938                     | TPR          | 125             | 4.875     | Plain Bore         | 3.438                | 2.625 x 3.750            | 1.750                    | 0.313                   | 20            |
| 1256129  | 4 x .938                     | Hard Rubber  | 150             | 4.875     | Plain Bore         | 3.438                | 2.625 x 3.750            | 1.750                    | 0.313                   | 20            |
| 1256130  | 4 x .938                     | Polyolefin   | 150             | 4.875     | Plain Bore         | 3.438                | 2.625 x 3.750            | 1.750                    | 0.313                   | 20            |
| 1256135  | 4 x 1.375                    | Soft Rubber  | 200             | 5.000     | Plain Bore         | 3.438                | 4 x 5.125                | 3.000                    | 0.375                   | 18            |
| 1256136  | 4 x 1.375                    | Polyolefin   | 250             | 5.000     | Plain Bore         | 3.438                | 4 x 5.125                | 3.000                    | 0.375                   | 18            |
| 1256137  | 4 x 1.375                    | Hard Rubber  | 300             | 5.000     | Plain Bore         | 3.438                | 4 x 5.125                | 3.000                    | 0.375                   | 18            |
| 1256151  | 5 x .938                     | Soft Rubber  | 130             | 5.875     | Plain Bore         | 4.125                | 2.625 x 3.750            | 1.750                    | 0.313                   | 15            |
| 1256152  | 5 x .938                     | TPR          | 130             | 5.875     | Plain Bore         | 4.125                | 2.625 x 3.750            | 1.750                    | 0.313                   | 15            |
| 1256153  | 5 x .938                     | Hard Rubber  | 150             | 5.875     | Plain Bore         | 4.125                | 2.625 x 3.750            | 1.750                    | 0.313                   | 15            |
| 1256154  | 5 x .938                     | Polyolefin   | 150             | 5.875     | Plain Bore         | 4.125                | 2.625 x 3.750            | 1.750                    | 0.313                   | 15            |
| 1256159  | 3 x 1.250                    | Polyurethane | 250             | 4.250     | Precision Bearings | 4.375                | 2.625 x 3.750            | 1.750                    | 0.313                   | 20            |
| 1256161  | 4 x 1.250                    | Polyurethane | 300             | 5.250     | Precision Bearings | 4.375                | 2.625 x 3.750            | 1.750                    | 0.313                   | 20            |
| 1256163  | 5 x 1.250                    | Polyurethane | 315             | 6.250     | Precision Bearings | 4.375                | 2.625 x 3.750            | 1.750                    | 0.313                   | 20            |
| 1256167  | 6 x 2                        | Phenolic     | 1200            | 7.500     | Roller Bearings    | 4.750                | 4 x 4.5                  | 2.625 to 3.000           | 0.375                   | 8             |
| 1256172  | 4 X 2                        | Polyurethane | 500             | 5.625     | Roller Bearings    | 5.438                | 4 x 4.5                  | 2.625 to 3.000           | 0.375                   | 8             |
| 1256173  | 4 X 2                        | Phenolic     | 800             | 5.625     | Roller Bearings    | 5.438                | 4.5 x 7                  | 2.625 to 3.000           | 0.375                   | 8             |
| 1256174  | 5 x 2                        | Polyurethane | 600             | 6.500     | Roller Bearings    | 5.813                | 4.5 x 5                  | 2.625 to 3.000           | 0.375                   | 8             |
| 1256175  | 5 x 2                        | Phenolic     | 900             | 6.500     | Roller Bearings    | 5.813                | 4.5 x 8                  | 2.625 to 3.000           | 0.375                   | 8             |
| 1256176  | 6 x 2                        | Polyurethane | 720             | 7.500     | Roller Bearings    | 6.000                | 4.5 x 6                  | 2.625 to 3.000           | 0.375                   | 8             |
| 1256177  | 6 x 2                        | Phenolic     | 900             | 7.500     | Roller Bearings    | 6.000                | 4.5 x 9                  | 2.625 to 3.000           | 0.375                   | 8             |

# THREADED STEM CASTERS / CASTER SELECTION GUIDELINES



## Steel Threaded Stem Casters



Rubber



TPR



Polyolefin

### Specifications:

- Housing Material: Zinc Plated Steel
- Wheel Material: See Table

### Features:

- Economical solution for general applications

| Item No. | Wheel Diameter x Width |             | Capacity | OAH   | Bearing    | Swivel Radius | Stem Size Length x Width |        | Thread Size | Bulk Pack Qty |
|----------|------------------------|-------------|----------|-------|------------|---------------|--------------------------|--------|-------------|---------------|
|          | In                     | Wheel Type  |          |       |            |               | In                       | In     |             |               |
| 1256061  | 2 x .813               | Soft Rubber | 80       | 2.625 | Plain Bore | 1.938         | 1-1/2 x 3/8              | 3/8-16 | 100         |               |
| 1256062  | 2 x .813               | TPR         | 80       | 2.625 | Plain Bore | 1.938         | 1-1/2 x 3/8              | 3/8-16 | 100         |               |
| 1256063  | 2 x .813               | Hard Rubber | 90       | 2.625 | Plain Bore | 1.938         | 1-1/2 x 3/8              | 3/8-16 | 100         |               |
| 1256064  | 2 x .813               | Polyolefin  | 90       | 2.625 | Plain Bore | 1.938         | 1-1/2 x 3/8              | 3/8-16 | 100         |               |
| 1256070  | 2.5 x .813             | Soft Rubber | 80       | 3.125 | Plain Bore | 2.125         | 1-1/2 x 3/8              | 3/8-16 | 80          |               |
| 1256071  | 2.5 x .813             | TPR         | 80       | 3.125 | Plain Bore | 2.125         | 1-1/2 x 3/8              | 3/8-16 | 80          |               |
| 1256072  | 2.5 x .813             | Hard Rubber | 95       | 3.125 | Plain Bore | 2.125         | 1-1/2 x 3/8              | 3/8-16 | 80          |               |
| 1256073  | 2.5 x .813             | Polyolefin  | 95       | 3.125 | Plain Bore | 2.125         | 1-1/2 x 3/8              | 3/8-16 | 80          |               |
| 1256082  | 3 x .813               | Soft Rubber | 110      | 3.500 | Plain Bore | 2.500         | 1-1/2 x 3/8              | 3/8-16 | 60          |               |
| 1256083  | 3 x .813               | TPR         | 110      | 3.500 | Plain Bore | 2.500         | 1-1/2 x 3/8              | 3/8-16 | 60          |               |
| 1256084  | 3 x .813               | Hard Rubber | 125      | 3.500 | Plain Bore | 2.500         | 1-1/2 x 3/8              | 3/8-16 | 60          |               |
| 1256085  | 3 x .813               | Polyolefin  | 125      | 3.500 | Plain Bore | 2.500         | 1-1/2 x 3/8              | 3/8-16 | 60          |               |
| 1256131  | 4 x .938               | Soft Rubber | 125      | 4.750 | Plain Bore | 3.438         | 1-1/2 x 3/8              | 3/8-16 | 20          |               |
| 1256132  | 4 x .938               | TPR         | 125      | 4.750 | Plain Bore | 3.438         | 1-1/2 x 3/8              | 3/8-16 | 20          |               |
| 1256133  | 4 x .938               | Hard Rubber | 150      | 4.750 | Plain Bore | 3.438         | 1-1/2 x 3/8              | 3/8-16 | 20          |               |
| 1256134  | 4 x .938               | Polyolefin  | 150      | 4.750 | Plain Bore | 3.438         | 1-1/2 x 3/8              | 3/8-16 | 20          |               |
| 1256155  | 5 x .938               | Soft Rubber | 130      | 5.750 | Plain Bore | 4.125         | 1-1/2 x 3/8              | 3/8-16 | 15          |               |
| 1256156  | 5 x .938               | TPR         | 130      | 5.750 | Plain Bore | 4.125         | 1-1/2 x 3/8              | 3/8-16 | 15          |               |
| 1256157  | 5 x .938               | Hard Rubber | 150      | 5.750 | Plain Bore | 4.125         | 1-1/2 x 3/8              | 3/8-16 | 15          |               |
| 1256158  | 5 x .938               | Polyolefin  | 150      | 5.750 | Plain Bore | 4.125         | 1-1/2 x 3/8              | 3/8-16 | 15          |               |

## GUIDELINES TO HELP YOU SELECT THE CORRECT CASTER

### Load Capacity

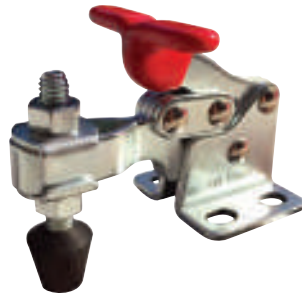
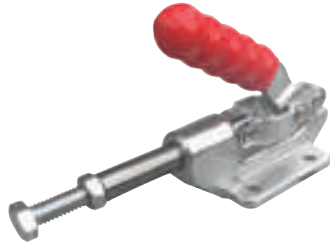
In order to determine the load capacity for each caster you must divide the combined weight and maximum load of the equipment by the number of casters to be used.

This is the load that each caster must support. Always select a caster that is rated with a load capacity greater than the calculated load per caster.

### Calculation

$$\frac{\text{MAXIMUM WEIGHT OF EQUIPMENT}}{\text{NUMBER OF CASTERS USED}} = \text{APPROXIMATE LOAD CAPACITY}$$

# WORKHOLDING







HORIZONTAL TOGGLE CLAMPS ..... 474



VERTICAL TOGGLE CLAMPS.....475 - 476



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LATCH TOGGLE CLAMPS ..... 480



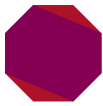
HOOK TOGGLE CLAMPS .....481



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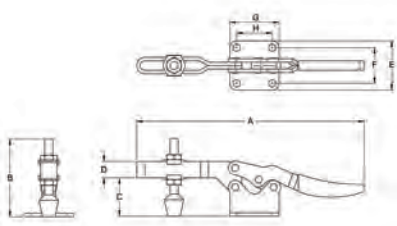


F TYPE TOGGLE CLAMPS ..... 482

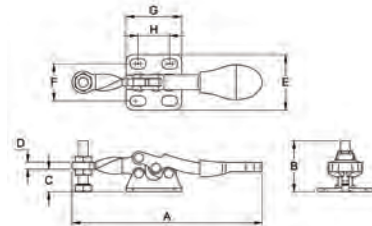


# HORIZONTAL TOGGLE CLAMPS

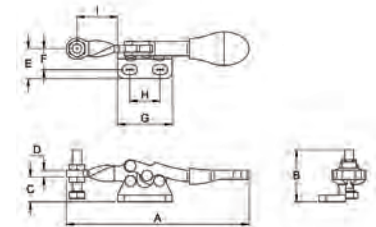
## TCH Series Horizontal Toggle Clamps



Type 1



Type 2



Type 3

### Specifications

- Material:
  - Clamp: See Table
  - Grip: PVC (Red)

### Features

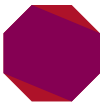
- Hand grip with cushioned profile for improved user comfort
- Pivot points are fitted with hardened steel or stainless steel rivets to maintain accuracy and provide a long service life
- Clamps with adjustable spindles are manufactured with a formed end to the arm
- The handle and arm linkage are designed to provide a smooth continuous action

### Steel

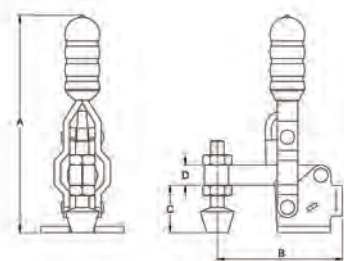
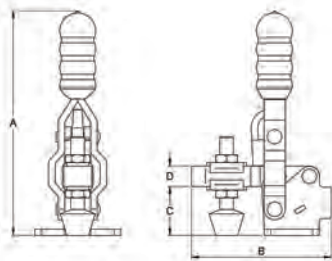
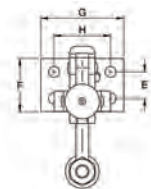
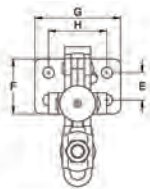
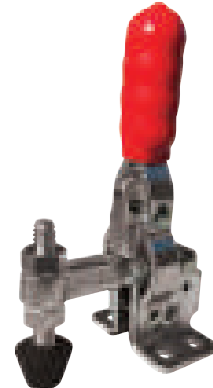
| Item No.  | Type | Holding Force |       | A     |      | B    |      | C    |      | D    |      | E    |      | F    |      | G    |      | H    |       | I    |   | Pack Qty. |
|-----------|------|---------------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|---|-----------|
|           |      | lbf           | mm    | in    | mm   | in   | mm   | in   | mm   | in   | mm   | in   | mm   | in   | mm   | in   | mm   | in   | mm    | in   |   |           |
| 493783    | 1    | 60            | 77.0  | 3.03  | 18.0 | 0.71 | 7.5  | 0.30 | 3.8  | 0.15 | 23.8 | 0.94 | 15.9 | 0.63 | 23.8 | 0.94 | 13.5 | 0.53 | 19.9  | 0.78 | 1 |           |
| EMC201A   | 2    | 60            | 81.2  | 3.20  | 21.9 | 0.86 | 9.6  | 0.38 | 3.0  | 0.12 | 23.8 | 0.94 | 15.9 | 0.63 | 23.8 | 0.94 | 13.5 | 0.53 | 18.1  | 0.71 | 1 |           |
| EMC201AL  | 3    | 60            | 81.2  | 3.20  | 21.9 | 0.86 | 11.0 | 0.43 | 3.0  | 0.12 | 16.5 | 0.65 | 9.4  | 0.37 | 24.3 | 0.96 | 13.5 | 0.53 | 18.1  | 0.71 | 1 |           |
| 493784    | 1    | 165           | 117.0 | 4.61  | 38.2 | 1.50 | 19.0 | 0.75 | 9.5  | 0.37 | 27.0 | 1.06 | 16.8 | 0.66 | 25.0 | 0.98 | 13.5 | 0.53 | 37.1  | 1.46 | 1 |           |
| EMC201B   | 1    | 200           | 143.5 | 5.65  | 47.5 | 1.87 | 25.1 | 0.99 | 12.7 | 0.50 | 36.0 | 1.42 | 22.0 | 0.87 | 37.0 | 1.46 | 26.2 | 1.03 | 56.9  | 2.24 | 1 |           |
| 493785    | 1    | 330           | 176.0 | 6.93  | 52.6 | 2.52 | 25.1 | 0.99 | 14.0 | 0.55 | 40.0 | 1.57 | 28.0 | 1.10 | 38.0 | 1.50 | 26.0 | 1.02 | 74.0  | 2.91 | 1 |           |
| EMC225D   | 1    | 500           | 171.5 | 6.75  | 63.0 | 2.64 | 34.9 | 1.37 | 12.7 | 0.50 | 35.0 | 1.38 | 22.2 | 0.87 | 38.0 | 1.50 | 23.1 | 0.91 | 71.6  | 2.82 | 1 |           |
| 493786    | 1    | 550           | 229.0 | 9.02  | 68.5 | 2.77 | 34.0 | 1.34 | 17.5 | 0.69 | 47.0 | 1.85 | 31.0 | 1.22 | 42.0 | 1.50 | 26.0 | 1.02 | 79.0  | 3.11 | 1 |           |
| EMC22502B | 1    | 550           | 225.0 | 8.86  | 66.5 | 2.69 | 34.0 | 1.34 | 17.5 | 0.69 | 47.0 | 1.85 | 28.5 | 1.12 | 42.0 | 1.65 | 26.0 | 1.02 | 79.0  | 3.11 | 1 |           |
| EMC20235  | 1    | 750           | 264.5 | 10.41 | 90.0 | 3.54 | 44.4 | 1.75 | 19.0 | 0.75 | 57.2 | 2.25 | 41.3 | 1.63 | 57.1 | 2.25 | 41.3 | 1.63 | 108.3 | 4.26 | 1 |           |
| 493787    | 1    | 771           | 276.0 | 10.87 | 90.2 | 3.55 | 45.0 | 1.77 | 23.8 | 0.94 | 59.0 | 2.32 | 41.2 | 1.62 | 59.0 | 2.32 | 41.2 | 1.62 | 108.0 | 4.25 | 1 |           |

### Stainless Steel

| Item No. | Type | Holding Force |       | A    |      | B    |      | C    |      | D    |      | E    |      | F    |      | G    |      | H    |      | I    |   | Pack Qty. |
|----------|------|---------------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|-----------|
|          |      | lbf           | mm    | in   | mm   | in   | mm   | in   | mm   | in   | mm   | in   | mm   | in   | mm   | in   | mm   | in   | mm   | in   |   |           |
| 493806   | 1    | 60            | 77.0  | 3.03 | 18.0 | 0.71 | 7.5  | 0.30 | 3.8  | 0.15 | 23.8 | 0.94 | 15.9 | 0.63 | 23.8 | 0.94 | 13.5 | 0.53 | 19.9 | 0.78 | 1 |           |
| 493807   | 2    | 165           | 117.0 | 4.61 | 38.2 | 1.50 | 19.0 | 0.75 | 9.5  | 0.37 | 27.0 | 1.06 | 16.8 | 0.66 | 25.0 | 0.98 | 13.5 | 0.53 | 37.1 | 1.46 | 1 |           |
| 493808   | 1    | 330           | 176.0 | 6.93 | 52.6 | 2.07 | 25.1 | 0.99 | 14.0 | 0.55 | 40.0 | 1.57 | 28.0 | 1.10 | 38.0 | 1.50 | 26.0 | 1.02 | 74.0 | 2.91 | 1 |           |



TCV Series  
Vertical Toggle Clamps



Type 1

Type 2

Specifications

- Material:
  - Clamp: See Table
  - Grip: PVC (Red)

Features

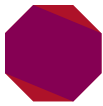
- Hand grip with cushioned profile for improved user comfort
- Pivot points are fitted with hardened steel or stainless steel rivets to maintain accuracy and provide a long service life
- Clamps with adjustable spindles are manufactured with a formed end to the arm
- Flanged washers are supplied with all slotted arm versions

Steel

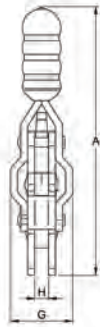
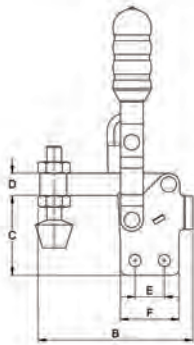
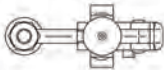
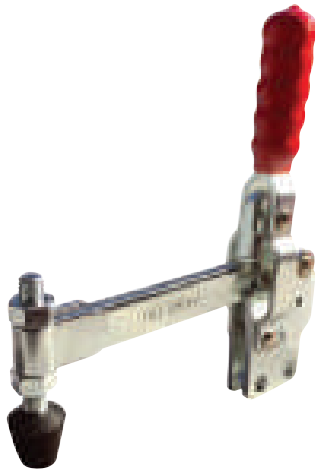
| Item No.   | Type | Holding Force |       | A    |       | B    |      | C    |      | D    |             | E           |      | F    |      | G    |             | H           |   | Pack Qty. |
|------------|------|---------------|-------|------|-------|------|------|------|------|------|-------------|-------------|------|------|------|------|-------------|-------------|---|-----------|
|            |      | lbf           | mm    | in   | mm    | in   | mm   | in   | mm   | in   | mm          | in          | mm   | in   | mm   | in   | mm          | in          |   |           |
| 493778     | 1    | 110           | 77.0  | 3.03 | 51.5  | 2.03 | 15.6 | 0.61 | 8.0  | 0.31 | 15.9        | 0.63        | 25.4 | 1.00 | 33.3 | 1.31 | 23.8        | 0.94        | 1 |           |
| 493779     | 1    | 156           | 95.9  | 3.78 | 56.5  | 2.22 | 16.0 | 0.63 | 9.0  | 0.35 | 16.0        | 0.63        | 26.0 | 1.02 | 34.0 | 1.34 | 26.8        | 1.06        | 1 |           |
| EMC11002B  | 1    | 165           | 96.5  | 3.80 | 67.0  | 2.64 | 22.0 | 0.87 | 10.0 | 0.39 | 14.0 - 16.0 | 0.55 - 0.63 | 29.0 | 1.14 | 34.0 | 1.34 | 17.5 - 24.0 | 0.69 - 0.94 | 1 |           |
| EMC12050   | 2    | 200           | 104.0 | 4.09 | 59.9  | 2.36 | 22.3 | 0.88 | 9.6  | 0.38 | 12.7        | 0.5         | 25.4 | 1.00 | 39.7 | 1.56 | 27.0        | 1.06        | 1 |           |
| EMC12050U  | 1    | 200           | 104.0 | 4.09 | 64.7  | 2.55 | 22.7 | 0.89 | 9.5  | 0.37 | 12.7        | 0.5         | 25.4 | 1.00 | 39.7 | 1.56 | 27.0        | 1.06        | 1 |           |
| EMC12050UL | 1    | 200           | 104.0 | 4.09 | 88.7  | 3.49 | 22.7 | 0.89 | 9.5  | 0.37 | 12.7        | 0.5         | 25.4 | 1.00 | 39.7 | 1.56 | 27.0        | 1.06        | 1 |           |
| 493780     | 1    | 330           | 123.0 | 4.84 | 69.9  | 2.75 | 23.0 | 0.91 | 11.0 | 0.43 | 12.7        | 0.5         | 27.0 | 1.06 | 37.8 | 1.49 | 24.8        | 0.98        | 1 |           |
| 493781     | 1    | 551           | 175.0 | 6.89 | 109.8 | 4.32 | 32.4 | 1.28 | 17.5 | 0.69 | 19.0        | 0.75        | 35.0 | 1.38 | 47.0 | 1.85 | 27.8        | 1.08        | 1 |           |
| EMC12265   | 1    | 750           | 205.5 | 8.09 | 139.5 | 5.49 | 44.0 | 1.73 | 19.0 | 0.75 | 31.8        | 1.25        | 49.2 | 1.94 | 64.3 | 2.53 | 45.3        | 1.78        | 1 |           |

Stainless Steel

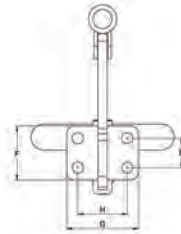
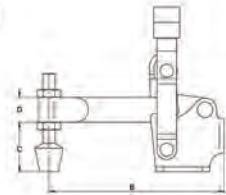
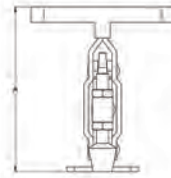
| Item No. | Type | Holding Force |       | A    |      | B    |      | C    |      | D    |      | E    |      | F    |      | G    |      | H    |      | I    |   | Pack Qty. |
|----------|------|---------------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|-----------|
|          |      | lbf           | mm    | in   | mm   | in   | mm   | in   | mm   | in   | mm   | in   | mm   | in   | mm   | in   | mm   | in   | mm   | in   |   |           |
| 493803   | 1    | 110           | 77.0  | 3.03 | 51.5 | 2.03 | 15.6 | 0.61 | 8.0  | 0.31 | 15.9 | 0.63 | 25.4 | 1.00 | 25.4 | 1.00 | 33.3 | 1.31 | 23.8 | 0.94 | 1 |           |
| 493804   | 1    | 110           | 95.9  | 3.78 | 56.5 | 2.22 | 16.0 | 0.63 | 9.0  | 0.35 | 16.0 | 0.63 | 26.0 | 1.02 | 26.0 | 1.02 | 34.0 | 1.34 | 26.8 | 1.06 | 1 |           |
| 493805   | 1    | 330           | 123.0 | 4.84 | 69.9 | 2.75 | 23.0 | 0.91 | 11.0 | 0.43 | 12.7 | 0.50 | 27.0 | 1.06 | 27.0 | 1.06 | 37.8 | 1.49 | 24.8 | 0.98 | 1 |           |



**TCV Series**  
Vertical Toggle Clamps



**Type 3**



**Type 4**

**Specifications**

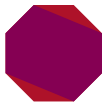
- Material:
  - Clamp: See Table
  - Grip: PVC (Red)

**Features**

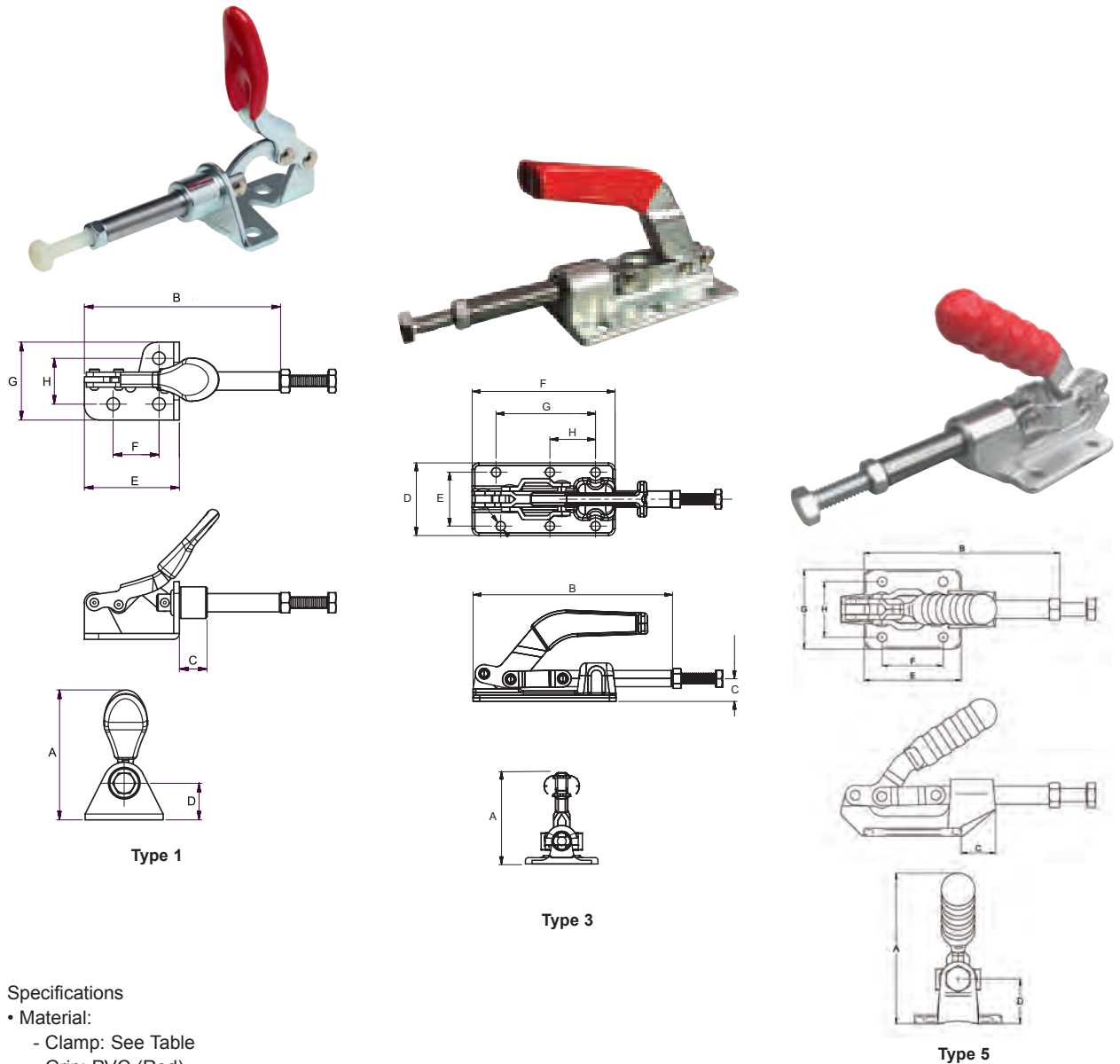
- Hand grip with cushioned profile for improved user comfort
- Pivot points are fitted with hardened steel or stainless steel rivets to maintain accuracy and provide a long service life
- Clamps with adjustable spindles are manufactured with a formed end to the arm
- Flanged washers are supplied with all slotted arm versions

**Steel**

| Item No. | Type | Holding Force |       | A    |       | B    |      | C    |      | D    |             | E           |      | F    |      | G    |      | H    |   | Pack Qty. |
|----------|------|---------------|-------|------|-------|------|------|------|------|------|-------------|-------------|------|------|------|------|------|------|---|-----------|
|          |      | lbf           | mm    | in   | mm    | in   | mm   | in   | mm   | in   | mm          | in          | mm   | in   | mm   | in   | mm   | in   |   |           |
| EMC13005 | 4    | 150           | 35.6  | 1.40 | 57.0  | 2.24 | 12.7 | 0.50 | 7.9  | 0.31 | 13.5        | 0.53        | 26.2 | 1.03 | 25.4 | 1.00 | 15.9 | 0.63 | 1 |           |
| EMC12055 | 3    | 200           | 116.0 | 4.57 | 66.1  | 2.60 | 28.5 | 1.12 | 9.6  | 0.38 | 12.7        | 0.50        | 25.4 | 1.00 | 26.8 | 1.06 | 6.0  | 0.24 | 1 |           |
| EMC13007 | 4    | 330           | 59.6  | 2.35 | 93.7  | 3.69 | 22.2 | 0.87 | 12.7 | 0.50 | 19.0 - 27.0 | 0.75 - 1.06 | 43.6 | 1.72 | 46.0 | 1.81 | 29.4 | 1.16 | 1 |           |
| EMC12141 | 4    | 500           | 106.0 | 4.17 | 118.4 | 4.66 | 31.8 | 1.25 | 16.0 | 0.63 | 19.0        | 0.75        | 34.9 | 1.37 | 46.0 | 1.81 | 31.8 | 1.25 | 1 |           |
| EMC12147 | 3    | 500           | 156.0 | 6.14 | 150.7 | 5.93 | 39.7 | 1.56 | 16.0 | 0.63 | 19.0        | 0.75        | 34.9 | 1.37 | 26.7 | 1.05 | 6.0  | 0.24 | 1 |           |



**TCPP Series  
Push Pull Toggle Clamp**



**Specifications**

- Material:
  - Clamp: See Table
  - Grip: PVC (Red)

**Features**

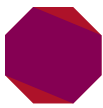
- All body and linkage components on the light duty range are zinc plated to resist corrosion
- The heavy-duty range has ductile cast iron bases for strength and rigidity
- A close tolerance is maintained between the base and plunger to allow use for pin location and gauging as well as clamping applications
- Pivot points are fitted with hardened steel or stainless steel rivets to maintain accuracy and provide a long service life

**Steel**

| Item No. | Type | Holding Force |      | A    |       | B    |      | C    |      | D    |      | E    |       | F    |      | G    |      | H    |   | Pack Qty. |
|----------|------|---------------|------|------|-------|------|------|------|------|------|------|------|-------|------|------|------|------|------|---|-----------|
|          |      | lbf           | mm   | in   | mm    | in   | mm   | in   | mm   | in   | mm   | in   | mm    | in   | mm   | in   | mm   | in   |   |           |
| 493788   | 1    | 99            | 45.0 | 1.77 | 68.0  | 2.68 | 9.6  | 0.38 | 33.0 | 1.30 | 33.0 | 1.30 | 16.0  | 0.63 | 27.0 | 1.06 | 16.0 | 0.63 | 1 |           |
| 493790   | 5    | 300           | 79.5 | 3.13 | 139.8 | 5.50 | —    | —    | 24.6 | 0.97 | 91.0 | 3.58 | 35.0  | 1.38 | 56.0 | 2.20 | 41.0 | 1.61 | 1 |           |
| EMC36003 | 5    | 600           | 82.4 | 3.24 | 124.7 | 4.91 | 20.3 | 0.80 | 24.6 | 0.97 | 58.0 | 2.28 | 36.5  | 1.44 | 47.6 | 1.87 | 33.3 | 1.31 | 1 |           |
| 493792   | 3    | 700           | 69.8 | 2.75 | 153.0 | 6.02 | 17.5 | 0.69 | 55.6 | 2.19 | 41.3 | 1.63 | 109.5 | 4.31 | 76.2 | 3.00 | 35.0 | 1.38 | 1 |           |

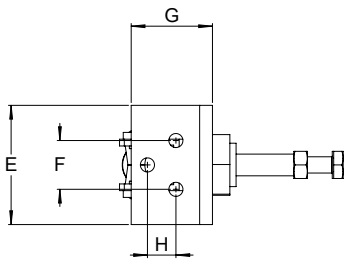
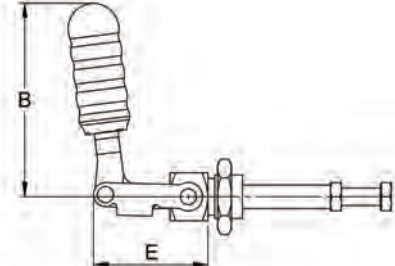
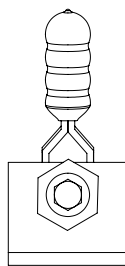
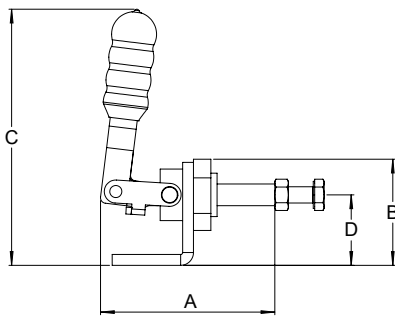
**Stainless Steel**

| Item No. | Type | Holding Force |      | A    |      | B    |     | C    |      | D   |      | E   |      | F    |      | G    |      | H    |   | Pack Qty. |
|----------|------|---------------|------|------|------|------|-----|------|------|-----|------|-----|------|------|------|------|------|------|---|-----------|
|          |      | lbf           | mm   | in   | mm   | in   | mm  | in   | mm   | in  | mm   | in  | mm   | in   | mm   | in   | mm   | in   |   |           |
| 493809   | 1    | 99            | 45.0 | 1.77 | 68.0 | 2.68 | 9.6 | 0.38 | 33.0 | 1.3 | 33.0 | 1.3 | 16.0 | 0.63 | 27.0 | 1.06 | 16.0 | 0.63 | 1 |           |

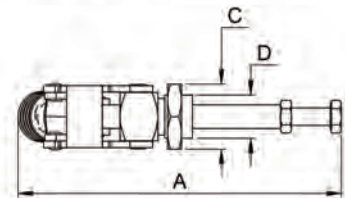


# PUSH PULL TOGGLE CLAMPS

TCPP Series  
Push Pull Toggle Clamp



Type 2



Type 4

**Specifications**

- Material:
  - Clamp: See Table
  - Grip: PVC (Red)

**Features**

- All body and linkage components on the light duty range are zinc plated to resist corrosion
- The heavy-duty range has ductile cast iron bases for strength and rigidity
- A close tolerance is maintained between the base and plunger to allow use for pin location and gauging as well as clamping applications
- Pivot points are fitted with hardened steel or stainless steel rivets to maintain accuracy and provide a long service life

**Steel**

| Item No. | Type | Holding Force |       | A    |      | B    |       | C    |      | D    |      | E    |      | F    |      | G    |      | H     |   | Pack Qty. |
|----------|------|---------------|-------|------|------|------|-------|------|------|------|------|------|------|------|------|------|------|-------|---|-----------|
|          |      | lbf           | mm    | in   | mm   | in   | mm    | in   | mm   | in   | mm   | in   | mm   | in   | mm   | in   | mm   | in    |   |           |
| 493789   | 2    | 200           | 63.8  | 2.51 | 38.0 | 1.50 | 96.0  | 3.78 | 26.0 | 1.02 | 44.0 | 1.73 | 18.0 | 0.71 | 30.0 | 1.18 | 10.0 | 0.39  | 1 |           |
| 493791   | 2    | 300           | 92.8  | 3.65 | 52.4 | 2.06 | 121.0 | 4.76 | 33.3 | 1.31 | 69.9 | 2.75 | 41.3 | 1.63 | 41.3 | 1.63 | 19.0 | 0.75  | 1 |           |
| EMC36204 | 4    | 300           | 126.0 | 4.96 | 88.9 | 3.5  | 30.0  | 1.18 | 20.0 | 0.79 | 52.8 | 2.08 | —    | —    | —    | —    | —    | —     | 1 |           |
| 493793   | 2    | 700           | 167.5 | 6.59 | 62.0 | 2.44 | 160.0 | 6.3  | 39.5 | 1.56 | 76.0 | 2.99 | 45.2 | 1.78 | 62.0 | 2.44 | 31.8 | 0.125 | 1 |           |

**Stainless Steel**

| Item No. | Type | Holding Force |       | A    |      | B   |      | C    |      | D    |      | E    |      | F    |      | G    |      | H    |   | Pack Qty. |
|----------|------|---------------|-------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|---|-----------|
|          |      | lbf           | mm    | in   | mm   | in  | mm   | in   | mm   | in   | mm   | in   | mm   | in   | mm   | in   | mm   | in   |   |           |
| 493810   | 2    | 200           | 63.8  | 2.51 | 38.0 | 1.5 | 96.0 | 3.78 | 26.0 | 1.02 | 44.0 | 1.73 | 18.0 | 0.71 | 30.0 | 1.18 | 10.0 | 0.39 | 1 |           |
| 493811   | 4    | 300           | 126.0 | 4.96 | 88.9 | 3.5 | 30.0 | 1.18 | 20.0 | 0.79 | 52.8 | 2.08 | —    | —    | —    | —    | —    | —    | 1 |           |



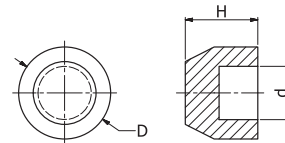
**Toggle Clamp Caps**

Specifications:

- Material: Neoprene

Features

- Replacement pad designed to avoid marking fragile or polished surfaces



| Item No. | Dimensions |      |      |      |      |      | Compatible with                        | Pack Qty. |
|----------|------------|------|------|------|------|------|----------------------------------------|-----------|
|          | d          |      | D    |      | H    |      |                                        |           |
|          | mm         | in   | mm   | in   | mm   | in   |                                        |           |
| 493812   | 5.5        | 0.21 | 11.0 | 0.43 | 8.5  | 0.33 | 493788, 493803, 493806, 493809         | 1         |
| 493813   | 6.5        | 0.25 | 12.5 | 0.49 | 10.5 | 0.41 | 493779, 493784, 493804, 493807         | 1         |
| 493814   | 8.5        | 0.33 | 15.5 | 0.61 | 12.0 | 0.47 | 493780, 493785, 493789, 493805, 493808 | 1         |
| 493815   | 11.0       | 0.43 | 19.0 | 0.74 | 15.0 | 0.59 | 493780, 493785, 493804, 493807, 493810 | 1         |

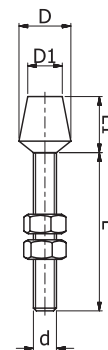
**Toggle Clamp Tipped Spindle**

Specifications

- Material: Neoprene/Steel

Features

- Designed to avoid marking fragile or polished surfaces



| Item No. | d  | Dimensions |      |      |      |      |      |      |      | Compatible with                        | Pack Qty. |
|----------|----|------------|------|------|------|------|------|------|------|----------------------------------------|-----------|
|          |    | L          |      | L1   |      | D    |      | D1   |      |                                        |           |
|          |    | mm         | in   | mm   | in   | mm   | in   | mm   | in   |                                        |           |
| 493816   | M4 | 32.0       | 1.25 | 10.0 | 0.39 | 12.0 | 0.47 | 8.0  | 0.31 | 493788                                 | 1         |
| 493817   | M5 | 20.0       | 0.78 | 12.0 | 0.47 | 14.0 | 0.55 | 11.0 | 0.43 | 493779, 493784                         | 1         |
| 493818   | M6 | 37.0       | 1.45 | 13.0 | 0.51 | 16.0 | 0.62 | 12.0 | 0.43 | 493780, 493785, 493789                 | 1         |
| 493819   | M8 | 55.0       | 2.16 | 20.0 | 0.78 | 17.0 | 0.66 | 12.0 | 0.47 | 493781, 493786, 493790, 493791, 493792 | 1         |

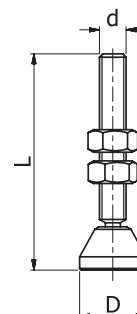
**Toggle Clamp Swivel Foot Spindle**

Specifications

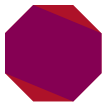
- Material: Steel

Features

- For use where a large area needs to be clamped or the clamping force needs to be spread over a larger area than just the spindle and surface area

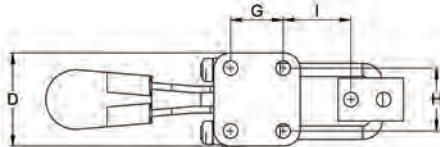
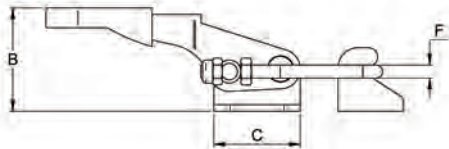
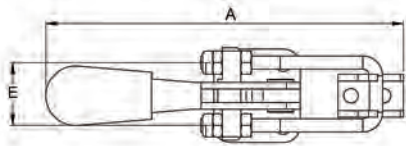
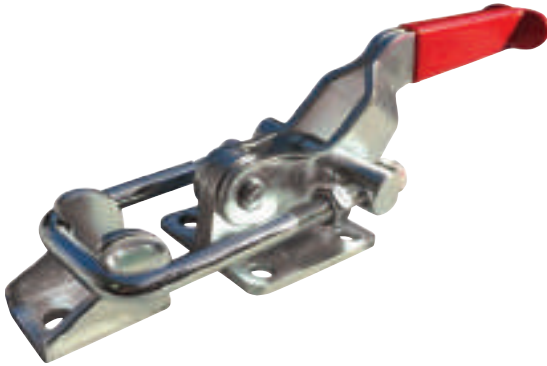


| Item No. | d  | Dimensions |      |      |      | Compatible with                        | Pack Qty. |
|----------|----|------------|------|------|------|----------------------------------------|-----------|
|          |    | D          |      | L    |      |                                        |           |
|          |    | mm         | in   | mm   | in   |                                        |           |
| 493820   | M5 | 12.0       | 0.47 | 40.0 | 1.57 | 493779, 493784                         | 1         |
| 493821   | M6 | 12.0       | 0.47 | 50.0 | 1.96 | 493780, 493785, 493789                 | 1         |
| 493822   | M8 | 20.0       | 0.78 | 65.0 | 2.55 | 493781, 493786, 493790, 493791, 493792 | 1         |

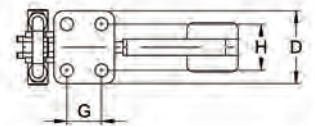
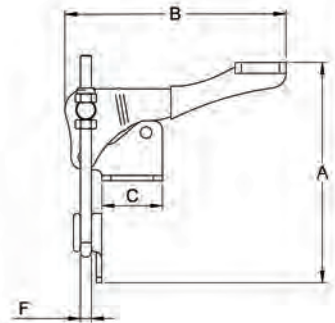
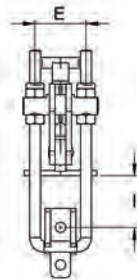


# LATCH TOGGLE CLAMPS

TCL Series  
Latch Toggle Clamps



Type 1



Type 2

Specifications

- Material:
  - Clamp: See Chart
  - Grip: PVC (Red)

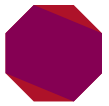
Features

- Hand grip with cushioned rib profile for improved user comfort
- All body and linkage components on the light duty range are zinc plated to resist corrosion
- Pivot points are fitted with hardened steel or stainless steel rivets to maintain accuracy and provide a long service life

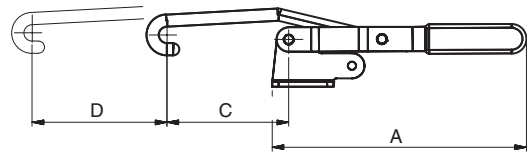
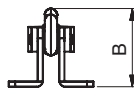
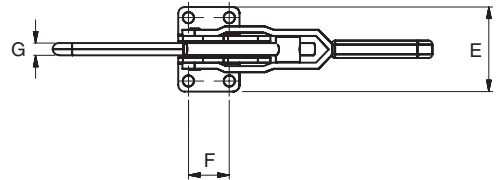
| Item No. | Type | Holding Force<br>lbf | A     |      | B     |      | C    |      | D    |      | E    |      | F   |      | G    |      | H    |      | I           |             | Pack Qty. |
|----------|------|----------------------|-------|------|-------|------|------|------|------|------|------|------|-----|------|------|------|------|------|-------------|-------------|-----------|
|          |      |                      | mm    | in   | mm    | in   | mm   | in   | mm   | in   | mm   | in   | mm  | in   | mm   | in   | mm   | in   | mm          | in          |           |
| 493796   | 1    | 360                  | 100.8 | 3.97 | 30.8  | 1.21 | 26.2 | 1.03 | 28.2 | 1.11 | 19.0 | 0.75 | 4.0 | 0.16 | 16.0 | 0.63 | 19.0 | 0.75 | 12.5 - 20.5 | 0.49 - 0.81 | 1         |
| EMC40323 | 1    | 360                  | 100.8 | 3.97 | 30.8  | 1.21 | 26.2 | 1.03 | 28.2 | 1.11 | 19.0 | 0.75 | 4.0 | 0.16 | 16.0 | 0.63 | 19.0 | 0.75 | 12.5 - 20.5 | 0.49 - 0.81 | 1         |
| EMC40334 | 2    | 500                  | 121.2 | 4.77 | 121.5 | 4.78 | 33.3 | 1.31 | 40.0 | 1.57 | 28.0 | 1.10 | 6.0 | 0.24 | 19.1 | 0.5  | 25.4 | 1.00 | 28.4 - 45.5 | 1.12 - 1.79 | 1         |
| 493797   | 1    | 700                  | 157.8 | 6.21 | 42.4  | 1.67 | 39.7 | 1.56 | 44.4 | 1.75 | 26.6 | 1.05 | 4.8 | 0.19 | 19.0 | 0.75 | 31.6 | 1.24 | 25.5 - 37.5 | 1.00 - 1.48 | 1         |
| 493798   | 1    | 2000                 | 214.1 | 8.43 | 75.6  | 2.98 | 60.3 | 2.37 | 54.0 | 2.13 | 44.5 | 1.75 | 8.0 | 0.31 | 41.3 | 1.63 | 38.1 | 1.50 | 19.5 - 38.5 | 0.77 - 1.52 | 1         |



# HOOK TOGGLE CLAMPS / PLIERS



## TCH Series Hook Toggle Clamps



### Specifications

- Material:
  - Clamp: Zinc Plated Steel
  - Grip: PVC (Red)

### Features

- Hand grip with cushioned rib profile for improved user comfort
- All body and linkage components on the light duty range are zinc plated to resist corrosion
- Pivot points are fitted with hardened steel or stainless steel rivets to maintain accuracy and provide a long service life

| Item No. | Holding Force |       | A    |      | B    |              | C           |       | D    |      | E    |      | F    |     | G    |   | Pack Qty. |
|----------|---------------|-------|------|------|------|--------------|-------------|-------|------|------|------|------|------|-----|------|---|-----------|
|          | lbf           | mm    | in   | mm   | in   | mm           | in          | mm    | in   | mm   | in   | mm   | in   | mm  | in   |   |           |
| 493794   | 375           | 138.4 | 5.45 | 37.6 | 1.48 | 52.1 - 63.5  | 2.05 - 2.50 | 120.7 | 4.75 | 49.3 | 1.94 | 19.1 | 0.75 | 8.0 | 0.32 | 1 |           |
| 493795   | 750           | 194.2 | 7.65 | 57.2 | 2.25 | 95.0 - 105.0 | 3.74 - 4.13 | 135.7 | 5.34 | 67.9 | 2.67 | 31.8 | 1.25 | 9.5 | 0.37 | 1 |           |

## TCP Series Plier Toggle Clamps



Type 1



Type 2



Type 3



Type 4

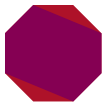
### Specifications

- Material:
  - Clamp: Zinc Plated Steel

### Features

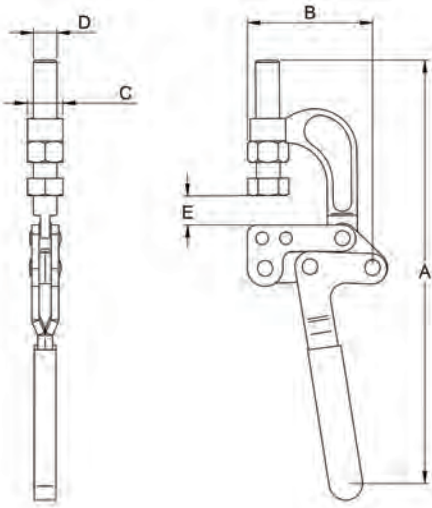
- Pivoting jaw allows a deep depth to open and close easily in awkward profiles
- The jaw spindle can be pre-set to achieve the optimum clamping distance and pressure
- Zinc plated finish to resist corrosion, profiled handles for operator comfort
- Spindles are supplied with a copper plated surface finish to resist weld splatter

| Item No. | Type | Holding Force |       | L    |      | L1   |              | W           |          | Thread Size | Quick Release | Pack Qty. |
|----------|------|---------------|-------|------|------|------|--------------|-------------|----------|-------------|---------------|-----------|
|          |      | lbf           | mm    | in   | mm   | in   | mm           | in          | UNC      |             |               |           |
| 493799   | 1    | 198           | 130.0 | 5.12 | 28.6 | 1.13 | 25.4 - 52.4  | 1.00 - 2.06 | 1/4"-20  | —           | 1             |           |
| 493800   | 2    | 350           | 165.1 | 6.50 | 44.4 | 1.75 | 31.8 - 65.1  | 1.25 - 2.56 | 5/16"-18 | —           | 1             |           |
| 493801   | 3    | 700           | 215.9 | 8.50 | 69.8 | 2.75 | 44.4 - 92.0  | 1.75 - 3.62 | 3/8"-16  | Yes         | 1             |           |
| 493802   | 4    | 700           | 216.0 | 8.50 | 69.8 | 2.75 | 76.2 - 123.8 | 3.00 - 4.87 | 3/8"-16  | Yes         | 1             |           |

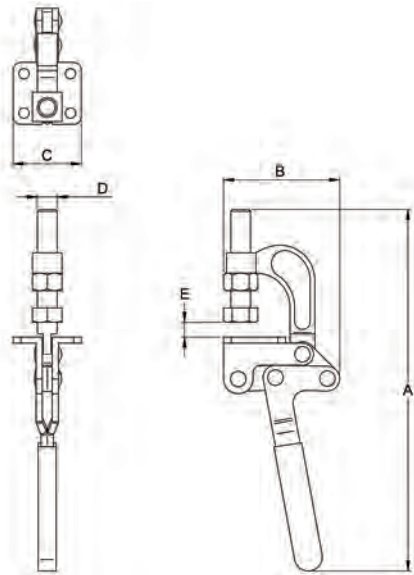


# F TYPE TOGGLE CLAMPS

TCF Series  
F Type Toggle Clamps



Type 1



Type 2

### Specifications

- Material:
  - Clamp: Zinc Plated Steel
  - Grip: PVC (Red)

### Features

- Hand grip with cushioned profile for improved user comfort

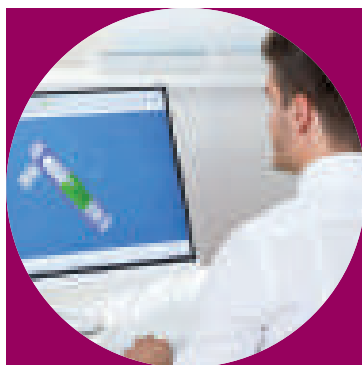
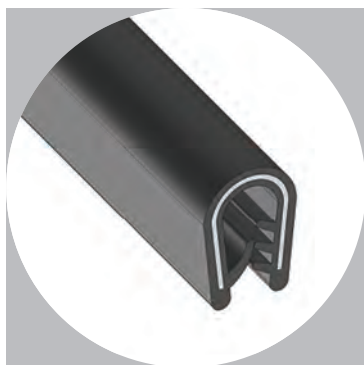
| Item No. | Type | Holding Force |       | A    |      | B    |      | C    |      | D   |       | E    |   | Pack Qty. |
|----------|------|---------------|-------|------|------|------|------|------|------|-----|-------|------|---|-----------|
|          |      | lbf           | mm    | in   | mm   | in   | mm   | in   | mm   | in  | mm    | in   |   |           |
| EMC80325 | 1    | 750           | 236.0 | 9.29 | 74.6 | 2.94 | 19.0 | 0.75 | 12.7 | 0.5 | 24.4  | 0.94 | 1 |           |
| EMC80379 | 2    | 750           | 233.1 | 9.18 | 74.9 | 2.95 | 44.0 | 1.73 | 12.7 | 0.5 | 20.59 | 0.81 | 1 |           |



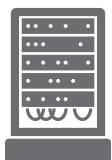
# ACCESS HARDWARE SOLUTIONS

Whatever your project demands, Essentra can help with a comprehensive range of high-quality Access Hardware and custom solutions for all your application requirements.

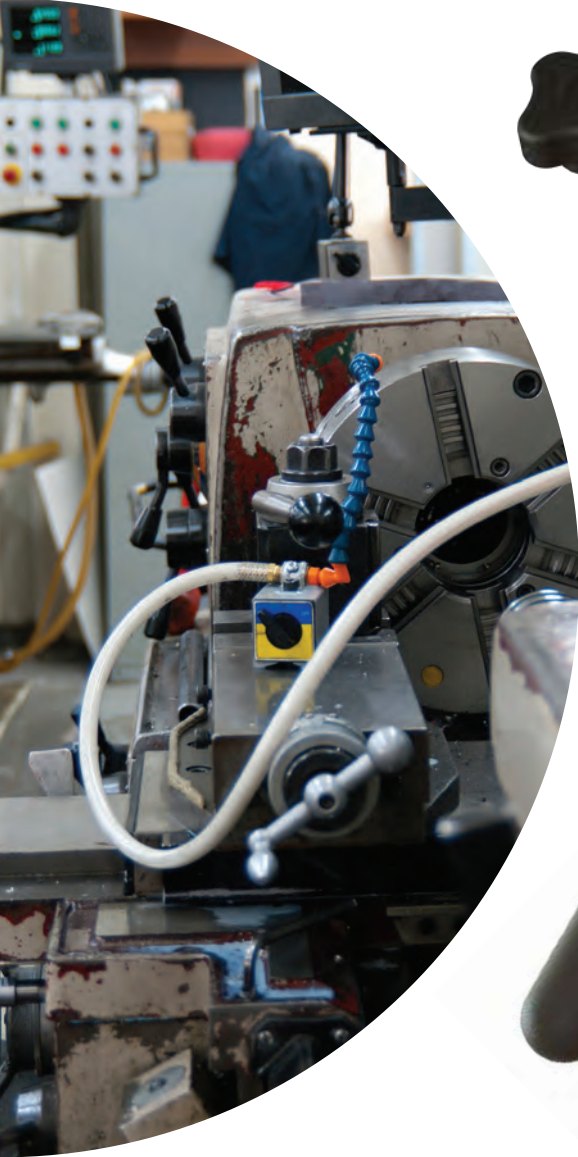
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# KNOBS, HANDLES & GRIPS



|                                                                                     |                                  |           |
|-------------------------------------------------------------------------------------|----------------------------------|-----------|
|    | 3-ARM CLAMPING KNOBS .....       | 486 - 487 |
|    | 4-ARM CLAMPING KNOBS .....       | 488 - 490 |
|    | STAR CLAMPING KNOBS .....        | 491 - 492 |
|    | FLUTED CLAMPING KNOBS .....      | 493 - 494 |
|    | T HANDLE CLAMPING KNOBS .....    | 495 - 496 |
|    | WING HANDLE CLAMPING KNOBS ..... | 497       |
|    | BALL KNOBS .....                 | 498 - 499 |
|    | TAPERED KNOBS.....               | 500 - 501 |
|    | PUSH PULL KNOBS .....            | 502 - 503 |
|   | SELF-ASSEMBLY KNOBS.....         | 504 - 505 |
|  | BRIDGE HANDLES.....              | 506 - 508 |
|  | ARCHED HANDLES .....             | 509       |
|  | WIRE PULL HANDLES .....          | 509 - 510 |
|  | TUBULAR HANDLES.....             | 510 - 511 |
|  | SNAP-IN HANDLES .....            | 512 - 513 |
|  | FLUSH HANDLES .....              | 513       |
|  | GRIPS.....                       | 514 - 515 |

# KNOBS, HANDLES & GRIPS

### 3-ARM CLAMPING KNOBS

**3P Series**  
**3-Prong Knobs**



Style 1



Style 2



Style 3



**Specifications**

- Knob Material: Polypropylene
- Insert Material: See Table
- Color: Black

**Features**

- Economical design for light to medium-duty securing and clamping applications
- Resistant to water and solvents
- Textured finish to help hide dirt and scratches in the field
- Impact resistant
- Stop Nut / Lock Nut provides anti-vibration locking mechanism



**Female Knobs**

| Item No.       | A     | Thread Size | B     | C     | D     | Style | Thread Type   | Insert Material | Plating Material | Bulk Pack Qty |
|----------------|-------|-------------|-------|-------|-------|-------|---------------|-----------------|------------------|---------------|
|                | in    |             |       |       |       |       |               |                 |                  |               |
| KN02---3P1--21 | 1.250 | 10-32       | 0.620 | 0.950 | 0.500 | 2     | Free Spinning | Steel           | Clear Zinc       | 1000          |
| KN4C---3P1--21 | 1.250 | 1/4-20      | 0.620 | 0.950 | 0.500 | 2     | Free Spinning | Steel           | Clear Zinc       | 1000          |
| KN4C---3P1B-21 | 1.250 | 1/4-20      | 0.620 | 0.950 | 0.500 | 1     | Blind         | Steel           | Clear Zinc       | 1000          |
| KN5C---3P1--22 | 1.250 | 5/16-18     | 0.620 | 0.950 | 0.500 | 2     | Free Spinning | Steel           | Yellow Zinc      | 1000          |
| KN04---3P4--21 | 1.750 | 10-24       | 0.750 | 1.050 | 0.490 | 2     | Free Spinning | Steel           | Clear Zinc       | 1200          |
| KN4C---3P4--21 | 1.750 | 1/4-20      | 0.750 | 1.050 | 0.490 | 2     | Free Spinning | Steel           | Clear Zinc       | 1200          |
| KN4C---3P4B-21 | 1.750 | 1/4-20      | 0.750 | 1.050 | 0.490 | 1     | Blind         | Steel           | Clear Zinc       | 1200          |
| KN4C---3P4L-21 | 1.750 | 1/4-20      | 0.750 | 1.050 | 0.490 | 2     | Stop Nut      | Steel           | Clear Zinc       | 1200          |
| KN5C---3P4--21 | 1.750 | 5/16-18     | 0.750 | 1.050 | 0.490 | 2     | Free Spinning | Steel           | Clear Zinc       | 1200          |
| KN5C---3P4L-21 | 1.750 | 5/16-18     | 0.750 | 1.050 | 0.490 | 2     | Stop Nut      | Steel           | Clear Zinc       | 1200          |
| KN6C---3P4--21 | 1.750 | 3/8-16      | 0.750 | 1.050 | 0.490 | 2     | Free Spinning | Steel           | Clear Zinc       | 1200          |
| KN6C---3P4B-21 | 1.750 | 3/8-16      | 0.750 | 1.050 | 0.490 | 1     | Blind         | Steel           | Clear Zinc       | 1200          |

**Male Knobs**

| Item No.        | A     | Thread Size | B     | C     | D     | Style | Stud Length | Insert Material | Plating Material | Bulk Pack Qty |
|-----------------|-------|-------------|-------|-------|-------|-------|-------------|-----------------|------------------|---------------|
|                 | in    |             |       |       |       |       | in          |                 |                  |               |
| KN4C07503P1--21 | 1.250 | 1/4-20      | 0.620 | 0.950 | 0.500 | 3     | 0.750       | Steel           | Clear Zinc       | 900           |
| KN4C10003P1--2R | 1.250 | 1/4-20      | 0.620 | 0.950 | 0.500 | 3     | 1.000       | Steel           | Clear Zinc       | 850           |
| KN0405003P4--21 | 1.750 | 10-24       | 0.750 | 1.050 | 0.490 | 3     | 0.500       | Steel           | Clear Zinc       | 1000          |
| KN4C07503P4--21 | 1.750 | 1/4-20      | 0.750 | 1.050 | 0.490 | 3     | 0.750       | Steel           | Clear Zinc       | 1000          |
| KN4C10003P4--21 | 1.750 | 1/4-20      | 0.750 | 1.050 | 0.490 | 3     | 1.000       | Steel           | Clear Zinc       | 1000          |
| KN4C15003P4--21 | 1.750 | 1/4-20      | 0.750 | 1.050 | 0.490 | 3     | 1.500       | Steel           | Clear Zinc       | 800           |
| KN4C17503P4--21 | 1.750 | 1/4-20      | 0.750 | 1.050 | 0.490 | 3     | 1.750       | Steel           | Clear Zinc       | 850           |
| KN4C20003P4--21 | 1.750 | 1/4-20      | 0.750 | 1.050 | 0.490 | 3     | 2.000       | Steel           | Clear Zinc       | 750           |
| KN5C05003P4--21 | 1.750 | 5/16-18     | 0.750 | 1.050 | 0.490 | 3     | 0.500       | Steel           | Clear Zinc       | 1000          |
| KN5C06253P4--21 | 1.750 | 5/16-18     | 0.750 | 1.050 | 0.490 | 3     | 0.625       | Steel           | Clear Zinc       | 500           |
| KN5C07503P4--21 | 1.750 | 5/16-18     | 0.750 | 1.050 | 0.490 | 3     | 0.750       | Steel           | Clear Zinc       | 500           |
| KN5C12503P4--21 | 1.750 | 5/16-18     | 0.750 | 1.050 | 0.490 | 3     | 1.250       | Steel           | Clear Zinc       | 300           |
| KN5C15003P4--21 | 1.750 | 5/16-18     | 0.750 | 1.050 | 0.490 | 3     | 1.500       | Steel           | Clear Zinc       | 400           |
| KN5C17503P4--21 | 1.750 | 5/16-18     | 0.750 | 1.050 | 0.490 | 3     | 1.750       | Steel           | Clear Zinc       | 600           |
| KN6C10003P4--2R | 1.750 | 3/8-16      | 0.750 | 1.050 | 0.490 | 3     | 1.000       | Steel           | Clear Zinc       | 400           |
| KN6C15003P4--21 | 1.750 | 3/8-16      | 0.750 | 1.050 | 0.490 | 3     | 1.500       | Steel           | Clear Zinc       | 400           |
| KN6C25003P4--21 | 1.750 | 3/8-16      | 0.750 | 1.050 | 0.490 | 3     | 2.500       | Steel           | Clear Zinc       | 275           |

**\*\*Other configurations, thread sizes, materials, and customizations available upon request.\*\***



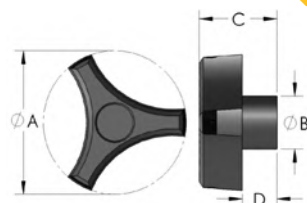
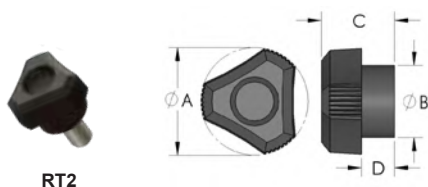
# CUSTOM SOLUTIONS AVAILABLE

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### 3-ARM CLAMPING KNOBS



#### RT Series Royal 3-Prong Knobs



#### Specifications

- Knob Material: See Table
- Insert Material: See Table
- Color: Black

#### Features

- Economical design for light to medium-duty securing and clamping applications
- Resistant to water and solvents
- Textured finish to help hide dirt and scratches in the field
- Impact resistant



#### Female Knobs

| Item No.        | A in  | Thread Size | B in  | C in  | D in  | Style | Thread Type   | Insert Material | Plating Material | Knob Material | Bulk Pack Qty |
|-----------------|-------|-------------|-------|-------|-------|-------|---------------|-----------------|------------------|---------------|---------------|
| KN5C----RT5B-22 | 2.000 | 5/16-18     | 0.740 | 1.100 | 0.490 | 1     | Blind         | Steel           | Yellow Zinc      | Polypropylene | 800           |
| KN5C----RT5--21 | 2.000 | 5/16-18     | 0.740 | 1.100 | 0.490 | 2     | Free Spinning | Steel           | Clear Zinc       | Polypropylene | 800           |
| KN6C----RT5--21 | 2.000 | 3/8-16      | 0.740 | 1.100 | 0.490 | 2     | Free Spinning | Steel           | Clear Zinc       | Polypropylene | 800           |
| KN6C----RT5B-21 | 2.000 | 3/8-16      | 0.740 | 1.100 | 0.490 | 1     | Blind         | Steel           | Clear Zinc       | Polypropylene | 800           |
| KN6C----RT7--21 | 2.500 | 3/8-16      | 0.740 | 1.120 | 0.480 | 2     | Free Spinning | Steel           | Clear Zinc       | Polypropylene | 500           |
| KN6C----RT7B-21 | 2.500 | 3/8-16      | 0.740 | 1.120 | 0.480 | 1     | Blind         | Steel           | Clear Zinc       | Polypropylene | 500           |

#### Male Knobs

| Item No.        | A in  | Thread Size | B in  | C in  | D in  | Style | Stud Length in | Insert Material | Plating Material | Knob Material | Bulk Pack Qty |
|-----------------|-------|-------------|-------|-------|-------|-------|----------------|-----------------|------------------|---------------|---------------|
| KN020250RT2-N21 | 0.750 | 10-32       | 0.500 | 0.510 | 0.230 | 3     | 0.250          | Steel           | Clear Zinc       | Nylon         | 3000          |
| KN020375RT2-N21 | 0.750 | 10-32       | 0.500 | 0.510 | 0.230 | 3     | 0.370          | Steel           | Clear Zinc       | Nylon         | 3000          |
| KN4C1000RT5--21 | 2.000 | 1/4-20      | 0.740 | 1.100 | 0.490 | 3     | 1.000          | Steel           | Clear Zinc       | Polypropylene | 500           |
| KN5C1000RT5--21 | 2.000 | 5/16-18     | 0.740 | 1.100 | 0.490 | 3     | 1.000          | Steel           | Clear Zinc       | Polypropylene | 250           |
| KN5C0750RT5--21 | 2.000 | 5/16-18     | 0.740 | 1.100 | 0.490 | 3     | 0.750          | Steel           | Clear Zinc       | Polypropylene | 800           |
| KN5C1250RT5--21 | 2.000 | 5/16-18     | 0.740 | 1.100 | 0.490 | 3     | 1.250          | Steel           | Clear Zinc       | Polypropylene | 300           |
| KN6C1500RT5--21 | 2.000 | 3/8-16      | 0.740 | 1.100 | 0.490 | 3     | 1.500          | Steel           | Clear Zinc       | Polypropylene | 500           |
| KN6C2000RT5--21 | 2.000 | 3/8-16      | 0.740 | 1.100 | 0.490 | 3     | 2.000          | Steel           | Clear Zinc       | Polypropylene | 500           |
| KN6C3500RT5--21 | 2.000 | 3/8-16      | 0.740 | 1.100 | 0.490 | 3     | 3.500          | Steel           | Clear Zinc       | Polypropylene | 150           |
| KN6C1250RT7--21 | 2.500 | 3/8-16      | 0.740 | 1.120 | 0.480 | 3     | 1.250          | Steel           | Clear Zinc       | Polypropylene | 400           |

\*\*Other configurations, thread sizes, materials, and customizations available upon request.\*\*

#### KNS Series 3-Arm Clamping Knobs



#### Specifications:

- Knob Material: Polypropylene
- Insert Material: Zinc Plated Steel
- Color: Black

#### Features:

- Economical design for light-duty securing and clamping applications
- Resistant to water and solvents



#### Female Knobs

| Item No. | A in  | A mm | Thread Size | Bulk Pack Qty |
|----------|-------|------|-------------|---------------|
| KNS1000A | 1.575 | 40.0 | 5/16 - 18   | 250           |
| KNS1100A | 2.362 | 60.0 | 5/16 - 18   | 250           |

#### Male Knobs

| Item No. | A     |      | Thread Size | Stud Length |      | Bulk Pack Qty |
|----------|-------|------|-------------|-------------|------|---------------|
|          | in    | mm   |             | in          | mm   |               |
| KNS1600A | 1.575 | 40.0 | 1/4 - 20    | 1.375       | 34.9 | 250           |
| KNS1700A | 1.575 | 40.0 | 5/16 - 18   | 0.500       | 12.7 | 250           |
| KNS1800A | 1.575 | 40.0 | 5/16 - 18   | 0.750       | 19.1 | 250           |
| KNS1900A | 1.575 | 40.0 | 5/16 - 18   | 1.375       | 34.9 | 250           |
| KNS2000A | 2.362 | 60.0 | 5/16 - 18   | 0.500       | 12.7 | 250           |
| KNS2100A | 2.362 | 60.0 | 5/16 - 18   | 0.750       | 19.1 | 250           |

## 4-ARM CLAMPING KNOBS

### 4P Series 4-Prong Knobs



#### Specifications

- Knob Material: Polypropylene
- Insert Material: See Table
- Color: Black

#### Features

- 4-Prong Knobs provide maximum grip and comfort
- Excellent for applications requiring high torque or heavy-duty clamping
- Resistant to water and solvents
- Textured finish to help hide dirt and scratches in the field
- Impact resistant
- Stop Nut / Lock Nut provides anti-vibration locking mechanism



#### Female Knobs

| Item No.        | A<br>in | Thread Size | B<br>in | C<br>in | D<br>in | Style | Thread Type   | Insert Material | Plating Material | Bulk Pack Qty |
|-----------------|---------|-------------|---------|---------|---------|-------|---------------|-----------------|------------------|---------------|
| KN4C----4P4--21 | 1.750   | 1/4-20      | 0.750   | 1.020   | 0.520   | 2     | Free Spinning | Steel           | Clear Zinc       | 1000          |
| KN4C----4P4B-21 | 1.750   | 1/4-20      | 0.750   | 1.020   | 0.520   | 1     | Blind         | Steel           | Clear Zinc       | 1000          |
| KN5C----4P4--21 | 1.750   | 5/16-18     | 0.750   | 1.020   | 0.520   | 2     | Free Spinning | Steel           | Clear Zinc       | 1000          |
| KN5C----4P4B-22 | 1.750   | 5/16-18     | 0.750   | 1.020   | 0.520   | 1     | Blind         | Steel           | Yellow Zinc      | 1000          |
| KN4C----4P7--21 | 2.500   | 1/4-20      | 0.980   | 1.130   | 0.480   | 2     | Free Spinning | Steel           | Clear Zinc       | 500           |
| KN4C----4P7B-21 | 2.500   | 1/4-20      | 0.980   | 1.130   | 0.480   | 1     | Blind         | Steel           | Clear Zinc       | 500           |
| KN5C----4P7--21 | 2.500   | 5/16-18     | 0.980   | 1.130   | 0.480   | 2     | Free Spinning | Steel           | Clear Zinc       | 500           |
| KN5C----4P7B-22 | 2.500   | 5/16-18     | 0.980   | 1.130   | 0.480   | 1     | Blind         | Steel           | Yellow Zinc      | 500           |
| KN6C----4P7--21 | 2.500   | 3/8-16      | 0.980   | 1.130   | 0.480   | 2     | Free Spinning | Steel           | Clear Zinc       | 500           |
| KN6C----4P7B-21 | 2.500   | 3/8-16      | 0.980   | 1.130   | 0.480   | 1     | Blind         | Steel           | Clear Zinc       | 500           |
| KN6C----4P7L-21 | 2.500   | 3/8-16      | 0.980   | 1.130   | 0.480   | 2     | Stop Nut      | Steel           | Clear Zinc       | 500           |
| KN8C----4P7--21 | 2.500   | 1/2-13      | 0.980   | 1.130   | 0.480   | 2     | Free Spinning | Steel           | Clear Zinc       | 500           |
| KN8C----4P7B-21 | 2.500   | 1/2-13      | 0.980   | 1.130   | 0.480   | 1     | Blind         | Steel           | Clear Zinc       | 500           |

#### Male Knobs

| Item No.        | A<br>in | Thread Size | B<br>in | C<br>in | D<br>in | Style | Stud Length<br>in | Insert Material | Plating Material | Bulk Pack Qty |
|-----------------|---------|-------------|---------|---------|---------|-------|-------------------|-----------------|------------------|---------------|
| KN5C07504P4--21 | 1.750   | 5/16-18     | 0.750   | 1.020   | 0.520   | 3     | 0.750             | Steel           | Clear Zinc       | 400           |
| KN5C10004P4--21 | 1.750   | 5/16-18     | 0.750   | 1.020   | 0.520   | 3     | 1.000             | Steel           | Clear Zinc       | 350           |
| KN5C25004P4--21 | 1.750   | 5/16-18     | 0.750   | 1.020   | 0.520   | 3     | 2.500             | Steel           | Clear Zinc       | 200           |
| KN6C30004P4--21 | 1.750   | 3/8-16      | 0.750   | 1.020   | 0.520   | 3     | 3.000             | Steel           | Clear Zinc       | 120           |
| KN4C05004P7--21 | 2.500   | 1/4-20      | 0.980   | 1.130   | 0.480   | 3     | 0.500             | Steel           | Clear Zinc       | 500           |
| KN4C10004P7--21 | 2.500   | 1/4-20      | 0.980   | 1.130   | 0.480   | 3     | 1.000             | Steel           | Clear Zinc       | 400           |
| KN5C05004P7--21 | 2.500   | 5/16-18     | 0.980   | 1.130   | 0.480   | 3     | 0.500             | Steel           | Clear Zinc       | 450           |
| KN5C10004P7--21 | 2.500   | 5/16-18     | 0.980   | 1.130   | 0.480   | 3     | 1.000             | Steel           | Clear Zinc       | 400           |
| KN6C07504P7--21 | 2.500   | 3/8-16      | 0.980   | 1.130   | 0.480   | 3     | 0.750             | Steel           | Clear Zinc       | 450           |
| KN6C10004P7--21 | 2.500   | 3/8-16      | 0.980   | 1.130   | 0.480   | 3     | 1.000             | Steel           | Clear Zinc       | 400           |
| KN6C12504P7--21 | 2.500   | 3/8-16      | 0.980   | 1.130   | 0.480   | 3     | 1.250             | Steel           | Clear Zinc       | 400           |
| KN6C15004P7--21 | 2.500   | 3/8-16      | 0.980   | 1.130   | 0.480   | 3     | 1.500             | Steel           | Clear Zinc       | 350           |
| KN6C25004P7--21 | 2.500   | 3/8-16      | 0.980   | 1.130   | 0.480   | 3     | 2.500             | Steel           | Clear Zinc       | 250           |

\*\*Other configurations, thread sizes, materials, and customizations available upon request.\*\*



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# 4-ARM CLAMPING KNOBS



## 4S Series 4-Star Knobs



Style 1



Style 3



**Specifications**

- Knob Material: Polypropylene
- Insert Material: See Table
- Color: Black

**Features**

- 4-Star Knobs provide maximum grip and comfort
- Available in two tone or soft touch material
- Excellent for applications requiring high torque or heavy-duty clamping
- Impact resistant



**Female Knobs**

| Item No.       | A<br>in | Thread Size | B<br>in | C<br>in | D<br>in | Style | Thread Type | Insert Material | Plating Material | Bulk Pack Qty |
|----------------|---------|-------------|---------|---------|---------|-------|-------------|-----------------|------------------|---------------|
| KN4C---4S2B-90 | 1.400   | 1/4-20      | 0.550   | 0.640   | 0.180   | 1     | Blind       | Brass           | Plain            | 700           |
| KN4C---4S4BL22 | 1.730   | 1/4-20      | 0.750   | 0.820   | 0.250   | 1     | Stop Nut    | Steel           | Yellow Zinc      | 400           |

**Male Knobs**

| Item No.        | A<br>in | Thread Size | B<br>in | C<br>in | D<br>in | Style | Stud Length<br>in | Insert Material | Plating Material | Bulk Pack Qty |
|-----------------|---------|-------------|---------|---------|---------|-------|-------------------|-----------------|------------------|---------------|
| KN0432504S1--21 | 1.150   | 10-24       | 0.500   | 0.650   | 0.250   | 3     | 3.250             | Steel           | Clear Zinc       | 500           |
| KN4C06254S1--90 | 1.150   | 1/4-20      | 0.500   | 0.650   | 0.250   | 3     | 0.620             | Brass           | Plain            | 1000          |
| KN4C03754S2--21 | 1.400   | 1/4-20      | 0.550   | 0.640   | 0.180   | 3     | 0.370             | Steel           | Clear Zinc       | 700           |
| KN5C20004S2--21 | 1.400   | 5/16-18     | 0.550   | 0.640   | 0.180   | 3     | 2.000             | Steel           | Clear Zinc       | 400           |
| KN4C05004S4--21 | 1.730   | 1/4-20      | 0.750   | 0.820   | 0.250   | 3     | 0.500             | Steel           | Clear Zinc       | 800           |
| KN5C05004S4--21 | 1.730   | 5/16-18     | 0.750   | 0.820   | 0.250   | 3     | 0.500             | Steel           | Clear Zinc       | 800           |

\*\*Other configurations, thread sizes, materials, and customizations available upon request.\*\*

## 4S Series

### Soft Touch 4-Star Knobs



Style 1

Style 3



**Specifications**

- Knob Material: TPE (Rubber) Overlay w/ Polypropylene Base
- Insert Material: Steel - Clear Zinc
- Color: Black

**Features**

- 4-Star Knobs provide maximum grip and comfort
- Excellent for applications requiring high torque or heavy-duty clamping
- Impact resistant mechanism



**Female Knobs**

| Item No.       | A<br>in | Thread Size | B<br>in | C<br>in | D<br>in | Style | Thread Type | Bulk Pack Qty |
|----------------|---------|-------------|---------|---------|---------|-------|-------------|---------------|
| KN02---4S2BS21 | 1.400   | 10-32       | 0.550   | 0.640   | 0.180   | 1     | Blind       | 800           |
| KN4C---4S2BS21 | 1.400   | 1/4-20      | 0.550   | 0.640   | 0.180   | 1     | Blind       | 700           |
| KN5C---4S4BS21 | 1.730   | 5/16-18     | 0.750   | 0.820   | 0.250   | 1     | Blind       | 375           |

**Male Knobs**

| Item No.        | A<br>in | Thread Size | B<br>in | C<br>in | D<br>in | Style | Stud Length<br>in | Bulk Pack Qty |
|-----------------|---------|-------------|---------|---------|---------|-------|-------------------|---------------|
| KN0205004S2-S21 | 1.400   | 10-32       | 0.550   | 0.640   | 0.180   | 3     | 0.500             | 1000          |
| KN0207504S2-S21 | 1.400   | 10-32       | 0.550   | 0.640   | 0.180   | 3     | 0.750             | 1000          |
| KN4C03754S2-S21 | 1.400   | 1/4-20      | 0.550   | 0.640   | 0.180   | 3     | 0.370             | 600           |
| KN4C06254S2-S21 | 1.400   | 1/4-20      | 0.550   | 0.640   | 0.180   | 3     | 0.630             | 500           |
| KN4C12504S2-S21 | 1.400   | 1/4-20      | 0.550   | 0.640   | 0.180   | 3     | 1.250             | 500           |
| KN0207504S4-S21 | 1.730   | 10-32       | 0.750   | 0.820   | 0.250   | 3     | 0.750             | 650           |
| KN5C05004S4-S21 | 1.730   | 5/16-18     | 0.750   | 0.820   | 0.250   | 3     | 0.500             | 350           |
| KN5C07504S4-S21 | 1.730   | 5/16-18     | 0.750   | 0.820   | 0.250   | 3     | 0.750             | 350           |
| KN5C25004S4-S21 | 1.730   | 5/16-18     | 0.750   | 0.820   | 0.250   | 3     | 2.500             | 200           |
| KN4C15004S5-S21 | 2.000   | 1/4-20      | 0.750   | 0.820   | 0.250   | 3     | 1.500             | 400           |

\*\*Other configurations, thread sizes, materials, and customizations available upon request.\*\*

## 4-ARM CLAMPING KNOBS

### KNS Series 4-Arm Clamping Knobs



**Specifications:**

- Knob Material: Polypropylene
- Insert Material: Zinc Plated Steel
- Color: Black

**Features:**

- Economical design for light-duty securing and clamping applications
- Resistant to water and solvents



#### Female Knobs

| Item No. | A     |      | Thread Size | Bulk Pack Qty |
|----------|-------|------|-------------|---------------|
|          | in    | mm   |             |               |
| KNS1200A | 1.575 | 40.0 | 1/4 - 20    | 250           |
| KNS1300A | 2.362 | 60.0 | 5/16 - 18   | 250           |

#### Male Knobs

| Item No. | A     |      | Thread Size | Stud Length |      | Style | Bulk Pack Qty |
|----------|-------|------|-------------|-------------|------|-------|---------------|
|          | in    | mm   |             | in          | mm   |       |               |
| KNS2200A | 1.575 | 40.0 | 1/4 - 20    | 0.750       | 19.1 | 2     | 250           |
| KNS2300A | 1.575 | 40.0 | 1/4 - 20    | 1.375       | 34.9 | 2     | 250           |
| KNS2400A | 1.575 | 40.0 | 5/16 - 18   | 0.500       | 12.7 | 2     | 250           |
| KNS2500A | 1.575 | 40.0 | 5/16 - 18   | 0.750       | 19.1 | 2     | 250           |
| KNS2600A | 1.575 | 40.0 | 5/16 - 18   | 1.000       | 25.4 | 2     | 250           |
| KNS2700A | 1.575 | 40.0 | 5/16 - 18   | 1.375       | 34.9 | 2     | 250           |
| KNS2800A | 2.362 | 60.0 | 5/16 - 18   | 0.750       | 19.1 | 2     | 250           |
| KNS2900A | 2.362 | 60.0 | 5/16 - 18   | 1.500       | 38.1 | 2     | 250           |

### KSP Series 4-Arm Clamping Knobs



**Specifications:**

- Knob Material: Phenolic
- Insert Material: Aluminum or Brass Insert or Zinc Plated Steel Stud
- Color: Black

**Features:**

- 4-Lobed Knobs provide maximum grip and comfort
- High-gloss finish
- High impact resistance
- Resistant to oils, fuels and greases
- Excellent thermal and electrical resistance



#### Female Knobs

| Item No. | A     |      | Thread Size | Style | Type      | Thread Material | Bulk Pack Qty |
|----------|-------|------|-------------|-------|-----------|-----------------|---------------|
|          | in    | mm   |             |       |           |                 |               |
| KSP1000A | 1.969 | 50.0 | 5/16 - 18   | 2     | Blind     | Aluminum        | 100           |
| KSP1100A | 1.969 | 50.0 | 5/16 - 18   | 3     | Thru Hole | Brass           | 100           |
| KSP1200A | 2.362 | 60.0 | 3/8 - 16    | 2     | Blind     | Aluminum        | 100           |
| KSP1300A | 2.362 | 60.0 | 3/8 - 16    | 3     | Thru Hole | Brass           | 100           |
| KSP1400A | 3.150 | 80.0 | 1/2 - 13    | 2     | Blind     | Aluminum        | 100           |
| KSP1500A | 3.150 | 80.0 | 1/2 - 13    | 3     | Thru Hole | Brass           | 100           |

#### Male Knobs

| Item No. | A     |      | Thread Size | Stud Length |      | Style | Bulk Pack Qty |
|----------|-------|------|-------------|-------------|------|-------|---------------|
|          | in    | mm   |             | in          | mm   |       |               |
| KSP2000A | 1.969 | 50.0 | 5/16 - 18   | 0.984       | 25.0 | 1     | 100           |
| KSP2100A | 2.362 | 60.0 | 3/8 - 16    | 1.181       | 30.0 | 1     | 100           |
| KSP2200A | 3.150 | 80.0 | 1/2 - 13    | 1.575       | 40.0 | 1     | 100           |

# STAR CLAMPING KNOBS



## 5S Series 5-Star Knobs



### Specifications

- Knob Material: Polypropylene
- Insert Material: See Table
- Color: Black

### Features

- 5-Star Knobs provide maximum grip and comfort
- Economical design for light to heavy-duty securing and clamping applications
- Resistant to water and solvents
- Textured finish to help hide dirt and scratches in the field
- Impact resistant
- Stop Nut / Lock Nut provides anti-vibration locking mechanism



### Female Knobs

| Item No.        | A     | Thread Size | B     | C     | D     | Style | Thread Type   | Insert Material | Plating Material | Bulk Pack Qty |
|-----------------|-------|-------------|-------|-------|-------|-------|---------------|-----------------|------------------|---------------|
|                 | in    |             | in    | in    | in    |       |               |                 |                  |               |
| KN4C----5S2--21 | 1.380 | 1/4-20      | 0.860 | 1.150 | 0.700 | 2     | Free Spinning | Steel           | Clear Zinc       | 1000          |
| KN4C----5S2B-21 | 1.380 | 1/4-20      | 0.860 | 1.200 | 0.750 | 1     | Blind         | Steel           | Clear Zinc       | 500           |
| KN4C----5S2L-21 | 1.380 | 1/4-20      | 0.860 | 1.150 | 0.700 | 2     | Stop Nut      | Steel           | Clear Zinc       | 1000          |
| KN5C----5S2B-22 | 1.380 | 5/16-18     | 0.860 | 1.200 | 0.750 | 1     | Blind         | Steel           | Yellow Zinc      | 450           |
| KN5C----5S2L-21 | 1.380 | 5/16-18     | 0.860 | 1.150 | 0.700 | 2     | Stop Nut      | Steel           | Clear Zinc       | 475           |
| KN4C----5S3A-21 | 1.750 | 1/4-20      | 0.880 | 1.170 | 0.720 | 2     | Free Spinning | Steel           | Clear Zinc       | 350           |
| KN4C----5S3B-21 | 1.750 | 1/4-20      | 0.880 | 1.250 | 0.750 | 1     | Blind         | Steel           | Clear Zinc       | 350           |
| KN4C----5S3L-21 | 1.750 | 1/4-20      | 0.880 | 1.250 | 0.750 | 2     | Stop Nut      | Steel           | Clear Zinc       | 600           |
| KN5C----5S3A-21 | 1.750 | 5/16-18     | 0.880 | 1.170 | 0.720 | 2     | Free Spinning | Steel           | Clear Zinc       | 350           |
| KN5C----5S3B-22 | 1.750 | 5/16-18     | 0.880 | 1.250 | 0.750 | 1     | Blind         | Steel           | Yellow Zinc      | 300           |
| KN5C----5S3L-21 | 1.750 | 5/16-18     | 0.880 | 1.250 | 0.750 | 2     | Stop Nut      | Steel           | Clear Zinc       | 300           |
| KN4C----5S4--21 | 2.250 | 1/4-20      | 0.980 | 0.610 | 0.120 | 2     | Free Spinning | Steel           | Clear Zinc       | 600           |
| KN4C----5S4L-21 | 2.250 | 1/4-20      | 0.980 | 0.610 | 0.120 | 2     | Stop Nut      | Steel           | Clear Zinc       | 600           |
| KN4C----5SA--21 | 2.250 | 1/4-20      | 0.980 | 1.000 | 0.470 | 2     | Free Spinning | Steel           | Clear Zinc       | 500           |
| KN4C----5SAB-21 | 2.250 | 1/4-20      | 0.980 | 1.000 | 0.470 | 1     | Blind         | Steel           | Clear Zinc       | 450           |
| KN5C----5S4--21 | 2.250 | 5/16-18     | 0.980 | 0.610 | 0.120 | 2     | Free Spinning | Steel           | Clear Zinc       | 600           |
| KN5C----5SA--21 | 2.250 | 5/16-18     | 0.980 | 1.000 | 0.470 | 2     | Free Spinning | Steel           | Clear Zinc       | 500           |
| KN5C----5SAB-22 | 2.250 | 5/16-18     | 0.980 | 1.000 | 0.470 | 1     | Blind         | Steel           | Yellow Zinc      | 500           |
| KN5C----5SDXW21 | 2.250 | 5/16-18     | 0.980 | 1.060 | 0.560 | 2     | Stop Nut      | Steel           | Clear Zinc       | 500           |
| KN6C----5S4--21 | 2.250 | 3/8-16      | 0.980 | 0.610 | 0.120 | 2     | Free Spinning | Steel           | Clear Zinc       | 600           |
| KN6C----5SAL-21 | 2.250 | 3/8-16      | 0.980 | 1.000 | 0.470 | 2     | Stop Nut      | Steel           | Clear Zinc       | 500           |
| KN6C----5SAB-21 | 2.250 | 3/8-16      | 0.980 | 1.000 | 0.470 | 1     | Blind         | Steel           | Clear Zinc       | 500           |
| KN6C----5SB--21 | 2.250 | 3/8-16      | 0.980 | 0.730 | 0.250 | 2     | Free Spinning | Steel           | Clear Zinc       | 575           |

### Male Knobs

| Item No.         | A     | Thread Size | B     | C     | D     | Style | Stud Length | Insert Material | Plating Material | Bulk Pack Qty |
|------------------|-------|-------------|-------|-------|-------|-------|-------------|-----------------|------------------|---------------|
|                  | in    |             | in    | in    | in    |       | in          |                 |                  |               |
| KN4C05005S2--21  | 1.380 | 1/4-20      | 0.860 | 1.150 | 0.700 | 3     | 0.500       | Steel           | Clear Zinc       | 400           |
| KN4C10005S2--21  | 1.380 | 1/4-20      | 0.860 | 1.150 | 0.700 | 3     | 1.000       | Steel           | Clear Zinc       | 400           |
| KN5C15005S2--21  | 1.380 | 5/16-18     | 0.860 | 1.150 | 0.700 | 3     | 1.500       | Steel           | Clear Zinc       | 350           |
| KN4C05005S3--21  | 1.750 | 1/4-20      | 0.880 | 1.250 | 0.750 | 3     | 0.500       | Steel           | Clear Zinc       | 250           |
| KN4C07505S3--21  | 1.750 | 1/4-20      | 0.880 | 1.250 | 0.750 | 3     | 0.750       | Steel           | Clear Zinc       | 250           |
| KN4C10005S3--21  | 1.750 | 1/4-20      | 0.880 | 1.250 | 0.750 | 3     | 1.000       | Steel           | Clear Zinc       | 250           |
| KN4C15005S3--21  | 1.750 | 1/4-20      | 0.880 | 1.250 | 0.750 | 3     | 1.500       | Steel           | Clear Zinc       | 225           |
| KN5C10005S3A--21 | 1.750 | 5/16-18     | 0.880 | 0.990 | 0.490 | 3     | 1.000       | Steel           | Clear Zinc       | 300           |
| KN5C20005S3--21  | 1.750 | 5/16-18     | 0.880 | 1.250 | 0.750 | 3     | 2.000       | Steel           | Clear Zinc       | 200           |
| KN5C25005S3--21  | 1.750 | 5/16-18     | 0.880 | 1.250 | 0.750 | 3     | 2.500       | Steel           | Clear Zinc       | 200           |
| KN4C06255S4-X21  | 2.250 | 1/4-20      | 0.980 | 0.610 | 0.120 | 3     | 0.620       | Steel           | Clear Zinc       | 500           |
| KN4C10005S4--21  | 2.250 | 1/4-20      | 0.980 | 0.610 | 0.120 | 3     | 1.000       | Steel           | Clear Zinc       | 500           |
| KN4C15005S4--21  | 2.250 | 1/4-20      | 0.980 | 0.610 | 0.120 | 3     | 1.500       | Steel           | Clear Zinc       | 400           |
| KN4C17505S4--21  | 2.250 | 1/4-20      | 0.980 | 0.610 | 0.120 | 3     | 1.750       | Steel           | Clear Zinc       | 400           |
| KN5C07505S4--21  | 2.250 | 5/16-18     | 0.980 | 0.610 | 0.120 | 3     | 0.750       | Steel           | Clear Zinc       | 500           |
| KN5C10005S4--21  | 2.250 | 5/16-18     | 0.980 | 0.610 | 0.120 | 3     | 1.000       | Steel           | Clear Zinc       | 500           |
| KN5C15005S4--21  | 2.250 | 5/16-18     | 0.980 | 0.610 | 0.120 | 3     | 1.500       | Steel           | Clear Zinc       | 500           |
| KN5C20005SA--21  | 2.250 | 5/16-18     | 0.980 | 1.000 | 0.470 | 3     | 2.000       | Steel           | Clear Zinc       | 350           |
| KN5C40005SA--21  | 2.250 | 5/16-18     | 0.980 | 1.000 | 0.470 | 3     | 4.000       | Steel           | Clear Zinc       | 250           |
| KN6C10005S4--21  | 2.250 | 3/8-16      | 0.980 | 0.610 | 0.120 | 3     | 1.000       | Steel           | Clear Zinc       | 450           |
| KN6C10005SA--21  | 2.250 | 3/8-16      | 0.980 | 1.000 | 0.470 | 3     | 1.000       | Steel           | Clear Zinc       | 400           |
| KN6C15005S4--21  | 2.250 | 3/8-16      | 0.980 | 0.610 | 0.120 | 3     | 1.500       | Steel           | Clear Zinc       | 400           |
| KN6C40005SA--21  | 2.250 | 3/8-16      | 0.980 | 1.000 | 0.470 | 3     | 4.000       | Steel           | Clear Zinc       | 250           |
| KN8C10005SA--21  | 2.250 | 1/2-13      | 0.980 | 1.000 | 0.470 | 3     | 1.000       | Steel           | Clear Zinc       | 130           |
| KN8C15005SA--21  | 2.250 | 1/2-13      | 0.980 | 1.000 | 0.470 | 3     | 1.500       | Steel           | Clear Zinc       | 120           |
| KN8C22005SA--21  | 2.250 | 1/2-13      | 0.980 | 1.000 | 0.470 | 3     | 2.200       | Steel           | Clear Zinc       | 100           |

\*\*Other configurations, thread sizes, materials, and customizations available upon request.\*\*

# STAR CLAMPING KNOBS

## R Series Ergo Star Knobs



Style 1



Style 2

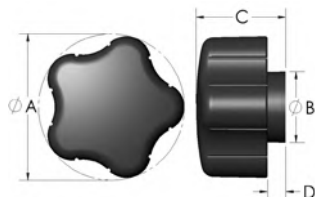


### Specifications

- Knob Material: Polypropylene
- Insert Material: See Table
- Color: Black

### Features

- Economical design for light to heavy-duty securing and clamping applications
- Textured finish to help hide dirt and scratches in the field
- Impact resistant



### Female Knobs

| Item No.        | A<br>in | Thread Size | B<br>in | C<br>in | D<br>in | Style | Thread Type   | Insert Material | Plating Material | Bulk Pack Qty |
|-----------------|---------|-------------|---------|---------|---------|-------|---------------|-----------------|------------------|---------------|
| KN4C----R2I-21  | 1.310   | 1/4-20      | 0.750   | 1.000   | 0.250   | 2     | Free Spinning | Steel           | Clear Zinc       | 350           |
| KN5C----R2IB-22 | 1.310   | 5/16-18     | 0.750   | 1.000   | 0.250   | 1     | Free Spinning | Steel           | Yellow Zinc      | 225           |
| KN5C----R3I-22  | 1.580   | 1/4-20      | 0.740   | 1.150   | 0.250   | 2     | Free Spinning | Steel           | Yellow Zinc      | 250           |
| KN5C----R3IB-22 | 1.580   | 5/16-18     | 0.740   | 1.150   | 0.250   | 1     | Free Spinning | Steel           | Yellow Zinc      | 250           |
| KN6C----R3IB-21 | 1.580   | 3/8-16      | 0.740   | 1.150   | 0.250   | 1     | Free Spinning | Steel           | Clear Zinc       | 350           |
| KN6C----R5I-21  | 1.890   | 3/8-16      | 1.000   | 1.220   | 0.250   | 2     | Free Spinning | Steel           | Clear Zinc       | 200           |
| KN6C----R5IB-21 | 1.890   | 3/8-16      | 1.000   | 1.220   | 0.250   | 1     | Free Spinning | Steel           | Clear Zinc       | 125           |
| KN8C----R5IB-21 | 1.890   | 1/2-13      | 1.000   | 1.220   | 0.250   | 1     | Free Spinning | Steel           | Clear Zinc       | 500           |

\*\*Other configurations, thread sizes, materials, and customizations available upon request.\*\*

## R Series Soft Touch Ergo Star Knobs



Style 1



Style 3

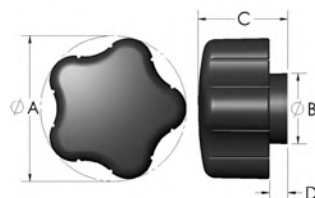


### Specifications

- Knob Material: TPE (Rubber) Overlay with Polypropylene Base
- Insert Material: See Table
- Color: Black

### Features

- 5-Star Soft Touch Knobs provide maximum grip and comfort
- Economical design for light to heavy-duty securing and clamping applications
- Resistant to water and solvents
- Textured finish to help hide dirt and scratches in the field
- Impact resistant
- Polypropylene base provides stability and strength



### Female Knobs

| Item No.        | A<br>in | Thread Size | B<br>in | C<br>in | D<br>in | Style | Thread Type   | Insert Material | Plating Material | Bulk Pack Qty |
|-----------------|---------|-------------|---------|---------|---------|-------|---------------|-----------------|------------------|---------------|
| KN4C----R3-BS21 | 1.570   | 1/4-20      | 0.740   | 1.150   | 0.250   | 1     | Free Spinning | Steel           | Clear Zinc       | 550           |
| KN5C----R3SB-22 | 1.570   | 5/16-18     | 0.740   | 1.150   | 0.250   | 1     | Free Spinning | Steel           | Yellow Zinc      | 575           |
| KN4C----R5SB-21 | 1.890   | 1/4-20      | 1.000   | 1.170   | 0.180   | 1     | Free Spinning | Steel           | Clear Zinc       | 300           |
| KN5C----R5SB-22 | 1.890   | 5/16-18     | 1.000   | 1.170   | 0.180   | 1     | Free Spinning | Steel           | Yellow Zinc      | 300           |
| KN6C----R5SB-21 | 1.890   | 3/8-16      | 1.000   | 1.170   | 0.180   | 1     | Free Spinning | Steel           | Clear Zinc       | 300           |
| KN6C----R7SB-21 | 2.420   | 3/8-16      | 1.000   | 1.260   | 0.200   | 1     | Free Spinning | Steel           | Clear Zinc       | 200           |
| KN8C----R7-BS21 | 2.420   | 1/2-13      | 1.000   | 1.260   | 0.200   | 1     | Free Spinning | Steel           | Clear Zinc       | 200           |

### Male Knobs

| Item No.       | A<br>in | Thread Size | B<br>in | C<br>in | D<br>in | Style | Stud Length<br>in | Insert Material | Plating Material | Bulk Pack Qty |
|----------------|---------|-------------|---------|---------|---------|-------|-------------------|-----------------|------------------|---------------|
| KN4C0500R3-S21 | 1.570   | 1/4-20      | 0.740   | 1.150   | 0.250   | 3     | 0.500             | Steel           | Clear Zinc       | 440           |
| KN4C0750R3-S21 | 1.570   | 1/4-20      | 0.740   | 1.150   | 0.250   | 3     | 0.750             | Steel           | Clear Zinc       | 350           |
| KN4C1000R3-S21 | 1.570   | 1/4-20      | 0.740   | 1.150   | 0.250   | 3     | 1.000             | Steel           | Clear Zinc       | 384           |
| KN5C1000R3-S21 | 1.570   | 5/16-18     | 0.740   | 1.150   | 0.250   | 3     | 1.000             | Steel           | Clear Zinc       | 384           |
| KN4C1000R5-S21 | 1.890   | 1/4-20      | 1.000   | 1.170   | 0.180   | 3     | 1.000             | Steel           | Clear Zinc       | 150           |
| KN5C1000R5-S21 | 1.890   | 5/16-18     | 1.000   | 1.170   | 0.180   | 3     | 1.000             | Steel           | Clear Zinc       | 200           |
| KN5C1250R5-S21 | 1.890   | 5/16-18     | 1.000   | 1.170   | 0.180   | 3     | 1.250             | Steel           | Clear Zinc       | 200           |
| KN5C1750R5-S21 | 1.890   | 5/16-18     | 1.000   | 1.170   | 0.180   | 3     | 1.750             | Steel           | Clear Zinc       | 171           |
| KN5C2000R5-S21 | 1.890   | 5/16-18     | 1.000   | 1.170   | 0.180   | 3     | 2.000             | Steel           | Clear Zinc       | 200           |
| KN5C2250R5-S21 | 1.890   | 5/16-18     | 1.000   | 1.170   | 0.180   | 3     | 2.250             | Steel           | Clear Zinc       | 200           |
| KN6C0750R5-S21 | 1.890   | 3/8-16      | 1.000   | 1.170   | 0.180   | 3     | 0.750             | Steel           | Clear Zinc       | 200           |
| KN6C1000R5-S21 | 1.890   | 3/8-16      | 1.000   | 1.170   | 0.180   | 3     | 1.000             | Steel           | Clear Zinc       | 200           |
| KN6C1250R5-S21 | 1.890   | 3/8-16      | 1.000   | 1.170   | 0.180   | 3     | 1.250             | Steel           | Clear Zinc       | 210           |
| KN6C2250R5-S21 | 1.890   | 3/8-16      | 1.000   | 1.170   | 0.180   | 3     | 2.250             | Steel           | Clear Zinc       | 170           |
| KN6C1500R7-S21 | 2.420   | 3/8-16      | 1.000   | 1.260   | 0.200   | 3     | 1.500             | Steel           | Clear Zinc       | 135           |
| KN6C3000R7-S21 | 2.420   | 3/8-16      | 1.000   | 1.260   | 0.200   | 3     | 3.000             | Steel           | Clear Zinc       | 144           |
| KN8C1250R7-S21 | 2.420   | 1/2-13      | 1.000   | 1.260   | 0.180   | 3     | 1.250             | Steel           | Clear Zinc       | 144           |
| KN8C1500R7-S21 | 2.420   | 3/8-16      | 1.000   | 1.260   | 0.200   | 3     | 1.500             | Steel           | Clear Zinc       | 144           |

\*\*Other configurations, thread sizes, materials, and customizations available upon request.\*\*

# FLUTED CLAMPING KNOBS



## F Series Fluted Knobs



### Specifications

- Knob Material: Polypropylene
- Insert Material: See Table
- Color: Black

### Features

- Designed with fluted perimeter for secure grip
- Economical design for light to heavy-duty securing and clamping applications
- Resistant to water and solvents
- Textured finish to help hide dirt and scratches in the field
- Impact resistant



## Female Knobs

| Item No.       | A<br>in | Thread Size | B<br>in | C<br>in | D<br>in | Style | Thread Type   | Insert Material | Plating Material | Bulk Pack Qty |
|----------------|---------|-------------|---------|---------|---------|-------|---------------|-----------------|------------------|---------------|
| KN04---F2-L-21 | 1.375   | 10-24       | 0.980   | 0.530   | 0.170   | 2     | Stop Nut      | Steel           | Clear Zinc       | 700           |
| KN4C---F2--21  | 1.375   | 1/4-20      | 0.980   | 0.530   | 0.170   | 2     | Free Spinning | Steel           | Clear Zinc       | 700           |
| KN4C---F2-B-21 | 1.375   | 1/4-20      | 0.980   | 0.530   | 0.170   | 1     | Blind         | Steel           | Clear Zinc       | 700           |
| KN4C---F2-L-21 | 1.375   | 1/4-20      | 0.980   | 0.530   | 0.170   | 2     | Stop Nut      | Steel           | Clear Zinc       | 750           |
| KN5C---F2--21  | 1.375   | 5/16-18     | 0.980   | 0.530   | 0.170   | 2     | Free Spinning | Steel           | Clear Zinc       | 700           |
| KN5C---F2-B-21 | 1.375   | 5/16-18     | 0.980   | 0.530   | 0.170   | 1     | Blind         | Steel           | Clear Zinc       | 700           |
| KN4C---F4--21  | 1.750   | 1/4-20      | 1.230   | 0.860   | 0.280   | 2     | Free Spinning | Steel           | Clear Zinc       | 600           |
| KN4C---F4-B-21 | 1.750   | 1/4-20      | 1.230   | 0.860   | 0.280   | 1     | Blind         | Steel           | Clear Zinc       | 600           |
| KN5C---F4--21  | 1.750   | 5/16-18     | 1.230   | 0.860   | 0.280   | 2     | Free Spinning | Steel           | Clear Zinc       | 600           |
| KN5C---F4-B-22 | 1.750   | 5/16-18     | 1.230   | 0.860   | 0.280   | 1     | Blind         | Steel           | Yellow Zinc      | 600           |
| KN5C---F4-L-21 | 1.750   | 5/16-18     | 1.230   | 0.860   | 0.280   | 2     | Stop Nut      | Steel           | Clear Zinc       | 600           |
| KN6C---F4--21  | 1.750   | 3/8-16      | 1.230   | 0.860   | 0.280   | 2     | Free Spinning | Steel           | Clear Zinc       | 600           |
| KN4C---F6--21  | 2.380   | 1/4-20      | 1.250   | 1.230   | 0.620   | 2     | Free Spinning | Steel           | Clear Zinc       | 250           |
| KN4C---F6-B-21 | 2.380   | 1/4-20      | 1.250   | 1.230   | 0.620   | 1     | Blind         | Steel           | Clear Zinc       | 250           |
| KN4C---F6-L-21 | 2.380   | 1/4-20      | 1.250   | 1.230   | 0.620   | 2     | Stop Nut      | Steel           | Clear Zinc       | 250           |
| KN5C---F6--21  | 2.380   | 5/16-18     | 1.250   | 1.230   | 0.620   | 2     | Free Spinning | Steel           | Clear Zinc       | 250           |
| KN5C---F6-B-22 | 2.380   | 5/16-18     | 1.250   | 1.230   | 0.620   | 1     | Blind         | Steel           | Yellow Zinc      | 250           |
| KN5C---F6-L-21 | 2.380   | 5/16-18     | 1.250   | 1.230   | 0.620   | 2     | Stop Nut      | Steel           | Clear Zinc       | 250           |
| KN6C---F6--21  | 2.380   | 3/8-16      | 1.250   | 1.230   | 0.620   | 2     | Free Spinning | Steel           | Clear Zinc       | 250           |
| KN6C---F6-B-21 | 2.380   | 3/8-16      | 1.250   | 1.230   | 0.620   | 1     | Blind         | Steel           | Clear Zinc       | 250           |
| KN8C---F6--21  | 2.380   | 1/2-13      | 1.250   | 1.230   | 0.620   | 2     | Free Spinning | Steel           | Clear Zinc       | 250           |
| KN8C---F6-B-21 | 2.380   | 1/2-13      | 1.250   | 1.230   | 0.620   | 1     | Blind         | Steel           | Clear Zinc       | 250           |
| KN8C---F6XBL21 | 2.380   | 1/2-13      | 1.250   | 1.230   | 0.620   | 1     | Stop Nut      | Steel           | Clear Zinc       | 250           |

## Male Knobs

| Item No.        | A<br>in | Thread Size | B<br>in | C<br>in | D<br>in | Style | Stud Length<br>in | Insert Material | Plating Material | Bulk Pack Qty |
|-----------------|---------|-------------|---------|---------|---------|-------|-------------------|-----------------|------------------|---------------|
| KN041000F2---21 | 1.375   | 10-24       | 0.980   | 0.530   | 0.170   | 3     | 1.000             | Steel           | Clear Zinc       | 1200          |
| KN4C0500F2---21 | 1.375   | 1/4-20      | 0.980   | 0.530   | 0.170   | 3     | 0.500             | Steel           | Clear Zinc       | 1300          |
| KN4C0625F2---21 | 1.375   | 1/4-20      | 0.980   | 0.530   | 0.170   | 3     | 0.625             | Steel           | Clear Zinc       | 1300          |
| KN4C0750F2---21 | 1.375   | 1/4-20      | 0.980   | 0.530   | 0.170   | 3     | 0.750             | Steel           | Clear Zinc       | 1200          |
| KN4C1000F2---21 | 1.375   | 1/4-20      | 0.980   | 0.530   | 0.170   | 3     | 1.000             | Steel           | Clear Zinc       | 1200          |
| KN4C2000F2---21 | 1.375   | 1/4-20      | 0.980   | 0.530   | 0.170   | 3     | 2.000             | Steel           | Clear Zinc       | 1100          |
| KN4C4250F2---21 | 1.375   | 1/4-20      | 0.980   | 0.530   | 0.170   | 3     | 4.250             | Steel           | Clear Zinc       | 600           |
| KN5C0750F2---21 | 1.375   | 5/16-18     | 0.980   | 0.530   | 0.170   | 3     | 0.750             | Steel           | Clear Zinc       | 550           |
| KN5C4750F2---21 | 1.375   | 5/16-18     | 0.980   | 0.530   | 0.170   | 3     | 4.750             | Steel           | Clear Zinc       | 175           |
| KN6C0875F2---21 | 1.375   | 3/8-16      | 0.980   | 0.530   | 0.170   | 3     | 0.875             | Steel           | Clear Zinc       | 550           |
| KN4C0750F4---21 | 1.750   | 1/4-20      | 1.230   | 0.860   | 0.280   | 3     | 0.750             | Steel           | Clear Zinc       | 500           |
| KN4C1000F4---21 | 1.750   | 1/4-20      | 1.230   | 0.860   | 0.280   | 3     | 1.000             | Steel           | Clear Zinc       | 500           |
| KN4C1750F4---21 | 1.750   | 1/4-20      | 1.230   | 0.860   | 0.280   | 3     | 1.750             | Steel           | Clear Zinc       | 450           |
| KN4C2000F4---21 | 1.750   | 1/4-20      | 1.230   | 0.860   | 0.280   | 3     | 2.000             | Steel           | Clear Zinc       | 500           |
| KN5C0750F4---21 | 1.750   | 5/16-18     | 1.230   | 0.860   | 0.280   | 3     | 0.750             | Steel           | Clear Zinc       | 500           |
| KN5C1000F4---21 | 1.750   | 5/16-18     | 1.230   | 0.860   | 0.280   | 3     | 1.000             | Steel           | Clear Zinc       | 500           |
| KN5C1250F4---21 | 1.750   | 5/16-18     | 1.230   | 0.860   | 0.280   | 3     | 1.250             | Steel           | Clear Zinc       | 500           |
| KN5C1500F4---21 | 1.750   | 5/16-18     | 1.230   | 0.860   | 0.280   | 3     | 1.500             | Steel           | Clear Zinc       | 500           |
| KN5C1750F4---21 | 1.750   | 5/16-18     | 1.230   | 0.860   | 0.280   | 3     | 1.750             | Steel           | Clear Zinc       | 500           |
| KN5C2000F4---21 | 1.750   | 5/16-18     | 1.230   | 0.860   | 0.280   | 3     | 2.000             | Steel           | Clear Zinc       | 450           |
| KN6C0500F4---21 | 1.750   | 3/8-16      | 1.230   | 0.860   | 0.280   | 3     | 0.500             | Steel           | Clear Zinc       | 500           |
| KN6C0750F4---21 | 1.750   | 3/8-16      | 1.230   | 0.860   | 0.280   | 3     | 0.750             | Steel           | Clear Zinc       | 500           |
| KN6C1000F4---21 | 1.750   | 3/8-16      | 1.230   | 0.860   | 0.280   | 3     | 1.000             | Steel           | Clear Zinc       | 500           |
| KN6C1250F4---21 | 1.750   | 3/8-16      | 1.230   | 0.860   | 0.280   | 3     | 1.250             | Steel           | Clear Zinc       | 450           |
| KN6C1500F4---21 | 1.750   | 3/8-16      | 1.230   | 0.860   | 0.280   | 3     | 1.500             | Steel           | Clear Zinc       | 500           |
| KN6C2250F4---21 | 1.750   | 3/8-16      | 1.230   | 0.860   | 0.280   | 3     | 2.250             | Steel           | Clear Zinc       | 170           |
| KN6C2500F4---21 | 1.750   | 3/8-16      | 1.230   | 0.860   | 0.280   | 3     | 2.500             | Steel           | Clear Zinc       | 400           |
| KN6C2875F4---21 | 1.750   | 3/8-16      | 1.230   | 0.860   | 0.280   | 3     | 2.875             | Steel           | Clear Zinc       | 150           |
| KN4C0750F6---21 | 2.380   | 1/4-20      | 1.250   | 1.230   | 0.620   | 3     | 0.750             | Steel           | Clear Zinc       | 250           |
| KN4C1000F6---21 | 2.380   | 1/4-20      | 1.250   | 1.230   | 0.620   | 3     | 1.000             | Steel           | Clear Zinc       | 250           |
| KN4C1750F6---21 | 2.380   | 1/4-20      | 1.250   | 1.230   | 0.620   | 3     | 1.750             | Steel           | Clear Zinc       | 225           |
| KN5C0500F6---21 | 2.380   | 5/16-18     | 1.250   | 1.230   | 0.620   | 3     | 0.500             | Steel           | Clear Zinc       | 250           |
| KN5C0750F6---21 | 2.380   | 5/16-18     | 1.250   | 1.230   | 0.620   | 3     | 0.750             | Steel           | Clear Zinc       | 250           |
| KN5C1000F6---21 | 2.380   | 5/16-18     | 1.250   | 1.230   | 0.620   | 3     | 1.000             | Steel           | Clear Zinc       | 250           |
| KN5C1750F6---21 | 2.380   | 5/16-18     | 1.250   | 1.230   | 0.620   | 3     | 1.750             | Steel           | Clear Zinc       | 200           |
| KN6C0500F6---21 | 2.380   | 3/8-16      | 1.250   | 1.230   | 0.620   | 3     | 0.500             | Steel           | Clear Zinc       | 250           |
| KN6C1000F6---21 | 2.380   | 3/8-16      | 1.250   | 1.230   | 0.620   | 3     | 1.000             | Steel           | Clear Zinc       | 250           |
| KN6C1500F6---21 | 2.380   | 3/8-16      | 1.250   | 1.230   | 0.620   | 3     | 1.500             | Steel           | Clear Zinc       | 225           |
| KN6C2000F6---21 | 2.380   | 3/8-16      | 1.250   | 1.230   | 0.620   | 3     | 2.000             | Steel           | Clear Zinc       | 200           |
| KN6C2250F6---21 | 2.380   | 3/8-16      | 1.250   | 1.230   | 0.620   | 3     | 2.250             | Steel           | Clear Zinc       | 200           |
| KN6C2500F6---21 | 2.380   | 3/8-16      | 1.250   | 1.230   | 0.620   | 3     | 2.500             | Steel           | Clear Zinc       | 200           |
| KN8C0500F6---21 | 2.380   | 1/2-13      | 1.250   | 1.230   | 0.620   | 3     | 0.500             | Steel           | Clear Zinc       | 250           |
| KN8C1250F6---21 | 2.380   | 1/2-13      | 1.250   | 1.230   | 0.620   | 3     | 1.250             | Steel           | Clear Zinc       | 200           |
| KN8C1500F6---21 | 2.380   | 1/2-13      | 1.250   | 1.230   | 0.620   | 3     | 1.500             | Steel           | Clear Zinc       | 200           |
| KN8C2000F6---21 | 2.380   | 1/2-13      | 1.250   | 1.230   | 0.620   | 3     | 2.000             | Steel           | Clear Zinc       | 200           |
| KN8C4000F6---21 | 2.380   | 1/2-13      | 1.250   | 1.230   | 0.620   | 3     | 4.000             | Steel           | Clear Zinc       | 150           |

\*\*Other configurations, thread sizes, materials, and customizations available upon request.\*\*

# FLUTED CLAMPING KNOBS

## F Series Soft Touch Fluted Knobs

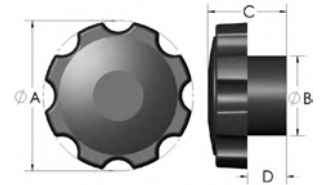


### Specifications

- Knob Material: TPE (Rubber) Overlay with Polypropylene Base
- Insert Material: See Table
- Color: Black

### Features

- Designed with fluted perimeter for secure grip
- Economical design for light to heavy duty securing and clamping applications
- Resistant to water and solvents
- Textured finish to help hide dirt and scratches in the field
- Impact resistant



### Female Knobs

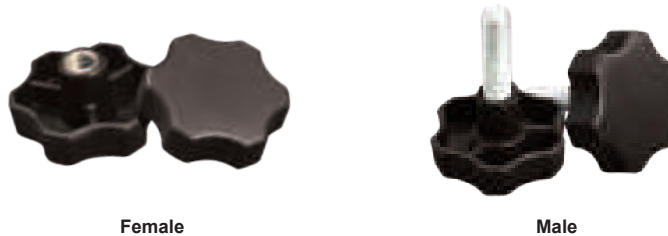
| Item No.        | A<br>in | Thread Size | B<br>in | C<br>in | D<br>in | Style | Thread Type   | Insert Material | Plating Material | Bulk Pack Qty |
|-----------------|---------|-------------|---------|---------|---------|-------|---------------|-----------------|------------------|---------------|
| KN5C----F7S--21 | 2.500   | 5/16-18     | 1.250   | 1.290   | 0.570   | 2     | Free Spinning | Steel           | Clear Zinc       | 200           |
| KN5C----F7SB-22 | 2.500   | 5/16-18     | 1.250   | 1.290   | 0.570   | 1     | Blind         | Steel           | Yellow Zinc      | 200           |
| KN5C----F7SBS22 | 2.500   | 5/16-18     | 1.250   | 1.290   | 0.570   | 1     | Blind         | Steel           | Yellow Zinc      | 200           |
| KN6C----F7S--21 | 2.500   | 3/8-16      | 1.250   | 1.290   | 0.570   | 2     | Free Spinning | Steel           | Clear Zinc       | 200           |
| KN6C----F7SB-21 | 2.500   | 3/8-16      | 1.250   | 1.290   | 0.570   | 1     | Blind         | Steel           | Clear Zinc       | 200           |
| KN8C----F7S--21 | 2.500   | 1/2-13      | 1.250   | 1.290   | 0.570   | 2     | Free Spinning | Steel           | Clear Zinc       | 200           |
| KN8C----F7SBL21 | 2.500   | 1/2-13      | 1.250   | 1.290   | 0.570   | 1     | Stop Nut      | Steel           | Clear Zinc       | 200           |

### Male Knobs

| Item No.        | A<br>in | Thread Size | B<br>in | C<br>in | D<br>in | Style | Stud Length<br>in | Insert Material | Plating Material | Bulk Pack Qty |
|-----------------|---------|-------------|---------|---------|---------|-------|-------------------|-----------------|------------------|---------------|
| KN5C1750F7S--21 | 2.500   | 5/16-18     | 1.250   | 1.290   | 0.570   | 3     | 1.750             | Steel           | Clear Zinc       | 150           |
| KN5C2000F7S--21 | 2.500   | 5/16-18     | 1.250   | 1.290   | 0.570   | 3     | 2.000             | Steel           | Clear Zinc       | 150           |
| KN6C1500F7S-S21 | 2.500   | 3/8-16      | 1.250   | 1.290   | 0.570   | 3     | 1.500             | Steel           | Clear Zinc       | 120           |
| KN6C2000F7S--21 | 2.500   | 3/8-16      | 1.250   | 1.290   | 0.570   | 3     | 2.000             | Steel           | Clear Zinc       | 150           |
| KN8C1000F7S--21 | 2.500   | 1/2-13      | 1.250   | 1.290   | 0.570   | 3     | 1.000             | Steel           | Clear Zinc       | 150           |
| KN8C1500F7S--21 | 2.500   | 1/2-13      | 1.250   | 1.290   | 0.570   | 3     | 1.500             | Steel           | Clear Zinc       | 150           |

\*\*Other configurations, thread sizes, materials, and customizations available upon request.\*\*

## KNS Series Fluted Clamping Knobs

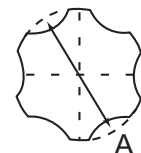


### Specifications:

- Knob Material: Polypropylene
- Insert Material: Zinc Plated Steel
- Color: Black

### Features:

- 6-Lobed Knobs provide maximum grip and comfort
- Economical design for light-duty securing and clamping applications
- Resistant to water and solvents



### Female Knobs

| Item No. | A     |      | Thread Size | Bulk Pack Qty |
|----------|-------|------|-------------|---------------|
|          | in    | mm   |             |               |
| KNS1400A | 1.575 | 40.0 | 5/16 - 18   | 250           |
| KNS1500A | 2.362 | 60.0 | 5/16 - 18   | 250           |

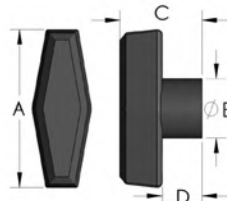
### Male Knobs

| Item No. | A     |      | Thread Size | Stud Length |      | Bulk Pack Qty |
|----------|-------|------|-------------|-------------|------|---------------|
|          | in    | mm   |             | in          | mm   |               |
| KNS3000A | 1.575 | 40.0 | 1/4 - 20    | 0.750       | 19.1 | 250           |
| KNS3100A | 1.575 | 40.0 | 1/4 - 20    | 1.375       | 34.9 | 250           |
| KNS3200A | 1.575 | 40.0 | 5/16 - 18   | 0.750       | 19.1 | 250           |
| KNS3300A | 1.575 | 40.0 | 5/16 - 18   | 0.500       | 12.7 | 250           |
| KNS3400A | 1.575 | 40.0 | 5/16 - 18   | 1.000       | 25.4 | 250           |
| KNS3500A | 1.575 | 40.0 | 5/16 - 18   | 1.500       | 38.1 | 250           |
| KNS3600A | 2.362 | 60.0 | 5/16 - 18   | 0.750       | 19.1 | 250           |
| KNS3700A | 2.362 | 60.0 | 5/16 - 18   | 1.500       | 38.1 | 250           |

# T HANDLE CLAMPING KNOBS



## T Series T-Knobs



### Specifications

- Knob Material: See Table
- Insert Material: See Table
- Color: Black

### Features

- T-Knobs provide maximum grip and comfort
- Resistant to water and solvents
- Impact resistant



### Female Knobs

| Item No.        | A<br>in | Thread Size | B<br>in | C<br>in | D<br>in | Style | Thread Type            | Insert Material | Plating Material | Knob Material | Bulk Pack Qty |
|-----------------|---------|-------------|---------|---------|---------|-------|------------------------|-----------------|------------------|---------------|---------------|
| KN04----T1A--21 | 1.160   | 10-24       | 0.500   | 0.940   | 0.390   | 2     | Free Spinning          | Steel           | Clear Zinc       | Polypropylene | 3500          |
| KN04----T1AB-90 | 1.160   | 10-24       | 0.500   | 0.670   | 0.120   | 1     | Blind                  | Brass           | Plain            | Polypropylene | 3500          |
| KN4C----T1--21  | 1.160   | 1/4-20      | 0.500   | 0.940   | 0.390   | 2     | Free Spinning          | Steel           | Clear Zinc       | Polypropylene | 1300          |
| KN4C----T1A--21 | 1.160   | 1/4-20      | 0.500   | 0.670   | 0.120   | 2     | Free Spinning          | Steel           | Clear Zinc       | Polypropylene | 3500          |
| KN4C----T1AB-21 | 1.160   | 1/4-20      | 0.500   | 0.670   | 0.120   | 1     | Blind                  | Steel           | Clear Zinc       | Polypropylene | 2000          |
| KN4C----T1-B-21 | 1.160   | 1/4-20      | 0.500   | 0.940   | 0.390   | 1     | Blind                  | Steel           | Clear Zinc       | Polypropylene | 1300          |
| KN4C----T1D-N-- | 1.160   | 1/4-20      | 0.480   | 0.980   | 0.420   | 2     | Molded Plastic Threads | Molded Plastic  | -                | Nylon         | 3500          |
| KN5C----T1--22  | 1.160   | 5/16-18     | 0.500   | 0.940   | 0.390   | 2     | Free Spinning          | Steel           | Yellow Zinc      | Polypropylene | 1300          |
| KN5C----T1--L22 | 1.160   | 5/16-18     | 0.500   | 0.940   | 0.390   | 2     | Stop Nut               | Steel           | Yellow Zinc      | Polypropylene | 1300          |
| KN4C----T5--21  | 2.000   | 1/4-20      | 0.750   | 1.040   | 0.490   | 2     | Free Spinning          | Steel           | Clear Zinc       | Polypropylene | 1200          |
| KN4C----T5-B-21 | 2.000   | 1/4-20      | 0.750   | 1.040   | 0.490   | 1     | Blind                  | Steel           | Clear Zinc       | Polypropylene | 550           |
| KN4C----T5-LN21 | 2.000   | 1/4-20      | 0.750   | 1.040   | 0.490   | 2     | Stop Nut               | Steel           | Clear Zinc       | Nylon         | 1200          |
| KN5C----T5--21  | 2.000   | 5/16-18     | 0.750   | 1.040   | 0.490   | 2     | Free Spinning          | Steel           | Clear Zinc       | Polypropylene | 1200          |
| KN5C----T5-B-22 | 2.000   | 5/16-18     | 0.750   | 1.040   | 0.490   | 1     | Blind                  | Steel           | Yellow Zinc      | Polypropylene | 1200          |
| KN5C----T5-LN21 | 2.000   | 5/16-18     | 0.750   | 1.040   | 0.490   | 2     | Stop Nut               | Steel           | Clear Zinc       | Nylon         | 1200          |
| KN6C----T5--21  | 2.000   | 3/8-16      | 0.750   | 1.040   | 0.490   | 2     | Free Spinning          | Steel           | Clear Zinc       | Polypropylene | 1200          |
| KN6C----T5-B-21 | 2.000   | 3/8-16      | 0.750   | 1.040   | 0.490   | 1     | Blind                  | Steel           | Clear Zinc       | Polypropylene | 1200          |
| KN6C----T5-L-21 | 2.000   | 3/8-16      | 0.750   | 1.040   | 0.490   | 2     | Stop Nut               | Steel           | Clear Zinc       | Polypropylene | 1200          |
| KN4C----T7--21  | 2.500   | 1/4-20      | 0.750   | 1.110   | 0.460   | 2     | Free Spinning          | Steel           | Clear Zinc       | Polypropylene | 800           |
| KN5C----T7--21  | 2.500   | 5/16-18     | 0.750   | 1.110   | 0.460   | 2     | Free Spinning          | Steel           | Clear Zinc       | Polypropylene | 800           |
| KN5C----T7-B-22 | 2.500   | 5/16-18     | 0.750   | 1.110   | 0.460   | 1     | Blind                  | Steel           | Yellow Zinc      | Polypropylene | 800           |
| KN4C----T7--21  | 2.500   | 1/4-20      | 0.750   | 1.110   | 0.460   | 2     | Free Spinning          | Steel           | Clear Zinc       | Polypropylene | 800           |
| KN5C----T7-LN21 | 2.500   | 5/16-18     | 0.750   | 1.110   | 0.460   | 2     | Stop Nut               | Steel           | Clear Zinc       | Nylon         | 800           |
| KN6C----T7--21  | 2.500   | 3/8-16      | 0.750   | 1.110   | 0.460   | 2     | Free Spinning          | Steel           | Clear Zinc       | Polypropylene | 800           |
| KN6C----T7-B-21 | 2.500   | 3/8-16      | 0.750   | 1.110   | 0.460   | 1     | Blind                  | Steel           | Clear Zinc       | Polypropylene | 800           |
| KN6C----T9-B-21 | 3.500   | 3/8-16      | 0.970   | 1.130   | 0.270   | 1     | Blind                  | Steel           | Clear Zinc       | Polypropylene | 400           |
| KN8C----T9-BN21 | 3.500   | 1/2-13      | 0.970   | 1.130   | 0.270   | 1     | Blind                  | Steel           | Clear Zinc       | Nylon         | 400           |

### Male Knobs

| Item No.        | A<br>in | Thread Size | B<br>in | C<br>in | D<br>in | Stud Length<br>in | Style | Insert Material | Plating Material | Knob Material | Bulk Pack Qty |
|-----------------|---------|-------------|---------|---------|---------|-------------------|-------|-----------------|------------------|---------------|---------------|
| KN020500T1---21 | 1.120   | 10-32       | 0.500   | 0.940   | 0.390   | 3                 | 0.500 | Steel           | Clear Zinc       | Polypropylene | 1300          |
| KN040500T1---21 | 1.120   | 10-24       | 0.500   | 0.940   | 0.390   | 3                 | 0.500 | Steel           | Clear Zinc       | Polypropylene | 1000          |
| KN040750T1---21 | 1.120   | 10-24       | 0.500   | 0.940   | 0.390   | 3                 | 0.750 | Steel           | Clear Zinc       | Polypropylene | 1000          |
| KN4C0500T1---21 | 1.120   | 1/4-20      | 0.500   | 0.940   | 0.390   | 3                 | 0.500 | Steel           | Clear Zinc       | Polypropylene | 1200          |
| KN4C0750T1---21 | 1.120   | 1/4-20      | 0.500   | 0.940   | 0.390   | 3                 | 0.750 | Steel           | Clear Zinc       | Polypropylene | 1000          |
| KN4C1000T1---21 | 1.120   | 1/4-20      | 0.500   | 0.940   | 0.390   | 3                 | 1.000 | Steel           | Clear Zinc       | Polypropylene | 1000          |
| KN4C0500T1A--21 | 1.120   | 1/4-20      | 0.500   | 0.670   | 0.120   | 3                 | 0.500 | Steel           | Clear Zinc       | Polypropylene | 1200          |
| KN4C0750T5---21 | 2.000   | 1/4-20      | 0.750   | 1.040   | 0.490   | 3                 | 0.750 | Steel           | Clear Zinc       | Polypropylene | 1000          |
| KN4C1000T5---21 | 2.000   | 1/4-20      | 0.750   | 1.040   | 0.490   | 3                 | 1.000 | Steel           | Clear Zinc       | Polypropylene | 1000          |
| KN4C1500T5---21 | 2.000   | 1/4-20      | 0.750   | 1.040   | 0.490   | 3                 | 1.500 | Steel           | Clear Zinc       | Polypropylene | 850           |
| KN4C2000T5---21 | 2.000   | 1/4-20      | 0.750   | 1.040   | 0.490   | 3                 | 2.000 | Steel           | Clear Zinc       | Polypropylene | 800           |
| KN5C0750T5---21 | 2.000   | 5/16-18     | 0.750   | 1.040   | 0.490   | 3                 | 0.750 | Steel           | Clear Zinc       | Polypropylene | 400           |
| KN5C1000T5---21 | 2.000   | 5/16-18     | 0.750   | 1.040   | 0.490   | 3                 | 1.000 | Steel           | Clear Zinc       | Polypropylene | 400           |
| KN5C1500T5---21 | 2.000   | 5/16-18     | 0.750   | 1.040   | 0.490   | 3                 | 1.500 | Steel           | Clear Zinc       | Polypropylene | 600           |
| KN5C2000T5---21 | 2.000   | 5/16-18     | 0.750   | 1.040   | 0.490   | 3                 | 2.000 | Steel           | Clear Zinc       | Polypropylene | 500           |
| KN6C1000T5---21 | 2.000   | 3/8-16      | 0.750   | 1.040   | 0.490   | 3                 | 1.000 | Steel           | Clear Zinc       | Polypropylene | 350           |
| KN6C1500T5---21 | 2.000   | 3/8-16      | 0.750   | 1.040   | 0.490   | 3                 | 1.500 | Steel           | Clear Zinc       | Polypropylene | 400           |
| KN5C1250T7---21 | 2.500   | 5/16-18     | 0.750   | 1.110   | 0.460   | 3                 | 1.250 | Steel           | Clear Zinc       | Polypropylene | 700           |
| KN5C2000T7---21 | 2.500   | 5/16-18     | 0.750   | 1.110   | 0.460   | 3                 | 2.000 | Steel           | Clear Zinc       | Polypropylene | 550           |
| KN6C0750T7---21 | 2.500   | 3/8-16      | 0.750   | 1.110   | 0.460   | 3                 | 0.750 | Steel           | Clear Zinc       | Polypropylene | 600           |

\*\*Other configurations, thread sizes, materials, and customizations available upon request.\*\*

# T HANDLE CLAMPING KNOBS

## TR Series Rounded T-Knobs



Style 1

Style 3

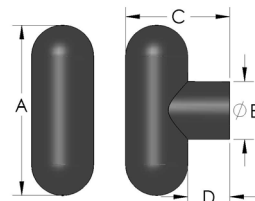


### Specifications

- Knob Material: Polypropylene
- Insert Material: Steel - Clear Zinc
- Color: Black

### Features

- Economical design for light to heavy-duty securing and clamping applications
- Resistant to water and solvents
- Textured finish to help hide dirt and scratches in the field
- Impact resistant



### Female Knobs

| Item No.      | A<br>in | Thread Size | B<br>in | C<br>in | D<br>in | Style | Thread Type | Insert Material | Plating Material | Bulk Pack Qty |
|---------------|---------|-------------|---------|---------|---------|-------|-------------|-----------------|------------------|---------------|
| KN4C---TR6-21 | 2.250   | 1/4-20      | 0.770   | 1.410   | 0.570   | 1     | Blind       | Steel           | Clear Zinc       | 600           |
| KN5C---TR6-22 | 2.250   | 5/16-18     | 0.770   | 1.410   | 0.570   | 1     | Blind       | Steel           | Clear Zinc       | 600           |
| KN6C---TR6-21 | 2.250   | 3/8-16      | 0.770   | 1.410   | 0.570   | 1     | Blind       | Steel           | Clear Zinc       | 600           |

### Male Knobs

| Item No.       | A<br>in | Thread Size | B<br>in | C<br>in | D<br>in | Style | Stud Length<br>in | Insert Material | Plating Material | Bulk Pack Qty |
|----------------|---------|-------------|---------|---------|---------|-------|-------------------|-----------------|------------------|---------------|
| KN5C0750TR6-21 | 2.250   | 5/16-18     | 0.770   | 1.410   | 0.570   | 3     | 0.750             | Steel           | Clear Zinc       | 500           |
| KN6C0500TR6-21 | 2.250   | 3/8-16      | 0.770   | 1.410   | 0.570   | 3     | 0.500             | Steel           | Clear Zinc       | 300           |
| KN6C1000TR6-21 | 2.250   | 3/8-16      | 0.770   | 1.410   | 0.570   | 3     | 1.000             | Steel           | Clear Zinc       | 225           |

\*\*Other configurations, thread sizes, materials, and customizations available upon request.\*\*

## TM Series Mini T-Knobs

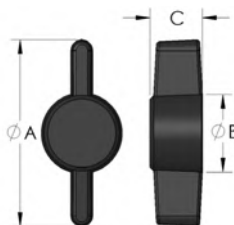


### Specifications

- Knob Material: Nylon
- Insert Material: Stainless Steel
- Color: Black

### Features

- Economical design for light duty securing and clamping applications
- Resistant to water and solvents
- Small diameter ideal for tight clearance spaces
- Impact resistant



### Male Knobs

| Item No.       | A<br>in | Thread Size | B<br>in | C<br>in | Style Number | Stud Length<br>in | Insert Material | Plating Material | Bulk Pack Qty |
|----------------|---------|-------------|---------|---------|--------------|-------------------|-----------------|------------------|---------------|
| KN020875T2-N70 | 1.250   | 10-32       | 0.540   | 0.350   | Style 3      | 0.870             | Stainless Steel | Plain            | 2000          |
| KN021125T2-N70 | 1.250   | 10-32       | 0.540   | 0.350   | Style 3      | 1.120             | Stainless Steel | Plain            | 2000          |

\*\*Other configurations, thread sizes, materials, and customizations available upon request.\*\*

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WING CLAMPING KNOBS



TH Series  
Hurricane T-Knobs



Style 2

Style 3



Specifications

- Knob Material: Polypropylene
- Insert Material: See Table
- Color: Black

Features

- Economical design for light duty securing and clamping applications
- Resistant to water and solvents
- Small diameter ideal for tight clearance spaces
- Impact resistant



Female Knobs

| Item No.       | A<br>in | Thread Size | B<br>in | C<br>in | D<br>in | Style | Type          | Insert Material | Plating Material | Bulk Pack Qty |
|----------------|---------|-------------|---------|---------|---------|-------|---------------|-----------------|------------------|---------------|
| KN5C---TH1--22 | 1.260   | 5/16-18     | 0.630   | 0.830   | 0.200   | 2     | Free Spinning | Steel           | Yellow Zinc      | 1200          |

Male Knobs

| Item No.        | A<br>in | Thread Size | B<br>in | C<br>in | D<br>in | Style | Stud Length<br>in | Insert Material | Plating Material | Bulk Pack Qty |
|-----------------|---------|-------------|---------|---------|---------|-------|-------------------|-----------------|------------------|---------------|
| KN042000TH1--21 | 1.260   | 10-24       | 0.630   | 0.830   | 0.200   | 3     | 2.000             | Steel           | Clear Zinc       | 800           |
| KN4C1250TH1--21 | 1.260   | 1/4-20      | 0.630   | 0.830   | 0.200   | 3     | 1.250             | Steel           | Clear Zinc       | 1200          |

\*\*Other configurations, thread sizes, materials, and customizations available upon request.\*\*

TW Series  
T-Wing Knobs



Specifications

- Knob Material: See Table
- Insert Material: Steel - Clear Zinc
- Color: Black

Features

- T-Knobs provide maximum grip and comfort
- Economical design for light to heavy duty securing and clamping applications
- Resistant to water and solvents
- Textured finish to help hide dirt and scratches in the field
- Impact resistant



Female Knobs

| Item No.       | A<br>in | Thread Size | B<br>in | C<br>in | D<br>in | Thread Type   | Knob Material      | Bulk Pack Qty |
|----------------|---------|-------------|---------|---------|---------|---------------|--------------------|---------------|
| KN5C---TW7--21 | 2.500   | 5/16-18     | 0.860   | 1.100   | 0.370   | Free Spinning | Polypropylene      | 950           |
| KN5C---TW7LX21 | 2.500   | 5/16-18     | 0.860   | 1.100   | 0.370   | Stop Nut      | 20% Talc Filled PP | 950           |

\*\*Other configurations, thread sizes, materials, and customizations available upon request.\*\*

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# MASKING PLUGS

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# BALL KNOBS

## B Series Ball Knobs

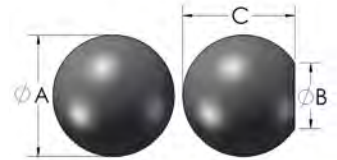


### Specifications

- Knob Material: Polypropylene
- Insert Material: See Table
- Color: Black

### Features

- Textured finish to help hide dirt and scratches in the field
- Resistant to water and solvents
- Impact resistant



### Female Knobs

| Item No.        | A<br>in | Thread Size | B<br>in | C<br>in | Thread Type | Insert Material | Plating Material | Bulk Pack Qty |
|-----------------|---------|-------------|---------|---------|-------------|-----------------|------------------|---------------|
| KN02---B0---90  | 0.750   | 10-32       | 0.370   | 0.700   | Blind       | Brass           | Plain            | 1000          |
| KN4C---B0-L-21  | 0.750   | 1/4-20      | 0.370   | 0.700   | Stop Nut    | Steel           | Clear Zinc       | 2000          |
| KN82---B0---22  | 0.750   | 8-32        | 0.370   | 0.700   | Blind       | Steel           | Yellow Zinc      | 2000          |
| KN04---B1-L-21  | 1.000   | 10-24       | 0.620   | 0.880   | Stop Nut    | Steel           | Clear Zinc       | 800           |
| KN4C---B1-L-21  | 1.000   | 1/4-20      | 0.620   | 0.880   | Stop Nut    | Steel           | Clear Zinc       | 900           |
| KN5C---B1-L-21  | 1.000   | 5/16-18     | 0.620   | 0.880   | Stop Nut    | Steel           | Clear Zinc       | 900           |
| KN6C---B1-L-21  | 1.000   | 3/8-16      | 0.620   | 0.880   | Stop Nut    | Steel           | Clear Zinc       | 800           |
| KN04---B2-L-21  | 1.250   | 10-24       | 0.620   | 1.150   | Stop Nut    | Steel           | Clear Zinc       | 450           |
| KN4C---B2---21  | 1.250   | 1/4-20      | 0.620   | 1.150   | Blind       | Steel           | Yellow Zinc      | 450           |
| KN5C---B2---22  | 1.250   | 5/16-18     | 0.620   | 1.150   | Blind       | Steel           | Yellow Zinc      | 450           |
| KN5C---B2-L-21  | 1.250   | 5/16-18     | 0.620   | 1.150   | Stop Nut    | Steel           | Clear Zinc       | 450           |
| KN6C---B2---21  | 1.250   | 3/8-16      | 0.620   | 1.150   | Blind       | Steel           | Clear Zinc       | 450           |
| KNM10---B2---21 | 1.250   | M10x1.5     | 0.620   | 1.150   | Blind       | Steel           | Clear Zinc       | 450           |
| KNM6---B2---22  | 1.250   | M6x1.0      | 0.620   | 1.150   | Blind       | Steel           | Yellow Zinc      | 450           |
| KNM8---B2---21  | 1.250   | M8x1.25     | 0.620   | 1.150   | Blind       | Steel           | Clear Zinc       | 450           |
| KN4C---B3---21  | 1.380   | 1/4-20      | 0.750   | 1.280   | Blind       | Steel           | Clear Zinc       | 300           |
| KN5C---B3---22  | 1.380   | 5/16-18     | 0.750   | 1.280   | Blind       | Steel           | Yellow Zinc      | 300           |
| KN6C---B3---21  | 1.380   | 3/8-16      | 0.750   | 1.280   | Blind       | Steel           | Clear Zinc       | 300           |
| KN8C---B3-L-21  | 1.380   | 1/2-13      | 0.750   | 1.280   | Stop Nut    | Steel           | Clear Zinc       | 300           |
| KNM10---B3---21 | 1.380   | M10x1.5     | 0.750   | 1.280   | Blind       | Steel           | Clear Zinc       | 300           |
| KNM6---B3---22  | 1.380   | M6x1.0      | 0.750   | 1.280   | Blind       | Steel           | Yellow Zinc      | 300           |
| KNM8---B3---21  | 1.380   | M8x1.25     | 0.750   | 1.280   | Blind       | Steel           | Clear Zinc       | 300           |
| KN4C---B4---21  | 1.470   | 1/4-20      | 0.750   | 1.400   | Blind       | Steel           | Clear Zinc       | 250           |
| KN5C---B4---22  | 1.470   | 5/16-18     | 0.750   | 1.400   | Blind       | Steel           | Yellow Zinc      | 250           |
| KN6C---B4---21  | 1.470   | 3/8-16      | 0.750   | 1.400   | Blind       | Steel           | Clear Zinc       | 250           |
| KN6C---B4-L-21  | 1.470   | 3/8-16      | 0.750   | 1.400   | Stop Nut    | Steel           | Clear Zinc       | 250           |
| KN8C---B4-L-21  | 1.470   | 1/2-13      | 0.750   | 1.400   | Stop Nut    | Steel           | Clear Zinc       | 250           |
| KNM10---B4-L-21 | 1.470   | M10x1.5     | 0.750   | 1.400   | Stop Nut    | Steel           | Clear Zinc       | 250           |
| KNM6---B4---22  | 1.470   | M6x1.0      | 0.750   | 1.400   | Blind       | Steel           | Yellow Zinc      | 250           |
| KNM8---B4---21  | 1.470   | M8x1.25     | 0.750   | 1.400   | Blind       | Steel           | Clear Zinc       | 250           |
| KN1C---B5-L-21  | 1.610   | 5/8-11      | 0.750   | 1.520   | Stop Nut    | Steel           | Clear Zinc       | 200           |
| KN4C---B5---21  | 1.610   | 1/4-20      | 0.750   | 1.520   | Blind       | Steel           | Clear Zinc       | 200           |
| KN5C---B5---22  | 1.610   | 5/16-18     | 0.750   | 1.520   | Blind       | Steel           | Yellow Zinc      | 200           |
| KN6C---B5-L-21  | 1.610   | 3/8-16      | 0.750   | 1.520   | Stop Nut    | Steel           | Clear Zinc       | 200           |
| KN8C---B5-L-21  | 1.610   | 1/2-13      | 0.750   | 1.520   | Stop Nut    | Steel           | Clear Zinc       | 200           |
| KNM10---B5---21 | 1.610   | M10x1.5     | 0.750   | 1.520   | Blind       | Steel           | Clear Zinc       | 200           |
| KNM6---B5---22  | 1.610   | M6x1.0      | 0.750   | 1.520   | Blind       | Steel           | Yellow Zinc      | 200           |
| KNM8---B5---21  | 1.610   | M8x1.25     | 0.750   | 1.520   | Blind       | Steel           | Clear Zinc       | 200           |
| KN1C---B7-L-21  | 1.880   | 5/8-11      | 1.000   | 1.750   | Stop Nut    | Steel           | Clear Zinc       | 125           |
| KN4C---B7---21  | 1.880   | 1/4-20      | 1.000   | 1.750   | Blind       | Steel           | Clear Zinc       | 125           |
| KN5C---B7---22  | 1.880   | 5/16-18     | 1.000   | 1.750   | Blind       | Steel           | Yellow Zinc      | 125           |
| KN6C---B7---21  | 1.880   | 3/8-16      | 1.000   | 1.750   | Blind       | Steel           | Clear Zinc       | 125           |
| KN8C---B7-L-21  | 1.880   | 1/2-13      | 1.000   | 1.750   | Stop Nut    | Steel           | Clear Zinc       | 125           |
| KNM10---B7---21 | 1.880   | M10x1.5     | 1.000   | 1.750   | Blind       | Steel           | Clear Zinc       | 125           |
| KNM6---B7---22  | 1.880   | M6x1.0      | 1.000   | 1.750   | Blind       | Steel           | Yellow Zinc      | 125           |
| KNM8---B7---21  | 1.880   | M8x1.25     | 1.000   | 1.750   | Blind       | Steel           | Clear Zinc       | 125           |

\*\*Other configurations, thread sizes, materials, and customizations available upon request.\*\*

3" to 59"

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**B Series**  
**Soft Touch Ball Knobs**

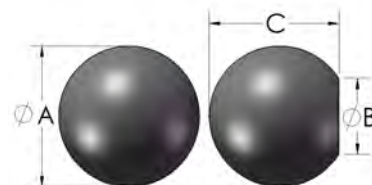


**Specifications**

- Knob Material: TPE (Rubber) Overlay with Polypropylene Base
- Insert Material: See Table
- Color: Black

**Features**

- Soft Touch TPE Overmold provides a comfortable grip
- Impact resistant
- Polypropylene base provides stability and strength



**Female Knobs**

| Item No.        | A<br>in | Thread Size | B<br>in | C<br>in | Thread Type | Insert Material | Plating Material | Bulk Pack Qty |
|-----------------|---------|-------------|---------|---------|-------------|-----------------|------------------|---------------|
| KN04----B1S--90 | 1.000   | 10-24       | 0.620   | 0.880   | Blind       | Brass           | Plain            | 800           |
| KN4C----B1SL-21 | 1.000   | 1/4-20      | 0.620   | 0.880   | Stop Nut    | Steel           | Clear Zinc       | 900           |
| KN82----B1S--22 | 1.000   | 8-32        | 0.620   | 0.880   | Blind       | Steel           | Yellow Zinc      | 800           |
| KN04----B2SL-21 | 1.250   | 10-24       | 0.620   | 1.150   | Stop Nut    | Steel           | Clear Zinc       | 400           |
| KN4C----B2S--21 | 1.250   | 1/4-20      | 0.620   | 1.150   | Blind       | Steel           | Clear Zinc       | 400           |
| KN5C----B2S--22 | 1.250   | 5/16-18     | 0.620   | 1.150   | Blind       | Steel           | Yellow Zinc      | 400           |
| KN6C----B2S--21 | 1.250   | 3/8-16      | 0.620   | 1.150   | Blind       | Steel           | Clear Zinc       | 400           |
| KN4C----B3S--21 | 1.380   | 1/4-20      | 0.750   | 1.280   | Blind       | Steel           | Clear Zinc       | 250           |
| KN5C----B3S--22 | 1.380   | 5/16-18     | 0.750   | 1.280   | Blind       | Steel           | Yellow Zinc      | 300           |
| KN6C----B3S--21 | 1.380   | 3/8-16      | 0.750   | 1.280   | Blind       | Steel           | Clear Zinc       | 300           |
| KN8C----B3S--21 | 1.380   | 1/2-13      | 0.750   | 1.280   | Blind       | Steel           | Clear Zinc       | 250           |
| KN4C----B4S--21 | 1.470   | 1/4-20      | 0.750   | 1.400   | Blind       | Steel           | Clear Zinc       | 200           |
| KN5C----B4S--22 | 1.470   | 5/16-18     | 0.750   | 1.400   | Blind       | Steel           | Yellow Zinc      | 250           |
| KN6C----B4S--21 | 1.470   | 3/8-16      | 0.750   | 1.400   | Blind       | Steel           | Clear Zinc       | 200           |
| KN8C----B4SL-21 | 1.470   | 1/2-13      | 0.750   | 1.400   | Stop Nut    | Steel           | Clear Zinc       | 200           |
| KN5C----B5S--22 | 1.610   | 5/16-18     | 0.750   | 1.520   | Blind       | Steel           | Yellow Zinc      | 200           |
| KN6C----B5S--21 | 1.610   | 3/8-16      | 0.750   | 1.520   | Blind       | Steel           | Clear Zinc       | 150           |
| KN8C----B5SL-21 | 1.610   | 1/2-13      | 0.750   | 1.520   | Stop Nut    | Steel           | Clear Zinc       | 200           |
| KN1C----B7SL-21 | 1.880   | 5/8-11      | 1.000   | 1.750   | Stop Nut    | Steel           | Clear Zinc       | 115           |
| KN6C----B7SL-21 | 1.880   | 3/8-16      | 1.000   | 1.750   | Stop Nut    | Steel           | Clear Zinc       | 115           |
| KN8C----B7SL-21 | 1.880   | 1/2-13      | 1.000   | 1.750   | Stop Nut    | Steel           | Clear Zinc       | 115           |

**B Series**  
**Universal Ball Knobs**

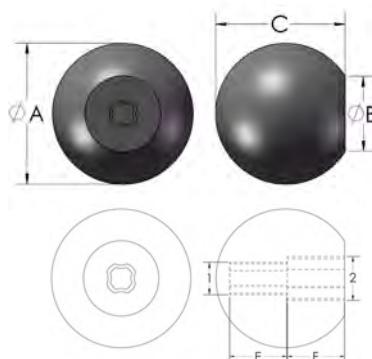


**Specifications**

- Knob Material: See Table
- Insert Material: N/A
- Color: Black; *Exception KN6X-8X-B5--R-- is Red*

**Features**

- Self-Tapping / Self-Threading / Cut their own threads
- Accepts Inch / Metric / Coarse / Fine threads
- When threading into the smaller diameter shaft, the stud length needs to exceed the larger diameter shaft length
- Impact resistant
- Vibration resistant



**Female Knobs**

| Item No.        | A<br>in | Accepts Thread Diameters |          | B<br>in | C<br>in | E<br>in | F<br>in | Thread Type  | Knob Material     | Bulk Pack Qty |
|-----------------|---------|--------------------------|----------|---------|---------|---------|---------|--------------|-------------------|---------------|
|                 |         | 1                        | 2        |         |         |         |         |              |                   |               |
| KN4X-5X-B3----- | 1.380   | 1/4, M6                  | 5/15, M8 | 0.750   | 1.280   | 0.500   | 0.500   | Self Tapping | Polypropylene     | 300           |
| KN4X-5X-B4-S--  | 1.500   | 1/4, M6                  | 5/15, M8 | 0.750   | 1.380   | 0.550   | 0.550   | Self Tapping | TPE - Soft Touch  | 200           |
| KN5X-6X-B4----- | 1.500   | 5/16, M8                 | 3/8, M10 | 0.750   | 1.380   | 0.630   | 0.630   | Self Tapping | Polypropylene     | 250           |
| KN5X-6X-B5-S--  | 1.630   | 5/16, M8                 | 3/8, M10 | 0.750   | 1.500   | 0.550   | 0.630   | Self Tapping | TPE - Soft Touch  | 200           |
| KN6X-8X-B5----- | 1.630   | 3/8, M10                 | 1/2, M12 | 0.750   | 1.500   | 0.630   | 0.630   | Self Tapping | Polypropylene     | 200           |
| KN6X-8X-B5-R--  | 1.630   | 3/8, M10                 | 1/2, M12 | 0.750   | 1.500   | 0.630   | 0.630   | Self Tapping | Red Polypropylene | 200           |
| KN6X-8X-B7-S--  | 1.880   | 3/8, M10                 | 1/2, M12 | 1.000   | 1.750   | 0.630   | 0.630   | Self Tapping | TPE - Soft Touch  | 125           |
| KN8X-1X-B7----- | 1.880   | 1/2, M12                 | 5/8      | 1.000   | 1.750   | 0.630   | 0.630   | Self Tapping | Polypropylene     | 125           |
| KN8X-1X-B7-S--  | 1.880   | 1/2, M12                 | 5/8      | 1.000   | 1.750   | 0.630   | 0.630   | Self Tapping | TPE - Soft Touch  | 100           |

**\*\*Other configurations, thread sizes, materials, and customizations available upon request.\*\***

## TAPERED KNOBS

### S Series

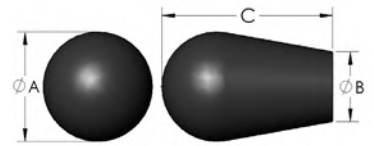
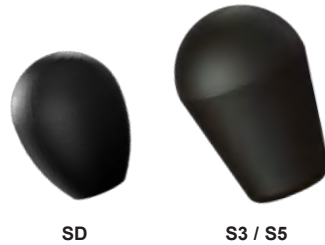
#### Shift Knobs

##### Specifications

- Knob Material: Polypropylene
- Insert Material: See Table
- Color: Black

##### Features

- Shift Knobs provide maximum grip and comfort
- Resistant to water and solvents
- Textured finish to help hide dirt and scratches in the field
- Impact resistant



#### Female Knobs

| Item No.       | A<br>in | Thread Size | B<br>in | C<br>in | Thread Type            | Insert Material | Plating Material | Bulk Pack Qty |
|----------------|---------|-------------|---------|---------|------------------------|-----------------|------------------|---------------|
| KN6C---SD---21 | 1.125   | 3/8-16      | 0.560   | 1.440   | Blind                  | Steel           | Clear Zinc       | 500           |
| KN02---S3-L-21 | 1.380   | 10-32       | 0.920   | 2.000   | Stop Nut               | Steel           | Clear Zinc       | 600           |
| KN4C---S3---21 | 1.380   | 1/4-20      | 0.920   | 2.000   | Blind                  | Steel           | Clear Zinc       | 400           |
| KN5C---S3---22 | 1.380   | 5/16-18     | 0.920   | 2.000   | Blind                  | Steel           | Yellow Zinc      | 550           |
| KN6C---S3---21 | 1.380   | 3/8-16      | 0.920   | 2.000   | Blind                  | Steel           | Clear Zinc       | 250           |
| KN6C---S3XL-21 | 1.380   | 3/8-16      | 0.920   | 2.000   | Stop Nut               | Steel           | Clear Zinc       | 500           |
| KN8C---S3-L-21 | 1.380   | 1/2-13      | 0.920   | 2.000   | Stop Nut               | Steel           | Clear Zinc       | 500           |
| KN6C---S5---21 | 1.630   | 3/8-16      | 1.000   | 2.420   | Blind                  | Steel           | Clear Zinc       | 125           |
| KN6C---S5---   | 1.630   | 3/8-16      | 1.000   | 2.420   | Molded Plastic Threads | Molded Plastic  | -                | 125           |
| KN8C---S5---21 | 1.630   | 1/2-13      | 1.000   | 2.420   | Blind                  | Steel           | Clear Zinc       | 115           |

\*\*Other configurations, thread sizes, materials, and customizations available upon request.\*\*

### S Series

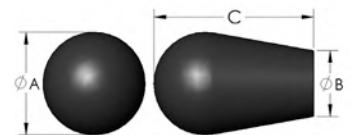
#### Soft Touch Shift Knobs

##### Specifications

- Knob Material: TPE (Rubber) Overlay with Polypropylene Base
- Insert Material: See Table
- Color: Black

##### Features

- Shift Knobs provide maximum grip and comfort
- Resistant to water and solvents
- Textured finish to help hide dirt and scratches in the field
- Impact resistant



#### Female Knobs

| Item No.       | A<br>in | Thread Size | B<br>in | C<br>in | Thread Type            | Insert Material | Plating Material | Bulk Pack Qty |
|----------------|---------|-------------|---------|---------|------------------------|-----------------|------------------|---------------|
| KN4C---S3--S21 | 1.380   | 1/4-20      | 0.920   | 2.000   | Blind                  | Steel           | Clear Zinc       | 150           |
| KN5C---S3--S22 | 1.380   | 5/16-18     | 0.920   | 2.000   | Blind                  | Steel           | Yellow Zinc      | 150           |
| KN6C---S3--S-- | 1.380   | 3/8-16      | 0.920   | 2.000   | Molded Plastic Threads | Molded Plastic  | -                | 200           |
| KN6C---S5--S21 | 1.630   | 3/8-16      | 1.000   | 2.420   | Blind                  | Steel           | Clear Zinc       | 115           |
| KN8C---S5-LS21 | 1.630   | 1/2-13      | 1.000   | 2.420   | Stop Nut               | Steel           | Clear Zinc       | 125           |

\*\*Other configurations, thread sizes, materials, and customizations available upon request.\*\*

### LT Series

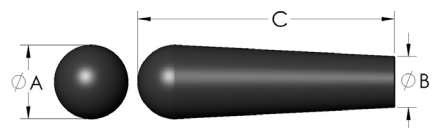
#### Long Tapered Knobs

##### Specifications

- Knob Material: Polypropylene
- Insert Material: See Table
- Color: Black

##### Features

- Economical design for light to medium duty securing and clamping applications
- Resistant to water and solvents
- Textured finish to help hide dirt and scratches in the field
- Impact resistant



#### Female Knobs

| Item No.       | A<br>in | Thread Size | B<br>in | C<br>in | Thread Type | Insert Material | Plating Material | Bulk Pack Qty |
|----------------|---------|-------------|---------|---------|-------------|-----------------|------------------|---------------|
| KN4C---L2---21 | 1.110   | 1/4-20      | 0.760   | 3.850   | Blind       | Steel           | Clear Zinc       | 140           |
| KN5C---L2---22 | 1.110   | 5/16-18     | 0.760   | 3.850   | Blind       | Steel           | Yellow Zinc      | 140           |
| KN6C---L2---21 | 1.110   | 3/8-16      | 0.760   | 3.850   | Blind       | Steel           | Clear Zinc       | 140           |
| KN8C---L2---21 | 1.110   | 1/2-13      | 0.760   | 3.850   | Blind       | Steel           | Clear Zinc       | 140           |

\*\*Other configurations, thread sizes, materials, and customizations available upon request.\*\*

**TAPERED KNOBS**



**S Series  
Universal Shift Knobs**

**Specifications**

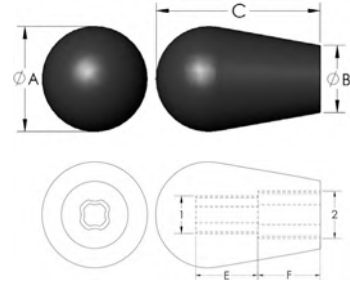
- Knob Material: See Table
- Insert Material: See Table

**Features**

- Self-Tapping / Self-Threading / Cut their own threads
- Accepts Inch / Metric / Coarse / Fine threads
- When threading into the smaller diameter shaft, the stud length needs to exceed the larger diameter shaft length
- Impact Resistant
- Vibration Resistant



S3 / S5



**Female Knobs**

| Item No.       | A     |          | Accepts Thread Diameters |       | B     | C     | E     | F            | Thread Type      | Knob Material | Bulk Pack Qty |
|----------------|-------|----------|--------------------------|-------|-------|-------|-------|--------------|------------------|---------------|---------------|
|                | in    |          | 1                        | 2     | in    | in    | in    | in           |                  |               |               |
| KN4X-5X-S3---- | 1.380 | 1/4, M6  | 5/16, M8                 | 0.920 | 2.000 | 0.630 | 0.630 | Self Tapping | Polypropylene    | 230           |               |
| KN4X-5X-S3--S- | 1.380 | 1/4, M6  | 5/16, M8                 | 0.920 | 2.000 | 0.550 | 0.550 | Self Tapping | TPE - Soft Touch | 150           |               |
| KN6X-8X-S3---- | 1.380 | 3/8, M10 | 1/2, M12                 | 0.920 | 2.000 | 0.720 | 0.720 | Self Tapping | Polypropylene    | 230           |               |
| KN6X-8X-S3--S- | 1.380 | 3/8, M10 | 1/2, M12                 | 0.920 | 2.000 | 0.500 | 0.500 | Self Tapping | TPE - Soft Touch | 150           |               |
| KN6X-8X-S5---- | 1.630 | 3/8, M10 | 1/2, M12                 | 1.000 | 2.420 | 0.630 | 0.630 | Self Tapping | Polypropylene    | 125           |               |
| KN6X-8X-S5--S- | 1.630 | 3/8, M10 | 1/2, M12                 | 1.000 | 2.420 | 0.750 | 0.880 | Self Tapping | TPE - Soft Touch | 125           |               |

**\*\*Other configurations, thread sizes, materials, and customizations available upon request.\*\***

**S Series  
Press-Fit Suction Shift Knobs**

**Specifications**

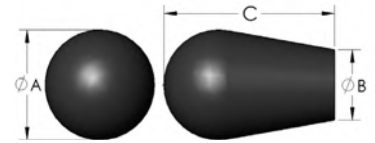
- Knob Material: TPE (Rubber)
- Insert Material: See Table
- Color: Black

**Features**

- Smooth unthreaded hole w/ suction grip
- Reduces installation time
- Soft Touch Knobs provide maximum grip and comfort
- Textured finish to help hide dirt and scratches in the field



S3 / S5



**Female Knobs**

| Item No.        | A     |     | Accepts Unthreaded Shafts | B     | C                          | Thread Type      | Knob Material | Bulk Pack Qty |
|-----------------|-------|-----|---------------------------|-------|----------------------------|------------------|---------------|---------------|
|                 | in    |     |                           | in    | in                         |                  |               |               |
| KN6X--PFS3--S-- | 1.380 | 3/8 | 0.920                     | 2.000 | Suction Grip / Smooth Hole | TPE - Soft Touch | 200           |               |
| KN6X--PFS5--S-- | 1.630 | 3/8 | 1.000                     | 2.420 | Suction Grip / Smooth Hole | TPE - Soft Touch | 125           |               |
| KN8X--PFS5--S-- | 1.630 | 1/2 | 1.000                     | 2.420 | Suction Grip / Smooth Hole | TPE - Soft Touch | 125           |               |

**\*\*Other configurations, thread sizes, materials, and customizations available upon request.\*\***

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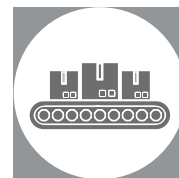
Medical



Science & Laboratory



Audio & Visual



Packaging

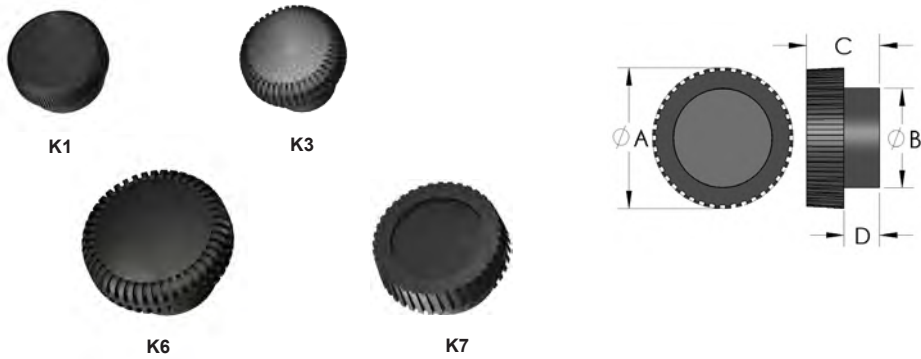


Sporting Goods

# PUSH-PULL KNOBS

## K Series

### Knurled / Round Thumbscrew Knobs



#### Specifications

- Knob Material: See Table
- Insert Material: See Table
- Color: Black

#### Features

- Knurled rim for easy gripping
- Economical design for light securing and clamping applications
- Resistant to water and solvents
- Textured finish to help hide dirt and scratches in the field
- Impact resistant



#### Female Knobs

| Item No.       | A<br>in | Thread Size | B<br>in | C<br>in | D<br>in | Style | Thread Type            | Insert Material | Plating Material | Knob Material | Bulk Pack Qty |
|----------------|---------|-------------|---------|---------|---------|-------|------------------------|-----------------|------------------|---------------|---------------|
| KN02---K7-L-21 | 0.750   | 10-32       | 0.500   | 0.500   | 0.280   | 1     | Stop Nut               | Steel           | Clear Zinc       | Polypropylene | 2500          |
| KN04---K7-L-21 | 0.750   | 10-24       | 0.500   | 0.500   | 0.280   | 1     | Stop Nut               | Steel           | Clear Zinc       | Polypropylene | 2500          |
| KN04---K7---2R | 0.750   | 10-24       | 0.500   | 0.500   | 0.280   | 1     | Blind                  | Steel           | Clear Zinc       | Polypropylene | 2500          |
| KN02---K3-LN21 | 0.750   | 10-32       | 0.500   | 0.480   | 0.170   | 1     | Stop Nut               | Steel           | Clear Zinc       | Nylon         | 2500          |
| KN04---K3-LN21 | 0.750   | 10-24       | 0.500   | 0.480   | 0.170   | 1     | Stop Nut               | Steel           | Clear Zinc       | Nylon         | 2500          |
| KN02---K6D-A21 | 1.000   | 10-32       | 0.630   | 0.580   | 0.170   | 1     | Blind                  | Steel           | Clear Zinc       | ABS           | 1500          |
| KN04---K6DBN21 | 1.000   | 10-24       | 0.630   | 0.580   | 0.170   | 1     | Blind                  | Steel           | Clear Zinc       | Nylon         | 1400          |
| KN4C---K6DBN21 | 1.000   | 1/4-20      | 0.630   | 0.580   | 0.170   | 1     | Blind                  | Steel           | Clear Zinc       | Nylon         | 1400          |
| KN4C---K6DBN-R | 1.000   | 1/4-20      | 0.630   | 0.580   | 0.170   | 1     | Molded Plastic Threads | Molded Plastic  | -                | Nylon         | 1400          |
| KN5C---K6DBN21 | 1.000   | 5/16-18     | 0.630   | 0.580   | 0.170   | 1     | Stop Nut               | Steel           | Clear Zinc       | Nylon         | 1400          |
| KN82---K6D--22 | 1.000   | 8-32        | 0.630   | 0.580   | 0.170   | 1     | Blind                  | Steel           | Yellow Zinc      | Polypropylene | 1200          |

#### Male Knobs

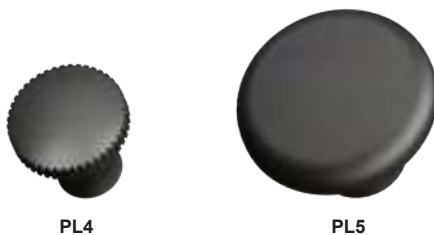
| Item No.        | A<br>in | Thread Size | B<br>in | C<br>in | D<br>in | Style | Stud Length |       | Insert Material | Plating Material | Knob Material | Bulk Pack Qty |
|-----------------|---------|-------------|---------|---------|---------|-------|-------------|-------|-----------------|------------------|---------------|---------------|
|                 |         |             |         |         |         |       | in          | in    |                 |                  |               |               |
| KN820625K1--N22 | 0.630   | 8-32        | 0.500   | 0.360   | 0.170   | 3     | 0.625       | 0.250 | Steel           | Yellow Zinc      | Nylon         | 3500          |
| KN020250K1---21 | 0.630   | 10-32       | 0.500   | 0.360   | 0.170   | 3     | 0.250       | 0.250 | Steel           | Clear Zinc       | Polypropylene | 3000          |
| KN820250K7---2R | 0.750   | 8-32        | 0.500   | 0.500   | 0.280   | 3     | 0.250       | 0.250 | Steel           | Clear Zinc       | Polypropylene | 2500          |
| KN040500K6---2R | 0.750   | 10-24       | 0.500   | 0.500   | 0.280   | 3     | 0.500       | 0.500 | Steel           | Clear Zinc       | Polypropylene | 2000          |
| KN4C0375K7---21 | 0.750   | 1/4-20      | 0.500   | 0.500   | 0.280   | 3     | 0.375       | 0.375 | Steel           | Clear Zinc       | Polypropylene | 3000          |
| KN4C0500K7---21 | 0.750   | 1/4-20      | 0.500   | 0.500   | 0.280   | 3     | 0.500       | 0.500 | Steel           | Clear Zinc       | Polypropylene | 2000          |
| KN820625K3--N21 | 0.750   | 8-32        | 0.500   | 0.480   | 0.170   | 3     | 0.625       | 0.625 | Steel           | Clear Zinc       | Nylon         | 2000          |
| KN040625K3--N21 | 0.750   | 10-24       | 0.500   | 0.480   | 0.170   | 3     | 0.625       | 0.625 | Steel           | Clear Zinc       | Nylon         | 2000          |
| KN4C0500K3--N21 | 0.750   | 1/4-20      | 0.500   | 0.480   | 0.170   | 3     | 0.500       | 0.500 | Steel           | Clear Zinc       | Nylon         | 2500          |
| KN4C1000K3--N21 | 0.750   | 1/4-20      | 0.500   | 0.480   | 0.170   | 3     | 1.000       | 1.000 | Steel           | Clear Zinc       | Nylon         | 2000          |
| KN4C1625K3--N21 | 0.750   | 1/4-20      | 0.500   | 0.480   | 0.170   | 3     | 1.620       | 1.620 | Steel           | Clear Zinc       | Nylon         | 1500          |
| KN020500K6--N2R | 1.000   | 10-32       | 0.630   | 0.500   | 0.090   | 3     | 0.500       | 0.500 | Steel           | Clear Zinc       | Nylon         | 1400          |
| KN020750K6---21 | 1.000   | 10-32       | 0.630   | 0.500   | 0.090   | 3     | 0.750       | 0.750 | Steel           | Clear Zinc       | Polypropylene | 1200          |
| KN020750K6C-N21 | 1.000   | 10-32       | 0.630   | 0.810   | 0.400   | 3     | 0.750       | 0.750 | Steel           | Clear Zinc       | Nylon         | 1000          |
| KN021250K6D-A21 | 1.000   | 10-32       | 0.630   | 0.580   | 0.170   | 3     | 1.250       | 1.250 | Steel           | Clear Zinc       | ABS           | 1400          |
| KN040750K6---21 | 1.000   | 10-24       | 0.630   | 0.500   | 0.090   | 3     | 0.750       | 0.750 | Steel           | Clear Zinc       | Polypropylene | 1400          |
| KN4C0375K6--A21 | 1.000   | 1/4-20      | 0.630   | 0.500   | 0.090   | 3     | 0.370       | 0.370 | Steel           | Clear Zinc       | ABS           | 1400          |
| KN4C0500K6--A21 | 1.000   | 1/4-20      | 0.630   | 0.500   | 0.090   | 3     | 0.500       | 0.500 | Steel           | Clear Zinc       | ABS           | 1300          |
| KN4C0500K6D-A21 | 1.000   | 1/4-20      | 0.630   | 0.580   | 0.170   | 3     | 0.500       | 0.500 | Steel           | Clear Zinc       | ABS           | 1200          |
| KN4C0625K6--A21 | 1.000   | 1/4-20      | 0.630   | 0.500   | 0.090   | 3     | 0.625       | 0.625 | Steel           | Clear Zinc       | ABS           | 1300          |
| KN4C0750K6--N21 | 1.000   | 1/4-20      | 0.630   | 0.500   | 0.090   | 3     | 0.750       | 0.750 | Steel           | Clear Zinc       | Nylon         | 1200          |
| KN4C1000K6D--21 | 1.000   | 1/4-20      | 0.630   | 0.580   | 0.170   | 3     | 1.000       | 1.000 | Steel           | Clear Zinc       | Polypropylene | 1100          |
| KN4C1500K6--A21 | 1.000   | 1/4-20      | 0.630   | 0.500   | 0.090   | 3     | 1.500       | 1.500 | Steel           | Clear Zinc       | ABS           | 1000          |
| KN4C2125K6---21 | 1.000   | 1/4-20      | 0.630   | 0.500   | 0.090   | 3     | 2.125       | 2.125 | Steel           | Clear Zinc       | Polypropylene | 750           |
| KN5C0500K6D--2R | 1.000   | 5/16-18     | 0.630   | 0.580   | 0.170   | 3     | 0.500       | 0.500 | Steel           | Clear Zinc       | Polypropylene | 1200          |
| KN5C0625K6C--21 | 1.000   | 5/16-18     | 0.630   | 0.810   | 0.400   | 3     | 0.620       | 0.620 | Steel           | Clear Zinc       | Polypropylene | 900           |
| KN5C0750K6D-A21 | 1.000   | 5/16-18     | 0.630   | 0.580   | 0.170   | 3     | 0.750       | 0.750 | Steel           | Clear Zinc       | ABS           | 1200          |
| KN5C0875K6D--21 | 1.000   | 5/16-18     | 0.630   | 0.580   | 0.170   | 3     | 0.875       | 0.875 | Steel           | Clear Zinc       | Polypropylene | 1000          |
| KN5C1500K6D-A21 | 1.000   | 5/16-18     | 0.630   | 0.580   | 0.170   | 3     | 1.500       | 1.500 | Steel           | Clear Zinc       | ABS           | 800           |

\*\*Other configurations, thread sizes, materials, and customizations available upon request.\*\*

# PUSH-PULL KNOBS (THUMBSCREW) KNOBS



## PL Series Pull Knobs

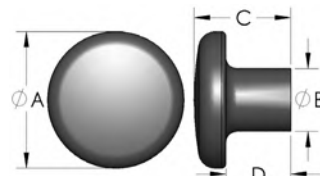


### Specifications

- Knob Material: Polypropylene
- Insert Material: See Table
- Color: Black

### Features

- Economical design for light to medium duty securing and clamping applications
- Resistant to water and solvents
- Textured finish to help hide dirt and scratches in the field
- Impact resistant



### Female Knobs

| Item No.       | A in  | Thread Size | B in  | C in  | D in  | Thread Type | Insert Material | Plating Material | Bulk Pack Qty |
|----------------|-------|-------------|-------|-------|-------|-------------|-----------------|------------------|---------------|
| KN04---PL4L-21 | 1.000 | 10-24       | 0.530 | 0.930 | 0.680 | Stop Nut    | Steel           | Clear Zinc       | 1200          |
| KN4C---PL4L-21 | 1.000 | 1/4-20      | 0.530 | 0.930 | 0.680 | Stop Nut    | Steel           | Clear Zinc       | 1200          |
| KN4C---PL5-21  | 1.600 | 1/4-20      | 0.750 | 1.160 | 0.780 | Blind       | Steel           | Clear Zinc       | 350           |
| KN5C---PL5-22  | 1.600 | 5/16-18     | 0.750 | 1.160 | 0.780 | Blind       | Steel           | Yellow Zinc      | 350           |
| KN6C---PL5-21  | 1.600 | 3/8-16      | 0.750 | 1.160 | 0.780 | Blind       | Steel           | Clear Zinc       | 350           |

\*\*Other configurations, thread sizes, materials, and customizations available upon request.\*\*

## KS Series Knurled Thumbscrew Knobs

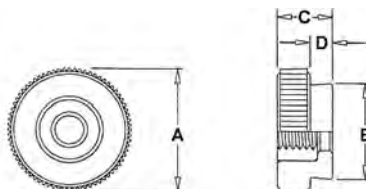


### Specifications

- Knob Material: Acetal
- Insert Material: Aluminum
- Color: Black

### Features

- Knurled rim for easy gripping
- Economical design for light securing and clamping applications
- Textured finish to help hide dirt and scratches in the field



### Female Knobs

| Item No.       | A in  | Accepts Thread Diameters | B in  | C in  | D in  |
|----------------|-------|--------------------------|-------|-------|-------|
| KS40---N1--5A0 | 0.313 | 4-40                     | 0.280 | 0.190 | 0.060 |
| KS62---N2--5A0 | 0.375 | 6-32                     | 0.360 | 0.230 | 0.060 |
| KS82---N3--5A0 | 0.500 | 8-32                     | 0.410 | 0.250 | 0.070 |
| KS04---N4--5A0 | 0.625 | 10-24                    | 0.420 | 0.250 | 0.080 |
| KS4C---N5--5A0 | 0.750 | 1/4-20                   | 0.500 | 0.310 | 0.140 |
| KS4C---N6--5A0 | 1.000 | 1/4-20                   | 0.590 | 0.410 | 0.140 |
| KS5C---N6--5A0 | 1.000 | 5/16-18                  | 0.590 | 0.410 | 0.140 |
| KSM3---N2--5A0 | 0.375 | M3                       | 0.360 | 0.230 | 0.060 |
| KSM4---N3--5A0 | 0.500 | M4                       | 0.410 | 0.250 | 0.070 |
| KSM5---N4--5A0 | 0.625 | M5                       | 0.420 | 0.250 | 0.080 |
| KSM6---N5--5A0 | 0.750 | M6                       | 0.500 | 0.310 | 0.140 |
| KSM8---N6--5A0 | 1.000 | M8                       | 0.590 | 0.410 | 0.140 |

\*\*Other configurations, thread sizes, materials, and customizations available upon request.\*\*



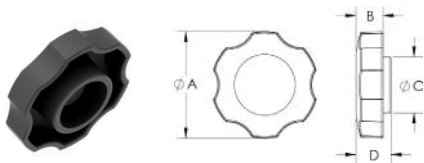
## CUSTOM COLORS AND CUSTOMIZATIONS

Customize your plastic knobs and molded parts to fit your project needs.

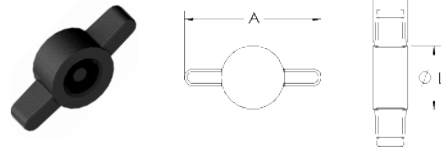
[www.essentracomponents.com](http://www.essentracomponents.com)

# SELF-ASSEMBLY KNOBS / ROUND HEAD KNOBS

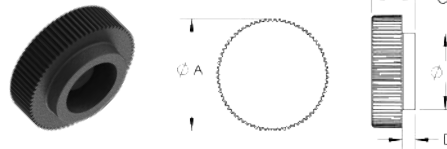
## KS Series Self-Assembly Knobs



Type 1



Type 2



Type 3



**Specifications:**

- Knob Material: Acetal
- Insert Material: Assemble onto socket head cap screw
- Color: Black

**Features:**

- Can be assembled on to a socket head cap screw thereby creating an instant thumbscrew without any need for glue or adhesive
- Note: These knobs cannot be assembled by hand and require the use of a punch press or hydraulic press to attach the socket head cap screw**
- Accepts course and fine thread pitch
- Textured finish to help hide dirt and scratches in the field
- Assembly fixtures are available for purchase

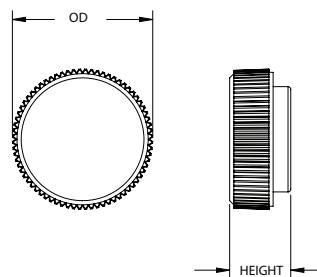
### Socket Head Screw Caps

| Item No.       | A<br>in | Accepts Thread<br>Dieters | B<br>in | C<br>in | D<br>in | Knob<br>Type | Bulk Pack<br>Qty |
|----------------|---------|---------------------------|---------|---------|---------|--------------|------------------|
| KSN4---N1--5-- | 0.313   | #4                        | 0.280   | 0.190   | 0.060   | Type 3       | 24700            |
| KSN6---N1--5-- | 0.313   | #6                        | 0.280   | 0.190   | 0.060   | Type 3       | 24700            |
| KSN6---N2--5-- | 0.375   | #6                        | 0.360   | 0.230   | 0.060   | Type 3       | 20000            |
| KSN8---N2--5-- | 0.375   | #8                        | 0.360   | 0.230   | 0.060   | Type 3       | 20000            |
| KSM3---N2--5-- | 0.375   | M3                        | 0.360   | 0.230   | 0.060   | Type 3       | 12500            |
| KSN1---N3--5-- | 0.500   | #10                       | 0.420   | 0.250   | 0.070   | Type 3       | 10000            |
| KSN8---N3--5-- | 0.500   | #8                        | 0.420   | 0.250   | 0.070   | Type 3       | 10000            |
| KSM4---N3--5-- | 0.500   | M4                        | 0.420   | 0.250   | 0.070   | Type 3       | 10000            |
| KSN1---N4--5-- | 0.625   | #11                       | 0.420   | 0.250   | 0.080   | Type 3       | 5000             |
| KSN8---N4--5-- | 0.625   | #8                        | 0.420   | 0.250   | 0.080   | Type 3       | 6000             |
| KSM5---N4--5-- | 0.625   | M5                        | 0.420   | 0.250   | 0.080   | Type 3       | 6500             |
| KSN1---N5--5-- | 0.750   | #10                       | 0.520   | 0.310   | 0.140   | Type 3       | 4000             |
| KS4X---N5--5-- | 0.750   | 1/4                       | 0.520   | 0.310   | 0.140   | Type 3       | 4000             |
| KSM6---N5--5-- | 0.750   | M6                        | 0.520   | 0.310   | 0.140   | Type 3       | 4000             |
| KSN1---N6--5-- | 1.000   | #10                       | 0.590   | 0.380   | 0.100   | Type 3       | 1800             |
| KS4X---N6--5-- | 1.000   | 1/4                       | 0.590   | 0.380   | 0.100   | Type 3       | 1800             |
| K5SX---N6--5-- | 1.000   | 5/16                      | 0.590   | 0.380   | 0.100   | Type 3       | 1800             |
| KSM5---N6--5-- | 1.000   | M5                        | 0.590   | 0.380   | 0.100   | Type 3       | 1800             |

| Item No.       | A<br>in | Accepts Thread<br>Dieters | B<br>in | C<br>in | D<br>in | Knob<br>Type | Bulk Pack<br>Qty |
|----------------|---------|---------------------------|---------|---------|---------|--------------|------------------|
| KSM6---N6--5-- | 1.000   | M6                        | 0.590   | 0.380   | 0.100   | Type 3       | 1800             |
| KSM8---N6--5-- | 1.000   | M8                        | 0.590   | 0.380   | 0.100   | Type 3       | 1500             |
| KSN1---T0--5-- | 1.020   | #10                       | 0.480   | 0.270   | -       | Type 2       | 7000             |
| KSN8---T0--5-- | 1.020   | #8                        | 0.480   | 0.270   | -       | Type 2       | 7000             |
| KSN1---T2--5-- | 1.250   | #10                       | 0.530   | 0.340   | -       | Type 2       | 3000             |
| KS4X---O3--5-- | 1.500   | 1/4                       | 0.375   | 0.475   | 0.780   | Type 1       | 700              |
| KS5X---O3--5-- | 1.500   | 5/16                      | 0.375   | 0.475   | 0.780   | Type 1       | 700              |
| KS6X---O3--5-- | 1.500   | 3/8                       | 0.375   | 0.475   | 0.780   | Type 1       | 700              |
| KSM1---O3--5-- | 1.500   | M10                       | 0.375   | 0.475   | 0.780   | Type 1       | 700              |
| KSM6---O3--5-- | 1.500   | M6                        | 0.375   | 0.475   | 0.780   | Type 1       | 700              |
| KSM8---O3--5-- | 1.500   | M8                        | 0.375   | 0.475   | 0.780   | Type 1       | 700              |
| KS4X---T3--5-- | 1.500   | 1/4                       | 0.630   | 0.410   | -       | Type 2       | 2000             |
| KS5X---T3--5-- | 1.500   | 5/16                      | 0.630   | 0.410   | -       | Type 2       | 2300             |
| KS6X---T3--5-- | 1.500   | M6                        | 0.630   | 0.410   | -       | Type 2       | 2300             |
| KSM8---T3--5-- | 1.500   | M8                        | 0.630   | 0.410   | -       | Type 2       | 2300             |
| KS6X---T6--5-- | 1.780   | 3/8                       | 0.800   | 0.500   | -       | Type 2       | 1500             |
| KSM1---T6--5-- | 1.780   | M1                        | 0.800   | 0.500   | -       | Type 2       | 1500             |

\*\*Other configurations, thread sizes, materials, and customizations available upon request.\*\*

## 29R/29M Series Round Head Knobs



**Specifications:**

- Material: Acetal
- Color: See Table

**Features:**

- Presses onto any standard socket hex cap screw

### Imperial

| Item No. |          |          |          |          | For Screw<br>Size | OD    |      | Height |     | Bulk Pack<br>Qty |
|----------|----------|----------|----------|----------|-------------------|-------|------|--------|-----|------------------|
| Black    | Blue     | Red      | White    | Green    |                   | in    | mm   | in     | mm  |                  |
| 29R004B  | 29R004BL | 29R004RD | 29R004WT | 29R004GR | #4                | 0.313 | 8.0  | 0.172  | 4.4 | 1000             |
| 29R006B  | 29R006BL | 29R006RD | 29R006WT | 29R006GR | #6                | 0.375 | 9.5  | 0.203  | 5.2 | 1000             |
| 29R008B  | 29R008BL | 29R008RD | 29R008WT | 29R008GR | #8                | 0.500 | 12.7 | 0.219  | 5.6 | 500              |
| 29R010B  | 29R010BL | 29R010RD | 29R010WT | 29R010GR | #10               | 0.656 | 16.7 | 0.250  | 6.4 | 500              |
| 29R147B  | 29R147BL | 29R147RD | 29R147WT | 29R147GR | 1/4               | 0.750 | 19.1 | 0.313  | 8.0 | 500              |
| 29R516B  | 29R516BL | 29R516RD | 29R516WT | 29R516GR | 5/16              | 1.000 | 25.4 | 0.391  | 9.9 | 500              |

### Metric

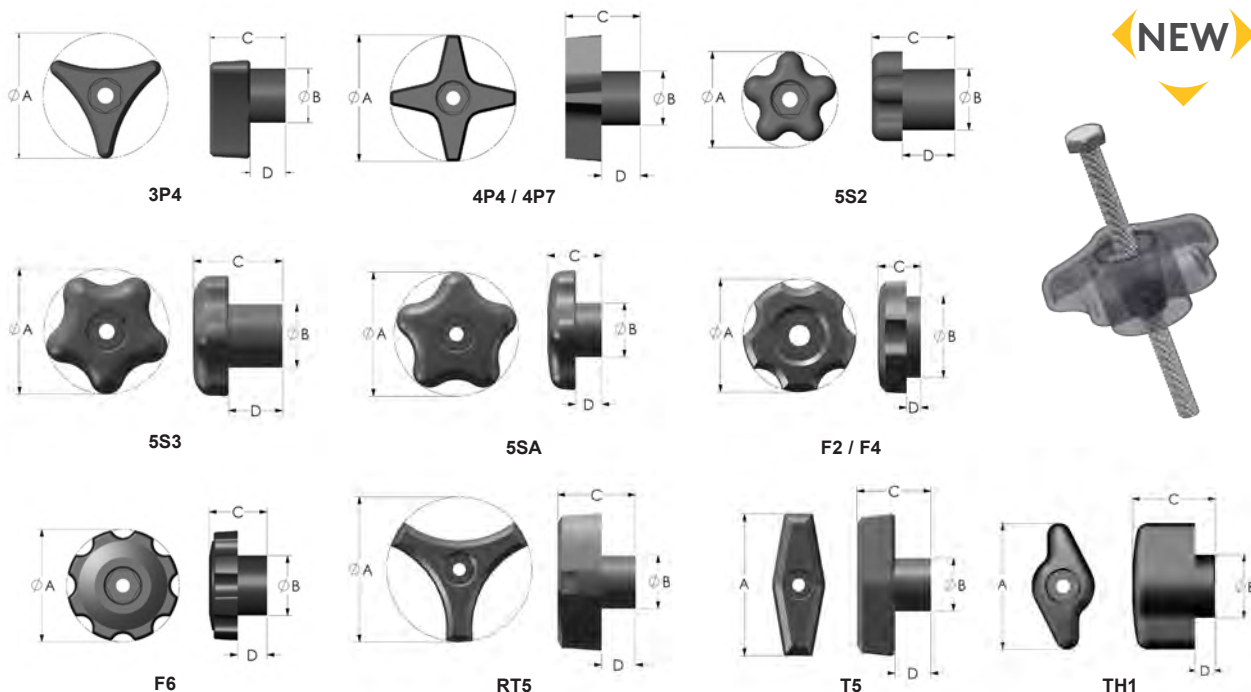
| Item No. |           |           |           |           | Screw<br>Size | OD    |      | Height |     | Bulk Pack<br>Qty |
|----------|-----------|-----------|-----------|-----------|---------------|-------|------|--------|-----|------------------|
| Black    | Blue      | Red       | White     | Green     |               | in    | mm   | in     | mm  |                  |
| 29M300RB | 29M300RBL | 29M300RRD | 29M300RWT | 29M300RGR | M3            | 0.375 | 9.5  | 0.203  | 5.2 | 1000             |
| 29M400RB | 29M400RBL | 29M400RRD | 29M400RWT | 29M400RGR | M4            | 0.500 | 12.7 | 0.219  | 5.6 | 500              |
| 29M500RB | 29M500RBL | 29M500RRD | 29M500RWT | 29M500RGR | M5            | 0.656 | 16.7 | 0.250  | 6.4 | 500              |
| 29M600RB | 29M600RBL | 29M600RRD | 29M600RWT | 29M600RGR | M6            | 0.750 | 19.1 | 0.313  | 8.0 | 500              |
| 29M601RB | 29M601RBL | 29M601RRD | 29M601RWT | 29M601RGR | M6            | 1.000 | 25.4 | 0.327  | 8.3 | 1000             |
| 29M801RB | 29M801RBL | 29M801RRD | 29M801RWT | 29M801RGR | M8            | 1.000 | 25.4 | 0.391  | 9.9 | 500              |



# SELF-ASSEMBLY (SNAP LOCK) KNOBS



## Hex Series Snap Lock Knobs



### Specifications

- Knob Material: Polypropylene
- Insert Material: Snap in your own hex head fastener
- Color: Black

### Features

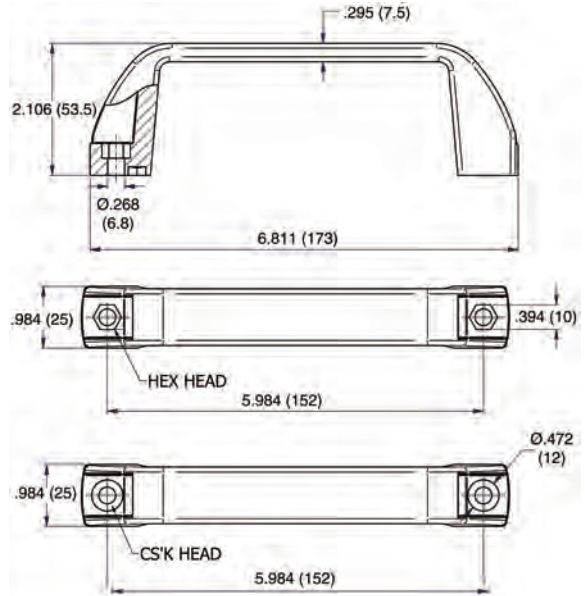
- Accepts hex nuts, lock nuts, tab bolts, and cap screws
- Snap into hex hole for a secure fit
- Perfect for MRO, prototypes, jigs, and fixtures
- Available for inch and metric fasteners
- Textured finish to help hide dirt and scratches in the field
- Impact resistant

| Item No.         | A<br>in | Thread Size        | B<br>in | c<br>in | D<br>in | Style Number | Bulk Pack Qty |
|------------------|---------|--------------------|---------|---------|---------|--------------|---------------|
| KNH10HEX3P4----  | 1.750   | 10-32 or 10-24     | 0.750   | 1.060   | 0.490   | 3P4          | 1200          |
| KNH1-HEX3P4----  | 1.750   | 1/4-20 or 1/4-28   | 0.750   | 1.060   | 0.490   | 3P4          | 1200          |
| KNH4-HEX3P4----  | 1.750   | M6                 | 0.750   | 1.060   | 0.490   | 3P4          | 1200          |
| KNH10HEX4P4----  | 1.750   | 10-32 or 10-24     | 0.750   | 1.040   | 0.540   | 4P4          | 700           |
| KNH1-HEX4P4----  | 1.750   | 1/4-20 or 1/4-28   | 0.750   | 1.040   | 0.540   | 4P4          | 1000          |
| KNH4-HEX4P4----  | 1.750   | M6                 | 0.750   | 1.040   | 0.540   | 4P4          | 1000          |
| KNH3-HEX4P7----  | 2.500   | 3/8-16 or 3/8-24   | 0.980   | 1.000   | 0.360   | 4P7          | 500           |
| KNH6-HEX4P7----  | 2.500   | M10                | 0.980   | 1.000   | 0.360   | 4P7          | 500           |
| KNH7-HEX4P7----  | 2.500   | 1/2-13 or 1/2-20   | 0.980   | 1.000   | 0.360   | 4P7          | 500           |
| KNH8-HEX4P7----  | 2.500   | M12                | 0.980   | 1.000   | 0.360   | 4P7          | 400           |
| KNH10HEX5S2----  | 1.380   | 10-32 or 10-24     | 0.850   | 1.150   | 0.700   | 5S2          | 1000          |
| KNH1-HEX5S2----  | 1.380   | 1/4-20 or 1/4-28   | 0.850   | 1.150   | 0.700   | 5S2          | 1000          |
| KNH2-HEX5S2----  | 1.380   | 5/16-18 or 5/16-24 | 0.850   | 1.150   | 0.700   | 5S2          | 1000          |
| KNH4-HEX5S2----  | 1.380   | M6                 | 0.850   | 1.150   | 0.700   | 5S2          | 1000          |
| KNH5-HEX5S2----  | 1.380   | M8                 | 0.850   | 1.150   | 0.700   | 5S2          | 1000          |
| KNH1-HEX5S3A---- | 1.750   | 1/4-20 or 1/4-28   | 0.880   | 1.250   | 0.750   | 5S3          | 350           |
| KNH2-HEX5S3A---- | 1.750   | 5/16-18 or 5/16-24 | 0.880   | 1.250   | 0.750   | 5S3          | 350           |
| KNH3-HEX5S3A---- | 1.750   | 3/8-16 or 3/8-24   | 0.880   | 1.250   | 0.750   | 5S3          | 350           |
| KNH5-HEX5S3A---- | 1.750   | M8                 | 0.880   | 1.250   | 0.750   | 5S3          | 350           |
| KNH6-HEX5S3A---- | 1.750   | M10                | 0.880   | 1.250   | 0.750   | 5S3          | 350           |
| KNH4-HEX5S3A---- | 1.750   | M6                 | 0.880   | 1.250   | 0.750   | 5S3          | 350           |
| KNH1-HEX5SA----  | 2.250   | 1/4-20 or 1/4-28   | 0.990   | 0.980   | 0.470   | 5SA          | 500           |
| KNH2-HEX5SA----  | 2.250   | 5/16-18 or 5/16-24 | 0.990   | 0.980   | 0.470   | 5SA          | 500           |
| KNH3-HEX5SA----  | 2.250   | 3/8-16 or 3/8-24   | 0.990   | 0.980   | 0.470   | 5SA          | 500           |
| KNH4-HEX5SA----  | 2.250   | M6                 | 0.990   | 0.980   | 0.470   | 5SA          | 500           |
| KNH5-HEX5SA----  | 2.250   | M8                 | 0.990   | 0.980   | 0.470   | 5SA          | 500           |
| KNH6-HEX5SA----  | 2.250   | M10                | 0.990   | 0.980   | 0.470   | 5SA          | 500           |
| KNH10HEXF2----   | 1.380   | 10-32 or 10-24     | 0.980   | 0.590   | 0.170   | F2           | 800           |
| KNH1-HEXF2----   | 1.380   | 1/4-20 or 1/4-28   | 0.980   | 0.590   | 0.170   | F2           | 800           |
| KNH4-HEXF2----   | 1.380   | M6                 | 0.980   | 0.590   | 0.170   | F2           | 800           |
| KNH2-HEXF4----   | 1.750   | 5/16-18 or 5/16-24 | 1.250   | 0.860   | 0.280   | F4           | 700           |
| KNH3-HEXF4----   | 1.750   | 3/8-16 or 3/8-24   | 1.250   | 0.860   | 0.280   | F4           | 700           |
| KNH5-HEXF4----   | 1.750   | M8                 | 1.250   | 0.860   | 0.280   | F4           | 700           |
| KNH6-HEXF4----   | 1.750   | M10                | 1.250   | 0.860   | 0.280   | F4           | 700           |
| KNH1-HEXF6----   | 2.380   | 1/4-20 or 1/4-28   | 1.250   | 1.230   | 0.620   | F6           | 250           |
| KNH2-HEXF6----   | 2.380   | 5/16-18 or 5/16-24 | 1.250   | 1.230   | 0.620   | F6           | 250           |
| KNH3-HEXF6----   | 2.380   | 3/8-16 or 3/8-24   | 1.250   | 1.230   | 0.620   | F6           | 250           |
| KNH4-HEXF6----   | 2.380   | M6                 | 1.250   | 1.230   | 0.620   | F6           | 250           |
| KNH5-HEXF6----   | 2.380   | M8                 | 1.250   | 1.230   | 0.620   | F6           | 250           |
| KNH6-HEXF6----   | 2.380   | M10                | 1.250   | 1.230   | 0.620   | F6           | 250           |
| KNH7-HEXF6----   | 2.380   | 1/2-13 or 1/2-20   | 1.250   | 1.230   | 0.620   | F6           | 250           |
| KNH8-HEXF6----   | 2.380   | M12                | 1.250   | 1.230   | 0.620   | F6           | 250           |
| KNH1-HEXRT5----  | 2.000   | 1/4-20 or 1/4-28   | 0.750   | 1.090   | 0.490   | RT5          | 900           |
| KNH2-HEXRT5----  | 2.000   | 5/16-18 or 5/16-24 | 0.750   | 1.090   | 0.490   | RT5          | 900           |
| KNH4-HEXRT5----  | 2.000   | M6                 | 0.750   | 1.090   | 0.490   | RT5          | 900           |
| KNH5-HEXRT5----  | 2.000   | M8                 | 0.750   | 1.090   | 0.490   | RT5          | 900           |
| KNH1-HEXT5----   | 2.000   | 1/4-20 or 1/4-28   | 0.750   | 1.060   | 0.490   | T5           | 1200          |
| KNH4-HEXT5----   | 2.000   | M6                 | 0.750   | 1.060   | 0.490   | T5           | 1200          |
| KNH10HEXTH1----  | 1.250   | 10-32 or 10-24     | 0.630   | 0.830   | 0.200   | TH1          | 1200          |
| KNH1-HEXTH1----  | 1.250   | 1/4-20 or 1/4-28   | 0.630   | 0.830   | 0.200   | TH1          | 1200          |
| KNH4-HEXTH1----  | 1.250   | M6                 | 0.630   | 0.830   | 0.200   | TH1          | 1200          |

\*\*Other configurations, thread sizes, materials, and customizations available upon request.\*\*

# BRIDGE HANDLES

## 186 Series Bridge Handles



Specifications:

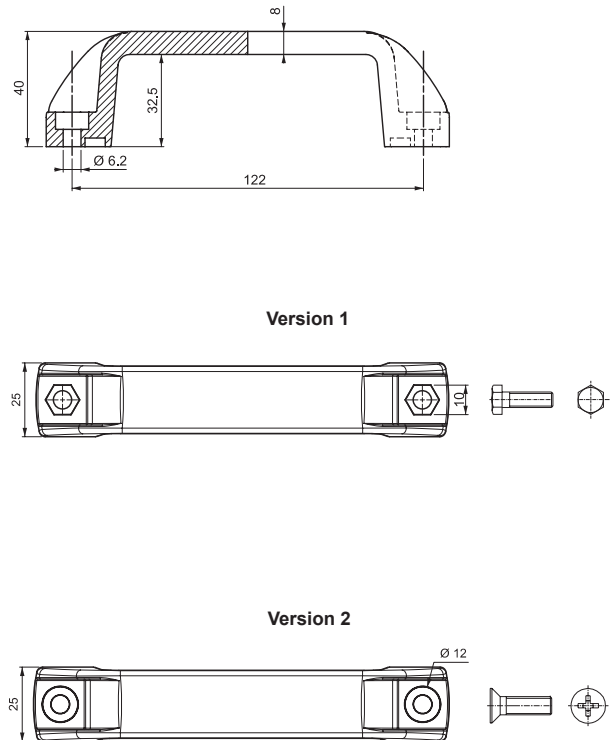
- Material: Nylon 6
- Color: Black

Features:

- Ideal for machinery covers

| Item No. | Type | Bulk Pack Qty |
|----------|------|---------------|
| 1861     | 1    | 25            |
| 1862     | 2    | 25            |

## 086 Series Bridge Handles



Specifications

- Material: 30% Glass-Filled Nylon 6
- Color: Black

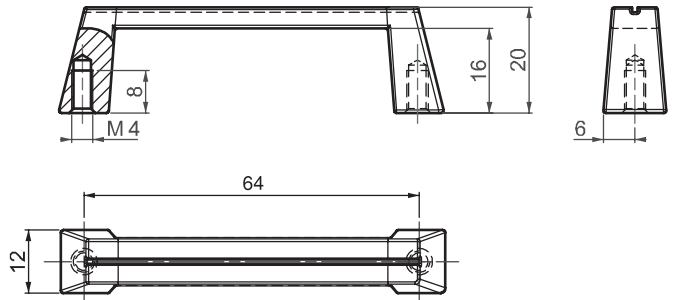
Features

- Two different types of securing

| Item No. | Version | Pack Qty |
|----------|---------|----------|
| 0861     | 1       | 1        |
| 0862     | 2       | 1        |



**085 Series  
Bridge Handles**



**Specifications**

- Materials: Zinc Alloy
- Finish: See Table

**Features**

- Handle is DIN-EN 1774 rated
- Stylish handle for wooden furniture and keyboard shelf in rack enclosure

| Item No. | Finish              | Pack Qty |
|----------|---------------------|----------|
| 08511    | Chrome Plated       | 1        |
| 08512    | Black Powder Coated | 1        |

**DWP Series  
Bridge Handles**



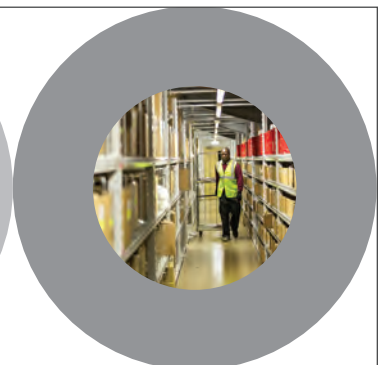
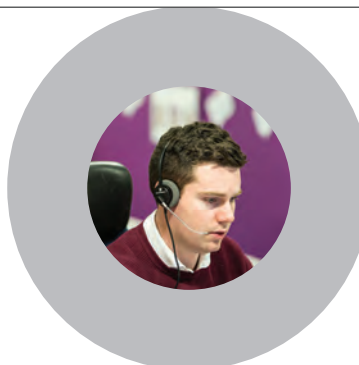
**Specifications**

- Material: ABS
- Color: Black

| Item No. | Distance Between Holes |       | Bulk Pack Qty |
|----------|------------------------|-------|---------------|
|          | in                     | mm    |               |
| DWP1200A | 4.000                  | 101.6 | 33            |

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# BRIDGE HANDLES

## HBS Series Bridge Handles



Type 1



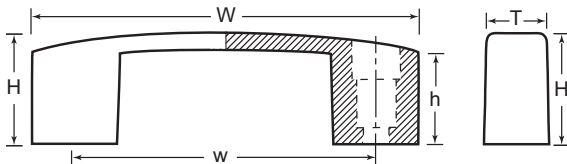
Type 2

Specifications:

- Material: Nylon
- Color: Black

Features:

- Round base with plain bore thru hole for use with specified socket head cap screw
- Made of impact & scratch resistant material
- Lightweight and versatile
- Optional caps available in 3 different colors, see HBSC Series (not available for HBS2000A)



| Item No. | Type | W     |       | H     |      | w     |       | h     |      | T     |      | Fits Socket Head Screw  | Bulk Pack Qty |
|----------|------|-------|-------|-------|------|-------|-------|-------|------|-------|------|-------------------------|---------------|
|          |      | in    | mm    | in    | mm   | in    | mm    | in    | mm   | in    | mm   |                         |               |
| HBS0100A | 1    | 4.705 | 119.5 | 1.378 | 35.0 | 3.677 | 93.4  | 1.142 | 29.0 | 1.024 | 26.0 | 1/4-20, 5/16 - 18, M6   | 100           |
| HBS0110A | 1    | 5.709 | 145.0 | 1.575 | 40.0 | 4.606 | 117.0 | 1.339 | 34.0 | 1.142 | 29.0 | 5/16 - 18, M8           | 100           |
| HBS0120A | 1    | 6.417 | 163.0 | 1.772 | 45.0 | 5.197 | 132.0 | 1.496 | 38.0 | 1.220 | 31.0 | 5/16 - 18, M8           | 100           |
| HBS2000A | 2    | 5.512 | 140.0 | 1.575 | 40.0 | 4.804 | 122.0 | 1.260 | 32.0 | 0.984 | 25.0 | 1/4 - 20, 5/16 - 18, M6 | 25            |

## HBSC Series Bridge Handle Caps



Specifications:

- Material: Nylon
- Color: See Table

Features:

- Available for closure purposes or color-coding requirements
- Available in 2 sizes & 3 colors to fit HBS series Type 1 Handles



Used with Bridge Handles. See HBS Series above

| Item No. | Color | Used With          | Bulk Pack Qty |
|----------|-------|--------------------|---------------|
| HBSC06A  | Black | HBS0100A, HBS0110A | 200           |
| HBSC06B  | Blue  | HBS0100A, HBS0110A | 200           |
| HBSC06C  | Red   | HBS0100A, HBS0110A | 200           |
| HBSC08A  | Black | HBS0120A           | 200           |
| HBSC08B  | Blue  | HBS0120A           | 200           |
| HBSC08C  | Red   | HBS0120A           | 200           |



# ARCHED HANDLES / WIRE PULL HANDLES

## 084 Series Arched Handles

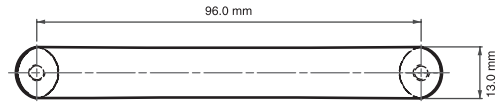


**Specifications**

- Materials: Zinc Alloy
- Finish: See Table
- Handle is DIN-EN 1774 rated

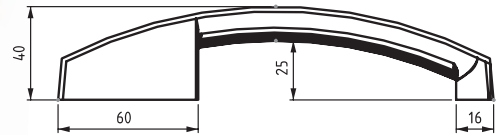
**Features**

- Stylish handle for wooden and metal furniture



| Item No. | Finish              | Pack Qty |
|----------|---------------------|----------|
| 08411    | Chrome Plated       | 1        |
| 08412    | Black Powder Coated | 1        |

## 286 Series Arched Handles

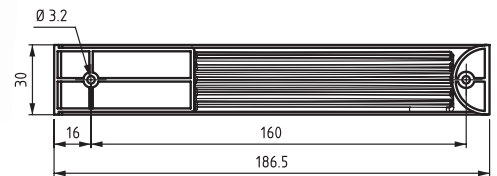


**Specifications**

- Material: 30% Glass-Filled Nylon 6
- Color: Black

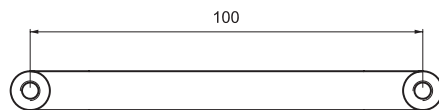
**Features**

- Compliant to DIN-EN 1043-1
- Ideal for machinery cover applications
- Installation using two screws



| Item No. | Pack Qty |
|----------|----------|
| 286      | 1        |

## 184 Series Wire Pull Handles

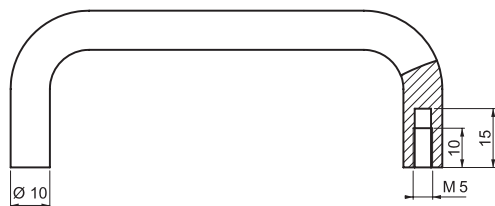


**Specifications**

- Material: See Table
- Finish: See Table

**Features**

- Stylish handle for wooden furniture and keyboard shelf in rack enclosure



| Item No.   | H Height | Material        | Finish        | Pack Qty |
|------------|----------|-----------------|---------------|----------|
| 1844040100 | 40 mm    | Stainless Steel | No Finish     | 1        |
| 1844050100 | 50 mm    | Stainless Steel | No Finish     | 1        |
| 1845740100 | 40 mm    | Aluminium       | Matt Anodized | 1        |
| 1845750100 | 50 mm    | Aluminium       | Matt Anodized | 1        |
| 1846140100 | 40 mm    | Steel           | Chrome Plated | 1        |

# WIRE PULL HANDLES / TUBULAR HANDLES

## DWP Series Wire Pull Handles



- Specifications
- Material: Nylon
  - Color: Black

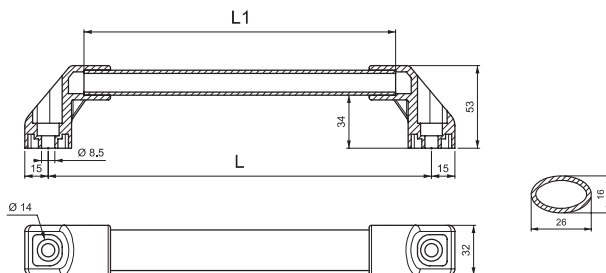
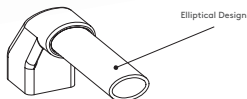
| Item No. | Distance Between Holes |       | Material | Bulk Pack Qty |
|----------|------------------------|-------|----------|---------------|
|          | in                     | mm    |          |               |
| DWP1100A | 4.000                  | 101.6 | Nylon    | 30            |

## 287 Series Tubular Handles



- Specifications
- Materials:  
Fixing Part: Nylon Black (PA6 30% GF)  
Handle: Aluminum
  - Finish: Matt anodized aluminum

- Features
- Ergonomic elliptical handle
  - Contact Essentra for alternate colors and dimensions



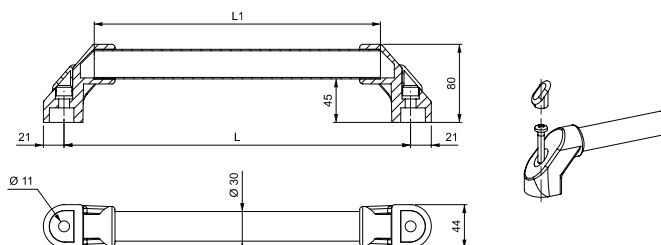
| Item No. | Length L1 | Length L |
|----------|-----------|----------|
|          | mm        | mm       |
| 287200   | 154       | 200      |
| 287300   | 254       | 300      |
| 287400   | 354       | 400      |
| 287500   | 454       | 500      |

## 487 Series Tubular Handles



- Specifications
- Materials:  
Fixing Part: Nylon Black (PA6 30% GF)  
Handle: Stainless Steel

- Features
- Please contact Essentra for alternate dimensions and colors



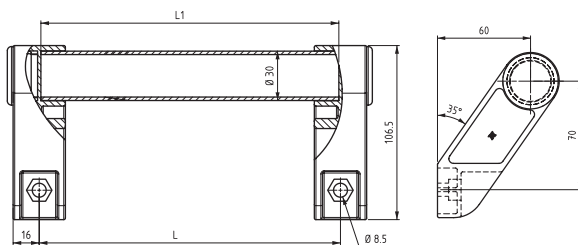
| Item No. | Length L1 | Length L |
|----------|-----------|----------|
|          | mm        | mm       |
| 487300   | 298       | 300      |
| 487400   | 398       | 400      |
| 487500   | 498       | 500      |
| 487600   | 598       | 600      |
| 487700   | 698       | 700      |
| 487800   | 798       | 800      |
| 4871000  | 998       | 1000     |

## 387 Series Tubular (Offset) Handles



- Specifications
- Materials:  
Fixing Part: Nylon Black (PA6 30% GF)  
Handle: Steel (Plastic Coated)
  - Finish: Matt anodized aluminum

- Features
- Plastic coated steel handle
  - Contact Essentra for alternate lengths and colors



| Item No. | Length L1 | Length L |
|----------|-----------|----------|
|          | mm        | mm       |
| 387300   | 298       | 300      |
| 387400   | 398       | 400      |
| 387500   | 498       | 500      |
| 387600   | 598       | 600      |
| 387700   | 698       | 700      |
| 387800   | 798       | 800      |
| 3871000  | 998       | 1000     |



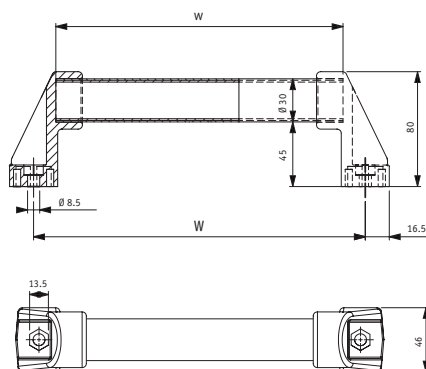
**187 & 087 Series**

**Tubular Handles**

- Type 1 & 2 can be ordered as component parts
- Type 1 - Polyamide with steel bar
- Type 2 - Polyamide with aluminium bar



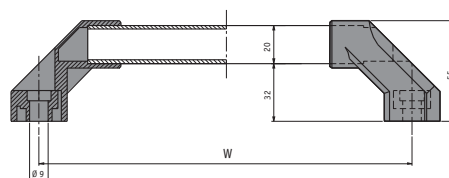
**Type 1**  
Polyamide Coated Steel Bar



| Item No. | W     |      | w     |     | Bulk Pack Qty |
|----------|-------|------|-------|-----|---------------|
|          | in    | mm   | in    | mm  |               |
| 187300   | 11.81 | 300  | 10.59 | 269 | 25            |
| 187400   | 15.75 | 400  | 14.53 | 369 | 30            |
| 187500   | 19.69 | 500  | 18.46 | 469 | 20            |
| 187600   | 23.62 | 600  | 22.40 | 569 | 20            |
| 187700   | 27.56 | 700  | 26.34 | 669 | 20            |
| 187800   | 31.50 | 800  | 30.28 | 769 | 10            |
| 187900   | 35.43 | 900  | 38.15 | 969 | 10            |
| 1871000  | 39.37 | 1000 | 39.29 | 998 | 10            |



**Type 2**  
Aluminum Bar



| Item No. | W     |     | Bulk Pack Qty |
|----------|-------|-----|---------------|
|          | in    | mm  |               |
| 087200   | 7.87  | 200 | 75            |
| 087300   | 11.81 | 300 | 50            |
| 087400   | 15.75 | 400 | 50            |
| 087500   | 19.69 | 500 | 50            |

**Type 1&2 Component Parts**



Type 1: Middle Holder



Type 1 Handle Ends



Type 2 Handle Ends



Type 2: 1m Long Aluminium Bar



Type 1: 1m Long Steel Bar

| Item No.     | W                                        | Bulk Pack Qty |
|--------------|------------------------------------------|---------------|
| 34002501     | Type 1 Middle Holder                     | 25            |
| 35002006     | Type 1 Handle Ends                       | 25            |
| 35002002     | Type 2 Handle Ends                       | 50            |
| 320036001000 | Type 1: 39.37 In / 1m Long Steel Bar     | 10            |
| 32006015     | Type 2: 39.37 In / 1m Long Aluminium Bar | 25            |



**LOCAL STOCK**



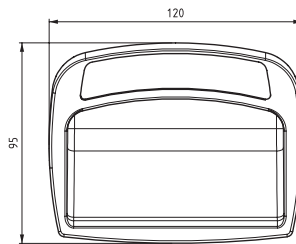
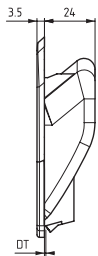
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# SNAP IN RECESSED HANDLES

## 374 Series Snap-In Handle - Cover Pull

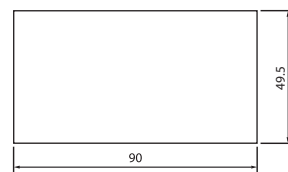
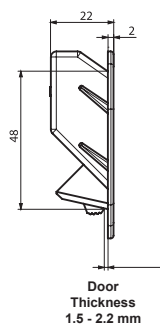
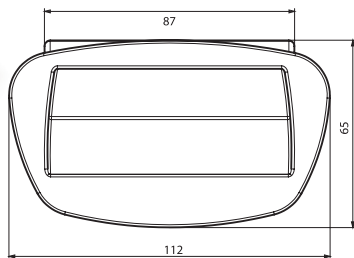


Specifications  
 • Material: ABS  
 • Color: Black

Features  
 • Easy assembly by clips  
 • Contact Essentra for alternate colors or custom logo options

| Item No. | Door Thickness mm | Cut-Out mm | Bulk Pack Qty |
|----------|-------------------|------------|---------------|
| 37415    | 0.8 - 1.4         | 107 x 70.5 | 1             |
| 37422    | 1.5 - 2.2         | 107 X 70.5 | 1             |

## 174 Series Snap-In Handle

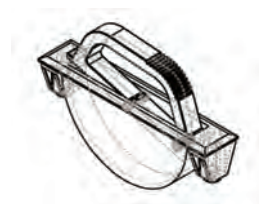


Specifications  
 • Material: ABS  
 • Color: Black

Features  
 • Ideal application for large doors and machinery covers  
 • Easy to install with snap-in clips

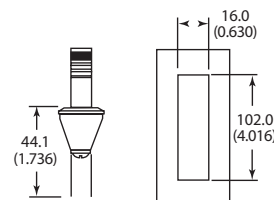
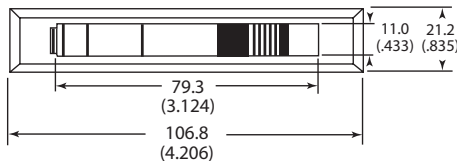
| Item No. | Door Thickness mm | Cut-Out mm | Bulk Pack Qty |
|----------|-------------------|------------|---------------|
| 174      | 1.5 - 2.2         | 90 X 49.5  | 1             |

## HSCP Series Surface Mount Concealed Pull Handle



Specifications:  
 • Body Material: Polyoxymethylene  
 • Handle Material: Black Powder Coated Metal  
 • Color: Black

Features:  
 • Supplied with screws  
 • Maximum hinge rotation of 168°



Cut-Out

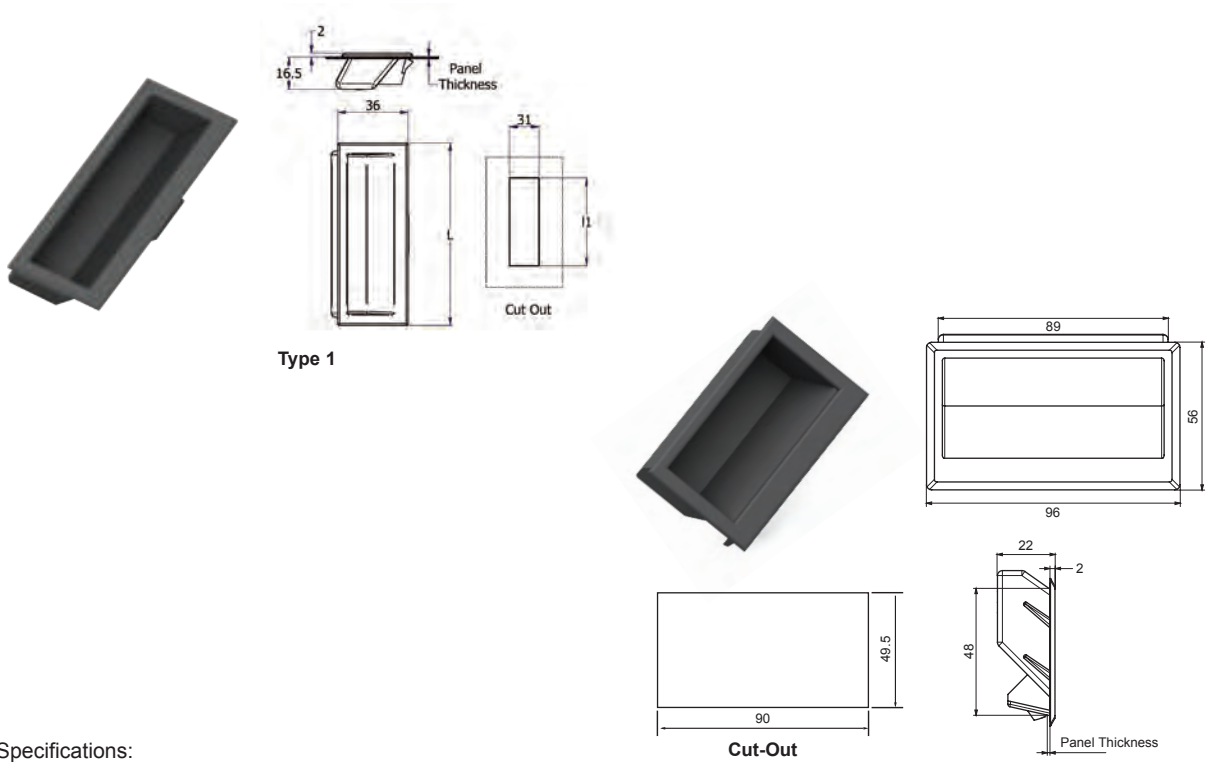
| Item No. | Bulk Pack Qty |
|----------|---------------|
| HSCP100A | 20            |



# SNAP IN RECESSED HANDLES / FLUSH HANDLES



## 274 Series Snap-In Cover Pull Handle



**Specifications:**

- Material: Nylon 6
- Color: Black

**Features:**

- Ideal for machinery covers
- Easy assembly by clips
- Flush design
- Contact Essentra for alternate colors or custom logo options

| Item No. | Type | Panel Thickness | Dimensions mm |       | Bulk Pack Qty |
|----------|------|-----------------|---------------|-------|---------------|
|          |      |                 | L             | I1    |               |
| 074      | 2    | 0.8 - 1.4       | 96.0          | 90.0  | 25            |
| 274115   | 1    | 0.8 - 1.4       | 93.0          | 87.5  | 50            |
| 274122   | 1    | 1.5 - 2.2       | 93.0          | 87.5  | 50            |
| 274215   | 1    | 0.8 - 1.4       | 136.0         | 132.0 | 50            |
| 274222   | 1    | 1.5 - 2.2       | 136.0         | 132.0 | 50            |

## DWP Series Snap-In Recessed Handles



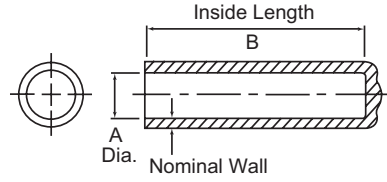
**Specifications**

- Material: See Table
- Color: See Table

| Item No. | Style | Distance Between Holes |       | Material | Color | Bulk Pack Qty |
|----------|-------|------------------------|-------|----------|-------|---------------|
|          |       | in                     | mm    |          |       |               |
| DWP1300A | 3     | 4.000                  | 101.6 | ABS      | Black | 30            |
| DWP1400A | 4     | 3.750                  | 95.3  | ABS      | Black | 30            |
| DWP1400E | 4     | 3.750                  | 95.3  | ABS      | Grey  | 30            |

# GRIPS

## VGRD Series Round Grips



**Specifications:**

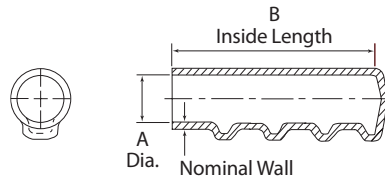
- Material: PVC
- Color: See Table

**Features:**

- Flexible material can stretch onto slightly larger dimensions for a snug fit without tearing, splitting or shredding
- Special order colors and materials available

| Item No.      | Material & Color   | A     |      | B     |       | Bulk Pack Qty |
|---------------|--------------------|-------|------|-------|-------|---------------|
|               |                    | in    | mm   | in    | mm    |               |
| VGRD07504000A | Black PVC          | 0.750 | 19.1 | 4.000 | 101.6 | 500           |
| VGRD07504000B | Textured Black PVC | 0.750 | 19.1 | 4.000 | 101.6 | 500           |
| VGRD07505000A | Black PVC          | 0.750 | 19.1 | 5.000 | 127.0 | 250           |
| VGRD07505000B | Textured Black PVC | 0.750 | 19.1 | 5.000 | 127.0 | 250           |
| VGRD07505000D | Red PVC            | 0.750 | 19.1 | 5.000 | 127.0 | 250           |
| VGRD08124500A | Textured Black PVC | 0.812 | 20.6 | 4.500 | 114.3 | 400           |
| VGRD08434500B | Textured Black PVC | 0.843 | 21.4 | 4.500 | 114.3 | 400           |
| VGRD08754000B | Textured Black PVC | 0.875 | 22.2 | 4.000 | 101.6 | 400           |
| VGRD08755000A | Black PVC          | 0.875 | 22.2 | 5.000 | 127.0 | 300           |
| VGRD08755000B | Textured Black PVC | 0.875 | 22.2 | 5.000 | 127.0 | 150           |
| VGRD08755000C | Red PVC            | 0.875 | 22.2 | 5.000 | 127.0 | 300           |
| VGRD09374000A | Black PVC          | 0.937 | 24.7 | 4.000 | 101.6 | 300           |
| VGRD09374000B | Textured Black PVC | 0.937 | 24.7 | 4.000 | 101.6 | 300           |
| VGRD10004000A | Black PVC          | 1.000 | 25.4 | 4.000 | 101.6 | 400           |
| VGRD10004500A | Black PVC          | 1.000 | 25.4 | 4.500 | 114.3 | 300           |
| VGRD10004500B | Textured Black PVC | 1.000 | 25.4 | 4.500 | 114.3 | 350           |
| VGRD10005000A | Black PVC          | 1.000 | 25.4 | 5.000 | 127.0 | 250           |
| VGRD10005000B | Textured Black PVC | 1.000 | 25.4 | 5.000 | 127.0 | 300           |
| VGRD10005000C | Red PVC            | 1.000 | 25.4 | 5.000 | 127.0 | 300           |
| VGRD10624000A | Black PVC          | 1.062 | 27.0 | 4.000 | 101.6 | 300           |
| VGRD10624500B | Textured Black PVC | 1.062 | 27.0 | 4.500 | 114.3 | 300           |
| VGRD11254000B | Textured Black PVC | 1.125 | 28.6 | 4.000 | 101.6 | 250           |
| VGRD11255000A | Black PVC          | 1.125 | 28.6 | 5.000 | 127.0 | 200           |
| VGRD11255000B | Textured Black PVC | 1.125 | 28.6 | 5.000 | 124.0 | 200           |
| VGRD12504500A | Black PVC          | 1.250 | 31.8 | 4.500 | 114.3 | 250           |
| VGRD12504500C | Red PVC            | 1.250 | 31.8 | 4.500 | 114.3 | 200           |
| VGRD12505000B | Textured Black PVC | 1.250 | 31.8 | 5.000 | 127.0 | 200           |
| VGRD15004000A | Black PVC          | 1.500 | 38.1 | 4.000 | 101.6 | 200           |
| VGRD15004500B | Textured Black PVC | 1.500 | 38.1 | 4.500 | 114.3 | 200           |
| VGRD17504000A | Black PVC          | 1.750 | 44.4 | 4.000 | 101.6 | 150           |

## VGN Series Finger Grasp Grips



**Specifications:**

- Material: PVC
- Color: Black

**Features:**

- Ideal for applications requiring a uniform finger grasp
- Flexible material can stretch onto slightly larger dimensions for a snug fit without tearing, splitting or shredding
- Special order colors and textured materials available

| Item No.     | A     |      | B     |       | Bulk Pack Qty |
|--------------|-------|------|-------|-------|---------------|
|              | in    | mm   | in    | mm    |               |
| VGN10004000A | 1.000 | 25.4 | 4.000 | 101.6 | 350           |
| VGN07504500A | 0.750 | 19.1 | 4.500 | 114.3 | 200           |
| VGN10004500A | 1.000 | 25.4 | 4.500 | 114.3 | 300           |
| VGN08755000A | 0.875 | 22.2 | 5.000 | 139.7 | 350           |



**VG Series**  
Flat Rectangular Grips

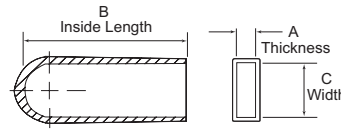


Specifications:

- Material: PVC
- Color: Black

Features:

- Ideal for capping bar stock for general protection
- Flexible material can stretch onto slightly larger dimensions for a snug fit without tearing, splitting or shredding
- Special order colors and textured materials available



| Item No.       | A     |     | C     |      | B     |       | Bulk Pack Qty |
|----------------|-------|-----|-------|------|-------|-------|---------------|
|                | in    | mm  | in    | mm   | in    | mm    |               |
| VG12505004375A | 0.125 | 3.2 | 0.500 | 12.7 | 4.375 | 111.1 | 1500          |
| VG12507504375A | 0.125 | 3.2 | 0.750 | 19.1 | 4.375 | 111.1 | 600           |
| VG12510004375A | 0.125 | 3.2 | 1.000 | 25.4 | 4.375 | 111.1 | 250           |
| VG25007504250A | 0.250 | 6.4 | 0.750 | 19.1 | 4.250 | 108.0 | 800           |
| VG25010004375B | 0.250 | 6.4 | 1.000 | 25.4 | 4.375 | 111.1 | 400           |
| VG25012504500A | 0.250 | 6.4 | 1.250 | 31.8 | 4.500 | 114.3 | 250           |

**GRIP Series**  
Round or Rectangle Grips



Grip replacements for worn grips on hand trucks, punch presses, tools and other equipment. Grips are molded of strong rigid black vinyl. They fit standard bar sizes and have a 1/4" hole opposite the open end, except where noted otherwise. All grips for 1" bar diameter will work with 3/4" I.P.S. pipe size.

| Item No.  | Style | Length    | For Bar | Bulk Pack Qty |
|-----------|-------|-----------|---------|---------------|
|           |       | in        | Ø in    |               |
| GRIP1200A | A     | 4 - 13/16 | 3/4     | 50            |
| GRIP1300A | A     | 4 - 3/4   | 7/8     | 50            |
| GRIP0500A | B     | 3 - 7/8   | 7/8     | 50            |
| GRIP0600A | B     | 4 - 5/8   | 7/8     | 50            |
| GRIP0300A | C     | 4 - 1/4   | 7/8     | 50            |
| GRIP0400A | C     | 4 - 1/2   | 1       | 50            |
| GRIP0200A | D     | 5 - 1/16  | 7/8     | 50            |
| GRIP0100A | D     | 5 - 1/16  | 1       | 50            |
| GRIP0700A | E     | 4 - 9/16  | 7/8     | 50            |
| GRIP0800A | E     | 4 - 9/16  | 1       | 50            |
| GRIP1000A | F     | 4 - 5/16  | 1       | 50            |
| GRIP0900A | F     | 4 - 5/16  | 11/4    | 50            |

# HASSLE-FREE SERVICE

Our teams of knowledgeable, dedicated employees are committed to providing a hassle-free experience from sampling and quoting through delivery. Call us today!

# ACCESS HARDWARE





COMPRESSION LATCHES .....524 - 537



QTR-TURN & SPRING LOADED CAM LATCHES..... 538 - 567



SWINGHANDLE LATCHES ..... 568 - 579



LIFT & TURN LATCHES ..... 580 - 583



ACCESSORIES, CAMS, DRIVERS & KEYS ..... 584 - 598



HEAVY DUTY LATCHES .....599 - 613



SLIDING LATCHES & CLAMPS..... 614 - 617



ROTARY LATCHES..... 618 - 619



SPECIALTY & DRAW LATCHES ..... 620 - 629



GASKETING ..... 630 - 633



SURFACE MOUNT HINGES ..... 634 - 662



SIDE MOUNT HINGES ..... 663 - 674



CORNER MOUNT HINGES .....675 - 687



CONCEALED & SPRING LOADED HINGES ..... 688 - 699



CATCHES & PANEL FASTENERS..... 700 - 704



ELECTRONIC LOCKING SYSTEMS..... 705 - 730

# ACCESS HARDWARE

# ACCESS SOLUTIONS

Whatever your project demands, we can help with a comprehensive range of high-quality Access Hardware and custom solutions for all your application requirements.

With free CAD's, samples and specialist advice available, there is no better choice for your solutions provider.



Our expertise ranges across multiple industries, supported by outstanding customer service. We can reduce your lead times, and provide custom solutions to help you achieve your business goals.

## INDUSTRIES



Indoor & Outdoor Cabinets



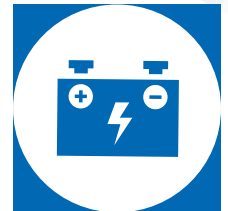
IT Cabinets



Transformers



Industrial Machinery



Power Generators



HVAC



Road Transportation



Rail Transportation



Food Industry



Diversified Applications

# CUSTOM SOLUTIONS

Sometimes you may not find the perfect solution amongst our portfolio of standard products. You may require a small variation, an alternative color, material or size.

Talk to our in-house team of design engineers and work directly with our R&D and manufacturing centers to create a custom solution to meet your needs.

We utilize 3D printing technology to showcase our designs which ensures your Specifications: are met and assists in expediting lead times from quotation to delivery.



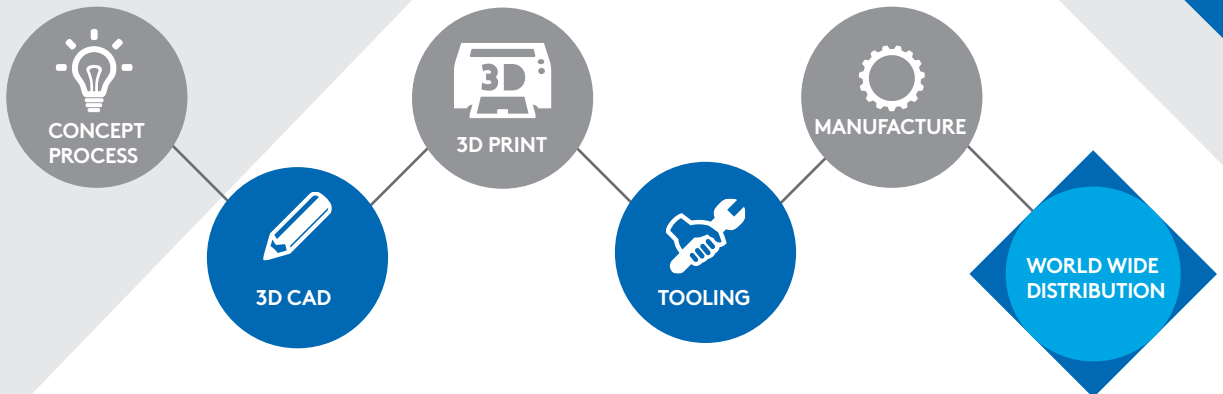
## Capabilities

- Design custom products
- Range of color choices
- Customer logo requirement



## R&D

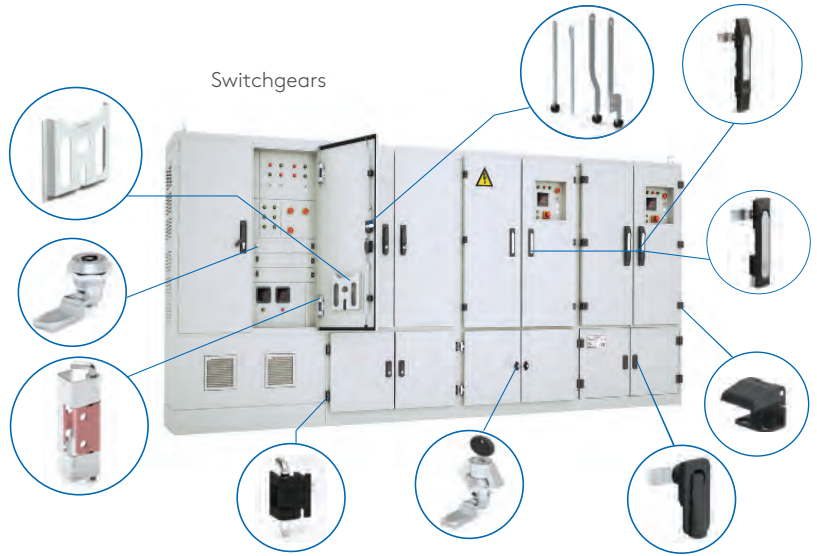
Facilitated by our state of the art R&D facilities we are constantly pursuing innovation to offer new and alternative solutions to you and your customers everyday problems.





## Indoor Cabinets

Essentra Components has an extensive range of secure switchgears, primarily for use on indoor cabinets. The range covers Swinghandles, Linear Locking Systems, 3 Point Locking Systems, Multipoint Locking systems, QuarterTurns, Camlocks, Hinges, Gaskets, and Project Holders.



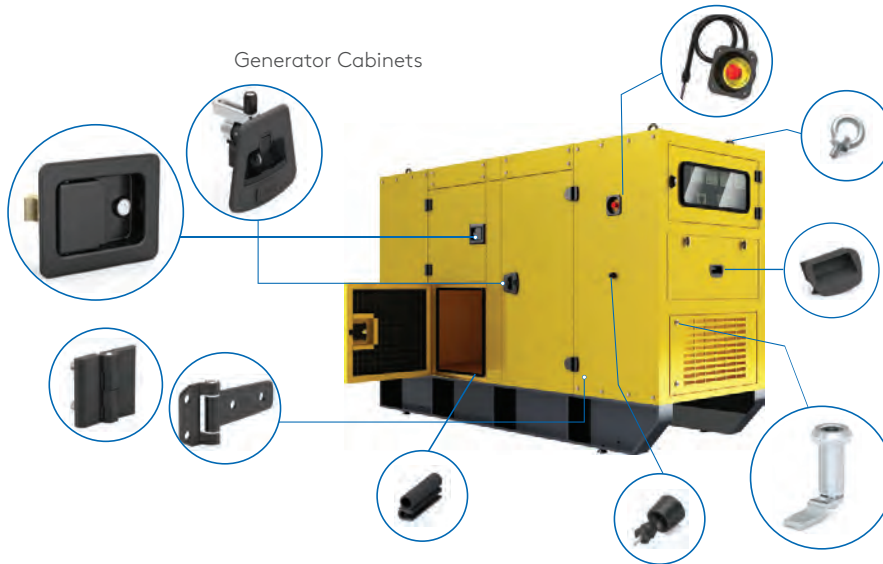
## Outdoor Cabinets

Specialist cabinet locks are required for a variety of applications not limited to ADSL, Telecommunication and CCTV applications. We offer a wide range of products in this sector including high security 1/2 din locks and WK2 standard locks.





# YOUR SOLUTIONS PARTNER



## IT Cabinets

With sensitive data becoming more and more prevalent, it's now more important than ever to securely manage your electronic cabinets. We've designed a range of high-tech Electromechanical Locking Systems to help monitor and track internal environments and entry to cabinets.



## Power Generators

Our eclectic product range means we've got a solution no matter how complex your needs. With our customer-centric designs, alternative solutions and our high-standard products, we can meet all your needs for both basic and sound proof canopies.



## Transformers

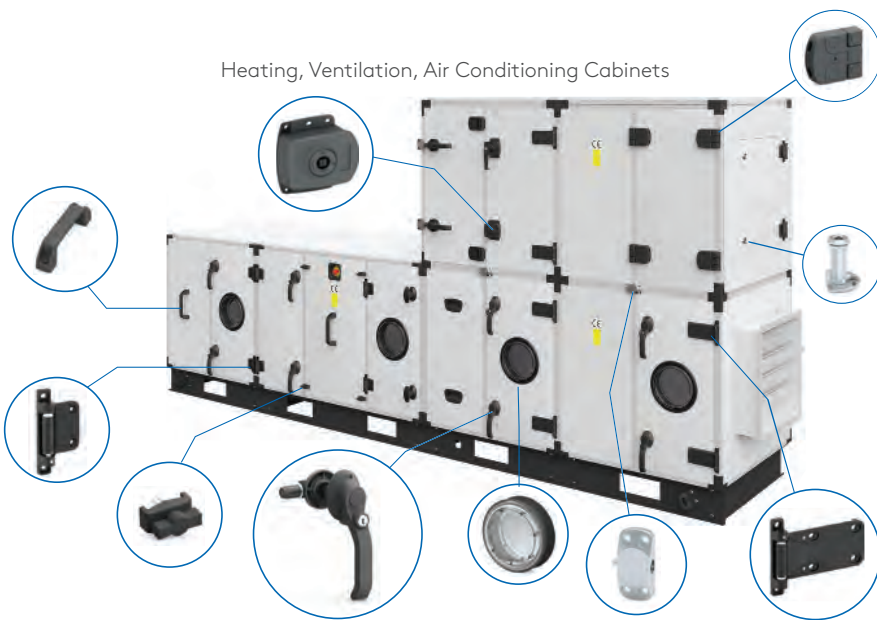
When working with transformers, it's important that all entry points are kept secure, particularly areas that contain medium voltage cells. Our solutions are high quality and secure, including hinges and locks designed for containment resistant requirements.



## HVAC

Outdoor HVAC cabinets need to cope with the differing environments in which they are used while ergonomics, functionality and modular system solutions are more common requirements. Our solutions are designed with this in mind so no matter the application, our offering will meet your needs.

Heating, Ventilation, Air Conditioning Cabinets



## Diversified Applications

Our expertise spans across many industries, allowing catered solutions to be produced for a number of non-standard applications.

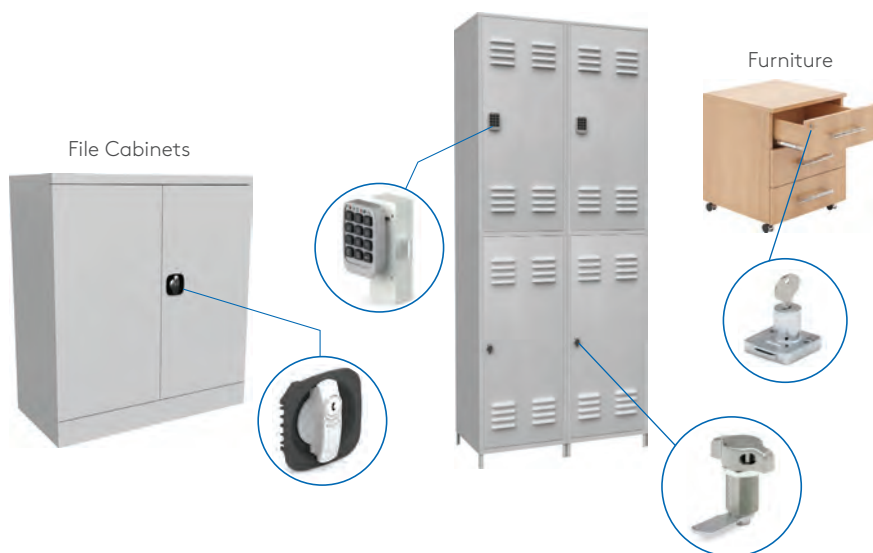
Tool Cabinets



Fire Extinguisher



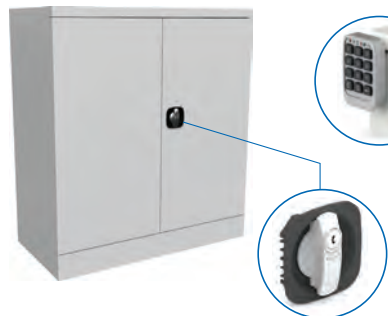
Lockers



Furniture

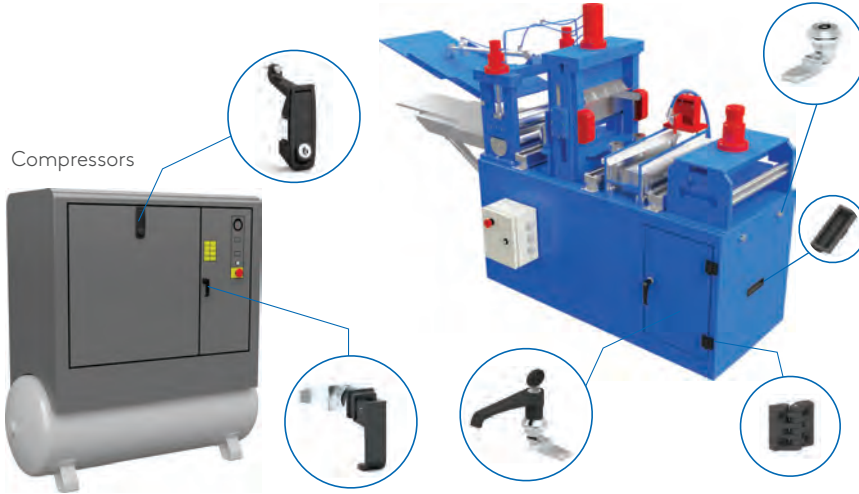


File Cabinets



# YOUR SOLUTIONS PARTNER

## Miscellaneous Machines



## Industrial Machinery

Whether you're building indoor or outdoor machines, sealing, noise isolation and vibration reduction are some of your most important considerations.

Essentra Components offers a wide range of solutions designed to meet your specific requirements.



## Road Transportation

We produce solutions for HGVs, utility trucks, caravans, construction machinery, and buses. Our range is specifically catered to the needs of these applications, offering paddle latches, quarter turn locks and latches, custom hinges, sealing products, and many other functional solutions.

## Construction Machinery



## RVs



## Buses



## Trucks



## Utility Trucks



## Rail Transportation

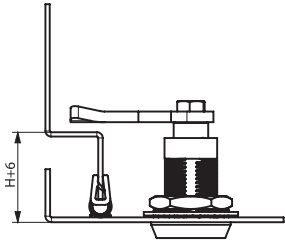
Suitable for both subway trains and high speed trains our compression latches, are certified to DIN EN 60068-2-64 [04/2011]. Many of our sealing products, trigger latches and heavy duty hinges are also UL 94 certified.

## High Speed Trains

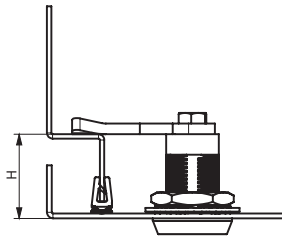


## Subway Trains



**FIXED COMPRESSION LATCHES****040 Series****Fixed Compression Latches & Locks**

The first 90° of key rotation turns the cam to locking position



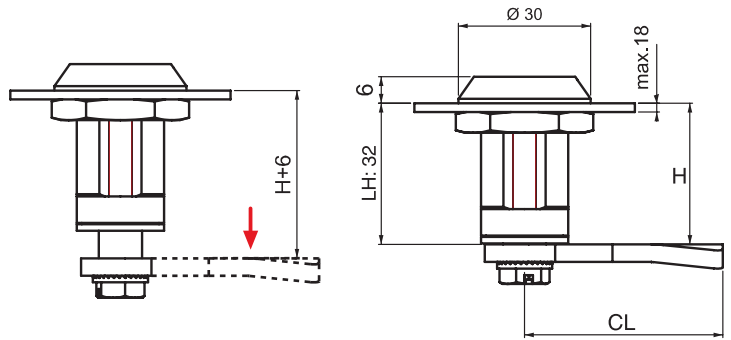
Further key rotation 180° applies 6 mm compression

**Specifications:**

- Material:
- Housing: Zinc Alloy
- Driver: Zinc Alloy
- Cam: Steel
- Washer: Rubber
- Finish: See Table

**Features:**

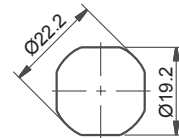
- Provides 6mm preset compression
- Lock is vibration and shock rated per DIN-EN 61373
- Housing and driver is DIN-EN 1774 rated
- Latch provides good compression and noise isolation
- Alternate cut-out available, contact Essentra for details



- ⚠ **FOR ALTERNATE DRIVERS SEE PAGE 596.**
- ⚠ **CAMS SOLD SEPARATELY. SEE PAGE 592 - 593.**
- ⚠ **DRIVER KEY SOLD SEPARATELY. SEE PAGES 597 - 598.**

**Round Spurred Lock Washer - Optional**

- Item No. 060A3
- Ideal for round through hole installation
- Ordered separately

**Cut-Out**

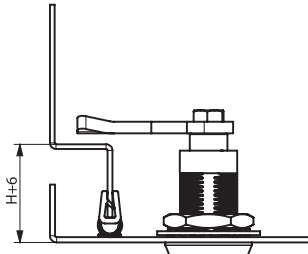
| Driver Style   |              |              |         |             |           |
|----------------|--------------|--------------|---------|-------------|-----------|
| 13             | 37           | 42           | 68      | 93          | 94        |
| 3mm Double Bit | 7mm Triangle | 2 x 4mm Slot | 8mm Hex | Tubular Key | Wing Knob |
|                |              |              |         |             |           |

| Item No.      | Finish              | Driver Style | Driver Description | Hand Operation |
|---------------|---------------------|--------------|--------------------|----------------|
| 0403111300001 | Chrome Plated       | 13           | 3mm Double Bit     | Right          |
| 0403111300002 | Chrome Plated       | 13           | 3mm Double Bit     | Left           |
| 0403113700001 | Chrome Plated       | 37           | 7mm Triangle       | Right          |
| 0403113700002 | Chrome Plated       | 37           | 7mm Triangle       | Left           |
| 0403114200001 | Chrome Plated       | 42           | 2 x 4mm Slot       | Right          |
| 0403114200002 | Chrome Plated       | 42           | 2 x 4mm Slot       | Left           |
| 0403116800001 | Chrome Plated       | 68           | 8mm Hex            | Right          |
| 0403116800002 | Chrome Plated       | 68           | 8mm Hex            | Left           |
| 0403119300001 | Chrome Plated       | 93           | Tubular Key        | Right          |
| 0403119300002 | Chrome Plated       | 93           | Tubular Key        | Left           |
| 0403119400001 | Chrome Plated       | 94           | Wing Knob          | Right          |
| 0403119400002 | Chrome Plated       | 94           | Wing Knob          | Left           |
| 0403121300001 | Black Powder Coated | 13           | 3mm Double Bit     | Right          |
| 0403121300002 | Black Powder Coated | 13           | 3mm Double Bit     | Left           |
| 0403123700001 | Black Powder Coated | 37           | 7mm Triangle       | Right          |
| 0403123700002 | Black Powder Coated | 37           | 7mm Triangle       | Left           |
| 0403124200001 | Black Powder Coated | 42           | 2 x 4mm Slot       | Right          |
| 0403124200002 | Black Powder Coated | 42           | 2 x 4mm Slot       | Left           |
| 0403126800001 | Black Powder Coated | 68           | 8mm Hex            | Right          |
| 0403126800002 | Black Powder Coated | 68           | 8mm Hex            | Left           |
| 0403129300001 | Black Powder Coated | 93           | Tubular Key        | Right          |
| 0403129300002 | Black Powder Coated | 93           | Tubular Key        | Left           |
| 0403129400001 | Black Powder Coated | 94           | Wing Knob          | Right          |
| 0403129400002 | Black Powder Coated | 94           | Wing Knob          | Left           |

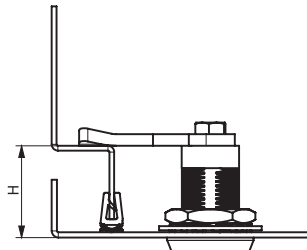
# FIXED COMPRESSION LATCHES



## 040 Series Fixed Compression Latches & Locks - Stainless Steel



The first 90° of key rotation turns the cam to locking position



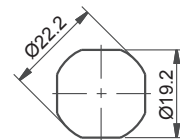
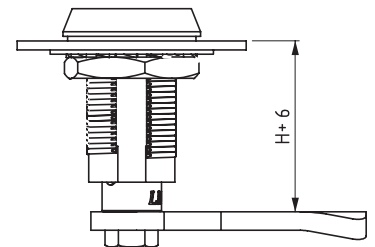
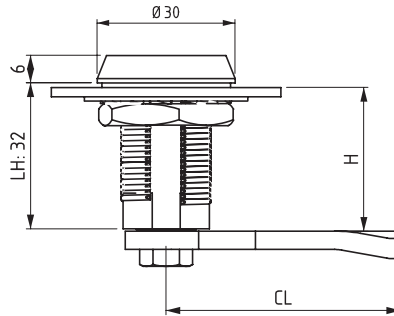
Further key rotation 180° applies 6mm compression

**Specifications:**

- Material:  
Housing: Stainless Steel  
Driver: Stainless Steel  
Cam: Stainless Steel  
Washer: Rubber
- Finish: Natural
- Includes Lock Washer

**Features:**

- Latch provides good compression, noise dampening and better sealing under vibration conditions
- Provides 6mm preset compression
- Lock is vibration and shock rated per DIN-EN 61373
- Housing and driver is DIN-EN 1774 rated
- Alternate cut-out available, contact Essentra for details



Cut-Out

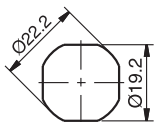
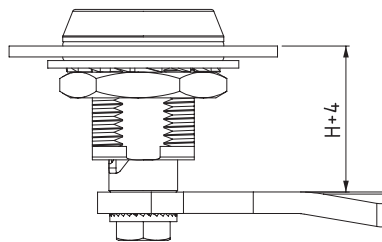
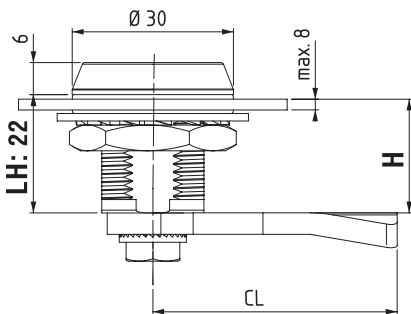
- ⚠ **FOR ALTERNATE DRIVERS SEE PAGE 596.**
- ⚠ **CAMS SOLD SEPARATELY. SEE PAGE 594.**
- ⚠ **DRIVER KEY SOLD SEPARATELY. SEE PAGES 597 - 598.**

| Driver Style   |            |              |              |         |
|----------------|------------|--------------|--------------|---------|
| 13             | 28         | 37           | 42           | 88      |
| 3mm Double Bit | 8mm Square | 7mm Triangle | 2 x 4mm Slot | Railway |
|                |            |              |              |         |

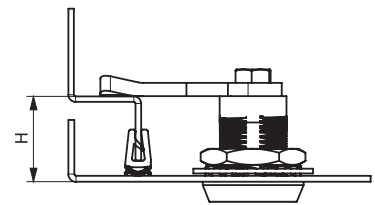
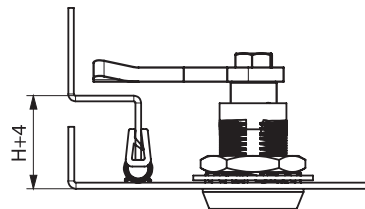
| Item No.      | Driver Style | Driver Description | Hand Operation |
|---------------|--------------|--------------------|----------------|
| 0408401300001 | 13           | 3mm Double Bit     | Right          |
| 0408401300002 | 13           | 3mm Double Bit     | Left           |
| 0408402800001 | 28           | 8mm Square         | Right          |
| 0408402800002 | 28           | 8mm Square         | Left           |
| 0408403700001 | 37           | 7mm Triangle       | Right          |
| 0408403700002 | 37           | 7mm Triangle       | Left           |
| 0408404200001 | 42           | 2 x 4mm Slot       | Right          |
| 0408404200002 | 42           | 2 x 4mm Slot       | Left           |
| 0408408800001 | 88           | Railway            | Right          |
| 0408408800002 | 88           | Railway            | Left           |

**FIXED COMPRESSION LATCHES & LOCKS - SHORT HOUSING****540 Series**

Fixed Compression Latches &amp; Locks - Short Housing



Cut-Out



## Specifications:

- Material:  
Housing: Stainless Steel (AISI 316)  
Driver: Same as housing  
Cam: Stainless Steel  
Gasket: Rubber
- Provides 4 mm preset compression
- Lock is vibration and shock rated per DIN EN 61373
- Two keys supplied with every lock

## Features:

- Latch provides good compression, noise dampening and better sealing under vibration condition
- When key is turned to 90° cam turns to locking position
- When key is turned to 180° cam turns to fixing position

The first 90° of key rotation turns the cam to locking position

Further key rotation 180° applies 4 mm compression

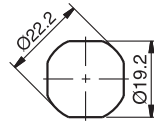
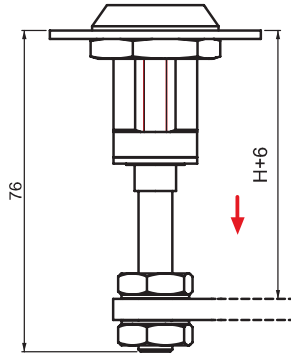
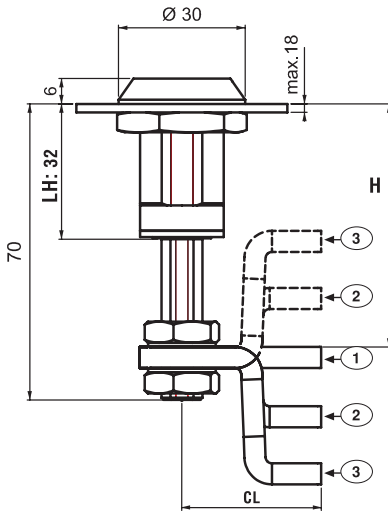
| Driver Style   |            |              |
|----------------|------------|--------------|
| 13             | 28         | 38           |
| 3mm Double Bit | 8mm Square | 8mm Triangle |
|                |            |              |

| Item No.      | Driver Style | Driver Description | Hand Operation |
|---------------|--------------|--------------------|----------------|
| 5403401300001 | 13           | 3mm Double bit     | Right          |
| 5403401300002 | 13           | 3mm Double bit     | Left           |
| 5403402800001 | 28           | 8 mm Square        | Right          |
| 5403402800002 | 28           | 8 mm Square        | Left           |
| 5403403800001 | 38           | 8 mm Triangle      | Right          |
| 5403403800002 | 38           | 8 mm Triangle      | Left           |

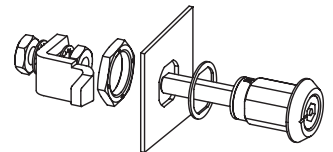
# ADJUSTABLE COMPRESSION LATCHES



## 040 Series Adjustable Compression Latches & Locks



Cut-Out



**Specifications:**

- Material:  
Housing: Zinc Alloy  
Driver: Zinc Alloy  
Cam: Steel  
Washer: Rubber
- Finish: See Table

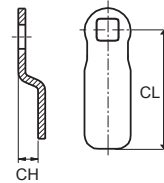
**Features:**

- Wide Grip range with adjustable screw
- Latch provides good compression, noise dampening and better sealing under vibration condition
- Provides 6mm preset compression
- Lock is vibration and shock rated per DIN-EN 61373
- Housing and driver is DIN-EN 1774 rated
- Alternate cut-out available, contact Essentra for details

**Cams Without Stoppers**

**Specifications:**

- Material: Steel
- Finish: Zinc Plated
- Thickness: 4mm



- ⚠ **FOR ALTERNATE DRIVERS SEE PAGE 596.**
- ⚠ **CAMS SOLD SEPARATELY. See Table >>**
- ⚠ **DRIVER KEY SOLD SEPARATELY. SEE PAGES 597 - 598.**



**Round Spurred Lock Washer - Optional**

- Item No. 060A3
- Ideal for round through hole Installation
- Ordered separately

| Item No. | Cam Type | CH   | CL | Position     | H Grip* |      |
|----------|----------|------|----|--------------|---------|------|
|          |          |      |    |              | Min     | Max  |
| 30403565 | ① Flat   | 0    | 33 | Cam Straight | 41      | 58   |
| 30403566 | ② Offset | 14   | 33 | Reversed     | 27      | 44   |
|          |          |      |    | Forward      | 55      | 72   |
| 30403567 | ③ Offset | 27.5 | 33 | Reversed     | 13.5    | 30.5 |
|          |          |      |    | Forward      | 68      | 85   |

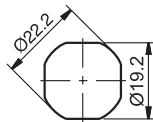
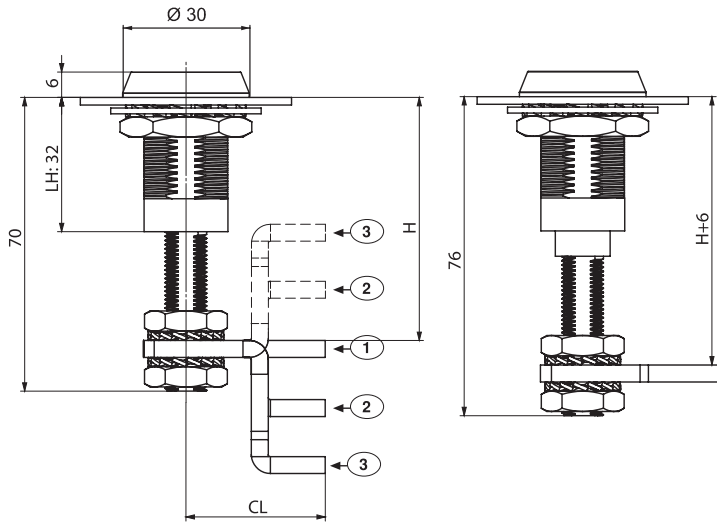
\*Grip is measured in latched position

| Driver Style   |            |              |              |         |             |           |
|----------------|------------|--------------|--------------|---------|-------------|-----------|
| 13             | 27         | 37           | 42           | 68      | 93          | 94        |
| 3mm Double Bit | 7mm Square | 7mm Triangle | 2 x 4mm Slot | 8mm Hex | Tubular Key | Wing Knob |
|                |            |              |              |         |             |           |

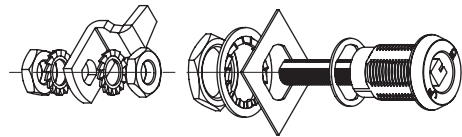
| Item No.      |                     | Driver Style | Driver Description | Hand Operation |
|---------------|---------------------|--------------|--------------------|----------------|
| Chrome Plated | Black Powder Coated |              |                    |                |
| —             | 0404121300001       | 13           | 3mm Double Bit     | Right          |
| 0404111300002 | 0404121300002       | 13           | 3mm Double Bit     | Left           |
| —             | 0404122700001       | 27           | 7mm Square         | Right          |
| —             | 0404122700002       | 27           | 7mm Square         | Left           |
| —             | 0404123700001       | 37           | 7mm Triangle       | Right          |
| —             | 0404123700002       | 37           | 7mm Triangle       | Left           |
| —             | 0404124200001       | 42           | 2 x 4mm Slot       | Right          |
| —             | 0404124200002       | 42           | 2 x 4mm Slot       | Left           |
| 0404116800001 | 0404126800001       | 68           | 8mm Hex            | Right          |
| 0404116800002 | 0404126800002       | 68           | 8mm Hex            | Left           |
| 0404119300001 | 0404129300001       | 93           | Tubular Key        | Right          |
| 0404119300002 | 0404129300002       | 93           | Tubular Key        | Left           |
| 0404119400001 | 0404129400001       | 94           | Wing Knob          | Right          |
| 0404119400002 | 0404129400002       | 94           | Wing Knob          | Left           |

**ADJUSTABLE COMPRESSION LATCHES****040 Series**

Adjustable Compression Latches &amp; Locks - Stainless Steel



Cut-Out



## Specifications:

- Material: Housing: Stainless Steel  
Driver: Same as housing  
Cam: Stainless Steel  
Washer: Rubber
- Finish: Natural

## Features:

- Wide Grip range with adjustable screw
- Ideal for applications that require better sealing under vibration conditions
- Provides 6mm preset compression
- Lock is vibration and shock rated per DIN-EN 61373
- Housing and driver is DIN-EN 1774 rated
- Alternate cut-out available, contact Essentra for details

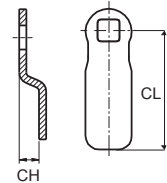
⚠ **FOR ALTERNATE DRIVERS SEE PAGE 596.**

⚠ **CAMS SOLD SEPARATELY. See Table >>**

⚠ **DRIVER KEY SOLD SEPARATELY. SEE PAGES 597 - 598.** \*Grip is measured in latched position

**Cams Without Stoppers**

- Material: Stainless Steel
- Finish: Natural
- Thickness: 4mm



| Item No. | Cam Type | CH   | CL | Position     | H Grip* |      |
|----------|----------|------|----|--------------|---------|------|
|          |          |      |    |              | Min     | Max  |
| 30405565 | ① Flat   | 0    | 33 | Cam Straight | 41      | 58   |
|          |          |      |    | Reversed     | 27      | 44   |
| 30405566 | ② Offset | 14   | 33 | Forward      | 55      | 72   |
|          |          |      |    | Reversed     | 13.5    | 30.5 |
| 30405567 | ③ Offset | 27.5 | 33 | Forward      | 68      | 85   |
|          |          |      |    | Reversed     | 13.5    | 30.5 |

| Driver Style   |            |              |              |         |
|----------------|------------|--------------|--------------|---------|
| 13             | 28         | 37           | 42           | 88      |
| 3mm Double Bit | 8mm Square | 7mm Triangle | 2 x 4mm Slot | Railway |
|                |            |              |              |         |

| Item No.      | Driver Style | Driver Description | Hand Operation |
|---------------|--------------|--------------------|----------------|
| 0406401300001 | 13           | 3mm Double Bit     | Right          |
| 0406401300002 | 13           | 3mm Double Bit     | Left           |
| 0406402800001 | 28           | 8mm Square         | Right          |
| 0406402800002 | 28           | 8mm Square         | Left           |
| 0406403700001 | 37           | 7mm Triangle       | Right          |
| 0406403700002 | 37           | 7mm Triangle       | Left           |
| 0406404200001 | 42           | 2 x 4mm Slot       | Right          |
| 0406404200002 | 42           | 2 x 4mm Slot       | Left           |
| 0406408800001 | 88           | Railway            | Right          |
| 0406408800002 | 88           | Railway            | Left           |

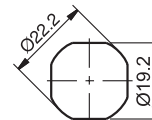
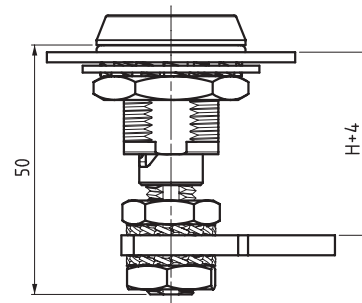
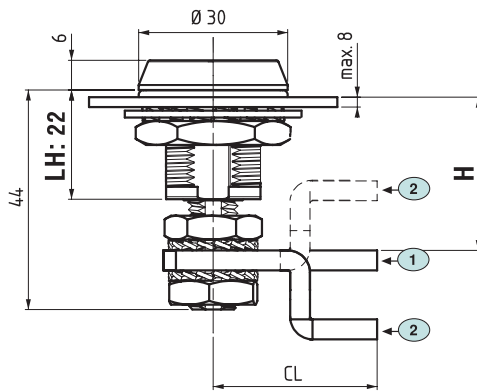
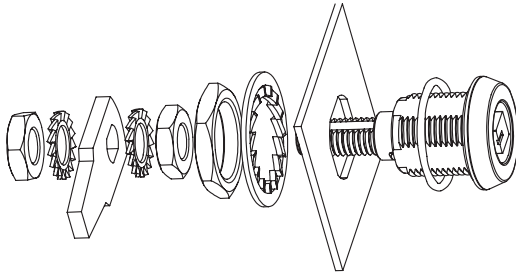




# FIXED COMPRESSION LATCHES & LOCKS - SHORT HOUSING

## 540 Series

### Fixed Compression Latches & Locks - Short Housing



Cut-Out

**Specifications:**

- Material:  
Housing: Stainless Steel (AISI316)  
Driver: same as housing (AISI 316)  
Cam: Stainless Steel (AISI304)  
Gasket: Rubber  
Nut: Stainless Steel (AISI304)
- Provides 6mm preset compression
- Lock is vibration and shock rated per DIN EN 61373
- Two keys supplied with every lock

**Features:**

- Latch provides good compression, noise dampening and better sealing under vibration condition
- When key is turned to 90° cam turns to locking position
- When key is turned to 180° cam turns to fixing position

- ⚠ **FOR ALTERNATE DRIVERS SEE PAGE 596.**
- ⚠ **CAMS SOLD SEPARATELY. See Table >>**
- ⚠ **DRIVER KEY SOLD SEPARATELY. SEE PAGES 597 - 598.**

| Item No. | Cam Type | CH | CL | Position     | H Grip* |     |
|----------|----------|----|----|--------------|---------|-----|
|          |          |    |    |              | Min     | Max |
| 30405565 | ① Flat   | 0  | 33 | Cam Straight | 41      | 58  |
| 30405566 | ② Offset | 14 | 33 | Reversed     | 27      | 44  |
|          |          |    |    | Forward      | 55      | 72  |

| Driver Style   |            |              |
|----------------|------------|--------------|
| 13             | 28         | 38           |
| 3mm Double Bit | 8mm Square | 8mm Triangle |
|                |            |              |

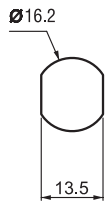
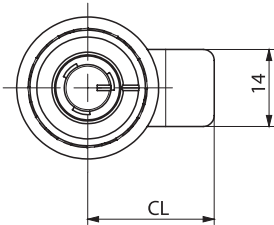
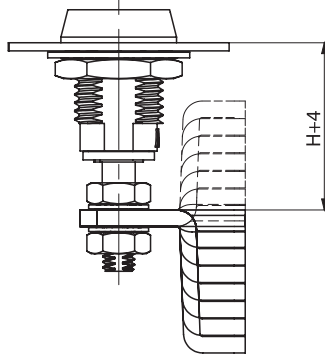
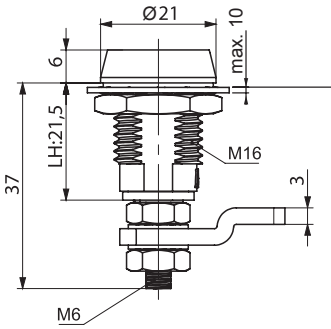
| Item No.      | Driver Style | Driver Description | Hand Operation |
|---------------|--------------|--------------------|----------------|
| 5404401300001 | 13           | 3mm Double bit     | Right          |
| 5404401300002 | 13           | 3mm Double bit     | Left           |
| 5404402800001 | 28           | 8 mm Square        | Right          |
| 5404402800002 | 28           | 8 mm Square        | Left           |
| 5404403800001 | 38           | 8 mm Triangle      | Right          |
| 5404403800002 | 38           | 8 mm Triangle      | Left           |



## MINI ADJUSTABLE COMPRESSION LATCHES

## 140 Series

## Mini Adjustable Compression Latches &amp; Locks



Cut-Out

## Specifications:

- Material:
  - Housing: Zinc Alloy
  - Driver: Zinc Alloy
  - Cam: Steel
  - Gasket: Rubber
- Finish: See Table
- Housing and Driver are DIN-EN 1774 rated

## Features:

- Wide Grip range with adjustable screw
- Ideal for applications that require better sealing
- Provides 4mm preset compression
- Applicable cams are without stoppers



## Dust Cap - Optional

- Item No. 140A1
- Ordered separately

⚠ FOR ALTERNATE DRIVERS SEE PAGE 596.

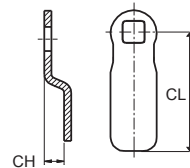
⚠ CAMS SOLD SEPARATELY. See Table >>

⚠ DRIVER KEY SOLD SEPARATELY. SEE PAGES 597 - 598.

## Cams Without Stoppers

## Specifications:

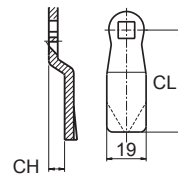
- Material: Steel
- Finish: Zinc Plated
- Thickness: 4mm



| Item No. | LH   | CH Cam Height |       | CL Cam Length |       | H Grip* |       |      |       |
|----------|------|---------------|-------|---------------|-------|---------|-------|------|-------|
|          |      | mm            | in    | mm            | in    | Min     | Max   | mm   | in    |
| 30400606 | 21.5 | 0.0           | 0.000 | 23.0          | 0.906 | 26.2    | 1.031 | 29.4 | 1.157 |
| 30403607 | 21.5 | 1.0           | 0.039 | 23.0          | 0.906 | 25.2    | 0.992 | 28.4 | 1.118 |
| 30403608 | 21.5 | 3.8           | 0.150 | 23.0          | 0.906 | 22.4    | 0.882 | 25.6 | 1.008 |
| 30403609 | 21.5 | 7.0           | 0.276 | 23.0          | 0.906 | 19.2    | 0.756 | 22.4 | 0.882 |
| 30403610 | 21.5 | 10.2          | 0.402 | 23.0          | 0.906 | 16.0    | 0.630 | 19.2 | 0.756 |
| 30403611 | 21.5 | 13.4          | 0.528 | 23.0          | 0.906 | 12.8    | 0.504 | 16.0 | 0.630 |
| 30403612 | 21.5 | 16.6          | 0.654 | 23.0          | 0.906 | 9.6     | 0.378 | 12.8 | 0.504 |
| 30403613 | 21.5 | 19.8          | 0.780 | 23.0          | 0.906 | 6.4     | 0.252 | 9.6  | 0.378 |
| 30403614 | 21.5 | 23.0          | 0.906 | 23.0          | 0.906 | 3.2     | 0.126 | 6.4  | 0.252 |

## Specifications:

- Material: Stainless Steel
- Finish: Natural
- Thickness: 4mm



| Item No. | CC | CH Height | CL Length | H Grip    |         |         |         |
|----------|----|-----------|-----------|-----------|---------|---------|---------|
|          |    |           |           | LH = 18.5 | LH = 20 | LH = 25 | LH = 32 |
| 30405117 | 30 | 0         | 45        | 18.5      | 20      | 25      | 32      |
| 30405058 | 40 | 0         | 51        | 18.5      | 20      | 25      | 32      |
| 30405012 | 35 | 2         | 45        | 20.5      | 22      | 27      | 34      |
| 30405013 | 31 | 3         | 45        | 21.5      | 23      | 28      | 35      |
| 30405015 | 34 | 4         | 45        | 22.5      | 24      | 29      | 36      |
| 30405002 | 42 | 7         | 49        | 25.5      | 27      | 32      | 39      |
| 30405016 | 36 | 8         | 45        | 26.5      | 28      | 33      | 40      |
| 30405017 | 47 | 10        | 45        | 28.5      | 30      | 35      | 42      |
| 30405018 | 44 | 12        | 45        | 30.5      | 32      | 37      | 44      |

\*Grip is measured in latched position

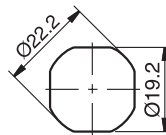
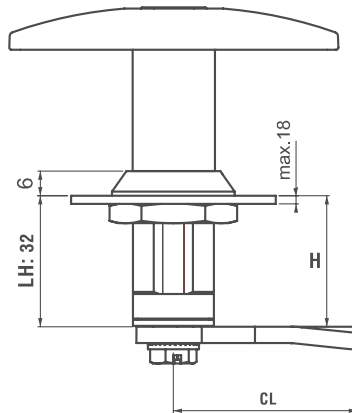
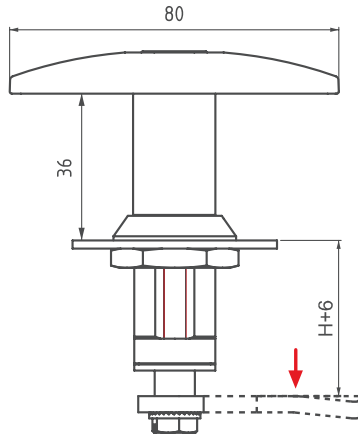
## Driver Style

| 45   | 64          | 93          | 94        |
|------|-------------|-------------|-----------|
| Slot | 4mm Hexagon | Tubular Key | Wing Knob |
|      |             |             |           |

## Item No.

| Zinc Alloy Chrome Plated | Zinc Alloy Black Powder Coated | Stainless Steel | Driver Style | Driver Description |
|--------------------------|--------------------------------|-----------------|--------------|--------------------|
| 140114500                | 140124500                      | • 140404500     | 45           | Slot               |
| 140116400                | 140126400                      | • 140406400     | 64           | 4mm Hexagon        |
| 140119300                | 140129300                      | • 140409300     | 93           | Tubular Key        |
| 140119400                | 140129400                      | -               | 94           | Wing Knob          |

## COMPRESSION LATCHES - T HANDLE FIXED


**240 Series**  
**Compression Latches - 'T' Handle Fixed Locks**


Cut-Out



## Specifications:

- Material:  
Housing: Zinc Alloy  
Handle: Zinc Alloy  
Cam: Steel  
Gasket: Rubber
- Finish: See Table
- Housing and Handle are DIN-EN 1774 rated
- Two keys supplied with every lock

## Features:

- Ideal for applications that require better sealing
- For alternate cut-outs or cylinders, please contact Essentra for details

**⚠ CAMS SOLD SEPARATELY. SEE PAGE 592 - 593.**

**Round Spurred Lock Washer - Optional**

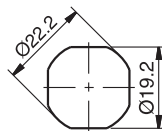
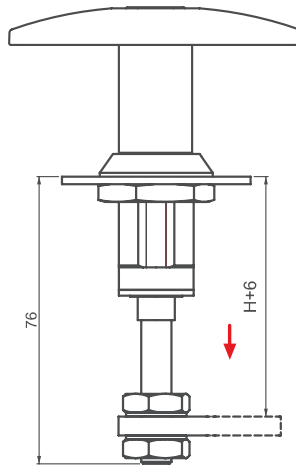
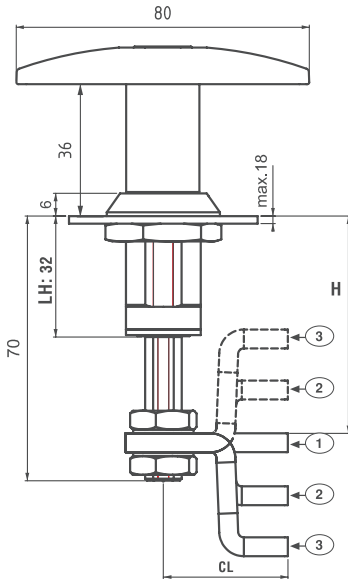
- Item No. 060A3
- Ideal for round through hole installation
- Ordered separately

| Item No.      |                     |  | Cylinder Description             |
|---------------|---------------------|--|----------------------------------|
| Chrome Plated | Black Powder Coated |  | No Cylinder                      |
| 2403110000    | 2403120000          |  |                                  |
| 2403110700    | 2403120700          |  | CH 751 (Stainless Steel Shutter) |



# CUSTOM SOLUTIONS AVAILABLE

Our expertise ranges across multiple industries, supported by outstanding customer service. We can reduce your lead times and provide custom solutions and advice to help you achieve your business goals.

**COMPRESSION LATCHES - T HANDLE ADJUSTABLE****240 Series****Compression Latches - Adjustable 'T' Handle Locks****Cut-Out****Specifications:**

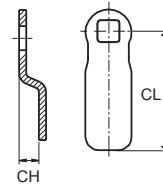
- Material:
  - Housing: Zinc Alloy
  - Handle: Zinc Alloy
  - Cam: Steel
  - Gasket: Rubber
  - Finish: See Table
- Housing and Handle are DIN-EN 1774 rated
- Two keys supplied with every lock

**Features:**

- Wide Grip range with adjustable nut
- Ideal for applications that require better sealing
- Adjustable screw latches with quarter turn Cam operation
- Provides 6mm preset compression
- For alternate cylinders, please contact Essentra for details

**▲ CAMS SOLD SEPARATELY. See Table >>****Cams Without Stoppers****Specifications:**

- Material: Steel
- Finish: Zinc Plated
- Thickness: 4mm

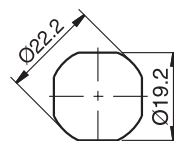
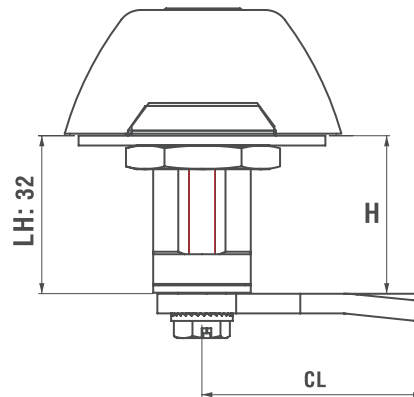
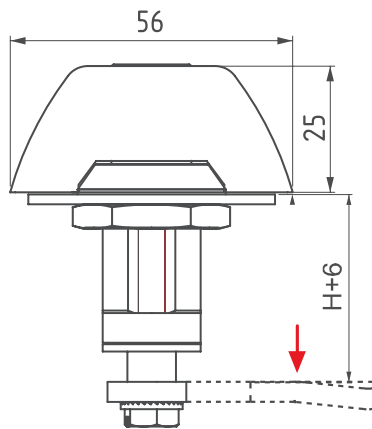


| Item No. | Cam Type | CH   | CL | Position     | H Grip* |      |
|----------|----------|------|----|--------------|---------|------|
|          |          |      |    |              | Min     | Max  |
| 30403565 | ① Flat   | 0    | 33 | Cam Straight | 41      | 58   |
|          |          |      |    | Reversed     | 27      | 44   |
| 30403566 | ② Offset | 14   | 33 | Forward      | 55      | 72   |
|          |          |      |    | Reversed     | 13.5    | 30.5 |
| 30403567 | ③ Offset | 27.5 | 33 | Forward      | 68      | 85   |

\*Grip is measured in latched position

| Item No.      |                     | Cylinder Description             |
|---------------|---------------------|----------------------------------|
| Chrome Plated | Black Powder Coated | No Cylinder                      |
| 2404110000    | 2404120000          |                                  |
| 2404110700    | 2404120700          | CH 751 (Stainless Steel Shutter) |

## COMPRESSION LATCHES - WING KNOB FIXED


**340 Series**  
 Compression Latches - Wing Knob Fixed Locks


Cut-Out

## Specifications:

- Material:  
Housing: Zinc Alloy  
Knob: Zinc Alloy  
Cam: Steel  
Gasket: Rubber
- Finish: See Table
- Housing and Knob are DIN-EN 1774 rated
- Two keys supplied with every lock

## Features:

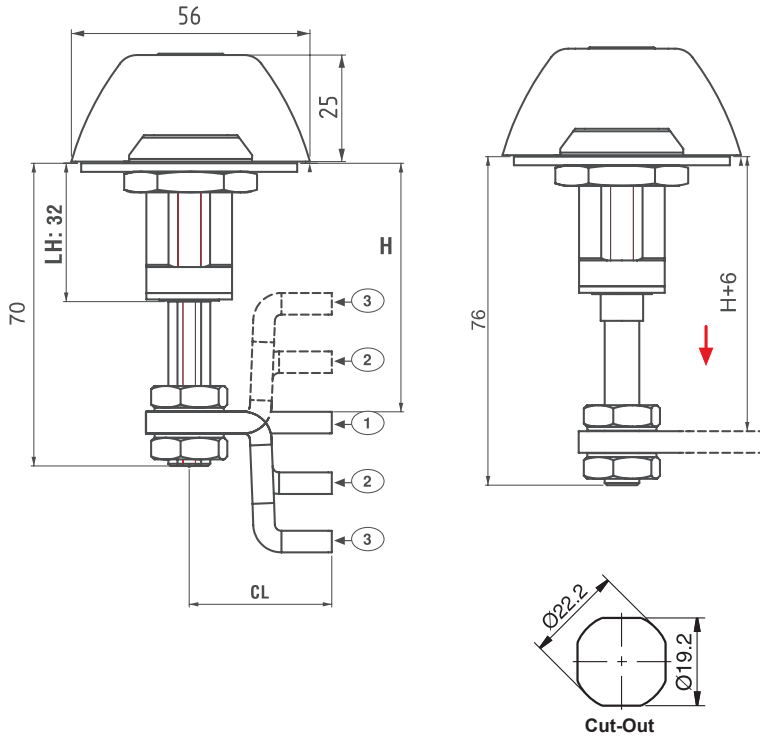
- Ideal for applications that require better sealing
- Provides 6mm preset compression
- For alternate cut-outs, cylinders or padlockable version, please contact Essentra for details

**▲ CAMS SOLD SEPARATELY. SEE PAGE 592 - 593.**

**Round Spurred Lock Washer - Optional**

- Item No. 060A3
- Ideal for round through hole Installation
- Ordered separately

| Item No.      |                     |                                  |
|---------------|---------------------|----------------------------------|
| Chrome Plated | Black Powder Coated | Cylinder Description             |
| 3403110000    | 3403120000          | No Cylinder                      |
| 3403110700    | 3403120700          | CH 751 (Stainless Steel Shutter) |

**COMPRESSION LATCHES - WING KNOB ADJUSTABLE****340 Series****Compression Latches - Wing Knob Adjustable Locks****Specifications:**• **Material:**

Housing: Zinc Alloy

Knob: Zinc Alloy

Cam: Steel

Gasket: Rubber

• **Finish:** See Table

## • Housing and Knob are DIN-EN 1774 rated

## • Two keys supplied with every lock

**Features:**

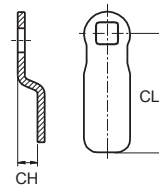
- Ideal for applications that require better sealing
- Adjustable screw latches with quarter turn CAM operation
- Provides 6mm preset compression
- For alternate cut-outs, cylinders or padlockable version, please contact Essentra for details

**CAMS SOLD SEPARATELY. See Table >>**
**Round Spurred Lock Washer - Optional**

- Item No. 060A3
- Ideal for round through hole Installation
- Ordered separately

**Cams Without Stoppers****Specifications:**

- Material: Steel
- Finish: Zinc Plated
- Thickness: 4mm



| Item No. | Cam Type | CH   | CL | Position     | H Grip* |      |
|----------|----------|------|----|--------------|---------|------|
|          |          |      |    |              | Min     | Max  |
| 30403565 | ① Flat   | 0    | 33 | Cam Straight | 41      | 58   |
| 30403566 | ② Offset | 14   | 33 | Reversed     | 27      | 44   |
|          |          |      |    | Forward      | 55      | 72   |
| 30403567 | ③ Offset | 27.5 | 33 | Reversed     | 13.5    | 30.5 |
|          |          |      |    | Forward      | 68      | 85   |

**Item No.****Chrome Plated**

3404110000

3404110700

**Black Powder Coated**

3404120000

3404120700

**Cylinder Description**

No Cylinder

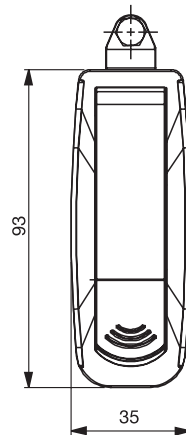
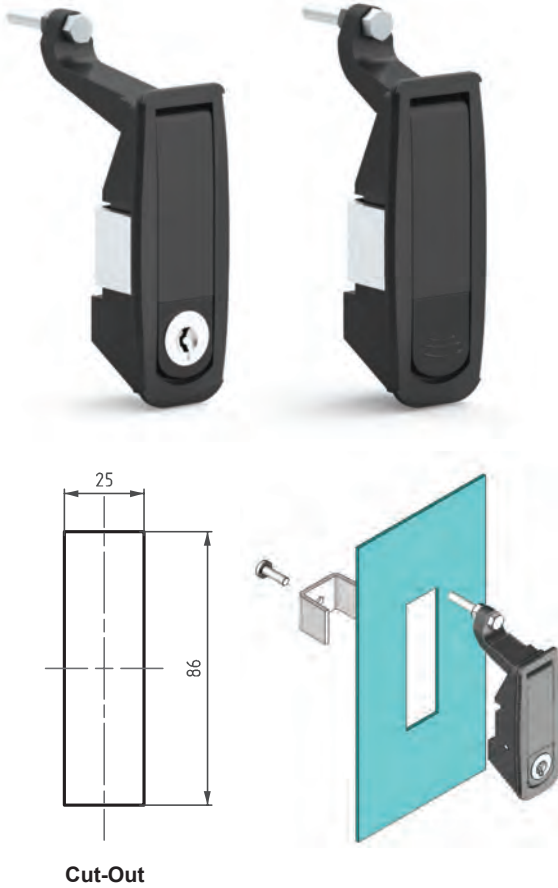
CH 751 (Stainless Steel Shutter)



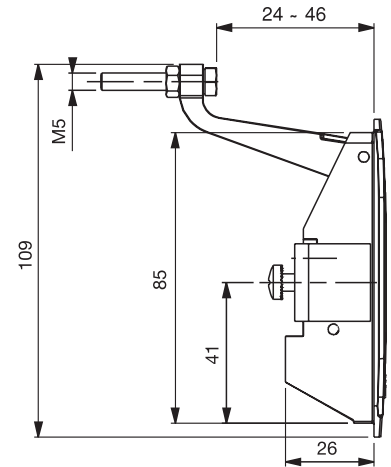
# COMPRESSION LATCHES - FLUSH TRIGGER LOCKS

## 077 Series

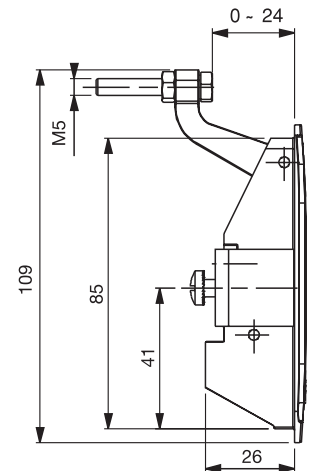
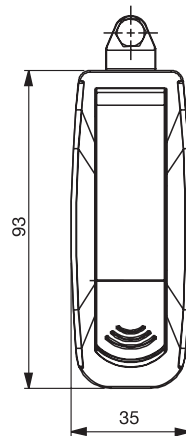
### Compression Latches / Flush Trigger Locks



**Version 1**



**Version 2**



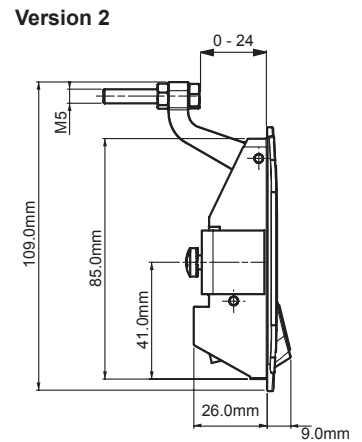
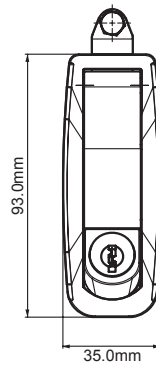
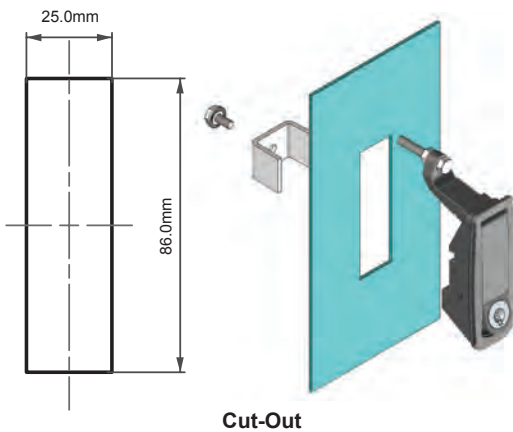
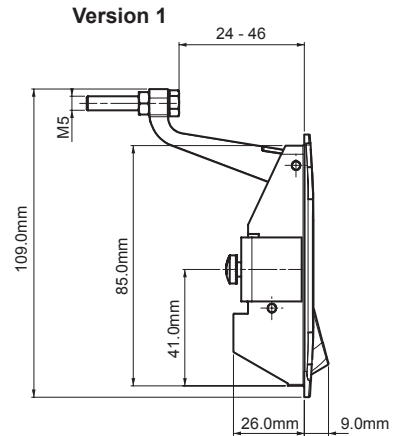
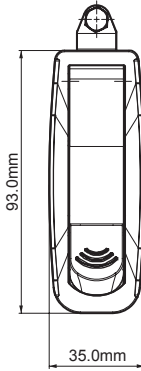
#### Specifications:

- Material:
  - Body: Zinc Alloy
  - Handle: Zinc Alloy
  - Installation Bracket: Steel
- Finish: See Table
- Housing and Knob Compliant to DIN-EN 1774 (Zinc Alloy)
- Two keys supplied with every lock

#### Features:

- Flush style trigger design
- Available with or without cylinders
- Suitable for 2mm door thickness (Maximum)

| Item No. | Finish              | Version | Grip Adjustment |  | Cylinder or Driver | Cylinder / Driver Description   |
|----------|---------------------|---------|-----------------|--|--------------------|---------------------------------|
|          |                     |         | mm              |  |                    |                                 |
| 0771100  | Chrome Plated       | 1       | 24 - 46         |  | Cylinder           | No Cylinder                     |
| 0772100  | Chrome Plated       | 2       | 0 - 24          |  | Cylinder           | No Cylinder                     |
| 0771200  | Black Powder Coated | 1       | 24 - 46         |  | Cylinder           | No Cylinder                     |
| 0771201  | Black Powder Coated | 1       | 24 - 46         |  | Cylinder           | Keyed Alike                     |
| 0771202  | Black Powder Coated | 1       | 24 - 46         |  | Cylinder           | Keyed to Differ                 |
| 0771207  | Black Powder Coated | 1       | 24 - 46         |  | Cylinder           | CH751 (Stainless Steel Shutter) |
| 0772200  | Black Powder Coated | 2       | 0 - 24          |  | Cylinder           | No Cylinder                     |
| 0772201  | Black Powder Coated | 2       | 0 - 24          |  | Cylinder           | Keyed Alike                     |
| 0772202  | Black Powder Coated | 2       | 0 - 24          |  | Cylinder           | Keyed to Differ                 |
| 0772207  | Black Powder Coated | 2       | 0 - 24          |  | Cylinder           | CH751 (Stainless Steel Shutter) |

**COMPRESSION LATCHES - OFF-SET TRIGGER LOCKS****177 Series****Compression Latches / Off-Set Trigger Locks****Specifications:**

- Material:  
Body: Zinc Alloy  
Handle: Zinc Alloy  
Installation Bracket: Steel
- Finish: See Table
- Housing and Handle are DIN-EN 1774 rated
- Two keys supplied with every lock

**Features:**

- Available with or without cylinders
- Suitable for 2mm door thickness (Maximum)

**No Cylinder****With Key Cylinder**

| Item No.      |                     | Version | Grip Adjustment | Cylinder or Driver | Cylinder / Driver Description   |
|---------------|---------------------|---------|-----------------|--------------------|---------------------------------|
| Chrome Plated | Black Powder Coated |         |                 |                    |                                 |
| 1771100       | 1771200             | 1       | 24 - 46mm       | Cylinder           | No Cylinder                     |
| —             | 1771201             | 1       | 24 - 46mm       | Cylinder           | Keyed Alike                     |
| —             | 1771202             | 1       | 24 - 46mm       | Cylinder           | Keyed to Differ                 |
| —             | 1771207             | 1       | 24 - 46mm       | Cylinder           | CH751 (Stainless Steel Shutter) |
| —             | 1771242             | 1       | 24 - 46mm       | Driver             | Slot (2 x 4mm)                  |
| 1772100       | 1772200             | 2       | 0 - 24mm        | Cylinder           | No Cylinder                     |
| —             | 1772201             | 2       | 0 - 24mm        | Cylinder           | Keyed Alike                     |
| —             | 1772202             | 2       | 0 - 24mm        | Cylinder           | Keyed to Differ                 |
| —             | 1772207             | 2       | 0 - 24mm        | Cylinder           | CH751 (Stainless Steel Shutter) |
| —             | 1772242             | 2       | 0 - 24mm        | Driver             | Slot (2 x 4mm)                  |



# ADJUSTABLE GRIP COMPRESSION LATCHES



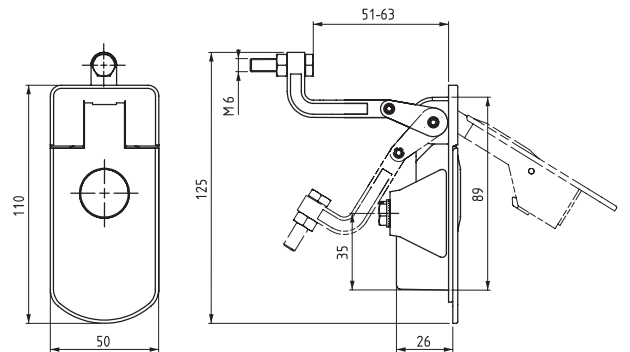
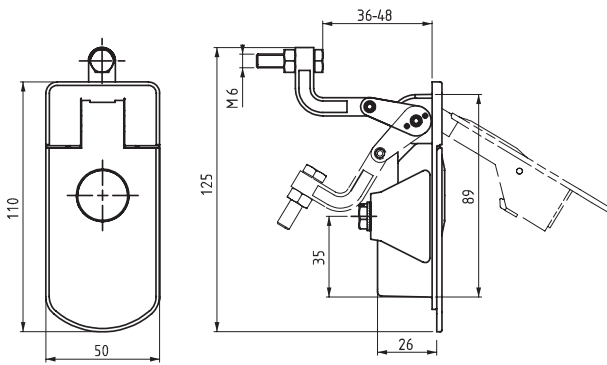
## 377 Series Compression Latch - Adjustable Grip



Version 1



Version 2

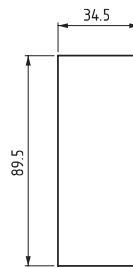


**Specifications:**

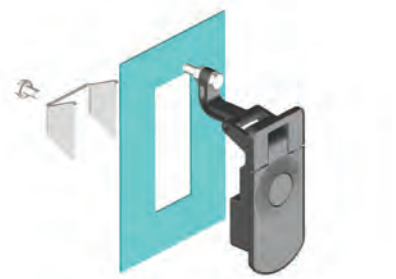
- Material:  
Body: Zinc Alloy  
Handle: Zinc Alloy  
Fixing Bracket: Steel  
Dust Cap: Stainless Steel
- Finish: Black Powder Coated
- Latch is DIN-EN 1774 rated
- Two keys supplied with every lock

**Features:**

- Available with or without cylinders
- Work with door/panel thickness up to 2mm
- Assemble lock with one fixing bracket
- Please contact Essentra for alternate Finish



Cut-Out

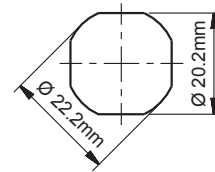
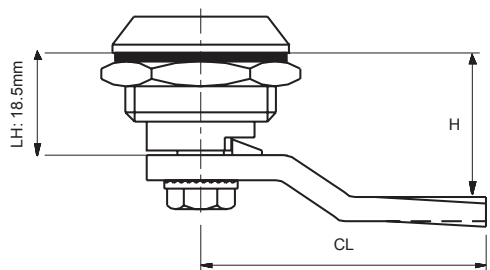
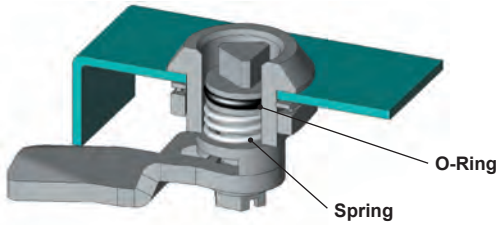


| Item No. | Version | Cylinder Description                         |
|----------|---------|----------------------------------------------|
| 3771200  | 1       | No Cylinder                                  |
| 3771203  | 1       | Keyed Alike with Stainless Steel Shutter     |
| 3771232  | 1       | Keyed Different with Stainless Steel Shutter |
| 3771207  | 1       | CH751 (Stainless Steel Shutter)              |
| 3772200  | 2       | No Cylinder                                  |
| 3772203  | 2       | Keyed Alike with Stainless Steel Shutter     |
| 3772232  | 2       | Keyed Different with Stainless Steel Shutter |
| 3772207  | 2       | CH751 (Stainless Steel Shutter)              |



# SPRING LOADED LATCHES & LOCKS

## 060 Series Spring Loaded Latches & Locks



Cut-Out

**Specifications:**

- Material: See Table
- Cam: Steel or Nylon
- Gasket: Rubber
- Finish: See Table
- Housing and driver is DIN-EN 1774 rated

**Features:**

- Internal spring provides tactile resistance
- Cam does not rotate beyond quarter turn due to stop lip
- Please contact Essentra for alternate drivers

- ⚠ **FOR ALTERNATE DRIVERS SEE PAGE 596.**
- ⚠ **CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**
- ⚠ **DRIVER KEY SOLD SEPARATELY. SEE PAGES 597 - 598.**

| Driver Style   |                |            |              |              |              |
|----------------|----------------|------------|--------------|--------------|--------------|
| 13             | 15             | 28         | 37           | 38           | 42           |
| 3mm Double Bit | 5mm Double Bit | 8mm Square | 7mm Triangle | 8mm Triangle | 2 x 4mm Slot |
|                |                |            |              |              |              |

| Driver Style |                 |                |         |               |
|--------------|-----------------|----------------|---------|---------------|
| 52           | 61              | 68             | 88      | 97            |
| Slot         | 10mm Hex Female | 8mm Hex Female | Railway | 11mm Hex Male |
|              |                 |                |         |               |

| Item Number                 |                                   |                            |                |              |                    |
|-----------------------------|-----------------------------------|----------------------------|----------------|--------------|--------------------|
| Zinc Alloy<br>Chrome Plated | Zinc Alloy<br>Black Powder Coated | Stainless Steel<br>Natural | Nylon<br>Black | Driver Style | Driver Description |
| 060111300                   | 060121300                         | 060401300                  | 060201300      | 13           | 3mm Double Bit     |
| 060111500                   | 060121500                         | 060401500                  | 060201500      | 15           | 5mm Double Bit     |
| 060112800                   | 060122800                         | 060402800                  | 060202800      | 28           | 8mm Square         |
| 060113700                   | —                                 | —                          | —              | 37           | 7mm Triangle       |
| 060113800                   | 060123800                         | 060403800                  | 060203800      | 38           | 8mm Triangle       |
| 060114200                   | 060124200                         | —                          | 060204200      | 42           | 2 x 4mm Slot       |
| 060115200                   | 060125200                         | —                          | —              | 52           | Slot               |
| 060116100                   | 060126100                         | —                          | —              | 61           | 10mm Hex Female    |
| 060116800                   | 060126800                         | —                          | —              | 68           | 8mm Hex Female     |
| —                           | —                                 | 060408800                  | —              | 88           | Railway            |
| 060119700                   | 060129700                         | —                          | —              | 97           | 11mm Hex Male      |

# QUARTER TURN LATCHES & LOCKS - SECURE



**461 Series**  
Secure Quarter Turn Latches & Locks



Key is removable at locked position



Key is not removable at open position, it works like a knob.

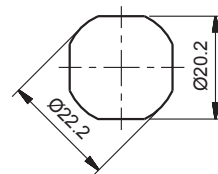
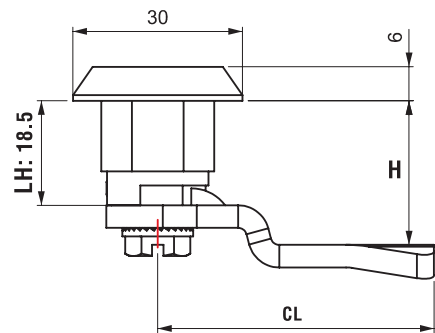
**Specifications:**

- Material:  
Housing: Zinc Alloy  
Driver: Zinc Alloy  
Cam: Steel  
Gasket: Rubber
- Finish: Chrome Plated
- Housing and Driver are DIN-EN 1774 rated

**Features:**

- When lock is open the key functions as a knob
- Applicable Cams are with stoppers
- Latch includes Stainless Steel Shutter

- ▲ **CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**
- ▲ **DRIVER KEY SOLD SEPARATELY. SEE PAGES 597 - 598.**

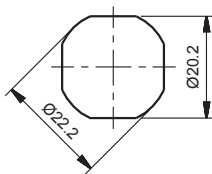
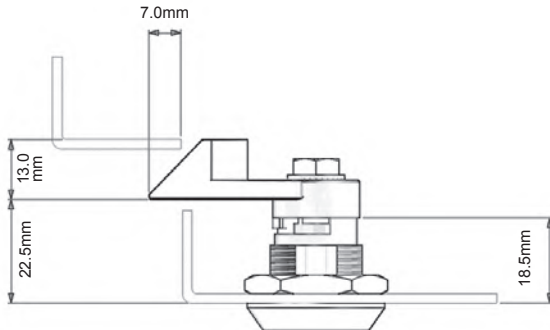
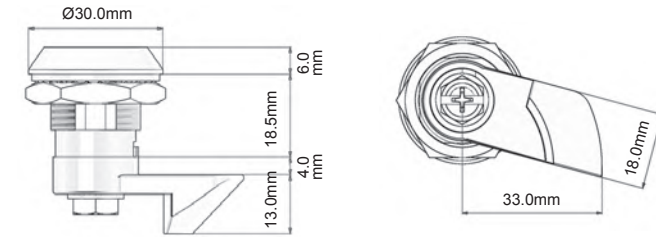


Cut-Out

| Driver Style   |  |  |  |
|----------------|--|--|--|
| 15             |  |  |  |
| 5mm Double Bit |  |  |  |



| Item No.       | Driver Style | Driver Description | Hand Operation |
|----------------|--------------|--------------------|----------------|
| 46111111500001 | 15           | 5mm Double Bit     | Right Hand     |
| 46111111500002 | 15           | 5mm Double Bit     | Left Hand      |

**QUARTER TURN LATCHES & LOCKS - SPRING CAM****160 Series****Quarter Turn Spring Cam Latch / Lock**

Cut-Out

**Specifications:**

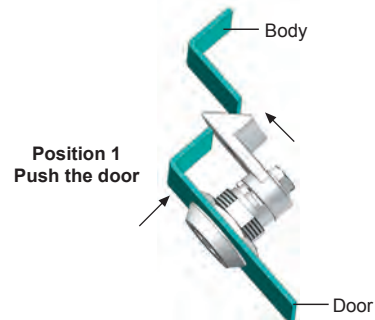
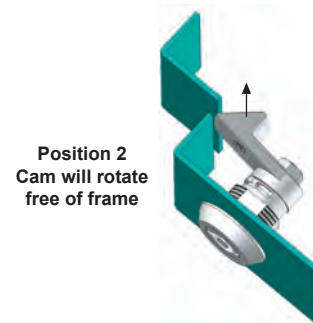
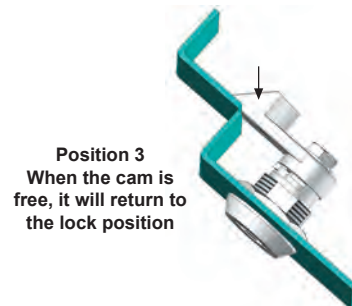
- Material:  
Housing: Zinc Alloy  
Drivers: Zinc Alloy  
Gasket: Rubber
- Finish: See Table
- Housing and Driver are DIN-EN 1774 rated
- Spring loaded cam is included

**Features:**

- Spring-loaded cam provides push-to-close action
- Distance between inside of lock face and front of cam fixed at 22.5mm
- Cam included with latch
- Please contact Essentra for alternate driver options

**⚠ FOR ALTERNATE DRIVERS SEE PAGE 596.**

**⚠ DRIVER KEY SOLD SEPARATELY. SEE PAGES 597 - 598.**

Position 1  
Push the doorPosition 2  
Cam will rotate  
free of framePosition 3  
When the cam is  
free, it will return to  
the lock position**Driver Style**

13

3mm Double Bit



15

5mm Double Bit



| Item No.   | Finish              | Driver Style | Driver Description | Hand Operation |
|------------|---------------------|--------------|--------------------|----------------|
| 1601113001 | Chrome Plated       | 13           | 3mm Double Bit     | Right          |
| 1601113002 | Chrome Plated       | 13           | 3mm Double Bit     | Left           |
| 1601115001 | Chrome Plated       | 15           | 5mm Double Bit     | Right          |
| 1601115002 | Chrome Plated       | 15           | 5mm Double Bit     | Left           |
| 1601215001 | Black Powder Coated | 15           | 5mm Double Bit     | Right          |
| 1601215002 | Black Powder Coated | 15           | 5mm Double Bit     | Left           |



# MINI QUARTER TURN LATCHES - SPRING LOADED

## 066 Series

### Mini Quarter Turn Latches - Spring Loaded Locks

**Specifications:**

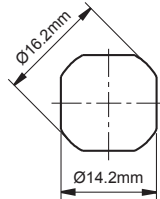
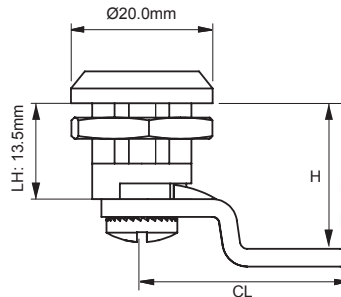
- Material:  
Housing: Zinc Alloy  
Driver: Zinc Alloy  
Cam: Steel
- Finish: See Table
- Housing and Driver are DIN-EN 1774 rated

**Features:**

- Specially designed internal spring provides 1mm tactile resistance
- Sealing washer NOT supplied, consult Essentra for IP rated latch/gasket
- Please contact Essentra for alternate drivers

**⚠ CAMS SOLD SEPARATELY. SEE PAGE 595.**

**⚠ DRIVER KEY SOLD SEPARATELY. SEE PAGES 597 - 598. Cut-Out**



| Driver Style       |                    |
|--------------------|--------------------|
| 26<br>6mm Square   | 37<br>7mm Triangle |
| 42<br>2 x 4mm Slot |                    |
|                    |                    |
|                    |                    |

| Item No.      |                     | Driver Style | Driver Description |
|---------------|---------------------|--------------|--------------------|
| Chrome Plated | Black Powder Coated |              |                    |
| 066112600     | 066122600           | 26           | 6mm Square         |
| 066113700     | 066123700           | 37           | 7mm Triangle       |
| 066114200     | 066124200           | 42           | 2 x 4mm Slot       |

## 266 Series

### Quarter Turn Latches - Spring Loaded Locks

**Specifications:**

- Material:  
Housing: Zinc Alloy  
Drivers: Zinc Alloy  
Cam: Steel
- Finish: See Table
- Housing and Driver are DIN-EN 1774 rated

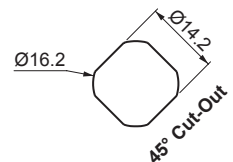
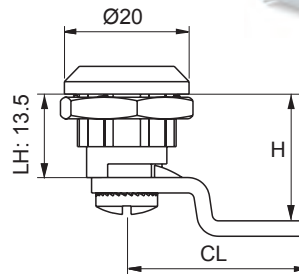
**Features:**

- Internal spring provides 1mm tactile resistance
- Cam does not rotate beyond quarter turn due to stop lip
- Applicable Cams are with stoppers
- Please contact Essentra for IP rated Latch

**⚠ FOR ALTERNATE DRIVERS SEE PAGE 596.**

**⚠ CAMS SOLD SEPARATELY. SEE PAGE 595.**

**⚠ DRIVER KEY SOLD SEPARATELY. SEE PAGES 597 - 598.**

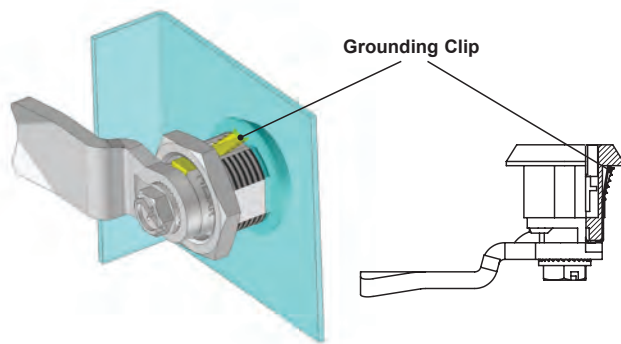


| Driver Style       |                    |
|--------------------|--------------------|
| 26<br>6mm Square   | 37<br>7mm Triangle |
| 42<br>2 x 4mm Slot |                    |
|                    |                    |
|                    |                    |

| Item No.      |                     | Driver Style | Driver Description |
|---------------|---------------------|--------------|--------------------|
| Chrome Plated | Black Powder Coated |              |                    |
| 266112600     | 266122600           | 26           | 6mm Square         |
| 266113700     | 266123700           | 37           | 7mm Triangle       |
| 266114200     | 266124200           | 42           | 2 x 4mm Slot       |

**QUARTER TURN LATCHES - SPRING LOADED****360 Series**

Quarter Turn Latches - Spring Loaded Locks with Grounding Clip



## Specifications:

## • Material:

Housing: Zinc Alloy

Driver: Zinc Alloy

Cam: Steel or Nylon

Gasket: Rubber

Grounding Clip: Stainless Steel

## • Finish: See Table

## • Housing and Driver are DIN-EN 1774 rated

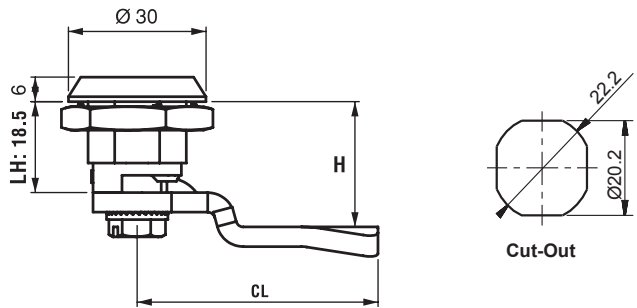
## Features:

• Internal spring provides tactile resistance

• CAM does not rotate beyond quarter turn due to stop lip

• Applicable Cams are with stoppers

• Special clip for grounding

**⚠ FOR ALTERNATE DRIVERS SEE PAGE 596.****⚠ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.****⚠ DRIVER KEY SOLD SEPARATELY. SEE PAGES 597 - 598.**

## Driver Style

| 13             | 15             | 28         | 37           | 38           | 42           |
|----------------|----------------|------------|--------------|--------------|--------------|
| 3mm Double Bit | 5mm Double Bit | 8mm Square | 7mm Triangle | 8mm Triangle | 2 x 4mm Slot |
|                |                |            |              |              |              |

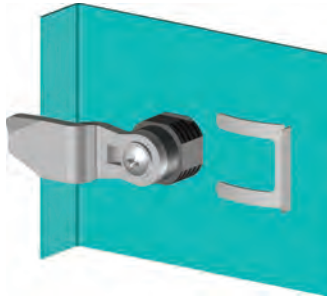
## Item No.

| Chrome Plated | Black Powder Coated | Driver Style | Cylinder Description |
|---------------|---------------------|--------------|----------------------|
| 360111300     | 360121300           | 13           | 3mm Double Bit       |
| 360111500     | 360121500           | 15           | 5mm Double Bit       |
| 360112800     | 360122800           | 28           | 8mm Square           |
| 360113700     | 360123700           | 37           | 7mm Triangle         |
| 360113800     | 360123800           | 38           | 8mm Triangle         |
| 360114200     | 360124200           | 42           | 2 x 4mm Slot         |

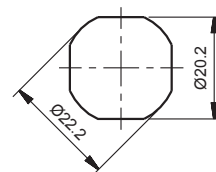
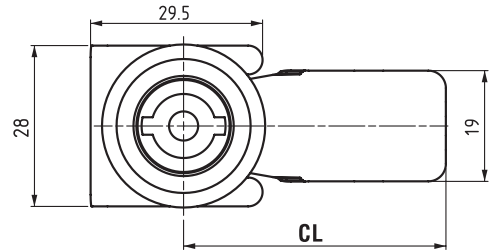
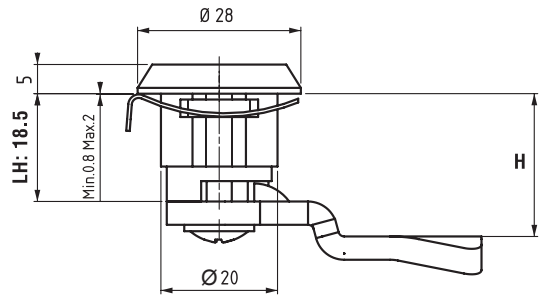
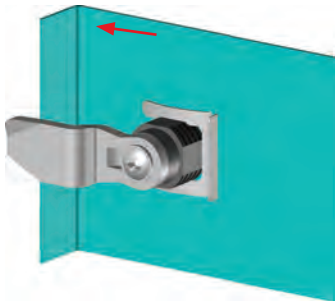


# QUARTER TURN LATCHES - QUICK INSTALLATION

**560 Series**  
**Quarter Turn - Quick Installation Locks**



Clip design allows for quick installation



Cut-Out

**Specifications:**

- Material:  
 Housing: Black Nylon (PA6 30% GF)  
 Driver: Black Nylon (PA6 30% GF)
- Housing and Driver Compliant to DIN-EN 1774

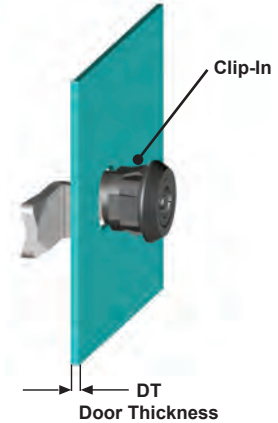
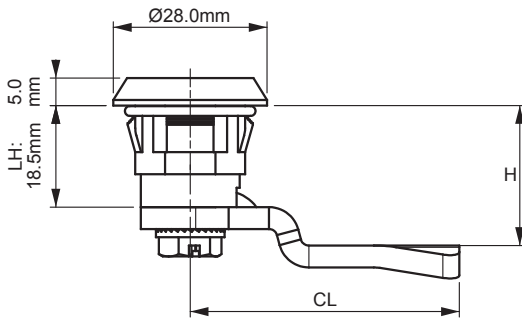
**Features:**

- Easy assembly by clips
- Specially designed internal spring provides tactile resistance
- Can be used for panel thickness 0.8-2.0mm

- ⚠ **FOR ALTERNATE DRIVERS SEE PAGE 596.**
- ⚠ **CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**
- ⚠ **DRIVER KEY SOLD SEPARATELY. SEE PAGES 597 - 598.**

| Driver Style   |            |              |              |
|----------------|------------|--------------|--------------|
| 15             | 28         | 38           | 42           |
| 5mm Double Bit | 8mm Square | 8mm Triangle | 2 x 4mm Slot |
|                |            |              |              |

| Item No.    | Driver Style | Driver Description |
|-------------|--------------|--------------------|
| 56020201500 | 15           | 5mm Double Bit     |
| 56020202800 | 28           | 8mm Square         |
| 56020203800 | 38           | 8mm Triangular     |
| 56020204200 | 42           | Slot (2 x 4)       |

**QUARTER TURN LATCHES - EASY INSTALL / SPRING LOADED****660 Series****Quarter Turn Latches - Easy Install Locks****Specifications:**

- Material:  
Housing: Black Nylon (PA6 30% GF)  
Driver Material: Black Nylon (PA6 30% GF)  
Cam: Steel, Nylon

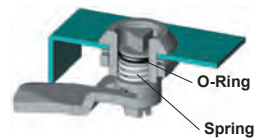
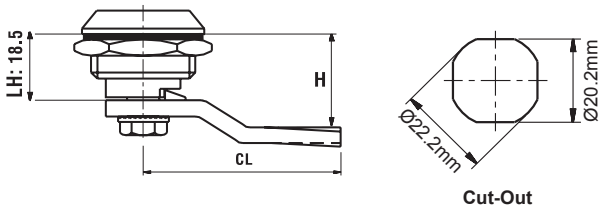
**Features:**

- Easy assembly by clips

- ⚠ **FOR ALTERNATE DRIVERS SEE PAGE 596.**
- ⚠ **CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**
- ⚠ **DRIVER KEY SOLD SEPARATELY. SEE PAGES 597 - 598.**

| Driver Style |
|--------------|
| 42           |
| 2 x 4mm Slot |
|              |

| Item No.     | Door Thickness (DT) |  | Driver Style | Driver Description |
|--------------|---------------------|--|--------------|--------------------|
|              | mm                  |  |              |                    |
| 660120204200 | 0.8 - 1.2           |  | 42           | 2 x 4mm Slot       |
| 660220204200 | 1.2 - 1.5           |  | 42           | 2 x 4mm Slot       |

**760 Series****Quarter Turn - Spring Loaded Latches****Specifications:**

- Material:  
Housing: Black Nylon (PA6 30% GF)  
Driver See Table  
Gasket: Polyurethane
- Housing and Driver compliant to DIN-EN 1774

**Features:**

- Specially designed internal spring provides 1.5mm compression

- ⚠ **CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**
- ⚠ **DRIVER KEY SOLD SEPARATELY. SEE PAGES 597 - 598.**

| Driver Style |
|--------------|
| 42           |
| 2 x 4mm Slot |
|              |

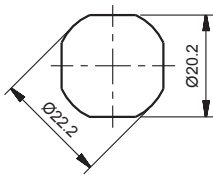
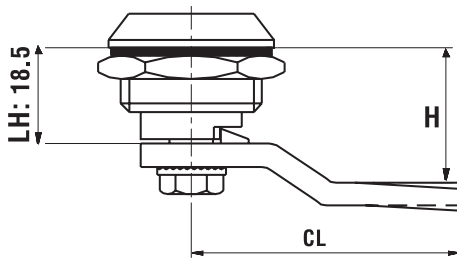
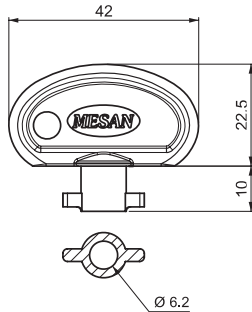
| Item No.    | Driver Style | Driver Description | Driver Material | Driver Finish       |
|-------------|--------------|--------------------|-----------------|---------------------|
| 76020124200 | 42           | 2 x 4mm Slot       | Zinc Alloy      | Black Powder Coated |
| 76020204200 | 42           | 2 x 4mm Slot       | Nylon           | Black               |



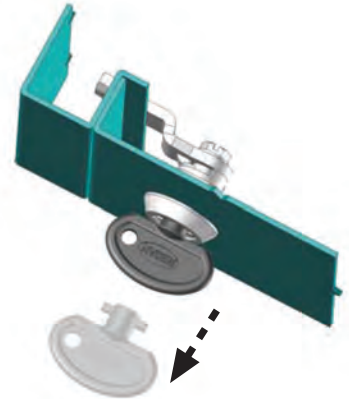
# QUARTER TURN LATCHES & LOCKS - SECURE



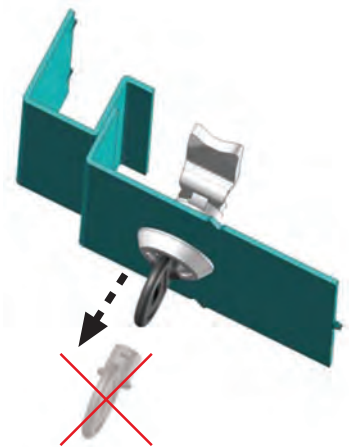
## 361 Series Secure Quarter Turn Latches / Locks



Cut-Out



Key is removable at locked position



Key is not removable at open position; it works like a knob

**Specifications:**

- Material:  
Housing: Zinc Alloy  
Driver: Zinc Alloy  
Gasket: Rubber
- Finish: See Table
- Housing is DIN-EN 1774 rated

**Features:**

- When lock is open the key functions as a knob
- Key is specific to latch and should be ordered at the same time, see table for Key Item No.
- Applicable Cams are with stoppers

**▲ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**



**Round Spurred Lock Washer - Optional**

- Item No. 060A3
- Ideal for round through hole Installation
- Ordered separately

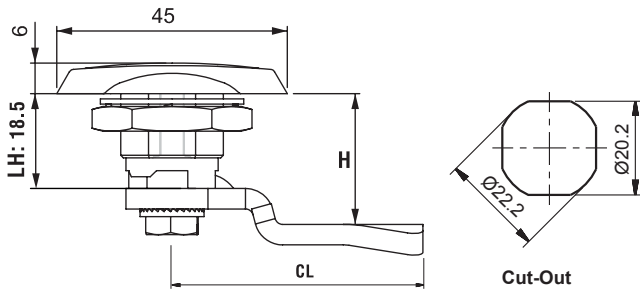
| Item No. | Finish              | Driver Description | Key Item No. |
|----------|---------------------|--------------------|--------------|
| 3611100  | Chrome Plated       | Key is Driver      | 16711        |
| 3611200  | Black Powder Coated | Key is Driver      | 16712        |



## PLASTIC KNOB LATCHES &amp; LOCKS

## 561 Series

## Plastic Knob Latch - Finger Grip Knob



## Specifications:

- Material:  
Housing: Black Nylon (PA6 30% GF)  
Cam: Steel, Nylon
- Housing is DIN-EN 1043-1 rated

## Features:

- Designed to act as a knob
- For special colors please contact Essentra

**⚠ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**

**⚠ DRIVER KEY SOLD SEPARATELY. SEE PAGES 597 - 598.**

## Driver Style

42

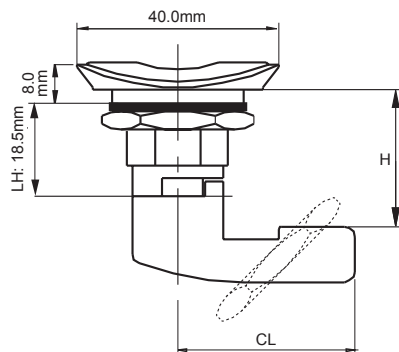
2 x 4mm Slot



| Item No.    | Driver Material | Driver Finish       | Driver Style | Driver Description |
|-------------|-----------------|---------------------|--------------|--------------------|
| 56120124200 | Zinc Alloy      | Black Powder Coated | 42           | 2 x 4mm Slot       |
| 56120204200 | Nylon           | Black               | 42           | 2 x 4mm Slot       |

## 161 Series

## Plastic Knob Lock / Finger Grip Latch



## Specifications:

- Material:  
Housing: See Table  
Driver: Zinc Alloy, Nylon (PA6 30% GF)  
Nut: Zinc Alloy, Nylon (PA6 30% GF)  
Cam: Steel, Nylon
- Finish: See Table
- Housing is DIN-EN 1043-1 rated

## Features:

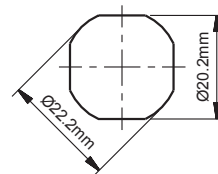
- Designed to act as a knob
- For special colors please contact Essentra
- Applicable CAMS are with stoppers

**⚠ FOR ALTERNATE DRIVERS SEE PAGE 596.**

**⚠ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**

**⚠ DRIVER KEY SOLD SEPARATELY. SEE PAGES 597 - 598.**

## Cut-Out



## Driver Style

13

3mm Double Bit

15

5mm Double Bit

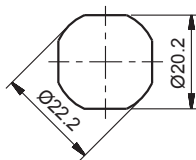
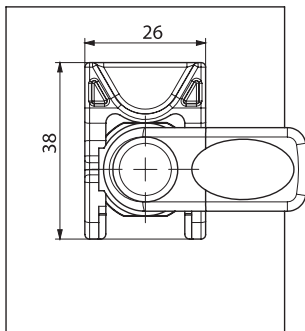
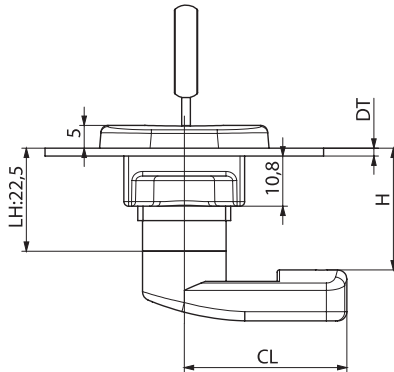
42

2 x 4mm Slot

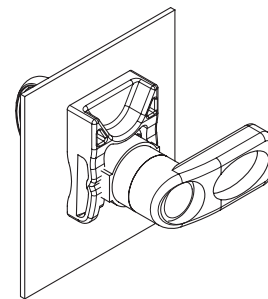
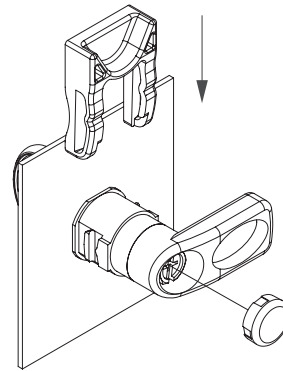


| Item No.    | Housing Material | Finish              | Driver Style | Driver Description |
|-------------|------------------|---------------------|--------------|--------------------|
| 16120201300 | Nylon            | Black               | 13           | 3mm Double Bit     |
| 16120201500 | Nylon            | Black               | 15           | 5mm Double Bit     |
| 16120124200 | Zinc Alloy       | Black Powder Coated | 42           | 2 x 4mm Slot       |
| 16120204200 | Nylon            | Black               | 42           | 2 x 4mm Slot       |

## CAM LATCHES - EASY FIXING


**761 Series**  
**Cam Latches - Easy Fixing**


Cut-Out



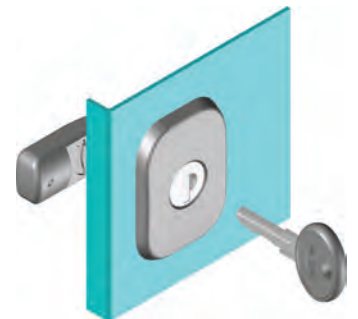
## Specifications:

- Material:  
Housing: Black Nylon (PA6 30% GF)  
Cylinder: Zinc Alloy
- Housing and Driver Compliant to DIN-EN 1774
- 2 keys supplied with each latch

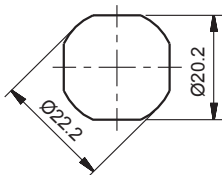
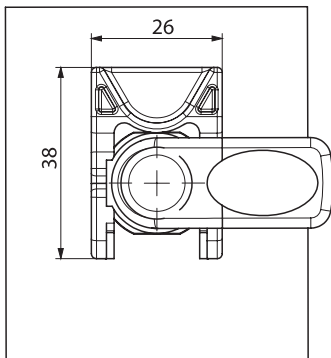
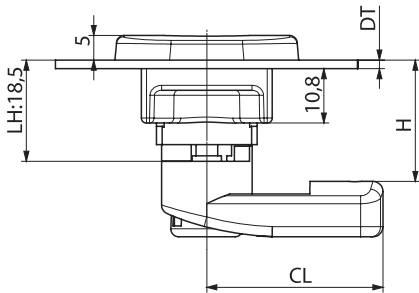
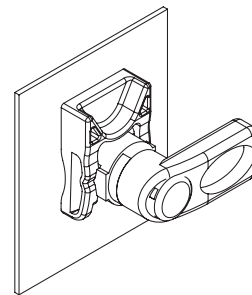
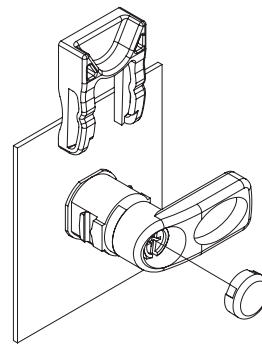
## Features:

- Easy assembly by plastic clips
- Applicable on various panel thicknesses
- Please consult factory for custom logo application
- Bolt cover available for grounding applications

**⚠ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**



| Item No.    | Cylinder Style | Cylinder Description | Panel Thickness |
|-------------|----------------|----------------------|-----------------|
| 76120031200 | 03             | Keyed Alike          | 1.2 - 1.8 mm    |
| 76120032300 | 03             | Keyed Alike          | 1.8 - 2.3 mm    |
| 76120321200 | 32             | Keyed Different      | 1.2 - 1.8 mm    |
| 76120322300 | 32             | Keyed Different      | 1.8 - 2.3 mm    |

**QUARTER TURN LATCHES - EASY FIXING****761 Series****Quarter Turn Latches - Easy Fixing****Cut-Out****Specifications:**

- Material:  
Housing: Black Nylon(PA6 30% GF)  
Driver: See Table

**Features:**

- Easy assembly by plastic clips
- Applicable on various panel thicknesses
- Please consult factory for custom logo application
- Bolt cover available for grounding applications

**⚠ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**

**⚠ DRIVER KEY SOLD SEPARATELY. SEE PAGES 597 - 598.**

**Driver Style****13**

3mm Double Bit

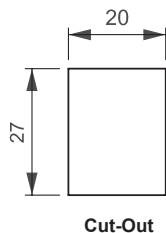
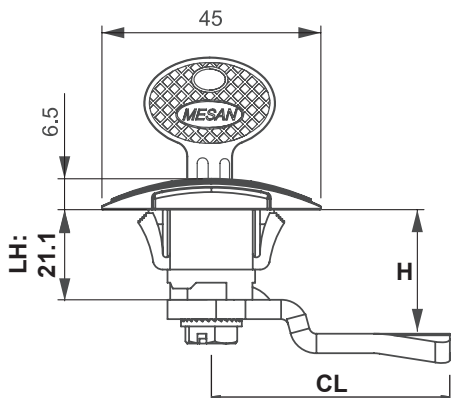


| Item No.      | Driver Style | Driver Description | Panel Thickness |
|---------------|--------------|--------------------|-----------------|
| 7612020131200 | 13           | 3 mm Double Bit    | 1.2 - 1.8 mm    |
| 7612020132300 | 13           | 3 mm Double Bit    | 1.8 - 2.3 mm    |

# FINGER GRIP LATCHES



## 261 Series Plastic Knob Lock / Finger Grip Latch



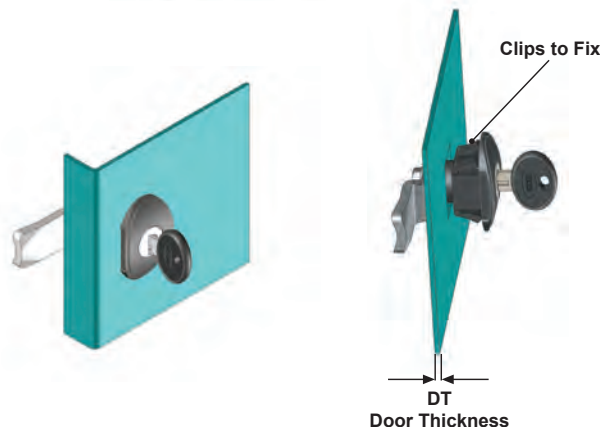
**Specifications:**

- Material:  
Housing: Black Nylon (PA6 30% GF)  
Cylinder: Zinc Alloy, Black Nylon (PA6 30% GF)  
Cam: Steel, Nylon
- Housing is DIN-EN 1043-1 rated

**Features:**

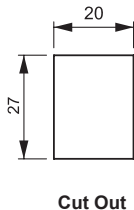
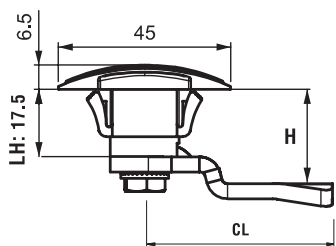
- Clip install for easy assembly
- Mounting nut not required
- Applicable CAMS are with stoppers
- Door Thickness 0.8mm Min - 1.8mm Max

- ⚠ **FOR ALTERNATE DRIVERS SEE PAGE 596.**
- ⚠ **CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**
- ⚠ **DRIVER KEY SOLD SEPARATELY. SEE PAGES 597 - 598.**



| Item No.  | Door Thickness (DT) |  | Cylinder Material | Cylinder Finish     | Cylinder Description                      |
|-----------|---------------------|--|-------------------|---------------------|-------------------------------------------|
|           | mm                  |  |                   |                     |                                           |
| 261200300 | 0.8 - 1.8           |  | Zinc Alloy        | Black Powder Coated | Keyed Alike (Stainless Steel Shutter)     |
| 261203200 | 0.8 - 1.8           |  | Nylon             | Black               | Keyed to Differ (Stainless Steel Shutter) |
| 261200700 | 0.8 - 1.8           |  | Nylon             | Black               | CH751 (Stainless Steel Shutter)           |

## 261 Series Finger Grip Easy Mounting Latch



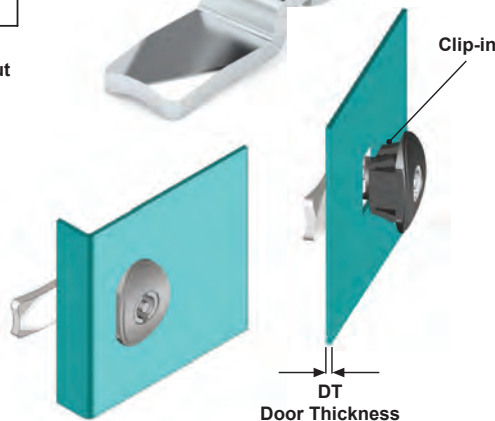
**Specifications:**

- Material:  
Housing: Black Nylon (PA6 30% GF)  
Driver: Black Nylon (PA6 30% GF)
- Housing is DIN-EN 1043-1 rated

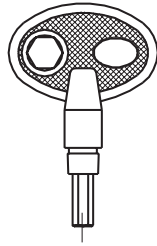
**Features:**

- Clip install for easy assembly
- Mounting nut not required
- Applicable CAMS are with stoppers
- Panel Thickness 1.8mm Max
- Please contact Essentra for alternate drivers.

- ⚠ **CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**



| Item No.    | Driver Style | Driver Description |
|-------------|--------------|--------------------|
| 26120201300 | 13           | 3 mm Double Bit    |

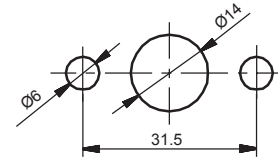
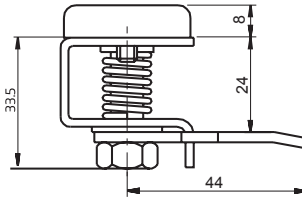
**PANEL LOCKS / QUARTER TURN LOCKS - PADLOCKABLE****075 Series****Panel Lock with Hexagonal Head**

## Specifications:

- Material:
  - Body: Steel
  - Cam: Steel
  - Cover: Black Nylon (PA6 30% GF)
- Housing and Driver are DIN-EN 1774 rated
- Cam included with Latch/Lock
- Allen Key sold separately, see table for details

## Features:

- Application for panels and machinery covers

**Cut-Out**

| Item No. | Hand Operation | Allen Key |
|----------|----------------|-----------|
| 075001   | Right          | 16966     |
| 075002   | Left           | 16966     |

**260 Series****Quarter Turn - Padlockable Locks****Application 1****Application 2**

## Specifications:

- Material:
  - Housing: Zinc Alloy
  - Driver: Zinc Alloy
  - Cam: Steel
  - Gasket: Rubber
- Finish: See Table
- Housing and Driver are DIN-EN 1774 rated

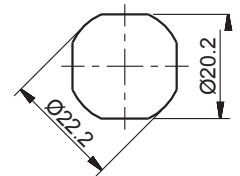
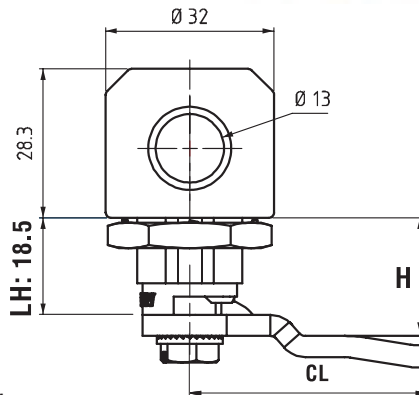
## Features:

- Padlockable
- Can be used with different drivers
- Applicable CAMS are with stoppers
- Please contact Essentra for alternate drivers

**⚠ FOR ALTERNATE DRIVERS SEE PAGE 596.**

**⚠ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**

**⚠ DRIVER KEY SOLD SEPARATELY. SEE PAGES 597 - 598.**

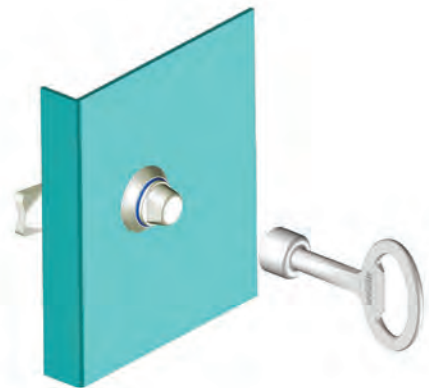
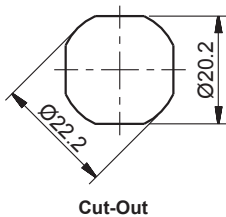
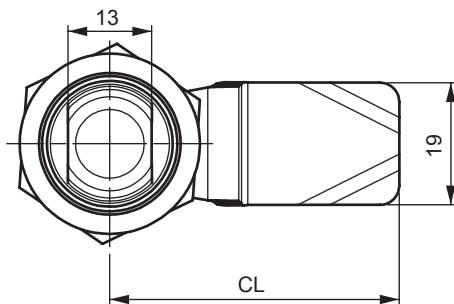
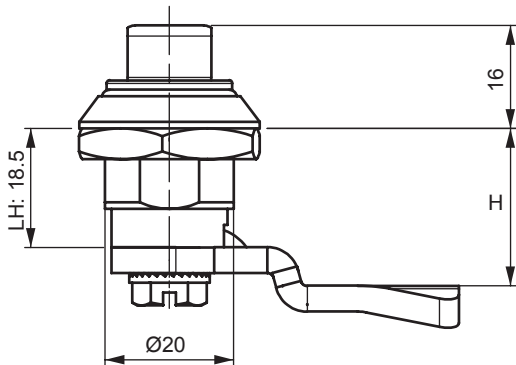
**Cut-Out**

| Driver Style   |              |              |
|----------------|--------------|--------------|
| 15             | 37           | 42           |
| 5mm Double Bit | 7mm Triangle | 2 x 4mm Slot |
|                |              |              |

| Item No.      |                     |              |                    |
|---------------|---------------------|--------------|--------------------|
| Chrome Plated | Black Powder Coated | Driver Style | Driver Description |
| 2601111500    | 26012121500         | 15           | 5mm Double Bit     |
| 26011113700   | 26012123700         | 37           | 7mm Triangular     |
| 26011114200   | 26012124200         | 42           | Slot (2 x 4mm)     |



**460 Series**  
Hygienic Latches & Locks



**Specifications:**

- Material:  
Housing: Stainless Steel  
Driver: Stainless Steel  
Cam: Stainless Steel  
O-Ring: Silicone
- Finish: Natural

**Features:**

- Dirt resistant and easy to clean
- Specifically designed for hygiene requirements
- Key is specific to the lock and should be ordered at the same time, please see table for details
- Latch has been tested according to GS-NV 6:2015/12

**▲ CAMS SOLD SEPARATELY. SEE PAGE 594.**

Item  
No.  
4604000

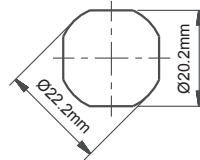
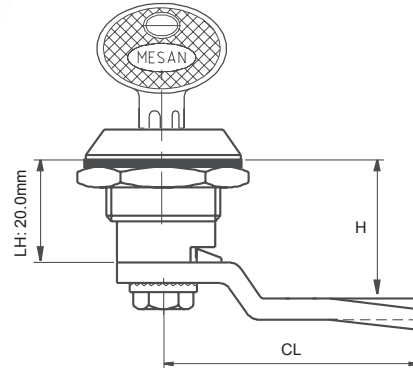
Metal Key  
36894

**CAM LATCHES & LOCKS****063 Series****Cylinder Cam Latches / Locks****Specifications:**

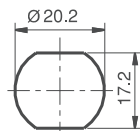
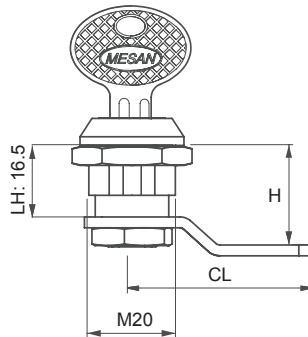
- **Material:**  
Housing: Zinc Alloy, Black Nylon (PA6 30% GF)  
Cam: Steel or Nylon  
Gasket: Rubber
- **Finish:** Chrome Plated, Black Powder Coated
- Housing and Driver are DIN-EN 1774 rated
- Two Keys supplied with every lock
- Master Key is sold separately, see table for details

**Features:**

- Quarter turn operation
- Body Length 20.5mm (please be sure to order appropriate cam)
- Available in all die-cast zinc alloy or with polyamide housing
- Please contact Essentra for spring loaded cam version and alternate cylinders

**Cut-Out****▲ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**

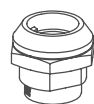
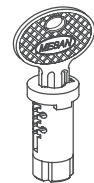
| Item No.                 |                                |             | Cylinder Description                      | Master System Key Reference |
|--------------------------|--------------------------------|-------------|-------------------------------------------|-----------------------------|
| Zinc Alloy Chrome Plated | Zinc Alloy Black Powder Coated | Black Nylon |                                           |                             |
| 063110100                | 063120100                      | 063200100   | Keyed Alike                               | —                           |
| 063110300                | 063120300                      | 063200300   | Keyed Alike with Stainless Steel Shutter  | —                           |
| 063110400                | 063120400                      | —           | Master System Keyed Differ                | 30204041                    |
| 063110700                | • 063120700                    | • 063200700 | CH751 (Stainless Steel Shutter)           | —                           |
| 063113200                | 063123200                      | —           | Keyed Differ with Stainless Steel Shutter | —                           |

**050 Series****Cam Latches & Locks****Cut-Out****Specifications:**

- **Material:**  
Housing: Zinc Alloy  
Cam: Steel
- **Finish:** Chrome Plated
- Housing is DIN-EN 1774 rated
- Two keys supplied with every lock

**Features:**

- Ideal for briefcase, steel doors and machinery covers
- Available in all die-cast zinc alloy or with polyamide housing
- Please contact Essentra for spring loaded cam version

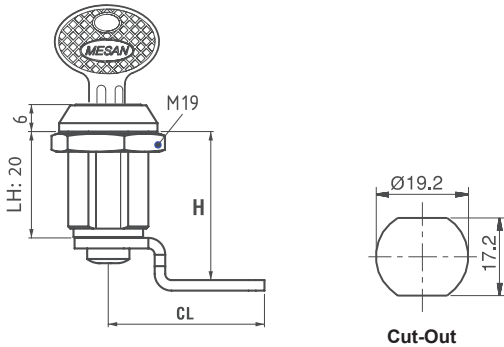
**M 12 Nut** → **▲ CAMS SOLD SEPARATELY. SEE PAGE 595. TYPE-2 CAMS ONLY**

| Item No. | Key Rotation Angle | Cylinder Description                      |
|----------|--------------------|-------------------------------------------|
| 05010300 | 180°               | Stainless Steel Shutter (keyed alike)     |
| 05013200 | 180°               | Stainless Steel Shutter (Keyed to Differ) |
| 05020300 | 90°                | Stainless Steel Shutter (keyed alike)     |
| 05023200 | 90°                | Stainless Steel Shutter (Keyed to Differ) |





**050 Series**  
Cam Latches / Locks



Specifications:

- Material:  
Housing: Zinc Alloy DIN-EN 1774 rated  
Cam: Steel
- Finish: Chrome Plated
- Two keys supplied with every lock

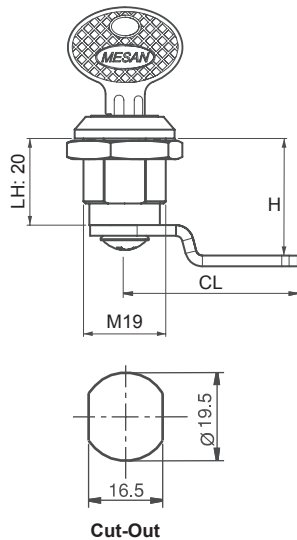
Features:

- Ideal for thicker walled applications
- Please contact Essentra for different housing length options

**▲ CAMS SOLD SEPARATELY. SEE PAGE 595.**

| Item No.  | Housing Length | Cylinder Description |
|-----------|----------------|----------------------|
| 050200100 | 20 mm          | Keyed Alike          |

**250 Series**  
Cam Latches / Locks



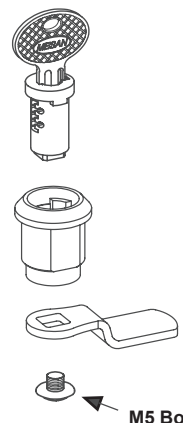
Specifications:

- Material:  
Housing: Zinc Alloy  
Cam: Steel
- Finish: Chrome Plated
- Housing is DIN-EN 1774 rated
- Two keys supplied with every lock

Features:

- Ideal for steel doors and machinery covers
- 90° Key rotation

**▲ CAMS SOLD SEPARATELY. SEE PAGE 595.**



| Item No.  | Cylinder Description                      |
|-----------|-------------------------------------------|
| 250200300 | Stainless Steel Shutter (Keyed Alike)     |
| 250203200 | Stainless Steel Shutter (Keyed to Differ) |

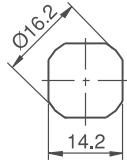
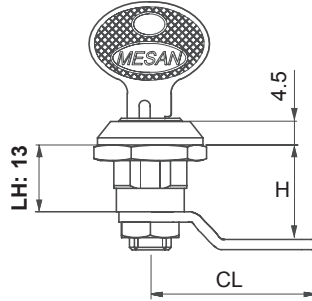
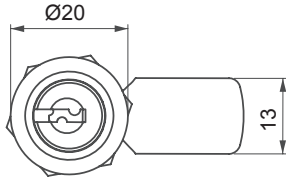


# MINI CAM LATCHES & LOCKS

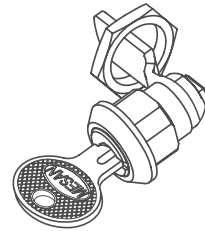
## 057 Series Mini Cam Latches & Locks



Version 1



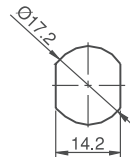
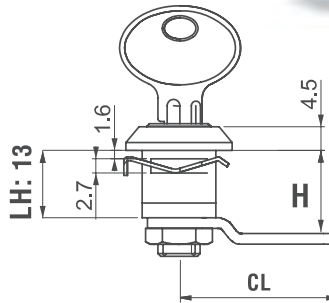
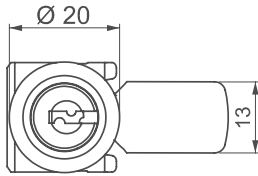
Cut-Out



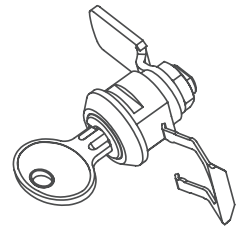
Installed by Nut



Version 3



Cut-Out



Installed by Clips

Specifications:

- Material:  
Housing: Zinc Alloy  
Cam: Steel
- Finish: Chrome Plated
- Housing is DIN-EN 1774 rated
- Two keys supplied with every lock

Features:

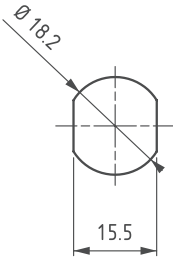
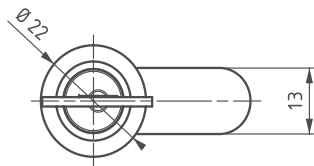
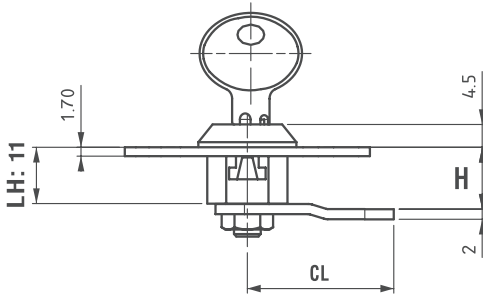
- Please Contact Essentra for Keyed to Differ version

**⚠ CAMS SOLD SEPARATELY. SEE PAGE 595.**

| Item No. | Version | Cylinder Description |
|----------|---------|----------------------|
| 05710300 | 1       | Keyed Alike          |
| 05730300 | 3       | Keyed Alike          |



257 Series  
Mini Cam Latches / Locks



Cut-Out

Specifications:

- Material:  
Housing: Nylon, Black (PA6 30% GF)  
Cam: Steel
- Housing is DIN-EN ISO 1043-1 rated
- Two keys supplied with every lock

Features:

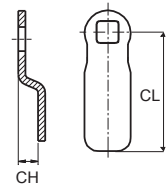
- Easy assembly with clips on housing
- 45° Key rotation

**⚠ CAMS SOLD SEPARATELY. See Table >>**

Cams Without Stoppers

Specifications:

- Material: Steel
- Finish: Zinc Plated
- Thickness: 2.4mm



| Item No.   | CH<br>Height | CL<br>Length | H Grip* |
|------------|--------------|--------------|---------|
| 30403487   | 0            | 16           | 11      |
| 31403040   | 1            | 33           | 12      |
| 31403032   | 1            | 38           | 12      |
| 30403469   | 5            | 38           | 16      |
| 31403041** | 6            | 30           | 17      |

\*Grip is measured in latched position

\*\* Hook Cam

| Item No. | Cylinder Description                      |
|----------|-------------------------------------------|
| 2570300  | Stainless Steel Shutter (Keyed Alike)     |
| 2573200  | Stainless Steel Shutter (Keyed to Differ) |

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DELIVERED



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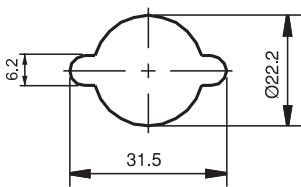
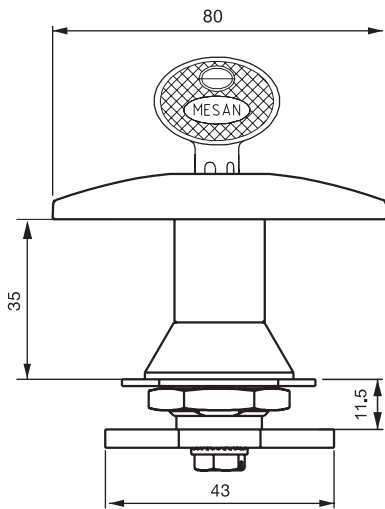
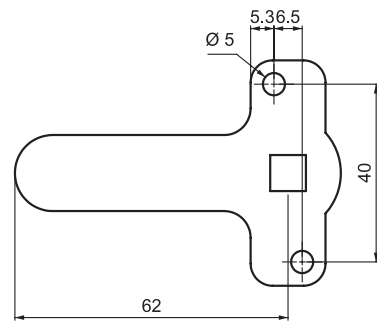
GIVE US A CALL  
800 847 0486



SEND US AN EMAIL  
[sales@essentracomponents.com](mailto:sales@essentracomponents.com)



SEND US A FAX  
866 561 6617

**T HANDLE CABINET LATCHES****010 Series****'T' Handle Cabinet Latches****Cut-Out****Specifications:**

- Material: Zinc Alloy
- Finish: Chrome Plated
- Housing and cylinder are DIN-EN 1774 rated
- Cam included with latch
- Two keys supplied with every lock

**Features:**

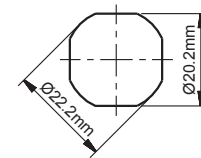
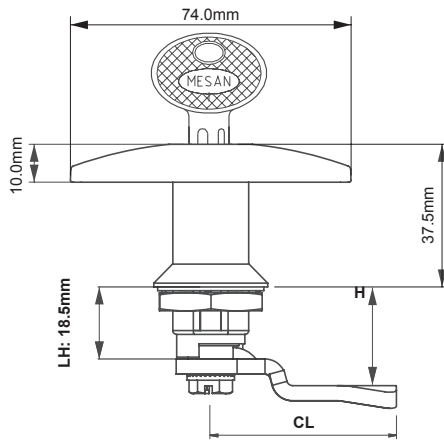
- Ideal for electrical panels and metal cabinets
- For alternate cylinders and finish, please contact Essentra for details
- For multi-point locking rods and accessories please contact Essentra for details

| Item No.   | Cylinder Description | Hand Operation |
|------------|----------------------|----------------|
| 0101102001 | Keyed to Differ      | Right          |
| 0101102002 | Keyed to Differ      | Left           |

# T HANDLE CAM LATCHES & LOCKS



## 110 Series Cam Latches - 'T' Handle Locks



Cut-Out

**Specifications:**

- Material:  
Housing: See Table  
Handle: Same as Housing  
Cam: Steel, Stainless Steel (AISI 304)  
Nylon Gasket: Rubber
- Housing and Driver are DIN-EN 1774 rated
- Two keys supplied with every lock

**Features:**

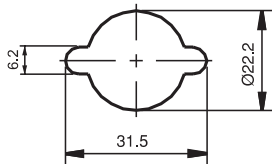
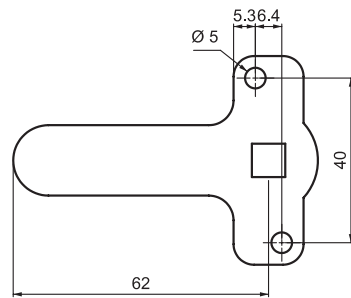
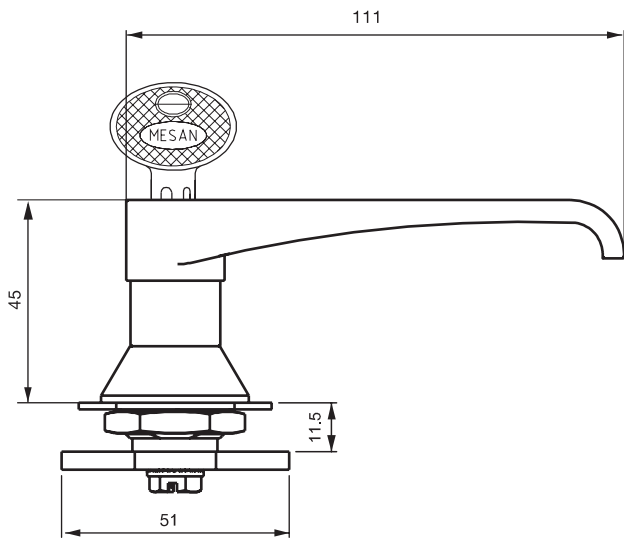
- Quarter-turn operation
- Optional blind version
- Please contact Essentra for alternate cylinders

**▲ CAMS SOLD SEPARATELY. SEE PAGE 593.**

| Item No.                 |                                |             |                         |                |                      |  |
|--------------------------|--------------------------------|-------------|-------------------------|----------------|----------------------|--|
| Zinc Alloy Chrome Plated | Zinc Alloy Black Powder Coated | Black Nylon | Stainless Steel Natural | Cylinder Style | Cylinder Description |  |
| 110110000                | 110120000                      | 110200000   | 110400000               | 00             | No Cylinder          |  |
| 110110100                | 110120100                      | 110200100   | —                       | 01             | Keyed Alike          |  |
| 110110200                | 110120200                      | —           | —                       | 02             | Keyed to Differ      |  |
| 110110700                | 110120700                      | • 110200700 | —                       | 07             | CH751                |  |

# GASKETING & SEALS

See more on  
pages 630 - 633.

**L HANDLE CABINET LATCHES****011 Series****'L' Handle Cabinet Latches****Cut-Out****Specifications:**

- Material: Zinc Alloy
- Finish: Chrome Plated
- Housing and cylinder are DIN-EN 1774 rated
- Cam included with latch
- Two keys supplied with every lock

**Features:**

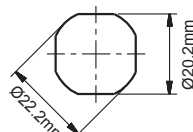
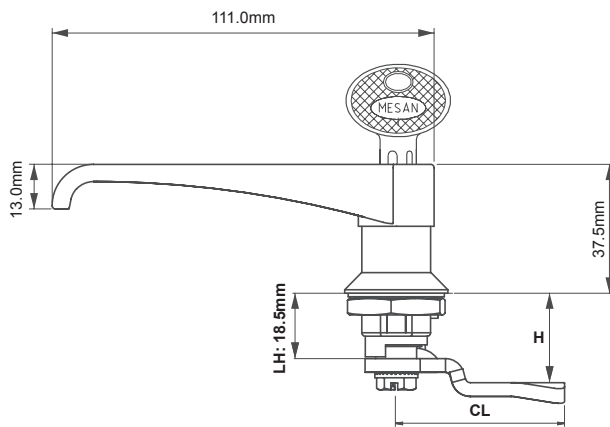
- Ideal for electrical panels and metal document cabinets
- For alternate cylinders or finish, please contact Essentra for details
- For multi-point locking rods and accessories please contact Essentra for details

| Item No.   | Cylinder Description | Hand Operation |
|------------|----------------------|----------------|
| 0111102001 | Keyed to Differ      | Right          |
| 0111102002 | Keyed to Differ      | Left           |

# L HANDLE CAM LATCHES & LOCKS



**111 Series**  
Cam Latches - 'L' Handle Locks



**Cut-Out**

**Specifications:**

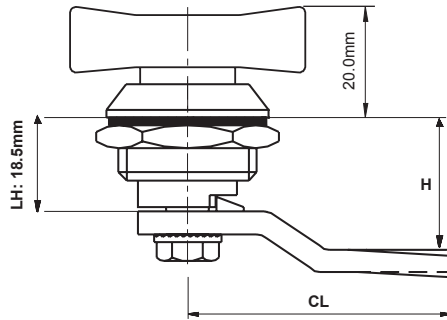
- Material:  
Housing: See Table  
Cam: Steel  
Gasket: Rubber
- Finish: See Table
- Housing and Driver are DIN-EN 1774 rated
- Two keys supplied with every lock

**Features:**

- Quarter-turn operation
- Optional blind version
- Please contact Essentra for alternate cylinders

**⚠ CAMS SOLD SEPARATELY. SEE PAGES 591, 593.**

| Item No.                    |                                   |                |                            |              |                                           |  |
|-----------------------------|-----------------------------------|----------------|----------------------------|--------------|-------------------------------------------|--|
| Zinc Alloy<br>Chrome Plated | Zinc Alloy<br>Black Powder Coated | Nylon<br>Black | Stainless Steel<br>Natural | Driver Style | Cylinder Specifications                   |  |
| 111110000                   | 111120000                         | 111200000      | 111400000                  | 00           | No Cylinder                               |  |
| 111110100                   | 111120100                         | 111200100      | —                          | 01           | Keyed Alike                               |  |
| —                           | —                                 | 111200200      | —                          | 02           | Keyed Differ                              |  |
| 111110300                   | 111120300                         | —              | 111400300                  | 03           | Stainless Steel Shutter (Keyed Alike)     |  |
| 111110700                   | 111120700                         | • 111200700    | 111400700                  | 07           | CH751 (Stainless Steel Shutter)           |  |
| 111113200                   | 111123200                         | —              | 111403200                  | 32           | Stainless Steel Shutter (Keyed to Differ) |  |

**QUARTER TURN LATCHES - WING KNOB LOCK****062 Series****Quarter Turn Latches - Wing Knob Lock**

## Specifications:

## • Material:

Housing: See Table

Knob: See Table

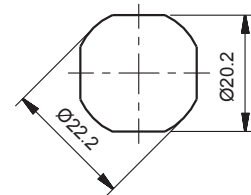
Gasket: Rubber

## • Finish: See Table

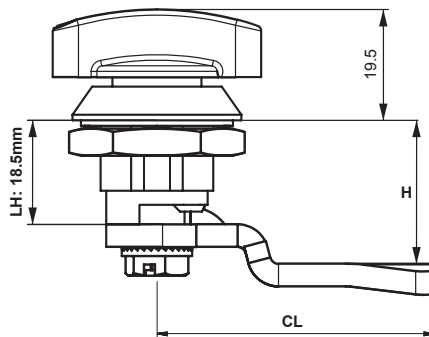
## • Housing and Knob are DIN-EN 1774 rated

## Features:

## • Wing operates lock and serves as knob

**Cut-Out****⚠ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**

| Item No. | Material   | Finish              |
|----------|------------|---------------------|
| 0621100  | Zinc Alloy | Chrome Plated       |
| 0621200  | Zinc Alloy | Black Powder Coated |
| 0622000  | Nylon      | Black               |

**362 Series****Quarter Turn Latches - Wing Knob Locks**

## Specifications:

## • Material:

Housing: See Table

Knob: See Table

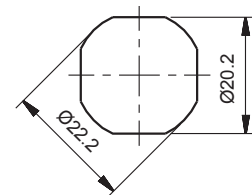
Gasket: Rubber

## • Finish: See Table

## • Housing and Knob are DIN-EN 1774 rated

## Features:

## • Wing operates lock and serves as knob

**Cut-Out****⚠ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**

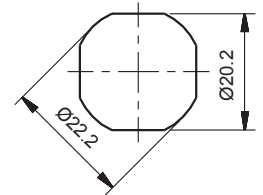
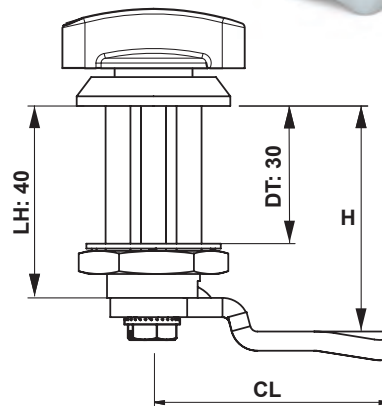
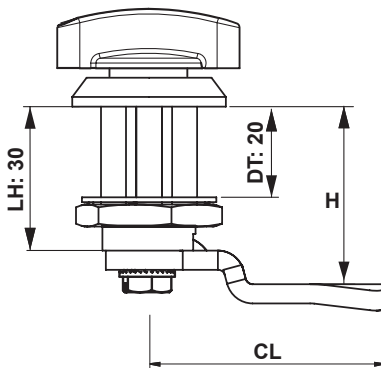
| Item No. | Material   | Finish              |
|----------|------------|---------------------|
| 3621100  | Zinc Alloy | Chrome Plated       |
| 3621200  | Zinc Alloy | Black Powder Coated |
| 3622000  | Nylon      | Black               |



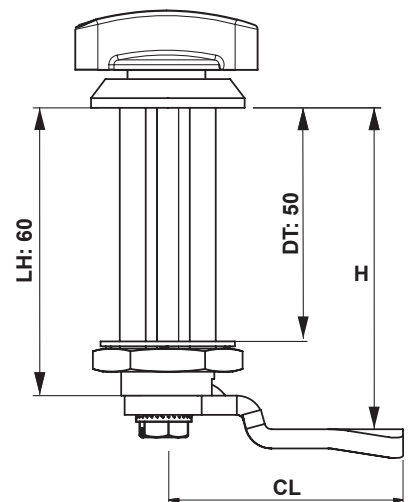
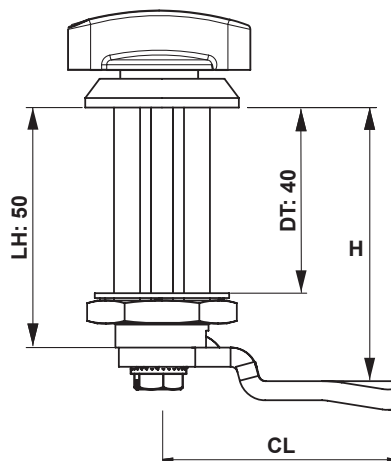
## QUARTER TURN LATCHES - WING KNOB LOCK



064 Series  
Quarter Turn Latches - Long Housing Wing Knob Locks



Cut-Out



## Specifications:

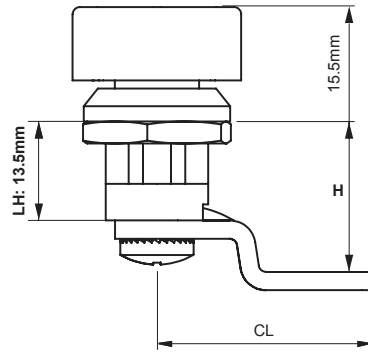
- Material:  
Housing: Zinc Alloy  
Driver: Zinc Alloy  
Cam: Steel  
Gasket: Rubber
- Finish: See Table
- Housing and handle are DIN-EN 1774 rated

## Features:

- Ideal for sound-proof or isolated doors

**⚠ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**

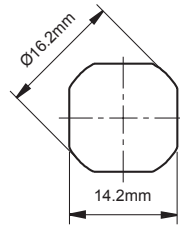
| Item No.      |                     | Door Thickness |
|---------------|---------------------|----------------|
| Chrome Plated | Black Powder Coated | mm             |
| 064362201100  | 064362201200        | 20             |
| 064362301100  | 064362301200        | 30             |
| 064362401100  | 064362401200        | 40             |
| 064362501100  | 064362501200        | 50             |

**QUARTER TURN LATCHES - WING KNOB LOCKS / MINI EASY INSTALL****166 Series****Mini Quarter Turn Latches - Wing Knob Locks****Specifications:**

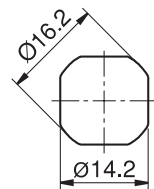
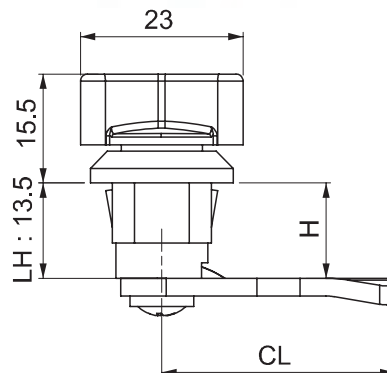
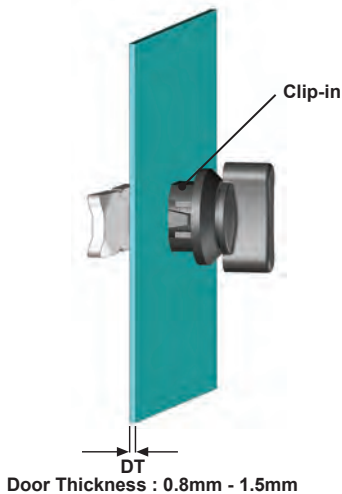
- Material:
- Housing: See Table
- Knob: See Table
- Finish: See Table
- Housing and Knob are DIN-EN 1774 rated

**Features:**

- Wing operates lock and serves as knob
- Sealing washer not included

**Cut-Out****⚠ CAMS SOLD SEPARATELY. SEE PAGE 595.**

| Item No. | Material   | Finish              |
|----------|------------|---------------------|
| 1661100  | Zinc Alloy | Chrome Plated       |
| 1661200  | Zinc Alloy | Black Powder Coated |
| 1662000  | Nylon      | Black               |

**566 Series****Mini Quarter Turn Latches - Easy Install Locks****Cut-Out****Specifications:**

- Material:
- Housing: Black Nylon (PA6 30% GF)
- Knob: Black Nylon (PA6 30% GF)
- Driver: Black Nylon (PA6 30% GF)

**Features:**

- Easy assembly by clips
- Specially designed internal spring provides 1mm tactile resistance

**⚠ CAMS SOLD SEPARATELY. SEE PAGE 595.**

Item No.

5661202000



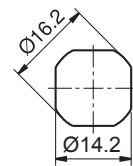
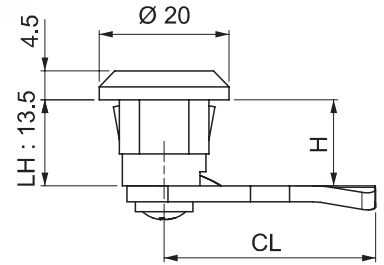
# QUARTER TURN LATCHES - EASY INSTALL LOCKS / WING KNOB

## 366 Series

### Quarter Turn Latches - Easy Install Locks



DT  
Door Thickness :  
0.8 mm - 1.2 mm



Cut-out

Specifications:

- Material:  
Housing: Black Nylon (PA6 30% GF)  
Driver: Black Nylon (PA6 30% GF)  
Cam: Steel, Nylon

Features:

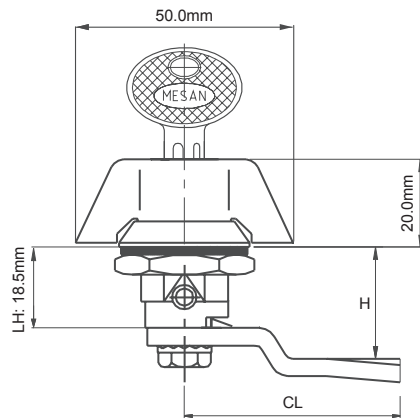
- Easy assembly by clips
- Cam does not rotate beyond quarter turn due to stop lip
- Applicable cams include stoppers
- Please contact Essentra for alternate drivers

- ⚠ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591, 595.
- ⚠ DRIVER KEY SOLD SEPARATELY. SEE PAGES 597 - 598.

| Item No.     | Door / Panel Thickness | Driver Style | Driver Description |
|--------------|------------------------|--------------|--------------------|
| 366120204200 | 0.8-1.2 mm             | 42           | 2X4mm Slot         |

## 065 Series

### Cam Latches - Wing Knob Locks



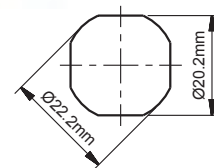
Specifications:

- Material: See Table  
Gasket: Rubber  
Housing: Zinc Alloy
- Finish: See Table
- Housing and Driver are DIN-EN 1774 rated
- Two keys supplied with every lock

Features:

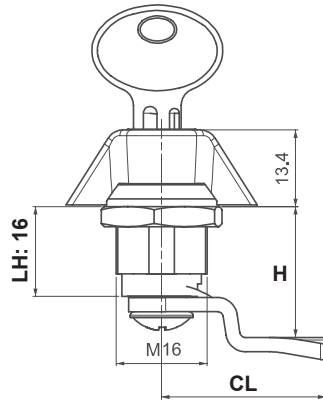
- Quarter turn operation
- For alternate cylinders, please contact Essentra for details

- ⚠ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.



Cut-Out

| Item No.                 |                                |             |                         | Cylinder Description                  |
|--------------------------|--------------------------------|-------------|-------------------------|---------------------------------------|
| Zinc Alloy Chrome Plated | Zinc Alloy Black Powder Coated | Nylon Black | Stainless Steel Natural |                                       |
| 065110000                | 065120000                      | 065200000   | 065400000               | No Cylinder                           |
| 065110300                | 065120300                      | 065200300   | —                       | Stainless Steel Shutter (Keyed Alike) |
| 065110700                | 065120700                      | 065200700   | —                       | CH751 (Stainless Steel Shutter)       |

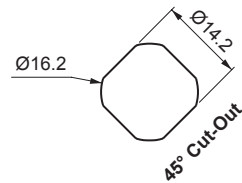
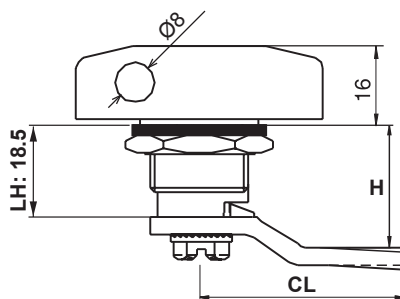
**CAM LATCHES - WING KNOB LOCKS****165 Series****Mini Cam Latches - Wing Knob Locks****Specifications:**

- Material:  
Housing: Zinc Alloy  
Cam: Zinc Alloy  
Gasket: Rubber
- Finish: See Table
- Housing is DIN-EN 1774 rated
- Two keys supplied with every lock

**Features:**

- Wing operates lock and serves as knob
- Suitable for small enclosures
- For alternate cylinders, please contact Essentra for details

**⚠ CAMS SOLD SEPARATELY. SEE PAGE 595.**

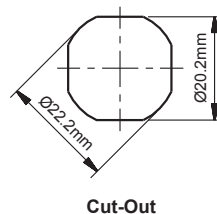
**262 Series****Quarter Turn Latches - Padlock Wing Knob Locks****Specifications:**

- Material:  
Housing: Zinc Alloy  
Knob: Zinc Alloy  
Cam: Steel
- Finish: See Table
- Housing and Knob are DIN-EN 1774 rated

**Features:**

- Padlockable wing knob
- Maximum shackle diameter 6mm

**⚠ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**



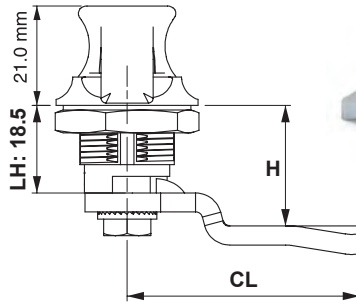
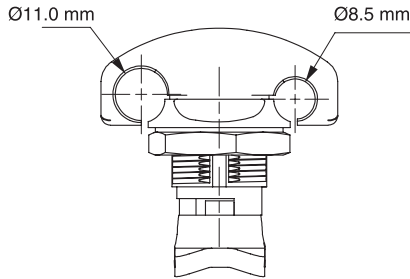
| Item No.      |                     |  | Hand Operation |
|---------------|---------------------|--|----------------|
| Chrome Plated | Black Powder Coated |  |                |
| 262100001     | 262200001           |  | Right          |
| 262100002     | 262200002           |  | Left           |



# QUARTER TURN LATCHES - PADLOCK WING KNOB LOCKS / FIXED

## 562 Series

### Quarter Turn Latches - Padlock Wing Knob Locks



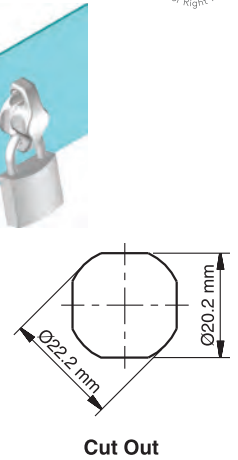
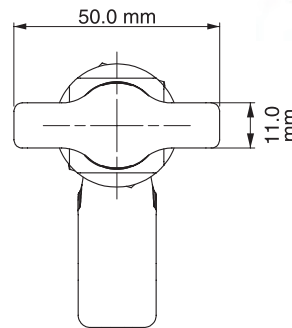
**Specifications:**

- Material: See Table
- Finish: See Table
- Housing and Knob are DIN-EN 1774 rated

**Features:**

- Padlockable wing knob
- Maximum shackle diameter is 10mm for 11mm hole
- Maximum shackle diameter is 6mm for 8.5mm hole

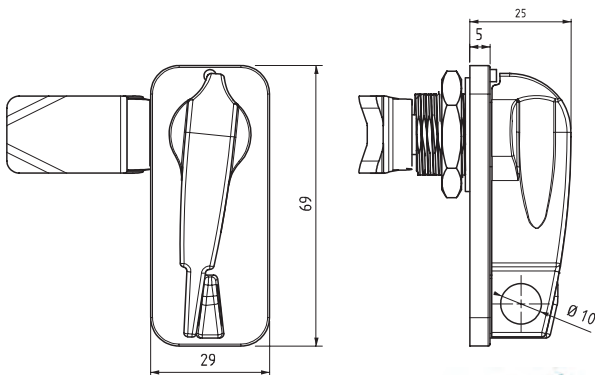
**⚠ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**



| Item No. | Material        | Finish              |
|----------|-----------------|---------------------|
| 562100   | Zinc Alloy      | Chrome Plated       |
| 562200   | Zinc Alloy      | Black Powder Coated |
| 562400   | Stainless Steel | Natural             |

## 662 Series

### Fixed Quarter Turn Knob Latches - Padlockable



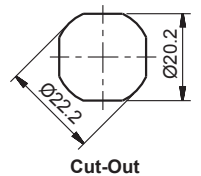
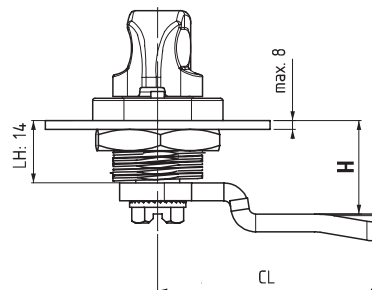
**Specifications:**

- Material:  
Housing: Zinc Alloy  
Knob: Zinc Alloy
- Finish: See Table
- Cam sold separately

**Features:**

- Maximum padlock diameter is 8.0 mm

**⚠ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**



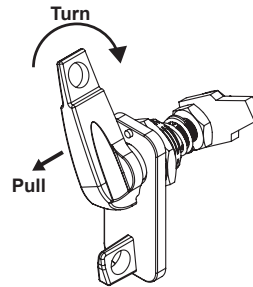
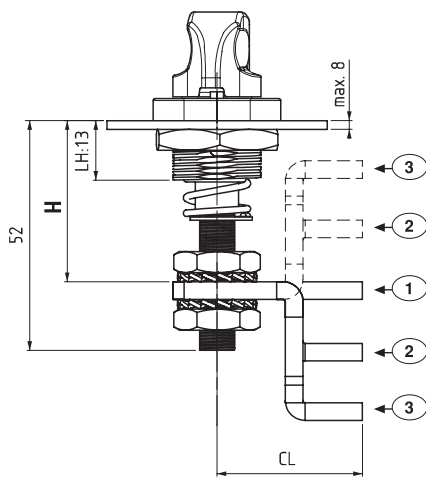
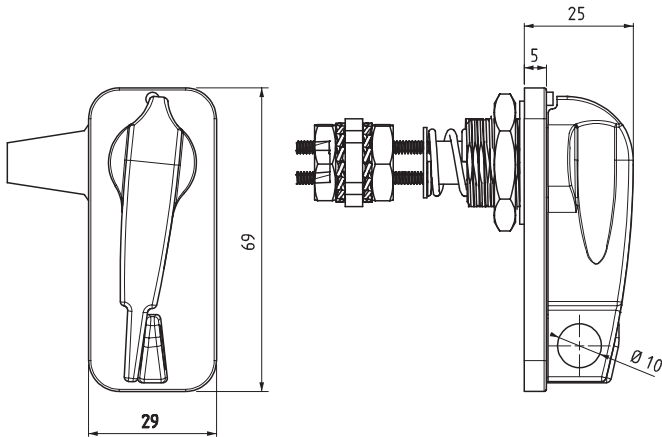
| Item No.      |                     | Hand Operation |
|---------------|---------------------|----------------|
| Chrome Plated | Black Powder Coated | Right          |
| 66211100001   | 66211200001         | Left           |
| 66211100002   | 66211200002         |                |



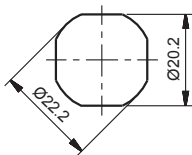
## ADJUSTABLE QUARTER TURN LATCHES - PADLOCKABLE

## 662 Series

## Adjustable Quarter Turn Knob Latches - Padlockable



Left hand & Right hand  
Pull and turn the knob



Cut-Out

## Specifications:

- Material: Housing: Zinc Alloy  
Knob: Zinc Alloy
- Finish: See Table
- Cam sold separately

## Features:

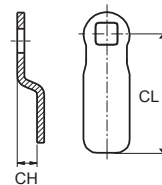
- Three styles of adjustable cams available
- Maximum padlock diameter is 8.0mm

**▲ CAMS SOLD SEPARATELY. SEE TABLE >>**

## Cams Without Stoppers

## Specifications:

- Material: Steel
- Finish: Zinc Plated
- Thickness: 4mm



| Item No. | Cam Type | CH   | CL | Position     | H Grip* |      |
|----------|----------|------|----|--------------|---------|------|
|          |          |      |    |              | Min     | Max  |
| 30403565 | ① Flat   | 0    | 33 | Cam Straight | 41      | 58   |
| 30403566 | ② Offset | 14   | 33 | Reversed     | 27      | 44   |
|          |          |      |    | Forward      | 55      | 72   |
| 30403567 | ③ Offset | 27.5 | 33 | Reversed     | 13.5    | 30.5 |
|          |          |      |    | Forward      | 68      | 85   |

\*Grip is measured in latched position

Item No.

Chrome Plated

Black Powder Coated

Hinge Rotation

66221100

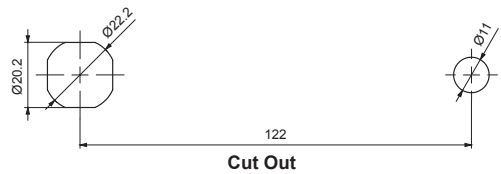
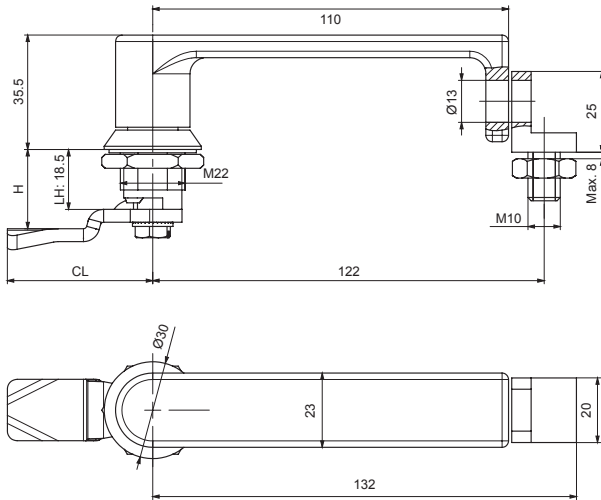
66221200

180°



# QUARTER TURN LATCHES - PADLOCKABLE L HANDLE / LEVER LOCK

## 211 Series Quarter Turn Latch - Padlockable 'L' Handle

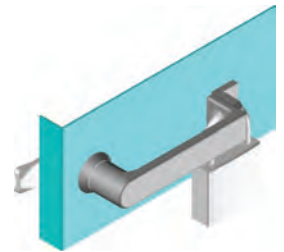


**Specifications:**

- Material: See Table
- Finish: See Table
- Zinc Alloy is DIN-EN 1774 rated

**Features:**

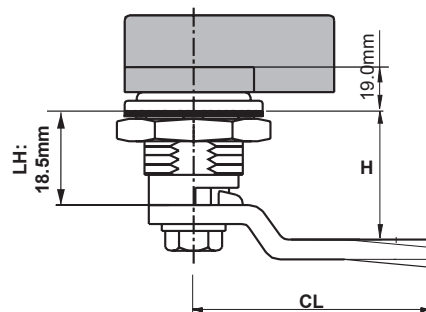
- Padlockable latch with handle
- Suitable for hygienic requirements



**⚠ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**

| Item No.  | Material        | Finish        |
|-----------|-----------------|---------------|
| 211111100 | Zinc Alloy      | Chrome Plated |
| 211121200 | Zinc Alloy      | Chrome Plated |
| 2114000   | Stainless Steel | No Finish     |

## 162 Series Quarter Turn Latches - Lever Lock

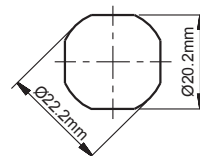


**Specifications:**

- Material:  
Housing: Zinc Alloy  
Knob: Nylon (PA6 30% GF)  
Gasket: Rubber
- Housing is DIN-EN 1774 rated

**Features:**

- Paco type knob

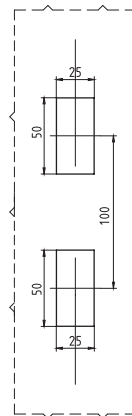
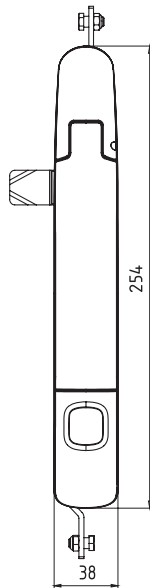
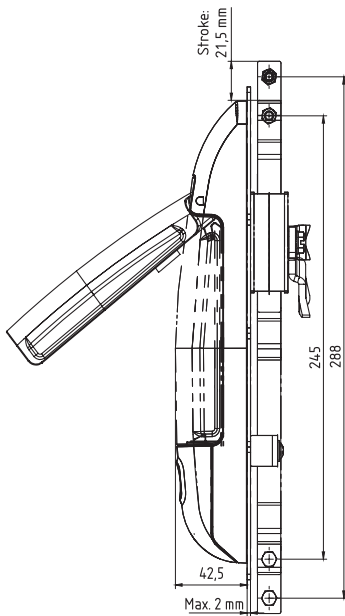
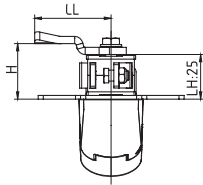


Cut-Out



**⚠ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**

| Item No. |
|----------|
| 16200M   |

**204 Series  
Swinghandle Latch Linear****Cut-Out****Specifications:**

- Material:
  - Body: Zinc Alloy
  - Handle: Zinc Alloy
  - Cover: Zinc Alloy
  - Seal: Polyurethane
  - Dust Cap: Stainless Steel
- Finishes: Chrome Plated, Black Powder Coated
- Zinc Alloy is DIN-EN 1774 rated
- Please contact Essentra for alternate finishes and high-security cylinders
- Two keys supplied with every lock

**Features:**

- All Metal construction
- Improved corrosion resistance
- High-security, brass, Euro profile single-cylinder available

**⚠ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**

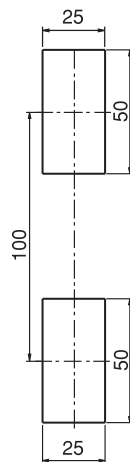
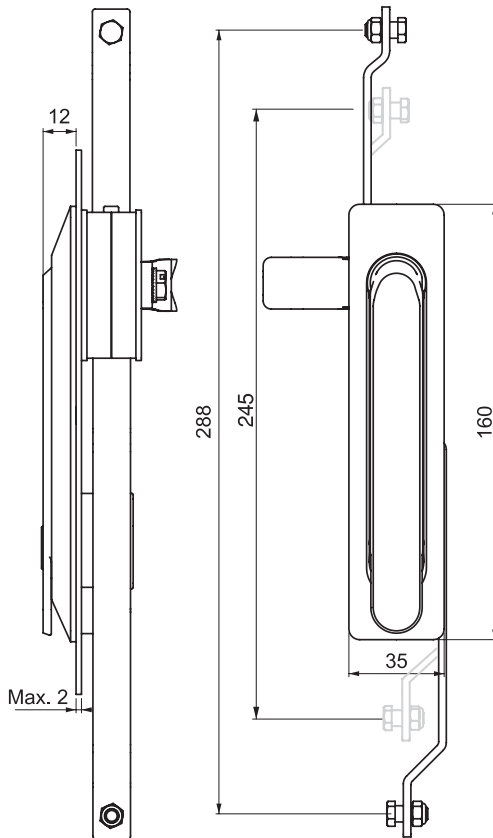


| Item No.      | Finish        | Cylinder Type | Cylinder Description      |
|---------------|---------------|---------------|---------------------------|
| 2042122007001 | Chrome Plated | 03            | Keyed Alike with Dust Cap |

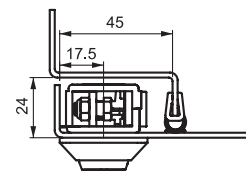
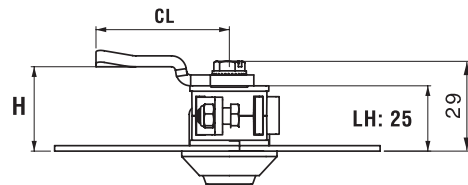




**219 Series**  
Swinghandle Rod Controlling



Cut Out



Outside of gasketing

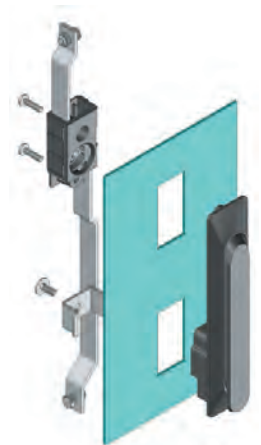


## Specifications:

- Material:  
Body: Zinc Alloy  
Handle: Zinc Alloy  
Finish: Black Powder Coated

## Features:

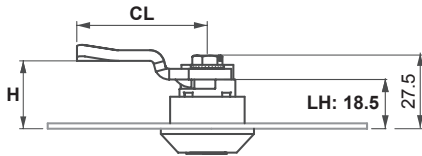
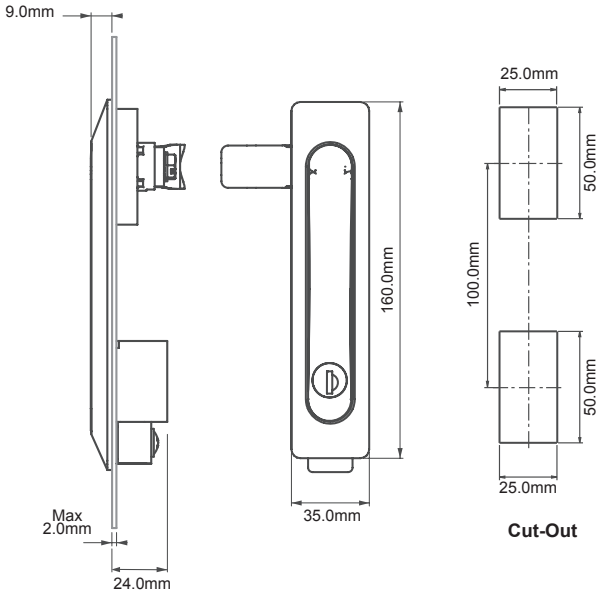
- Three point latching available with cam and rod system purchases
- Integrated gear-box located in housing for multiple point latching



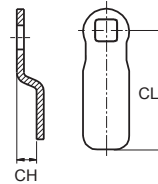
| Item No. | Driver Style | Driver Description |
|----------|--------------|--------------------|
| 2191200  | 00           | Keyless            |



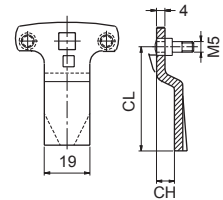
**108 Series**  
Swinghandle Latches / Locks



**Cams with Stoppers**



**Type 2 & 3**



**Type 4**

**Specifications:**

- Material:  
Body: Zinc Alloy, Nylon (PA6 30% GF)  
Cam: Steel or Nylong (PA6 30% GF)  
Handle: See Table  
Finish: See Table  
Seal: Polyurethane
- Housing and Knob are DIN-EN 1774 rated
- Two keys supplied with every lock

**Features:**

- All metal construction
- Spring-loaded, slam action swing handle
- For customized colors or alternate cylinder and driver options please contact Essentra

**⚠ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**

**Specifications:**

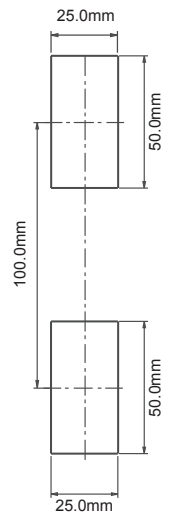
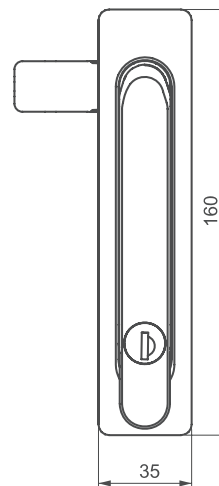
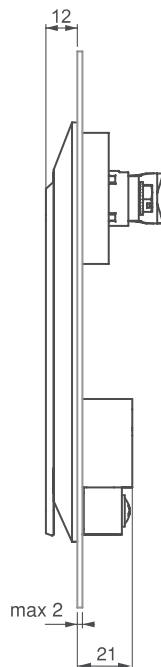
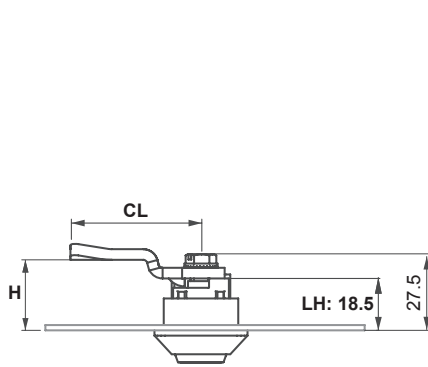
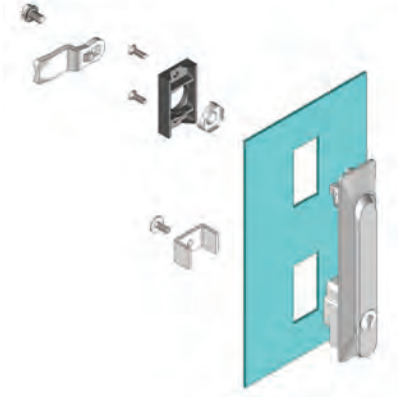
- Material: Steel
- Finish: Zinc Plated
- Thickness: 4mm

| Item No. | Cam Type | CH | CL | H Grip* |      |
|----------|----------|----|----|---------|------|
|          |          |    |    | Min     | Max  |
| 30403140 |          | 0  | 51 | 18.5    | 60   |
| 30403525 |          | 2  | 45 | 20.5    | 20.5 |
| 30403470 |          | 6  | 35 | 24.5    | 66   |
| 30403073 |          | 7  | 44 | 25.5    | 39   |

| Item No.      | Body Material | Body Finish / Color | Handle Material | Handle Finish       | Cylinder / Driver | Cylinder Description                       |
|---------------|---------------|---------------------|-----------------|---------------------|-------------------|--------------------------------------------|
| 108220300     | Nylon         | Black               | Zinc Alloy      | Black Powder Coated | 03                | Stainless Steel Dust Cap (Keyed Alike)     |
| 108223200     | Nylon         | Black               | Zinc Alloy      | Black Powder Coated | 32                | Stainless Steel Dust Cap (Keyed to Differ) |
| 10811110300   | Zinc Alloy    | Chrome Plated       | Zinc Alloy      | Chrome Plated       | 03                | Stainless Steel Dust Cap (Keyed Alike)     |
| 10811110700   | Zinc Alloy    | Chrome Plated       | Zinc Alloy      | Chrome Plated       | 07                | CH751 (Stainless Steel Dust Cap)           |
| • 10811111500 | Zinc Alloy    | Chrome Plated       | Zinc Alloy      | Chrome Plated       | 15                | 5 mm Double Bit Driver                     |
| 10811113200   | Zinc Alloy    | Chrome Plated       | Zinc Alloy      | Chrome Plated       | 32                | Stainless Steel Dust Cap (Keyed to Differ) |
| 10812120300   | Zinc Alloy    | Black Powder Coated | Zinc Alloy      | Black Powder Coated | 03                | Stainless Steel Dust Cap (Keyed Alike)     |
| 10812120700   | Zinc Alloy    | Black Powder Coated | Zinc Alloy      | Black Powder Coated | 07                | CH751 (Stainless Steel Dust Cap)           |
| • 10812121500 | Zinc Alloy    | Black Powder Coated | Zinc Alloy      | Black Powder Coated | 15                | 5 mm Double Bit Driver                     |
| 10812123200   | Zinc Alloy    | Black Powder Coated | Zinc Alloy      | Black Powder Coated | 32                | Stainless Steel Dust Cap (Keyed to Differ) |



**208 Series**  
Swinghandle Latches / Locks



**Cut-Out**

**Specifications:**

- Material: See Table
- Finish: See Table
- Seal: Polyurethane
- Zinc Alloy is DIN-EN 1774 rated
- Nylon is DIN-EN ISO 1043-1 rated
- Two keys supplied with every lock

**Features:**

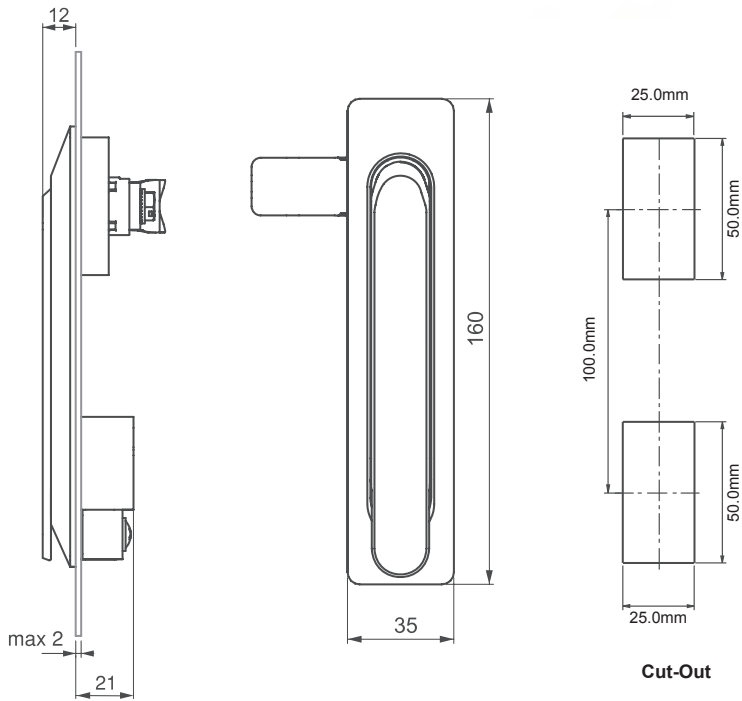
- Key can be removed at unlocked position

**⚠ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**

| Item No.   | Body / Handle Material | Finish              | Cylinder Description                            |
|------------|------------------------|---------------------|-------------------------------------------------|
| 208110300  | Zinc Alloy             | Chrome Plated       | Stainless Steel Shutter (Keyed Alike)           |
| 208110700  | Zinc Alloy             | Chrome Plated       | CH751 (Stainless Steel Shutter)                 |
| 208113200  | Zinc Alloy             | Chrome Plated       | Stainless Steel Shutter (Keyed is Different)    |
| 2081103001 | Zinc Alloy             | Chrome Plated       | Stainless Steel Shutter (Keyed Alike) w/Padlock |
| 208120300  | Zinc Alloy             | Black Powder Coated | Stainless Steel Shutter (Keyed Alike)           |
| 208123200  | Zinc Alloy             | Black Powder Coated | Stainless Steel Shutter (Keyed is Different)    |
| 2081203001 | Zinc Alloy             | Black Powder Coated | Stainless Steel Shutter (Keyed Alike) w/Padlock |
| 208200300  | Nylon                  | Black               | Stainless Steel Shutter (Keyed Alike)           |
| 208200700  | Nylon                  | Black               | CH751 (Stainless Steel Shutter)                 |
| 208203200  | Nylon                  | Black               | Stainless Steel Shutter (Keyed is Different)    |



## 218 Series Swinghandle Latches / Locks



**Cut-Out**

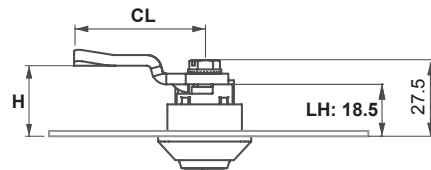
### Specifications:

- Material: See Table
- Seal: Polyurethane
- Finish: See Table
- Nylon is DIN-EN ISO 1043-1 rated

### Features:

- Concealed special cam on the handle provides ease of installation
- Ideal for both indoor and outdoor applications

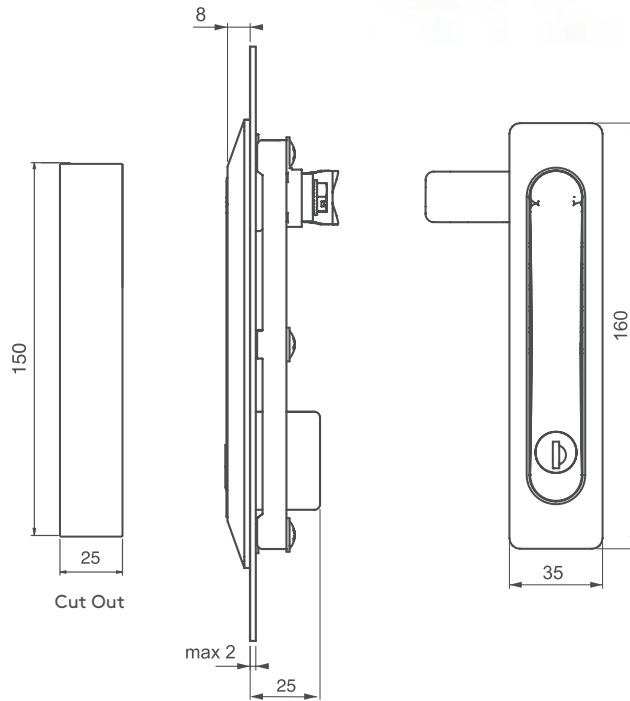
**▲ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**



| Item No. | Material   | Finish/Color        |
|----------|------------|---------------------|
| 2181100  | Zinc Alloy | Chrome Plated       |
| 2181200  | Zinc Alloy | Black Powder Coated |
| 2182000  | Nylon      | Black               |



**008 Series**  
**Swinghandle Latch**



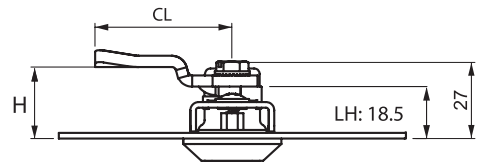
**Specifications:**

- Material:  
Body: Nylon Black (PA6 30% GF)  
Handle: Zinc Alloy  
Seal: Polyurethane
- Finishes: Refer to chart
- Nylon is DIN-EN ISO 1043-1 rated
- Zinc Alloy is DIN-EN 1774 rated
- IP 65 (NEMA 4) rated

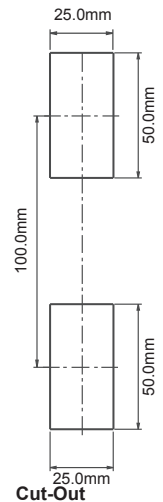
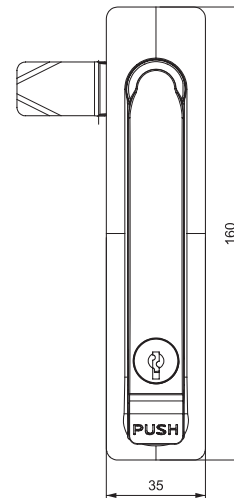
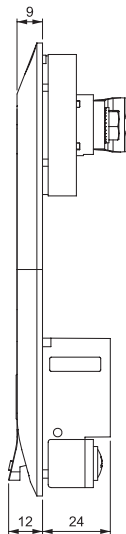
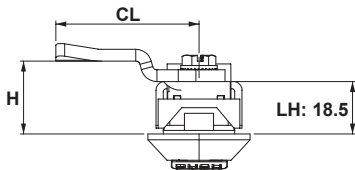
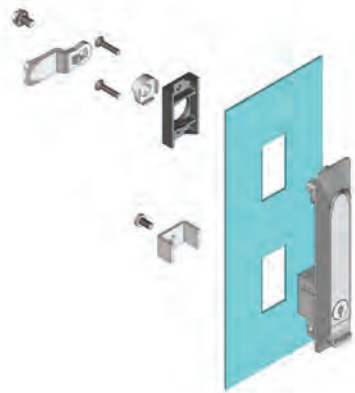
**Features:**

- Spring-loaded design
- Ultra low external profile, only 9mm protrusion
- Please contact essentra for alternate cylinder or driver options
- Two keys supplied with every lock

**▲ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**



| Item No.  | Handle / Lever Finish | Cylinder Type | Cylinder Description       |
|-----------|-----------------------|---------------|----------------------------|
| 008120300 | Chrome Plated         | 03            | Keyed Alike                |
| 008120700 | Chrome Plated         | 07            | Keyed CH751                |
| 008122000 | Chrome Plated         | 20            | Keyed Alike, High Security |
| 008220300 | Black Powder Coated   | 03            | Keyed Alike                |
| 008220500 | Black Powder Coated   | 05            | Keyed EURO                 |
| 008220700 | Black Powder Coated   | 07            | Keyed CH751                |
| 008221500 | Black Powder Coated   | 15            | 5 mm Double Bit Driver     |
| 008222000 | Black Powder Coated   | 20            | Keyed Alike, High Security |

**908 Series  
Swinghandle Latch****Specifications:**

- Material:  
Body: See Table  
Handle: Zinc Alloy, Black Nylon (PA6 30% GF)  
Cam: Steel, Nylon  
Seal: Polyurethane  
Dust Cap: Stainless Steel
- Finish: See Table
- Zinc Alloy is DIN-EN 1774 rated
- Two keys supplied with every lock

**Features:**

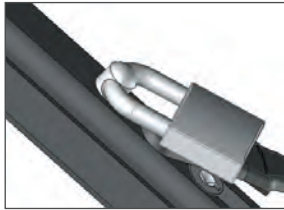
- Swinghandle with push button
- Ultra low external profile, only 9mm protrusion
- Please contact Essentra for alternate finishes, cylinder or driver options and high-security cylinders

**⚠ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**

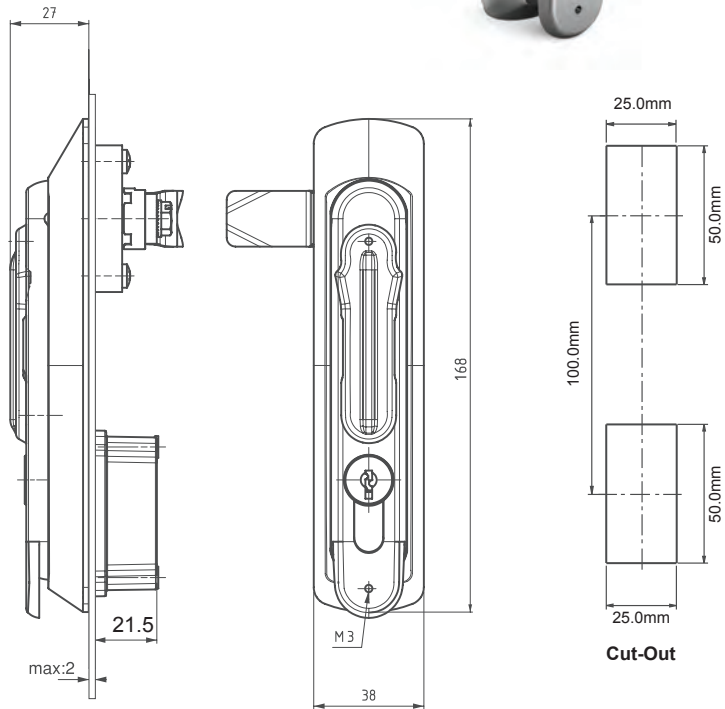
| Item No.    | Handle Finish       | Body Material | Body Finish / Color | Cylinder / Driver Style | Cylinder Description      |
|-------------|---------------------|---------------|---------------------|-------------------------|---------------------------|
| 90811110000 | Chrome Plated       | Zinc Alloy    | Chrome Plated       | 00                      | Keyless No Cylinder       |
| 90811110700 | Chrome Plated       | Zinc Alloy    | Chrome Plated       | 07                      | Keyed CH751               |
| 90811111500 | Chrome Plated       | Zinc Alloy    | Chrome Plated       | 15                      | 5 mm Double Bit           |
| 90811112000 | Chrome Plated       | Zinc Alloy    | Chrome Plated       | 20                      | Keyed Alike High-Security |
| 90811120000 | Chrome Plated       | Zinc Alloy    | Black Powder Coated | 00                      | Keyless No Cylinder       |
| 90811120700 | Chrome Plated       | Zinc Alloy    | Black Powder Coated | 07                      | Keyed CH751               |
| 90811121500 | Chrome Plated       | Zinc Alloy    | Black Powder Coated | 15                      | 5 mm Double Bit           |
| 90811122000 | Chrome Plated       | Zinc Alloy    | Black Powder Coated | 20                      | Keyed Alike High-Security |
| 90811200700 | Chrome Plated       | Nylon         | Black               | 07                      | Keyed CH751               |
| 90811201500 | Chrome Plated       | Nylon         | Black               | 15                      | 5 mm Double Bit           |
| 90811202000 | Chrome Plated       | Nylon         | Black               | 20                      | Keyed Alike High-Security |
| 90812110000 | Black Powder Coated | Zinc Alloy    | Chrome Plated       | 00                      | Keyless No Cylinder       |
| 90812110300 | Black Powder Coated | Zinc Alloy    | Chrome Plated       | 03                      | Keyed Alike               |
| 90812110700 | Black Powder Coated | Zinc Alloy    | Chrome Plated       | 07                      | Keyed CH751               |
| 90812111500 | Black Powder Coated | Zinc Alloy    | Chrome Plated       | 15                      | 5 mm Double Bit           |
| 90812112000 | Black Powder Coated | Zinc Alloy    | Chrome Plated       | 20                      | Keyed Alike High-Security |
| 90812113200 | Black Powder Coated | Zinc Alloy    | Chrome Plated       | 32                      | CH751 with Dust Cap       |
| 90812120000 | Black Powder Coated | Zinc Alloy    | Black Powder Coated | 00                      | Keyless No Cylinder       |
| 90812120700 | Black Powder Coated | Zinc Alloy    | Black Powder Coated | 07                      | Keyed CH751               |
| 90812122000 | Black Powder Coated | Zinc Alloy    | Black Powder Coated | 20                      | Keyed Alike High-Security |
| 90812200000 | Black Powder Coated | Nylon         | Black               | 00                      | Keyless No Cylinder       |
| 90812200700 | Black Powder Coated | Nylon         | Black               | 07                      | Keyed CH751               |
| 90812201500 | Black Powder Coated | Nylon         | Black               | 15                      | 5 mm Double Bit           |
| 90812202000 | Black Powder Coated | Nylon         | Black               | 20                      | Keyed Alike High-Security |



**601 Series**  
**Swinghandle Latch**



**Pad Lock Version**



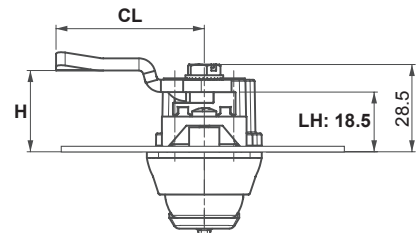
**Specifications:**

- **Material:**  
Body: Zinc Alloy  
Handle: Zinc Alloy  
Cover: Zinc Alloy  
Seal: Polyurethane  
Dust Cap: Stainless Steel
- **Finish:** See Table
- Zinc Alloy is DIN-EN 1774 rated
- Two keys supplied with every lock

**Features:**

- All-Metal construction
- Improved corrosion resistance
- For alternate or high security cylinders, please contact Essentra for details

**▲ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**

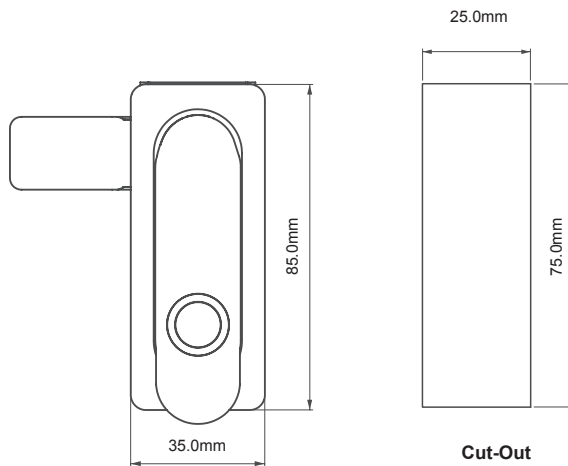
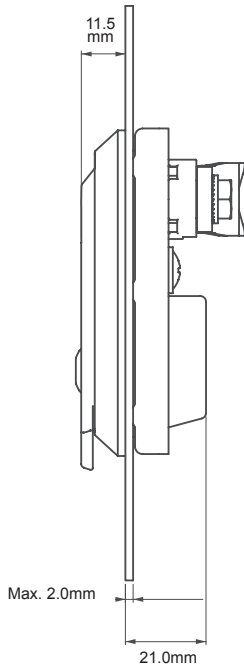
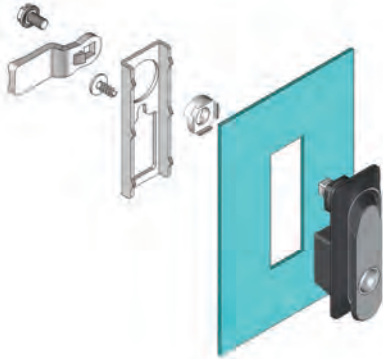


| Item No.     | Finish              | Cylinder Description                            |
|--------------|---------------------|-------------------------------------------------|
| 60111110300  | Chrome Plated       | Keyed Alike (Stainless Steel Shutter)           |
| 60111110700  | Chrome Plated       | CH751 (Stainless Steel Shutter)                 |
| 60111113200  | Chrome Plated       | Keyed Different (Stainless Steel Shutter)       |
| 601111103001 | Chrome Plated       | Keyed Alike (Stainless Steel Shutter) w/Padlock |
| 60112120300  | Black Powder Coated | Keyed Alike (Stainless Steel Shutter)           |
| 60112120700  | Black Powder Coated | CH751 (Stainless Steel Shutter)                 |
| 60112123200  | Black Powder Coated | Keyed Different (Stainless Steel Shutter)       |
| 601121203001 | Black Powder Coated | Keyed Alike (Stainless Steel Shutter) w/Padlock |



# SWINGHANDLES

## 708 Series Push Button Swinghandle Latch

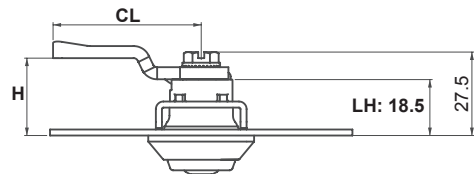


### Specifications:

- Material:
  - Body: Nylon Black (PA6 30% GF)
  - Handle: Nylon Black (PA6 30% GF)
  - Button: Zinc Alloy
  - Seal: Polyurethane inside perimeter groove
- Finish: See Table
- Nylon is DIN-EN ISO 1043-1 rated
- Zinc Alloy compliant to DIN-EN 1774

### Features:

- Operates by push-button
- Ideal for electric panels, machinery covers and rack enclosures



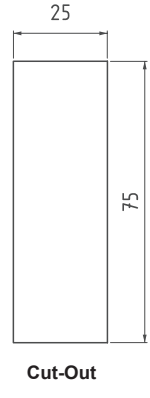
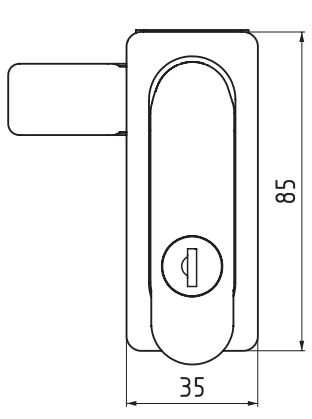
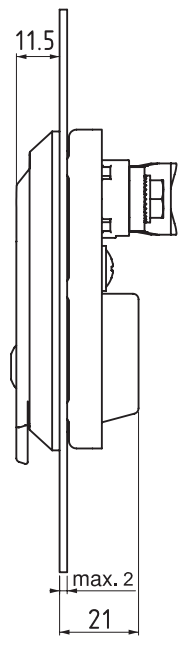
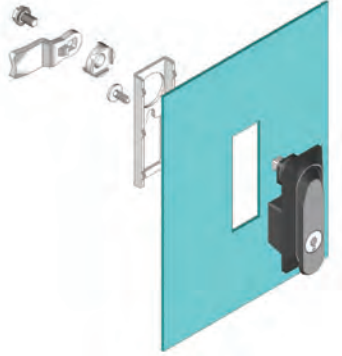
**⚠ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**

| Item No.  | Button Finish       |
|-----------|---------------------|
| 708201100 | Chrome Plated       |
| 708201200 | Black Powder Coated |





**708 Series  
 Swinghandle Latch**



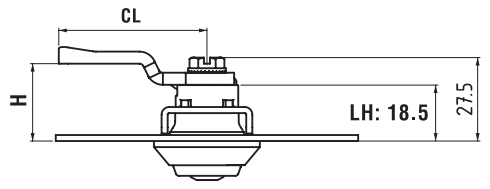
**Specifications:**

- Material:
  - Body: Nylon Black (PA6 30% GF)
  - Handle: Nylon (PA6 30% GF)
  - Cylinder: Zinc Alloy
  - Seal: Polyurethane (inside perimeter groove)
- Nylon is DIN-EN ISO 1043-1 rated
- Zinc Alloy compliant to DIN-EN 1774

**Features:**

- Operates by push-button
- Ideal for electric panels
- Machinery covers and rack enclosures

**▲ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**

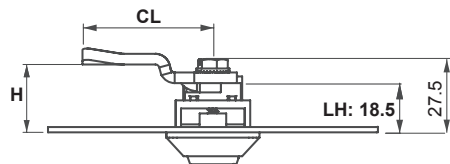
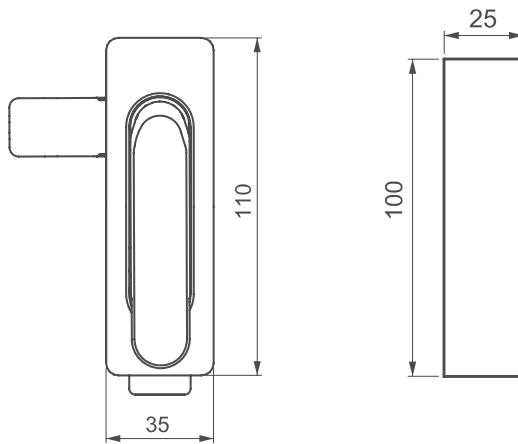
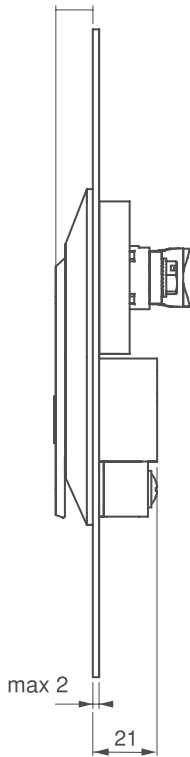
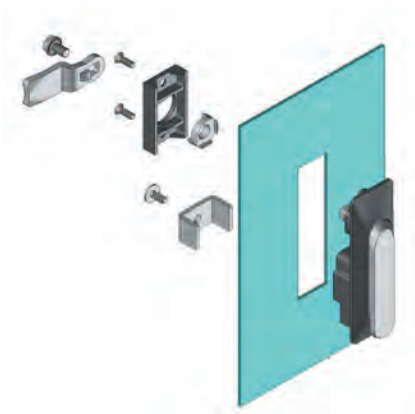


| Item No.   | Cylinder Style | Cylinder Description |
|------------|----------------|----------------------|
| 7082020300 | 03             | Keyed Alike          |



# SWINGHANDLES - SMALL

318 Series  
Small Swinghandle Latches



**Specifications:**

- Material: See Table
- Finish: See Table
- Nylon is DIN EN / ISO 1043 rated

**Features:**

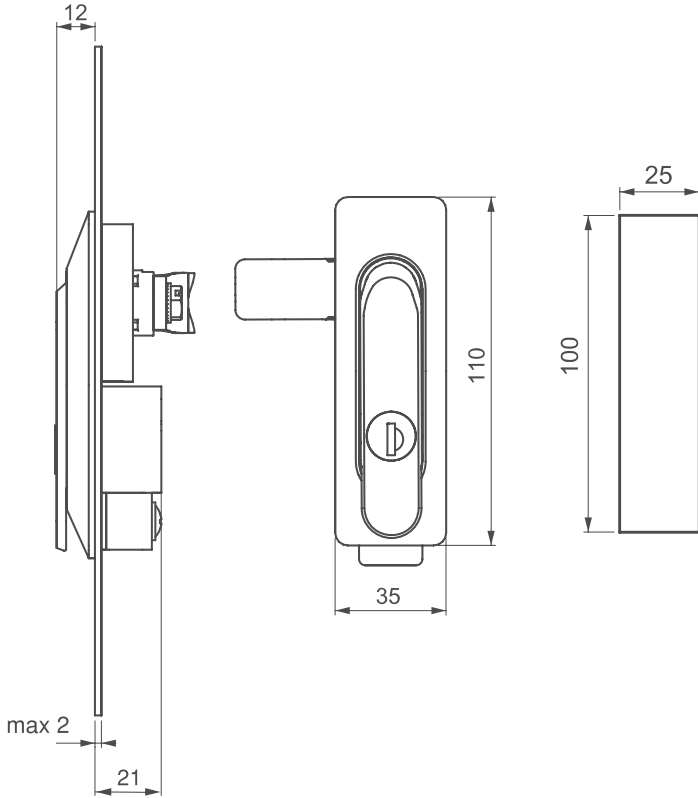
- Ideal for both indoor and outdoor applications

**▲ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**

| Item No. | Material   | Finish              |
|----------|------------|---------------------|
| 31811200 | Zinc Alloy | Chrome Plated       |
| 31812200 | Zinc Alloy | Black Powder Coated |
| 31820200 | Nylon      | Black               |



**308 Series**  
**Small Swinghandle Latches**



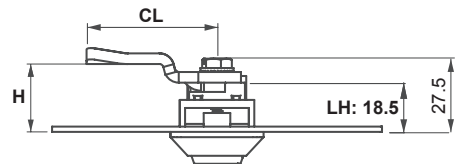
**Specifications:**

- Material:  
 Body: Black Nylon (PA6 30% GF)  
 Handle: See Table  
 Seal: Polyurethane
- Finish: See Table
- Zinc Alloy is DIN-EN 1774 rated
- Nylon is DIN-EN ISO 1043-1 rated
- Two keys supplied with every lock

**Features:**

- Ideal for indoor or outdoor applications
- Please contact Essentra for alternate cylinder and driver options

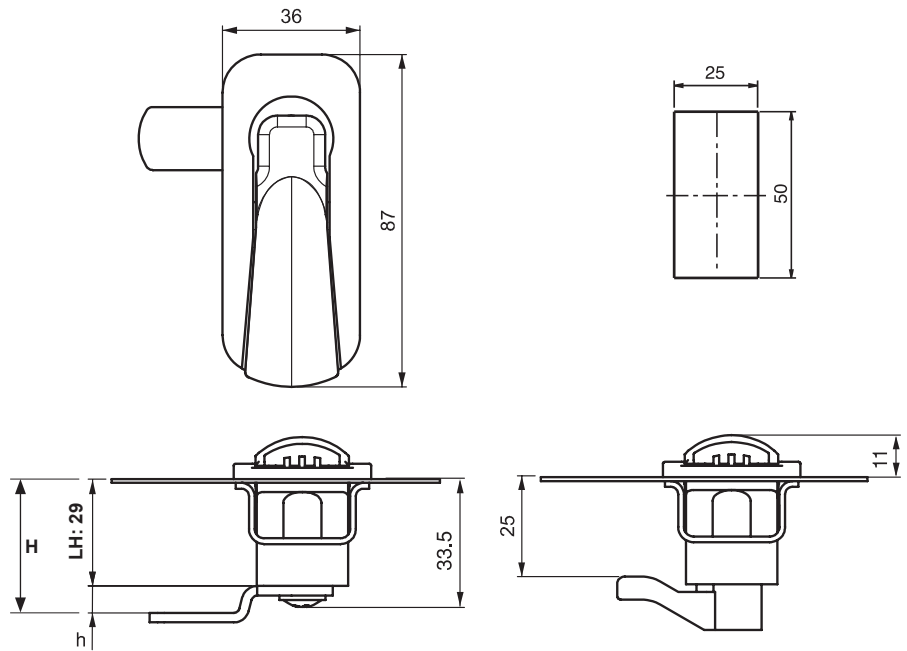
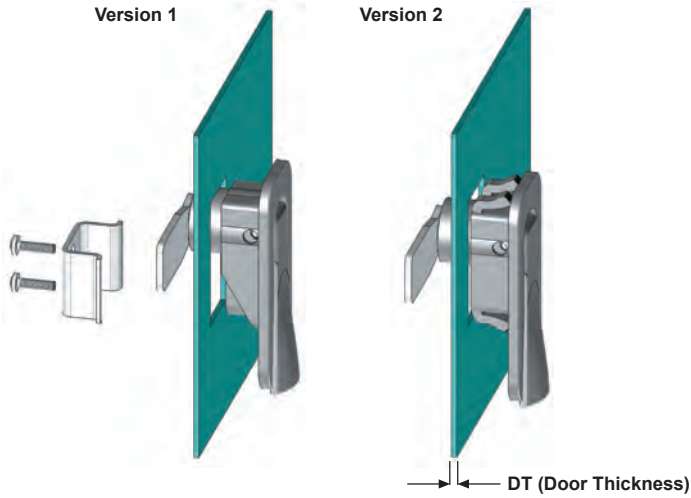
**⚠ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591, 595.**



| Item No.     | Handle Material | Handle Finish       | Cylinder / Driver Type | Cylinder Description |
|--------------|-----------------|---------------------|------------------------|----------------------|
| 3081220300   | Zinc Alloy      | Chrome Plated       | 03                     | Keyed Alike          |
| • 3081220700 | Zinc Alloy      | Black Powder Coated | 07                     | Keyed EURO           |
| 3081223200   | Zinc Alloy      | Black Powder Coated | 32                     | Keyed Different      |
| 3082020300   | Nylon           | Black               | 03                     | Keyed Alike          |
| 3082023200   | Nylon           | Black               | 32                     | Keyed Different      |

**LIFT & TURN LATCHES****072 Series**

Functional Lock - Lift &amp; Turn Latch



## Specifications:

- Material:  
Body: Nylon Black (PA6 30% GF)
- Housing is DIN-EN 1043-1 rated

## Features:

- Suitable for all panels

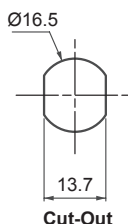
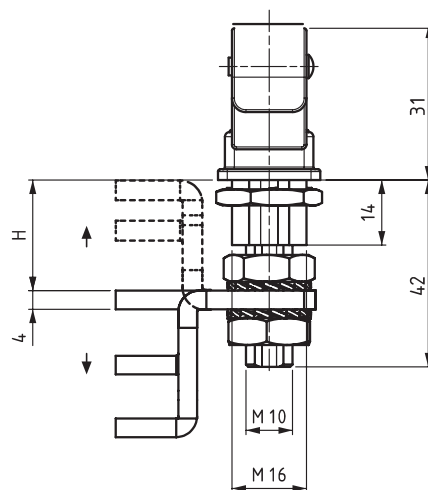
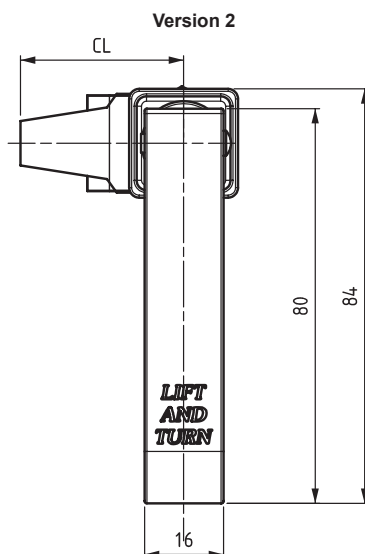
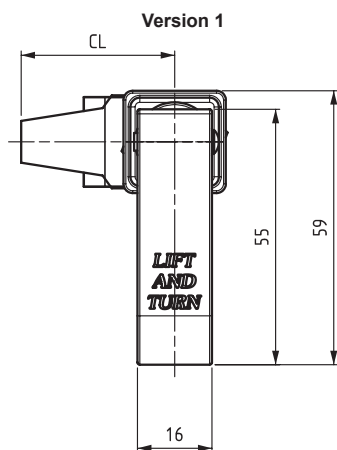
**⚠ CAMS SOLD SEPARATELY. SEE PAGE 595.**

| Item No.  | Panel Thickness |  | Version | Version Description       | Hand Operation |
|-----------|-----------------|--|---------|---------------------------|----------------|
|           | mm              |  |         |                           |                |
| 072100001 | 0.8 - 2.0       |  | 1       | Bracket Fastening         | Right          |
| 072100002 | 0.8 - 2.0       |  | 1       | Bracket Fastening         | Left           |
| 072200001 | 0.8 - 2.0       |  | 2       | Molded-in Fastening Clips | Right          |
| 072200002 | 0.8 - 2.0       |  | 2       | Molded-in Fastening Clips | Left           |

# LIFT & TURN LATCHES



## 170 Series Lift-and-Turn Latches - Fixed Compression Locks



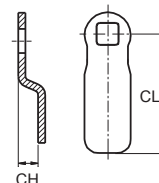
- Specifications:**
- Material:
    - Housing: Zinc Alloy
    - Handle: Zinc Alloy
  - Finish: See Table
  - Housing and Handle are DIN-EN 1774 rated

- Features:**
- Applicable Cams are without stoppers
  - Provides 5mm preset compression

**⚠ CAMS SOLD SEPARATELY. See Table >>**

### Cams without Stoppers

- Specifications:**
- Material: Steel
  - Finish: Zinc Plated
  - Thickness: 4mm



| Item No. | Cam Type | CH   | CL | H Grip* |      |
|----------|----------|------|----|---------|------|
|          |          |      |    | Min     | Max  |
| 30403565 | ① Flat   | 0    | 33 | 22.5    | 30   |
| 30403566 | ② Offset | 14   | 33 | 8.5     | 44   |
| 30403567 | ③ Offset | 27.5 | 33 | 0       | 57.5 |

\*Grip is measured in latched position

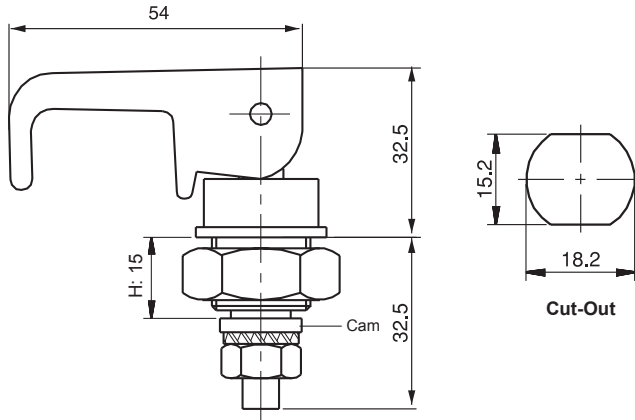
| Item No.                 |                                | Version Type | Handle |
|--------------------------|--------------------------------|--------------|--------|
| Zinc Alloy Chrome Plated | Zinc Alloy Black Powder Coated |              | mm     |
| 17011100                 | 17011200                       | 1            | 55     |
| 17021100                 | 17021200                       | 2            | 80     |



# LIFT & TURN LATCHES

## 070 Series

### Lift-and-Turn Latches - Compression Locks



#### Specifications:

- Material:  
Body: Nylon Black (PA6 30% GF)  
Cam: Steel
- Housing and Handle are DIN-EN ISO 1043-1 rated
- Standard flat cam included
- Latch includes flat cam

#### Features:

- Suitable for a variety of panels
- Provides 5mm preset compression

| Item No. | CH<br>Cam Height | CL<br>Cam Length | H<br>Grip |
|----------|------------------|------------------|-----------|
| 070      | 0                | 45               | 15        |

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**270 Series  
Swell Latch**

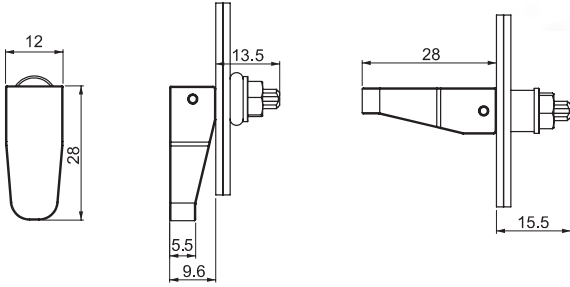


**Versions 1 & 2**

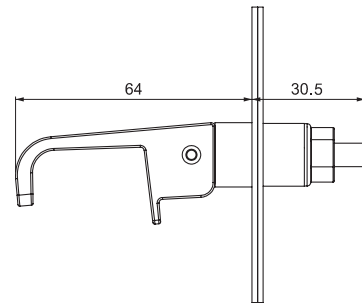
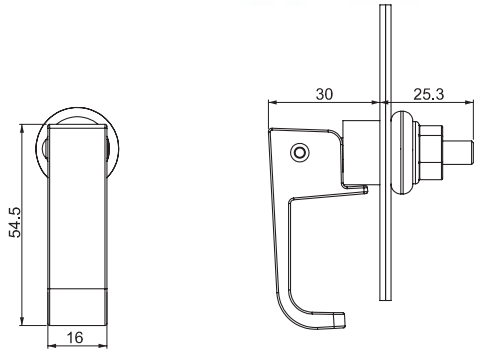
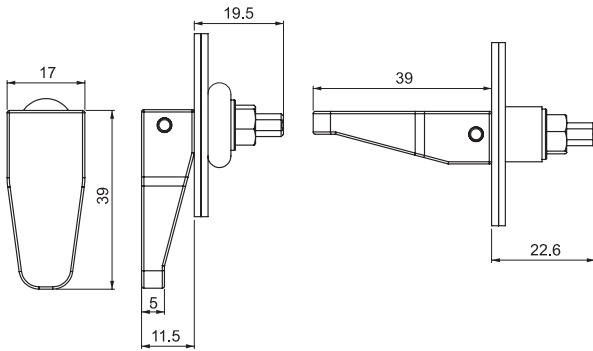
**Version 3**



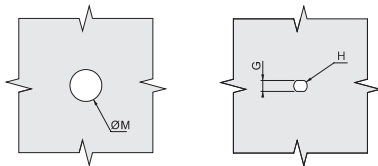
**Version 1**



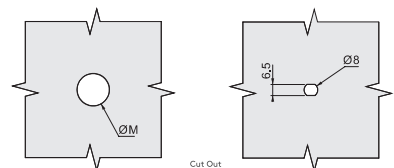
**Version 2**



**Cut-Out**



**Cut-Out**



**Specifications:**

- **Material:**  
Handle: Zinc Alloy, Nylon Black (PA6 30% GF)  
Washer: Nylon Black (PA66)  
Nut: Nylon Black (PA66)  
Bushing: SBR Rubber
- Latch is DIN-EN ISO 1043-1 rated

**Features:**

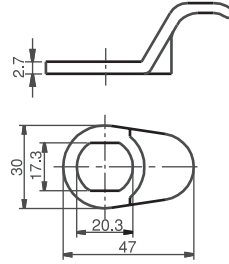
- Used for the cabinets that require better performance under vibration conditions
- It is suitable with special Cut-Out for different frame thickness
- Applications include electrical panels, machinery covers, railway and construction equipment



| Item No. | Version | Material   | Finish              | G<br>+0.1 - 0.0 | H<br>+0.1 - 0.0 | Cut-Out ØM | Frame Thickness |
|----------|---------|------------|---------------------|-----------------|-----------------|------------|-----------------|
| 270201   | 1       | Nylon      | Black               | 3.3             | 4.1             | 9.5        | 3.2             |
| 270202   | 2       | Nylon      | Black               | 4.5             | 5.8             | 13.5       | Up to 3.2mm     |
|          |         |            |                     |                 |                 | 14.0       | 3.2 - 4.8       |
|          |         |            |                     |                 |                 | 19.1       | 1.2 - 3.2       |
| 270123   | 3       | Zinc Alloy | Black Powder Coated | —               | —               | 19.5       | 3.2 - 4.8       |
|          |         |            |                     |                 |                 | 20.0       | 4.8 - 6.4       |
|          |         |            |                     |                 |                 | 20.5       | 6.4 and up      |



## Lock Handle



## Specifications:

- Material: Nylon (30% GF)
- Color: Black

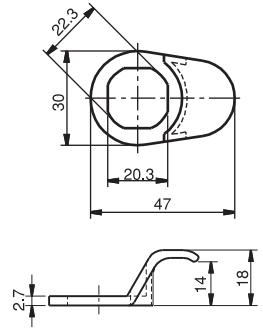
## Features:

- Allows lock to be fitted to thick doors
- Easy installation for isolated doors

Item No.

050A3

## Finger Pull Latch Handle



## Specifications:

- Material: Nylon (30% GF)
- Color: Black

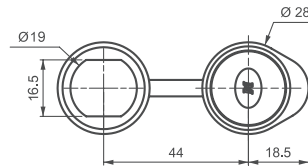
## Features:

- Allows lock to be fitted to thick doors
- Easy installation for isolated doors

Item No.

060A2

## Dust Cap



## Specifications:

- Material: Nylon (30% GF)
- Color: Black

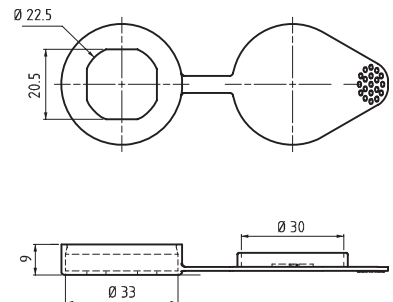
## Features:

- Protects against dust and debris

Item No.

050A4

## Dust Cap



## Specifications:

- Material: Polyurethane
- Color: Black

## Features:

- Recommended when dust and humidity protection is required

Item No.

060A7





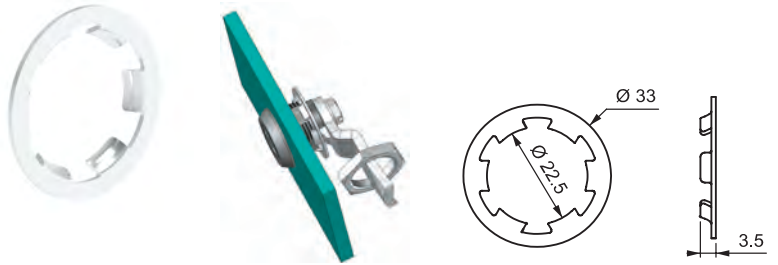
### Lock Washer

#### Specifications:

- Material: Steel
- Finish: Zinc Plated

#### Features:

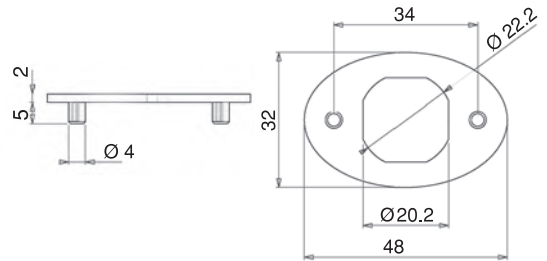
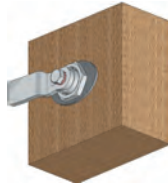
- Prevents rotation
- Ideal for applications subject to rotation



Item No.

060A3

### Installation Bracket



#### Specifications:

- Material: Zinc Alloy

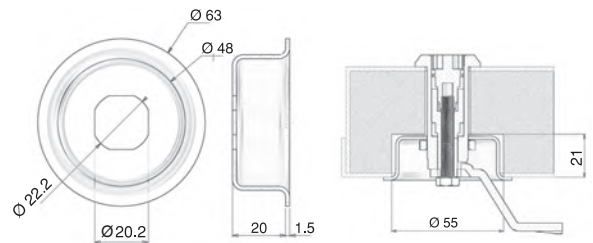
#### Features:

- Installation device for wooden applications

Item No.

060A5

### Spacer



#### Specifications:

- Material: Steel
- Finish: Zinc Plated

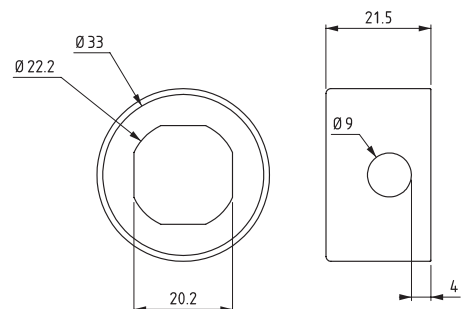
#### Features:

- Allows lock to be fitted to thick doors
- Easy installation for isolated doors

Item No.

060A6

### Padlock Adapter



#### Specifications:

- Material: Steel
- Finish: Zinc Plated

#### Features:

- Max shackle diameter is 8mm

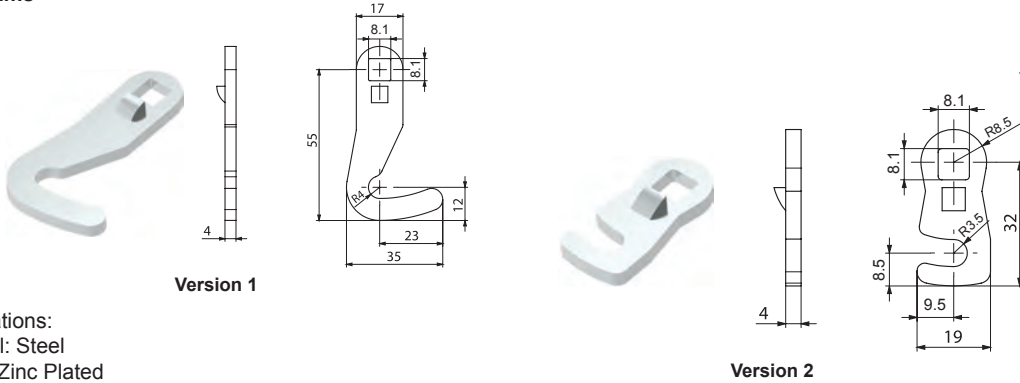
Item No.

060A8



# LATCH & LOCK ACCESSORIES

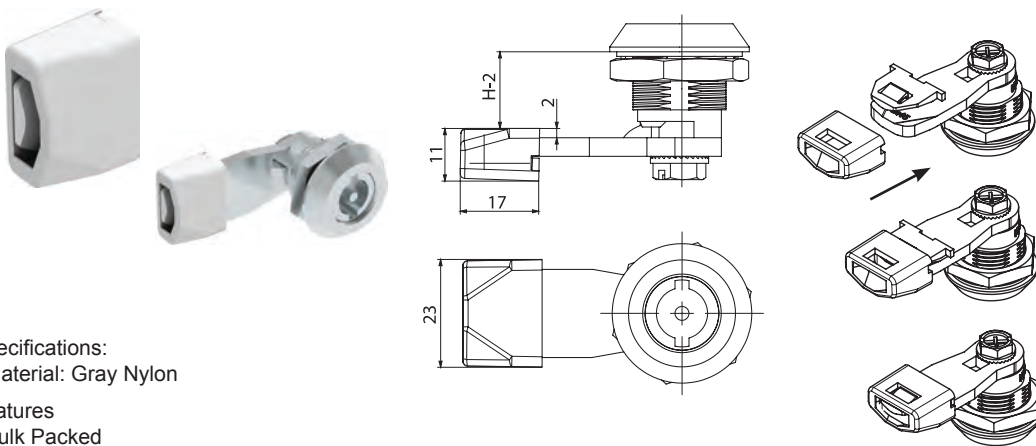
## Hook Cams



- Specifications:
- Material: Steel
  - Finish: Zinc Plated

| Item No. | Version | Height<br>mm | Length<br>mm |
|----------|---------|--------------|--------------|
| 30403485 | 1       | 0            | 55           |
| 30403712 | 2       | 0            | 32           |

## Slide Shoe for Cam



- Specifications:
- Material: Gray Nylon
- Features
- Bulk Packed

| Item No. |
|----------|
| 32002180 |

## Flat Rod Bracket for 204 Series

- Specifications:
- Material: Black Nylon
- Features
- Use with 204 series on page 568
  - Clip-in part reduces mounting time by 50%
  - Bulk Packed



| Item No. |
|----------|
| 32002225 |

## Bolt Cover - Cam Lock for 761 Series Plug

- Specifications:
- Material: Black Nylon
- Features
- Use with 761 series on pages 547 - 548
  - Bulk Packed



| Item No. |
|----------|
| 32002221 |



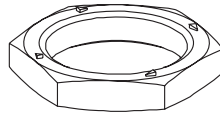
### Latch Retainer Hex Nuts

Specifications:

- Material: Steel
- Finish: Zinc Plated

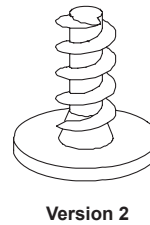
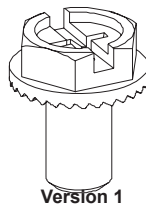
Features

- Bulk Packed



| Item No. | Hex Nut Size |
|----------|--------------|
| 30501008 | M19          |
| 30501015 | M22          |

### Latch Accessory Screws



Specifications:

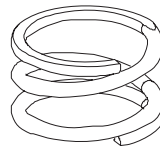
- Material: Steel
- Finish: Zinc Plated

Features

- Bulk Packed

| Item No. | Version | Screw Type   |
|----------|---------|--------------|
| 30603002 | 1       | M6 6x10      |
| 30603055 | 2       | M5 5x11 RYSB |

### Latch Accessory Spring



Specifications:

- Material: Steel
- Finish: Zinc Plated

Features

- Bulk Packed

| Item No. |
|----------|
| 30703001 |

### O-Ring for Latch Inserts



Specifications:

- Material: EPDM

Features

- Bulk Packed

| Item No. |
|----------|
| 30802002 |



Latch Housing Sealing Washer

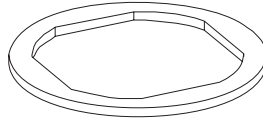


Specifications:

- Material: Black Rubber

Features

- Bulk Packed



| Item No. | Size     |
|----------|----------|
| 30802021 | mm<br>22 |

Door Holdback

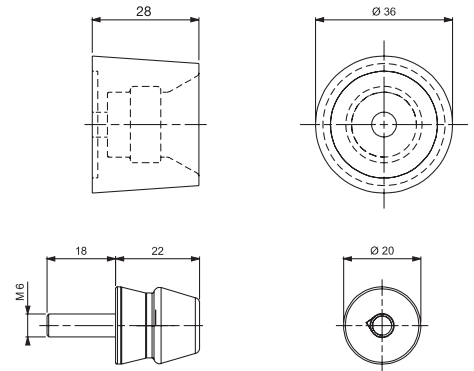


Specifications:

- Material: NBR Rubber
- Color: Black

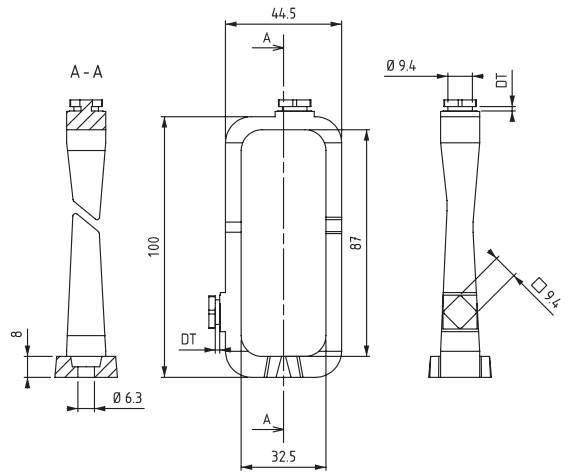
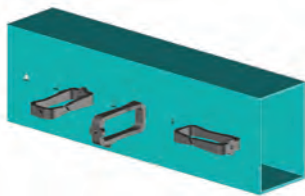
Features:

- Absorbs shock while door is connected to frame
- Keeps the door at open position and can be used instead of cover stays
- Suitable for outdoor cabinets with high corrosion resistance



| Item Number |
|-------------|
| 34008001    |

320 Series Cable Shunting Rings



Specifications:

- Materials: Nylon (PA6 30% GF)
- Color: Black

Features:

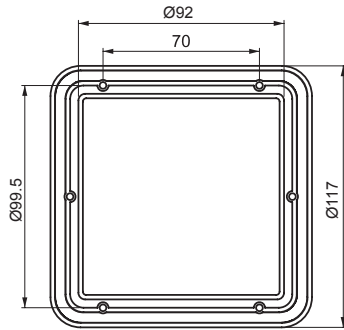
- Quick fixing in a square hole by turning 45° or mount by using M6 screws
- Install horizontal or vertical

Cut-Out

| Item No. | Panel Thickness |
|----------|-----------------|
| 32002164 | mm<br>1.3 - 1.5 |
| 32002165 | 1.6 - 2.0       |



**2215 & 2216 Series Counter Screen**



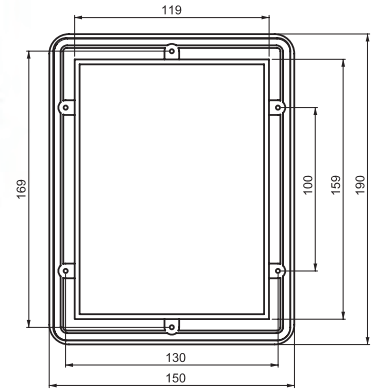
**Version 1**

**Specifications:**

- Material: Polycarbonate (Heat and UV stabilized)
- Color: Transparent

**Features:**

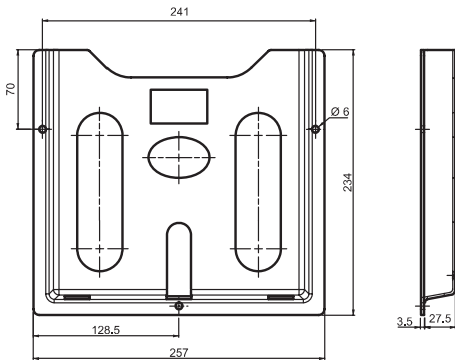
- Allows counters or dials to be viewed from outside enclosure



**Version 2**

| Item No. | Version |
|----------|---------|
| 2215     | 1       |
| 2216     | 2       |

**2150 & 2152 Series Document Holder**



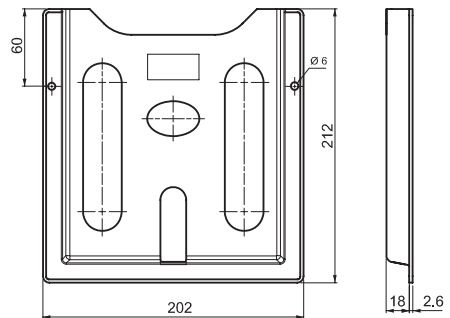
**Version 1**

**Specifications:**

- Material: Polystyrene
- Color: Grey

**Features:**

- Used to store documents or folders
- Can be secured using screws, bolts or adhesive strips

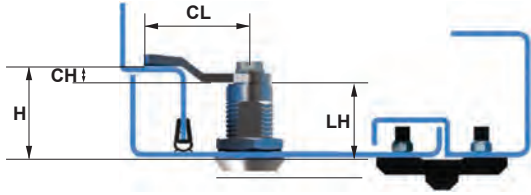


**Version 2**

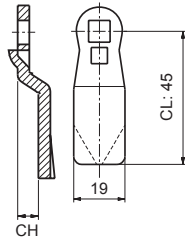
| Item No. | Version |
|----------|---------|
| 2150     | 1       |
| 2152     | 2       |

**CAMS WITH STOPPERS****Cams With Stoppers**

- H = Grip
- LH = Housing Length
- CL = Cam Length
- CH = Cam Height
- Please contact Essentra for alternate cam options

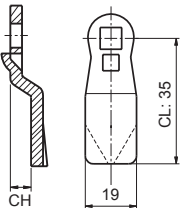


Know your Latch Housing Length (LH) and identify your Grip (H). Total Grip (H) is measured from the mounting outer surface and the contact surface of the inner frame. See illustration. When the Grip (H) is determined, select the matching cam from the options below.

**Cam Style 1****Specifications:**

- Material: Steel
- Finish: Zinc Plated
- Thickness: 4mm

| Item No. | CC | CH     | CL     | H Grip    |         |         |         |         |         |
|----------|----|--------|--------|-----------|---------|---------|---------|---------|---------|
|          |    | Height | Length | LH = 18.5 | LH = 20 | LH = 30 | LH = 40 | LH = 50 | LH = 60 |
| 30403033 | 30 | 0      | 45     | 18.5      | 20      | 30      | 40      | 50      | 60      |
| 30403439 | 17 | 1      | 45     | 19.5      | 21      | 31      | 41      | 51      | 61      |
| 30403159 | 35 | 2      | 45     | 20.5      | 22      | 32      | 42      | 52      | 62      |
| 30403063 | 31 | 3      | 45     | 21.5      | 23      | 33      | 43      | 53      | 63      |
| 30403149 | 33 | 4      | 45     | 22.5      | 24      | 34      | 44      | 54      | 64      |
| 30403160 | 34 | 6      | 45     | 24.5      | 26      | 36      | 46      | 56      | 66      |
| 30403161 | 36 | 8      | 45     | 26.5      | 28      | 38      | 48      | 58      | 68      |
| 30403162 | 47 | 10     | 45     | 28.5      | 30      | 40      | 50      | 60      | 70      |
| 30403045 | 44 | 12     | 45     | 30.5      | 32      | 42      | 52      | 62      | 72      |
| 30403163 | 48 | 14     | 45     | 32.5      | 34      | 44      | 54      | 64      | 74      |
| 30403151 | 49 | 16     | 45     | 34.5      | 36      | 46      | 56      | 66      | 76      |
| 30403165 | 55 | 18     | 45     | 36.5      | 38      | 48      | 58      | 68      | 78      |
| 30403166 | 56 | 20     | 45     | 38.5      | 40      | 50      | 60      | 70      | 80      |
| 30403167 | 57 | 22     | 45     | 40.5      | 42      | 52      | 62      | 72      | 82      |
| 30403168 | 58 | 24     | 45     | 42.5      | 44      | 54      | 64      | 74      | 84      |
| 30403169 | 37 | -2     | 45     | 16.5      | 18      | 28      | 38      | 48      | 58      |
| 30403170 | 38 | -4     | 45     | 14.5      | 16      | 26      | 36      | 46      | 56      |
| 30403171 | 39 | -6     | 45     | 12.5      | 14      | 24      | 34      | 44      | 54      |
| 30403172 | 59 | -8     | 45     | 10.5      | 12      | 22      | 32      | 42      | 52      |
| 30403173 | 60 | -10    | 45     | 8.5       | 10      | 20      | 30      | 40      | 50      |
| 30403174 | 61 | -12    | 45     | 6.5       | 8       | 18      | 28      | 38      | 48      |
| 30403175 | 62 | -14    | 45     | 4.5       | 6       | 16      | 26      | 36      | 46      |

**Cam Style 2****Specifications:**

- Material: Steel
- Finish: Zinc Plated
- Thickness: 4mm

| Item No. | CC | CH     | CL     | H Grip    |         |         |         |         |         |
|----------|----|--------|--------|-----------|---------|---------|---------|---------|---------|
|          |    | Height | Length | LH = 18.5 | LH = 20 | LH = 30 | LH = 40 | LH = 50 | LH = 60 |
| 30403187 | 11 | -2     | 35     | 16.5      | 18      | 28      | 38      | 48      | 58      |
| 30403185 | 12 | 0      | 35     | 18.5      | 20      | 30      | 40      | 50      | 60      |
| 30403186 | 13 | 2      | 35     | 20.5      | 22      | 32      | 42      | 52      | 62      |
| 30403188 | 14 | 4      | 35     | 22.5      | 24      | 34      | 44      | 54      | 64      |
| 30403470 | 15 | 6      | 35     | 24.5      | 26      | 36      | 46      | 56      | 66      |
| 30403471 | 16 | 7      | 35     | 25.5      | 27      | 37      | 47      | 57      | 67      |
| 30403189 | 23 | 10     | 35     | 28.5      | 30      | 40      | 50      | 60      | 70      |
| 30403046 | 52 | 26     | 35     | 44.5      | 46      | 56      | 66      | 76      | 86      |

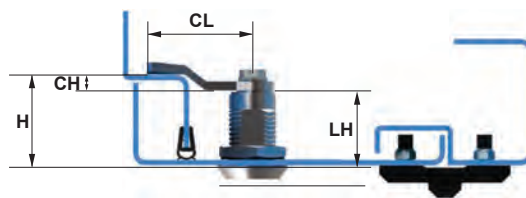
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# CAMS WITH STOPPERS

## Cams With Stoppers

- H = Grip
- LH = Housing Length
- CL = Cam Length
- CH = Cam Height
- Please contact Essentra for alternate cam options

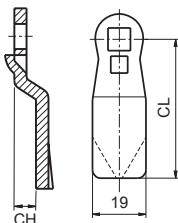


Know your Latch Housing Length (LH) and identify your Grip (H). Total Grip (H) is measured from the mounting outer surface and the contact surface of the inner frame. See illustration. When the Grip (H) is determined, select the matching cam from the options below.

### Cam Style 3



- Specifications:
- Material: Steel
  - Finish: Zinc Plated
  - Thickness: 4mm

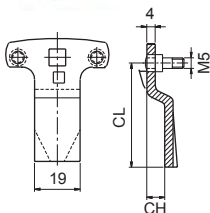


| Item No. | CC | CH     |        | H Grip    |         |         |         |         |         |
|----------|----|--------|--------|-----------|---------|---------|---------|---------|---------|
|          |    | Height | Length | LH = 18.5 | LH = 20 | LH = 30 | LH = 40 | LH = 50 | LH = 60 |
| 30403031 | 10 | 0      | 29     | 18.5      | 20      | 30      | 40      | 50      | 60      |
| 30403032 | 20 | 0      | 38     | 18.5      | 20      | 30      | 40      | 50      | 60      |
| 30403036 | 70 | 0      | 66     | 18.5      | 20      | 30      | 40      | 50      | 60      |
| 30403034 | 40 | 0      | 51     | 18.5      | 20      | 30      | 40      | 50      | 60      |
| 30403037 | 21 | 3      | 38     | 21.5      | 23      | 33      | 43      | 53      | 63      |
| 30403038 | 41 | 3      | 51     | 21.5      | 23      | 33      | 43      | 53      | 63      |
| 30403129 | 22 | 6      | 37     | 24.5      | 26      | 36      | 46      | 56      | 66      |
| 30403039 | 32 | 7      | 44     | 25.5      | 27      | 37      | 47      | 57      | 67      |
| 30403040 | 42 | 7      | 49     | 25.5      | 27      | 37      | 47      | 57      | 67      |
| 30403043 | 43 | 10     | 48     | 28.5      | 30      | 40      | 50      | 60      | 70      |

### Cam Style 4



- Specifications:
- Material: Steel
  - Finish: Zinc Plated
  - Thickness: 4mm

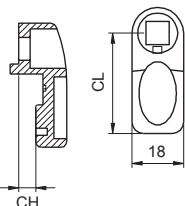


| Item No. | CC  | CH     |        | H Grip    |         |         |         |         |         |
|----------|-----|--------|--------|-----------|---------|---------|---------|---------|---------|
|          |     | Height | Length | LH = 18.5 | LH = 20 | LH = 30 | LH = 40 | LH = 50 | LH = 60 |
| 30403140 | 03  | 0      | 51     | 18.5      | 20      | 30      | 40      | 50      | 60      |
| 30403522 | 06  | 0      | 45     | 18.5      | 20      | 30      | 40      | 50      | 60      |
| 30403047 | 01  | 7      | 49     | 25.5      | 27      | 37      | 47      | 57      | 67      |
| 30403524 | 07  | 2      | 45     | 20.5      | 22      | 32      | 42      | 52      | 62      |
| 30403526 | 08  | 3      | 45     | 21.5      | 23      | 33      | 43      | 53      | 63      |
| 30403528 | 09  | 4      | 45     | 22.5      | 24      | 34      | 44      | 54      | 64      |
| 30403530 | 100 | 5      | 45     | 23.5      | 25      | 35      | 45      | 55      | 65      |
| 30403532 | 101 | 6      | 45     | 24.5      | 26      | 36      | 46      | 56      | 66      |
| 30403534 | 102 | 7      | 45     | 25.5      | 27      | 37      | 47      | 57      | 67      |
| 30403147 | 02  | 12     | 46     | 30.5      | 32      | 42      | 52      | 62      | 72      |
| 30403536 | 103 | 14     | 45     | 32.5      | 34      | 44      | 54      | 64      | 74      |

### Cam Style 5



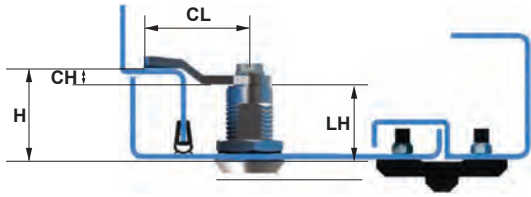
- Specifications:
- Material: Nylon
  - Color: Black
  - Thickness: Contact Essentra for details as needed



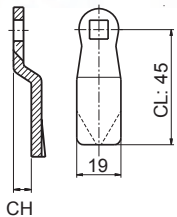
| Item No. | CC | CH     |        | H Grip    |         |         |         |         |         |
|----------|----|--------|--------|-----------|---------|---------|---------|---------|---------|
|          |    | Height | Length | LH = 18.5 | LH = 20 | LH = 30 | LH = 40 | LH = 50 | LH = 60 |
| 30402004 | 90 | 0      | 35     | 18.5      | 20      | 30      | 40      | 50      | 60      |
| 30402011 | 93 | 0      | 25     | 18.5      | 20      | 30      | 40      | 50      | 60      |
| 30402005 | 91 | 6      | 35     | 24.5      | 26      | 36      | 46      | 56      | 66      |
| 30402008 | 92 | 4      | 45     | 22.5      | 24      | 34      | 44      | 54      | 64      |
| 30402013 | 94 | -4     | 45     | 14.5      | 16      | 26      | 36      | 46      | 56      |

**CAMS WITHOUT STOPPERS****Cams without Stoppers**

- H = Grip
- LH = Housing Length
- CL = Cam Length
- CH = Cam Height
- Please contact Essentra for alternate cam options

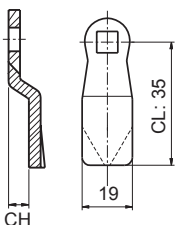


Know your Latch Housing Length (LH) and identify your Grip (H). Total Grip (H) is measured from the mounting outer surface and the contact surface of the inner frame. See illustration. When the Grip (H) is determined, select the matching cam from the options below.

**Cam Style 1****Specifications:**

- Material: Steel
- Finish: Zinc Plated
- Thickness: 4mm

| Item No. | CC | CH     |        | H Grip    |         |         |         |
|----------|----|--------|--------|-----------|---------|---------|---------|
|          |    | Height | Length | LH = 18.5 | LH = 20 | LH = 25 | LH = 32 |
| 30403117 | 30 | 0      | 45     | 18.5      | 20      | 25      | 32      |
| 30403557 | 17 | 1      | 45     | 19.5      | 21      | 26      | 33      |
| 30403581 | 35 | 2      | 45     | 20.5      | 22      | 27      | 34      |
| 30403054 | 31 | 3      | 45     | 21.5      | 23      | 28      | 35      |
| 30403197 | 33 | 4      | 45     | 22.5      | 24      | 29      | 36      |
| 30403128 | 34 | 6      | 45     | 24.5      | 26      | 31      | 38      |
| 30403583 | 36 | 8      | 45     | 26.5      | 28      | 33      | 40      |
| 30403584 | 48 | 10     | 45     | 28.5      | 30      | 35      | 42      |
| 30403123 | 44 | 12     | 45     | 30.5      | 32      | 37      | 44      |
| 30403422 | 48 | 14     | 45     | 32.5      | 34      | 39      | 46      |
| 30403410 | 49 | 16     | 45     | 34.5      | 36      | 41      | 48      |
| 30403429 | 55 | 18     | 45     | 36.5      | 38      | 43      | 50      |
| 30403585 | 56 | 20     | 45     | 38.5      | 40      | 45      | 52      |
| 30403586 | 57 | 22     | 45     | 40.5      | 42      | 47      | 54      |
| 30403411 | 58 | 24     | 45     | 42.5      | 44      | 49      | 56      |
| 30403425 | 37 | -2     | 45     | 16.5      | 18      | 23      | 30      |
| 30403198 | 38 | -4     | 45     | 14.5      | 16      | 21      | 28      |
| 30403423 | 39 | -6     | 45     | 12.5      | 14      | 19      | 26      |
| 30403412 | 59 | -8     | 45     | 10.5      | 12      | 17      | 24      |
| 30403552 | 60 | -10    | 45     | 8.5       | 10      | 15      | 22      |
| 30403587 | 61 | -12    | 45     | 6.5       | 8       | 13      | 20      |
| 30403420 | 62 | -14    | 45     | 4.5       | 6       | 11      | 18      |

**Cam Style 2****Specifications:**

- Material: Steel
- Finish: Zinc Plated
- Thickness: 4mm

| Item No. | CC | CH     |        | H Grip    |         |         |         |
|----------|----|--------|--------|-----------|---------|---------|---------|
|          |    | Height | Length | LH = 18.5 | LH = 20 | LH = 25 | LH = 32 |
| 30403069 | 11 | -2     | 35     | 16.5      | 18      | 23      | 30      |
| 30403444 | 12 | 0      | 35     | 18.5      | 20      | 25      | 32      |
| 30403519 | 13 | 2      | 35     | 20.5      | 22      | 27      | 34      |
| 30403588 | 14 | 4      | 35     | 22.5      | 24      | 29      | 36      |
| 30403477 | 15 | 6      | 35     | 24.5      | 26      | 31      | 38      |
| 30403589 | 16 | 7      | 35     | 25.5      | 27      | 32      | 39      |
| 30403407 | 23 | 10     | 35     | 28.5      | 30      | 35      | 42      |
| 30403075 | 52 | 26     | 35     | 44.5      | 46      | 51      | 58      |



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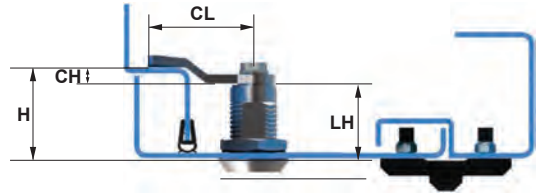




# CAMS WITHOUT STOPPERS

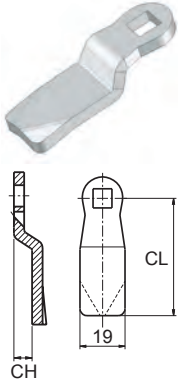
## Cams without Stoppers

- H = Grip
- LH = Housing Length
- CL = Cam Length
- CH = Cam Height
- Please contact Essentra for alternate cam options



Know your Latch Housing Length (LH) and identify your Grip (H). Total Grip (H) is measured from the mounting outer surface and the contact surface of the inner frame. See illustration. When the Grip (H) is determined, select the matching cam from the options below.

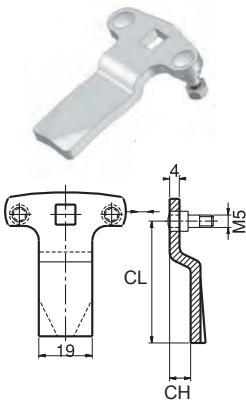
### Cam Style 3



- Specifications:
- Material: Steel
  - Finish: Zinc Plated
  - Thickness: 4mm

| Item No. | CC | CH Height | CL Length | H Grip    |         |         |         |
|----------|----|-----------|-----------|-----------|---------|---------|---------|
|          |    |           |           | LH = 18.5 | LH = 20 | LH = 25 | LH = 32 |
| 30403006 | 10 | 0         | 29        | 18.5      | 20      | 25      | 32      |
| 30403130 | 20 | 0         | 38        | 18.5      | 20      | 25      | 32      |
| 30403003 | 40 | 0         | 51        | 18.5      | 20      | 25      | 32      |
| 30403005 | 70 | 0         | 66        | 18.5      | 20      | 25      | 32      |
| 30403064 | 21 | 3         | 38        | 21.5      | 23      | 28      | 35      |
| 30403141 | 41 | 3         | 51        | 21.5      | 23      | 28      | 35      |
| 30403138 | 22 | 6         | 37        | 24.5      | 26      | 31      | 38      |
| 30403073 | 32 | 7         | 44        | 25.5      | 27      | 32      | 39      |
| 30403002 | 42 | 7         | 49        | 25.5      | 27      | 32      | 39      |
| 30403004 | 43 | 10        | 48        | 28.5      | 30      | 35      | 42      |

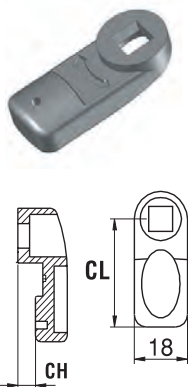
### Cam Style 4



- Specifications:
- Material: Steel
  - Finish: Zinc Plated
  - Thickness: 4mm

| Item No. | CC  | CH Height | CL Length | H Grip    |
|----------|-----|-----------|-----------|-----------|
|          |     |           |           | LH = 18.5 |
| 30403135 | 03  | 0         | 51        | 18.5      |
| 30403523 | 06  | 0         | 45        | 18.5      |
| 30403001 | 01  | 7         | 49        | 25.5      |
| 30403525 | 07  | 2         | 45        | 20.5      |
| 30403527 | 08  | 3         | 45        | 21.5      |
| 30403529 | 09  | 4         | 45        | 22.5      |
| 30403531 | 100 | 5         | 45        | 23.5      |
| 30403533 | 101 | 6         | 45        | 24.5      |
| 30403535 | 102 | 7         | 45        | 25.5      |
| 30403068 | 02  | 12        | 46        | 30.5      |
| 30403537 | 103 | 14        | 45        | 32.5      |

### Cam Style 5



- Specifications:
- Material: Nylon
  - Color: Black
  - Thickness: Contact Essentra for details as needed

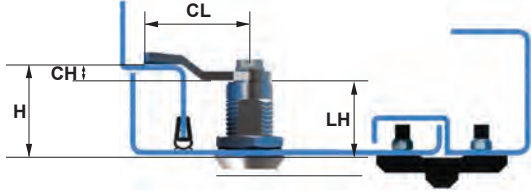
| Item No. | CC | CH Height | CL Length | H Grip    |         |         |
|----------|----|-----------|-----------|-----------|---------|---------|
|          |    |           |           | LH = 18.5 | LH = 20 | LH = 25 |
| 30402002 | 90 | 0         | 35        | 18.5      | 20      | 25      |
| 30402010 | 93 | 0         | 25        | 18.5      | 20      | 25      |
| 30402007 | 92 | 4         | 45        | 22.5      | 24      | 29      |
| 30402003 | 91 | 6         | 35        | 24.5      | 26      | 31      |
| 30402014 | 94 | -4        | 45        | 14.5      | 16      | 21      |



# STAINLESS STEEL CAMS

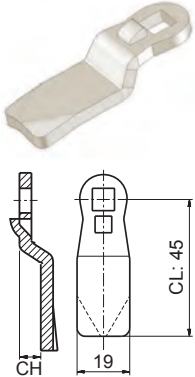
## Cams with and without Stoppers

- H = Grip
- LH = Housing Length
- CL = Cam Length
- CH = Cam Height
- Please contact Essentra for alternate cam options



Know your Latch Housing Length (LH) and identify your Grip (H). Total Grip (H) is measured from the mounting outer surface and the contact surface of the inner frame. See illustration. When the Grip (H) is determined, select the matching cam from the options below.

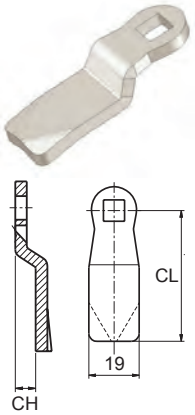
### Cam Style 1 - with Stopper



- Specifications:
- Material: Stainless Steel
  - Finish: Natural
  - Thickness: 4mm

| Item No. | CC | CH     |        | CL        |         | H Grip  |         |         |         |         |  |
|----------|----|--------|--------|-----------|---------|---------|---------|---------|---------|---------|--|
|          |    | Height | Length | LH = 18.5 | LH = 20 | LH = 30 | LH = 32 | LH = 40 | LH = 50 | LH = 60 |  |
| 30405004 | 30 | 0      | 45     | 18.5      | 20      | 30      | 32      | 40      | 50      | 60      |  |
| 30405003 | 40 | 0      | 51     | 18.5      | 20      | 30      | 32      | 40      | 50      | 60      |  |
| 30405159 | 35 | 2      | 45     | 20.5      | 22      | 32      | 34      | 42      | 52      | 62      |  |
| 30405063 | 31 | 3      | 45     | 21.5      | 23      | 33      | 35      | 43      | 53      | 63      |  |
| 30405149 | 33 | 4      | 45     | 22.5      | 24      | 34      | 36      | 44      | 54      | 64      |  |
| 30405160 | 34 | 6      | 45     | 24.5      | 26      | 36      | 38      | 46      | 56      | 66      |  |
| 30405040 | 42 | 7      | 49     | 25.5      | 27      | 37      | 39      | 47      | 57      | 67      |  |
| 30405006 | 36 | 8      | 45     | 26.5      | 28      | 38      | 41      | 48      | 58      | 68      |  |
| 30405162 | 47 | 10     | 45     | 28.5      | 30      | 40      | 42      | 50      | 60      | 70      |  |
| 30405045 | 44 | 12     | 45     | 30.5      | 32      | 42      | 44      | 52      | 62      | 72      |  |

### Cam Style 2 - without Stopper



- Specifications:
- Material: Stainless Steel
  - Finish: Natural
  - Thickness: 4mm

| Item No. | CC | CH     |        | CL        |         | H Grip  |         |  |  |
|----------|----|--------|--------|-----------|---------|---------|---------|--|--|
|          |    | Height | Length | LH = 18.5 | LH = 20 | LH = 25 | LH = 32 |  |  |
| 30405117 | 30 | 0      | 45     | 18.5      | 20      | 25      | 32      |  |  |
| 30405058 | 40 | 0      | 51     | 18.5      | 20      | 25      | 32      |  |  |
| 30405012 | 35 | 2      | 45     | 20.5      | 22      | 27      | 34      |  |  |
| 30405013 | 31 | 3      | 45     | 21.5      | 23      | 28      | 35      |  |  |
| 30405015 | 34 | 4      | 45     | 22.5      | 24      | 29      | 36      |  |  |
| 30405002 | 42 | 7      | 49     | 25.5      | 27      | 32      | 39      |  |  |
| 30405016 | 36 | 8      | 45     | 26.5      | 28      | 33      | 40      |  |  |
| 30405017 | 47 | 10     | 45     | 28.5      | 30      | 35      | 42      |  |  |
| 30405018 | 44 | 12     | 45     | 30.5      | 32      | 37      | 44      |  |  |

## FOR YOUR ELECTRONIC LOCKING SYSTEMS NEEDS

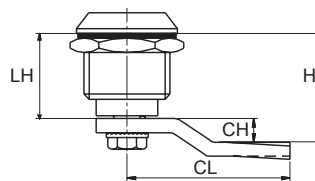
Server Cabinets | Data Centers | Electric Panels | Telecommunications | Kiosks | GSM Cabinets

See pages 705 - 730 for more details.



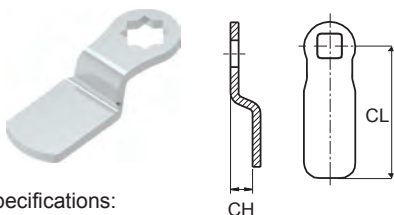
**Cams with and without Stoppers**

- H = Grip
- LH = Housing Length
- CL = Cam Length
- CH = Cam Height
- Please contact Essentra for alternate cam options



Know your Latch Housing Length (LH) and identify your Grip (H). Total Grip (H) is measured from the mounting outer surface and the contact surface of the inner frame. See illustration. When the Grip (H) is determined, select the matching cam from the options below.

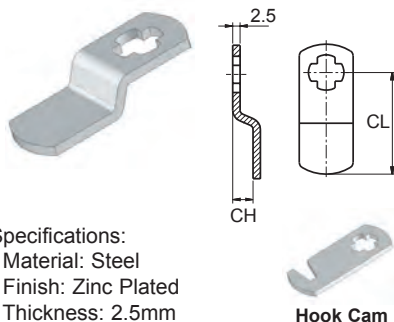
**Cam Style 1 - without Stopper**



- Specifications:
- Material: Steel
  - Finish: Zinc Plated
  - Thickness: Contact Essentra for details as needed

| Item No. | CC | CH     | CL     | H Grip    |         |         |
|----------|----|--------|--------|-----------|---------|---------|
|          |    | Height | Length | LH = 16.5 | LH = 20 | LH = 29 |
| 30403124 | 50 | 0      | 45     | 16.5      | 20      | 29      |
| 31403010 | 56 | 0      | 23     | 16.5      | 20      | 29      |
| 31403011 | 30 | 0      | 33     | 16.5      | 20      | 29      |
| 30403157 | 57 | 3      | 48     | 19.5      | 23      | 32      |
| 30403125 | 51 | 7      | 40     | 23.5      | 27      | 36      |
| 30403110 | 52 | 10     | 37     | 26.5      | 30      | 39      |
| 30403111 | 53 | 14     | 33     | 30.5      | 34      | 43      |

**Cam Style 2 - without Stopper**

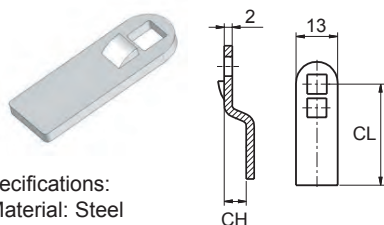


- Specifications:
- Material: Steel
  - Finish: Zinc Plated
  - Thickness: 2.5mm

| Item No.  | CC | CH     | CL     | H Grip    |
|-----------|----|--------|--------|-----------|
|           |    | Height | Length | LH = 16.5 |
| 30403014  | 10 | 0      | 38     | 16.5      |
| 30403100  | 30 | 0      | 33     | 16.5      |
| 30403019  | 20 | 0      | 49     | 16.5      |
| 30403082  | 11 | 3      | 38     | 19.5      |
| 30403015  | 12 | 7      | 36     | 23.5      |
| 30403016  | 21 | 7      | 47     | 23.5      |
| 30403017  | 22 | 10     | 44     | 26.5      |
| 30403022* | 13 | 0      | 39     | 16.5      |

\* Hook Style Cam

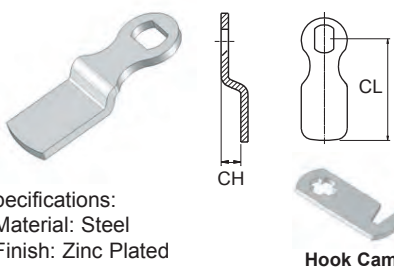
**Cam Style 3 - with Stopper**



- Specifications:
- Material: Steel
  - Finish: Zinc Plated
  - Thickness: 2mm

| Item No. | CC | CH     | CL     | H Grip    |         |
|----------|----|--------|--------|-----------|---------|
|          |    | Height | Length | LH = 13.5 | LH = 16 |
| 30403084 | 10 | 0      | 33     | 13.5      | 16      |
| 30403184 | 20 | 0      | 25     | 13.5      | 16      |
| 30403183 | 21 | 6      | 25     | 19.5      | 22      |
| 30403085 | 11 | 7      | 30     | 20.5      | 23      |
| 30403196 | 22 | 6      | 25     | 19.5      | 22      |

**Cam Style 4 - without Stopper**



- Specifications:
- Material: Steel
  - Finish: Zinc Plated
  - Thickness: Contact Essentra for details as needed

| Item No.  | CC | CH     | CL     | H Grip  |
|-----------|----|--------|--------|---------|
|           |    | Height | Length | LH = 13 |
| 30403158  | 10 | 0      | 24     | 13      |
| 31403016  | 50 | 0      | 21     | 13      |
| 30403029  | 20 | 0      | 31     | 13      |
| 30403028  | 30 | 0      | 36     | 13      |
| 30403089  | 21 | 3      | 30     | 16      |
| 30403030  | 22 | 7      | 26     | 20      |
| 30403182  | 11 | -3     | 28     | 10      |
| 30403058* | 40 | 0      | 31     | 13      |

\* Hook Style Cam



# ALTERNATE DRIVERS FOR LATCHES AND LOCKS

## Alternate Driver Keys



Please Contact Essentra for product details

**13**  
3mm Double Bit



**15**  
5mm Double Bit



**28**  
8mm Square



**26**  
6mm Square



**27**  
7mm Square



**39**  
9mm Triangular



**37**  
7mm Triangular



**38**  
8mm Triangular



**52**  
Slot (2 x 4mm)



**42**  
Slot (2 x 4mm)



**58**  
8mm Square Slot



**61**  
10mm Hexagon (female)



**68**  
8mm Hexagon (female)



**71**  
Slot (5 x 10mm)



**76**  
6mm Square



**83**  
Slot



**88**  
Railway



**91**  
Eastern



**92**  
Tork (T-30)



**97**  
11mm Hexagon (male)



**95**  
Fiat
















**Driver Keys - Long**

Specifications:

- Material: Zinc Alloy
- Finish: Chrome Plated
- Key Width = 50mm

|                                                                                    |                                                                                    |                                                                                    |                                                                                      |                                                                                     |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   |   |   |    |  |
| Item No.<br><b>36813</b><br>3mm Double Bit<br>Key Size: 75mm Height                | Item No.<br><b>36815</b><br>5mm Double Bit<br>Key Size: 75mm Height                | Item No.<br><b>36826</b><br>6mm Square<br>Key Size: 81mm Height                    | Item No.<br><b>36827</b><br>7mm Square<br>Key Size: 81mm Height                      | Item No.<br><b>36828</b><br>8mm Square<br>Key Size: 81mm Height                     |
|  |  |  |    |  |
| Item No.<br><b>36837</b><br>7mm Triangle<br>Key Size: 75mm Height                  | Item No.<br><b>36838</b><br>8mm Triangle<br>Key Size: 75mm Height                  | Item No.<br><b>36839</b><br>9mm Triangle<br>Key Size: 81mm Height                  | Item No.<br><b>36891</b><br>Eastern<br>Key Size: 83mm Height                         | Item No.<br><b>36868</b><br>8mm Hexagon<br>High Security<br>Key Size: 81mm Height   |
|                                                                                    |                                                                                    |                                                                                    |  | Item No.<br><b>36861</b><br>10mm Hexagon<br>Female<br>Key Size: 83mm Height         |

**Driver Keys - Short**

Specifications:

- Material: Zinc Alloy
- Finish: Chrome Plated
- Key Width = 36mm

|                                                                                    |                                                                                     |                                                                                     |                                                                                       |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |
| Item No.<br><b>26713</b><br>3mm Double Bit<br>Key Height = 51mm                    | Item No.<br><b>26715</b><br>5mm Double Bit<br>Key Height = 51mm                     | Item No.<br><b>26726</b><br>6mm Square<br>Key Height = 57mm                         | Item No.<br><b>26727</b><br>7mm Square<br>Key Height = 57mm                           |
|  |  |  |  |
| Item No.<br><b>26728</b><br>8mm Square<br>Key Height = 57mm                        | Item No.<br><b>26737</b><br>7mm Triangle<br>Key Height = 57mm                       | Item No.<br><b>26738</b><br>8mm Triangle<br>Key Height = 57mm                       | Item No.<br><b>26739</b><br>9mm Triangle<br>Key Height = 57mm                         |



# DRIVER KEYS

## Driver Keys - Plastic

Specifications:

- Material: Plastic Nylon
- Color: Black



| Item No.    |
|-------------|
| 16966       |
| 6mm Hexagon |



| Item No.       |
|----------------|
| 16915          |
| 5mm Double Bit |



| Item No.       |
|----------------|
| 26915          |
| 5mm Double Bit |

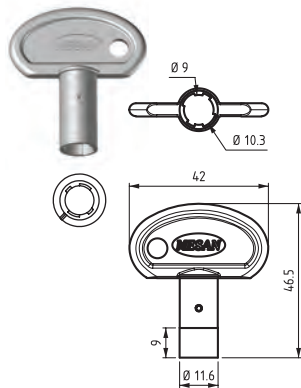


| Item No.     |
|--------------|
| 16939        |
| 9mm Triangle |

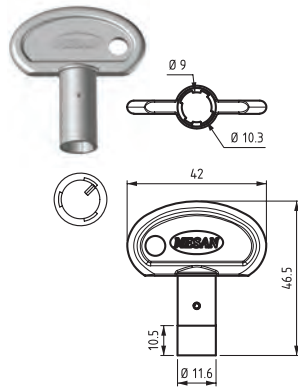
## Tubular Keys

Specifications:

- Material: See Table
- Finish: See Table

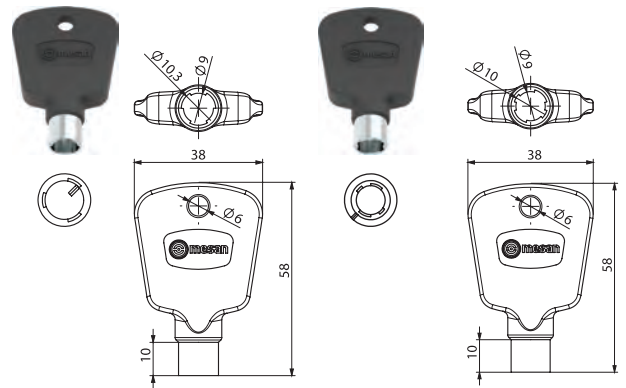


Version 1



Version 2

| Item No. | Version | Material      | Finish              |
|----------|---------|---------------|---------------------|
| 36911    | 1       | Zinc Alloy    | Chrome Plated       |
| 36912    | 1       | Zinc Alloy    | Black Powder Coated |
| 76993    | 3       | Steel / Nylon | Over Molded Nylon   |



Version 3

Version 4

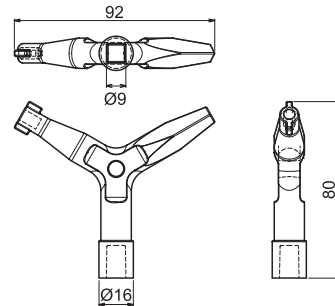
- Version 2, 3 - Suitable for 140 Series compression latches
- Version 1, 4 - Suitable for 040, 540 Series compression latches

| Item No. | Version | Material      | Finish              |
|----------|---------|---------------|---------------------|
| 46911    | 2       | Zinc Alloy    | Chrome Plated       |
| 46912    | 2       | Zinc Alloy    | Black Powder Coated |
| 66993    | 4       | Steel / Nylon | Over Molded Nylon   |

## Multi-Key

Specifications:

- Material: Zinc Alloy
- Finish: Chrome Plated
- Double Bit
- Square

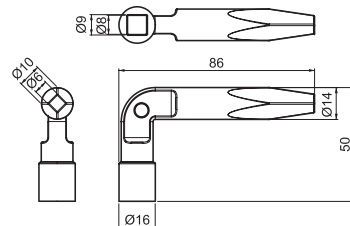


| Item No. | Description                 |
|----------|-----------------------------|
| 56813    | Double Bit, Square, Railway |

## Railway Key

Specifications:

- Material: Zinc Alloy
- Finish: Chrome Plated
- Square

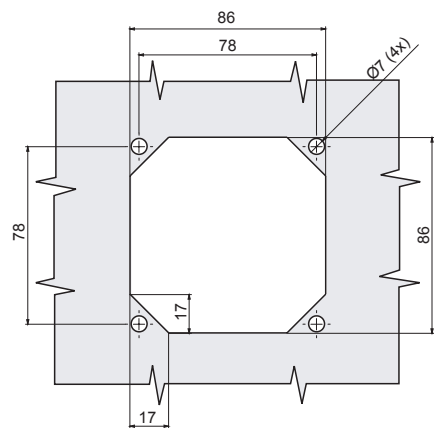
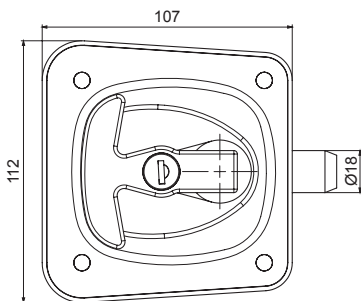
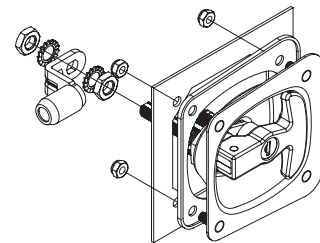
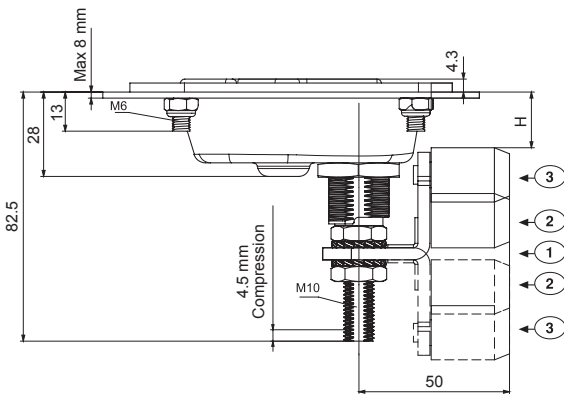


| Item No. | Description     |
|----------|-----------------|
| 56913    | Square, Railway |

# HEAVY DUTY LATCHES - T HANDLE



214 Series  
"T" Handle Heavy Duty Lock / Latch



**Specifications:**

- Material:  
Body: Steel  
Handle: Zinc Alloy  
Cam: Steel with Nylon Roller
- Handle is DIN-EN 1774 rated
- 1 Key supplied with each latch
- Cams sold separately

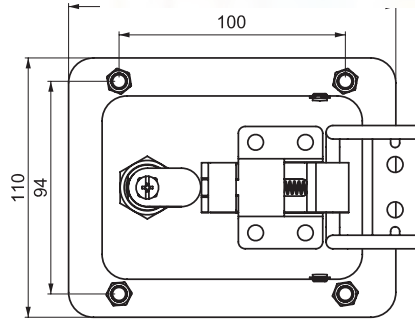
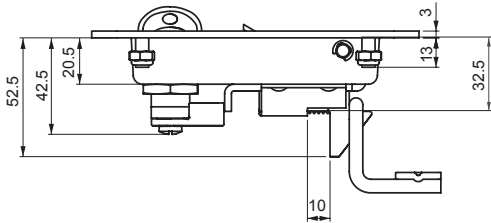
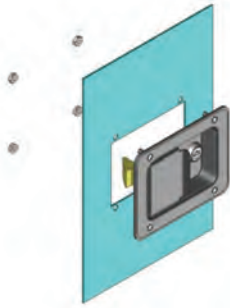
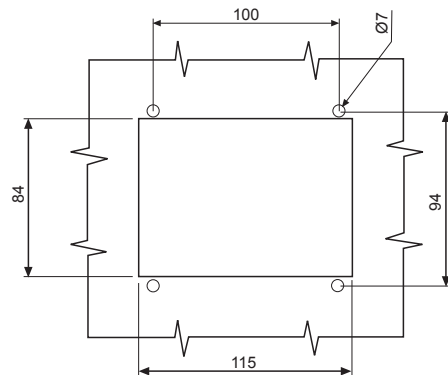
**Features:**

- Compression feature offers varied sealing options
- Adjustable grip
- Available with and without padlock feature

**▲ CAMS SOLD SEPARATELY. SEE TABLE >>**

| Item No. | Cam Type | CC | Position | H Grip* |     |
|----------|----------|----|----------|---------|-----|
|          |          |    |          | Min     | Max |
| 214C01Y  |          | 01 | Up       | 35      | 54  |
|          |          |    | Down     | 57      | 72  |
| 214C02Y  |          | 02 | Up       | 35      | 50  |
|          |          |    | Down     | 63      | 78  |
| 214C03Y  |          | 03 | Up       | 20      | 35  |
|          |          |    | Down     | 75      | 90  |

| Item No.   | Cylinder | Cylinder Description     |
|------------|----------|--------------------------|
| 214120300  | 03       | Keyed Alike              |
| 2141200001 | 00       | Keyless, with Padlock    |
| 2141203011 | 03       | Keyed Alike with Padlock |
| 214123200  | 03       | Keyed Different          |

**HEAVY DUTY LATCHES - PUSH TO CLOSE****016 Series****Heavy Duty Latches - Push to Close Latch****Version 1****Cut-Out****Specifications:**

- Material:  
Body: See Table  
Handle: Steel  
Cam: Brass  
Screw: Stainless Steel  
Seal: Polyurethane
- Supplied with one key
- Standard Cam included
- Stainless Steel is AISI 304 rated

**Features:**

- Slam-shut operation
- Can be opened from inside by moving cam

**⚠ STRIKE PLATE SOLD SEPARATELY, SEE TABLE.**

**Black Powder Coated Steel**

| Item No.  | Version | Cylinder Style | Cylinder Description | Striking Plate / Bolt |
|-----------|---------|----------------|----------------------|-----------------------|
| 01662031  | 1       | 03             | Keyed Alike          | 016A71                |
| 01662321  | 1       | 32             | Keyed Different      | 016A71                |
| 016620011 | 1       | 00             | Padlock Only         | 016A71                |

**Stainless Steel**

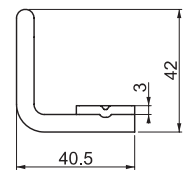
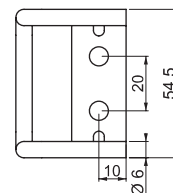
| Item No. | Version | Cylinder Style | Cylinder Description                       | Striking Plate / Bolt |
|----------|---------|----------------|--------------------------------------------|-----------------------|
| 01640031 | 1       | 03             | Stainless Steel Dust Cap (Keyed Alike)     | 016A71                |
| 01640321 | 1       | 32             | Stainless Steel Dust Cap (Keyed to Differ) | 016A71                |

**016A Series****Cam Striking Plate****Specifications:**

- Material: See Table
- Finish: See Table

**Features:**

- Strike plate used with 016 Series



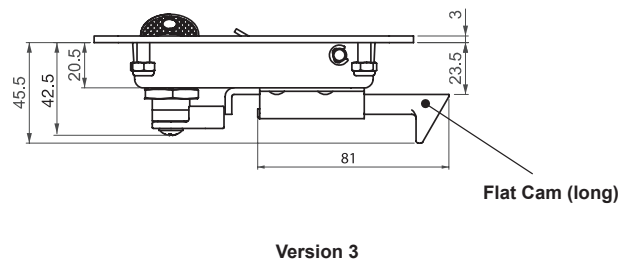
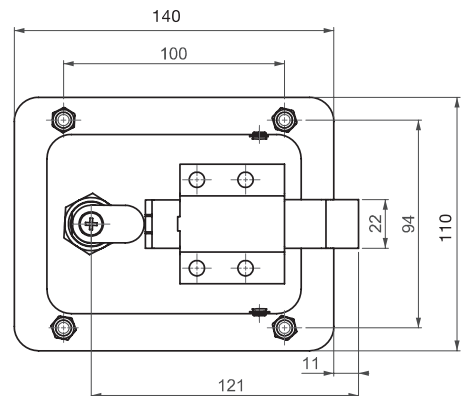
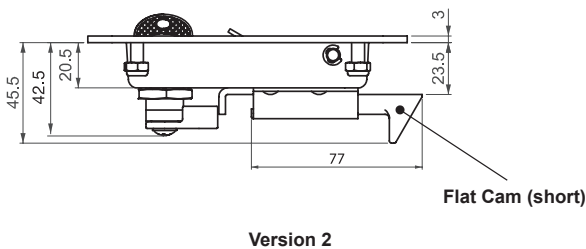
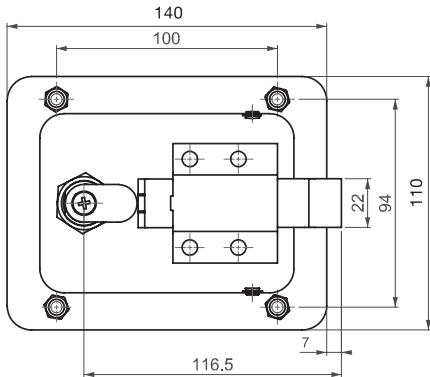
| Item No. | Material        | Finish      |
|----------|-----------------|-------------|
| 016A71   | Steel           | Zinc Plated |
| 016A740  | Stainless Steel | Natural     |



# HEAVY DUTY LATCHES - PUSH TO CLOSE



016 Series (Continued)  
Heavy Duty Latches - Push to Close Latch



**Specifications:**

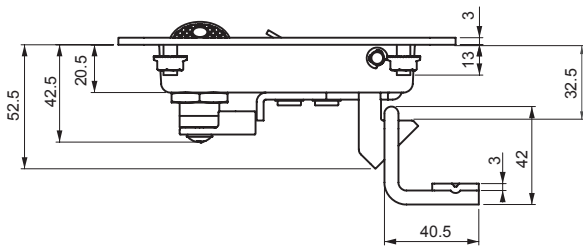
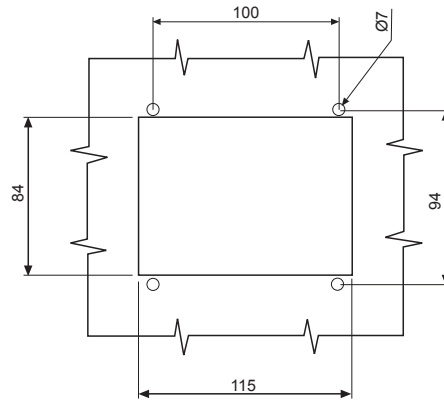
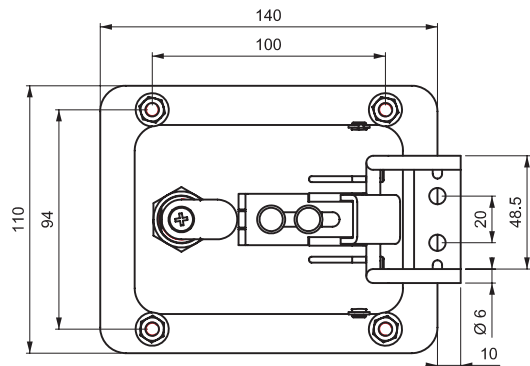
- Material:  
Body: See Table  
Handle: Steel  
Cam: Brass  
Screw: Stainless Steel  
Seal: Polyurethane
- Supplied with one key
- Standard Cam included
- Stainless Steel is AISI 304 rated

**Features:**

- Two types of die-cast zinc Cams
- No locking device needed
- Can be opened from inside by moving Cam

**▲ STRIKE PLATE SOLD SEPARATELY, SEE TABLE.**

| Item No. | Version | Cylinder Style | Cylinder Description | Striking Plate / Bolt |
|----------|---------|----------------|----------------------|-----------------------|
| 01662032 | 2       | 03             | Keyed Alike          | Na                    |
| 01662322 | 2       | 32             | Keyed Different      | Na                    |
| 01662033 | 3       | 03             | Keyed Alike          | Na                    |
| 01662323 | 3       | 32             | Keyed Different      | Na                    |

**HEAVY DUTY LATCHES - PUSH TO CLOSE****016 Series (Continued)****Heavy Duty Latches - Push to Close Latch****Version 4****Cut-Out****Specifications:**

- Material:
  - Body: Steel
  - Handle: Steel
  - Cam: Steel
  - Seal: Polyurethane
- Supplied with one key
- Cam is DIN-EN 1774 rated

**Features:**

- Two types of die-cast zinc Cams
- No locking device needed
- Can be opened from inside by moving Cam

**⚠ STRIKE PLATE SOLD SEPARATELY, SEE TABLE.**

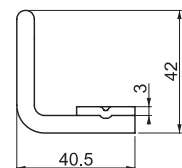
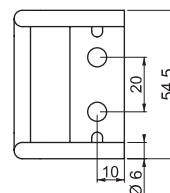
| Item No. | Version | Cylinder Style | Cylinder Description | Striking Plate / Bolt |
|----------|---------|----------------|----------------------|-----------------------|
| 01662034 | 4       | 03             | Keyed Alike          | 016A71                |
| 01662324 | 4       | 32             | Keyed Different      | 016A71                |

**016A Series  
Cam Striking Plate****Specifications:**

- Material: See Table
- Finish: See Table

**Features:**

- Strike plate used with 016 Series

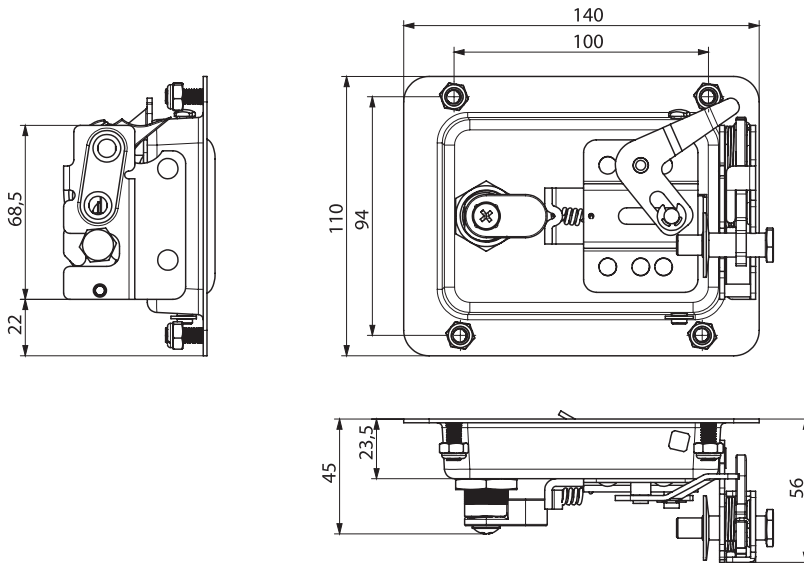


| Item No. | Material        | Finish      |
|----------|-----------------|-------------|
| 016A71   | Steel           | Zinc Plated |
| 016A740  | Stainless Steel | Natural     |



# HEAVY DUTY LATCHES - PUSH TO CLOSE

016 Series (Continued)  
Heavy Duty Latches - Push to Close Latch



Version 5

**Specifications:**

- Material:  
Body: Steel  
Handle: Steel  
Cam: Steel  
Seal: Polyurethane
- Supplied with one key
- Cam is DIN-EN 1774 rated

**Features:**

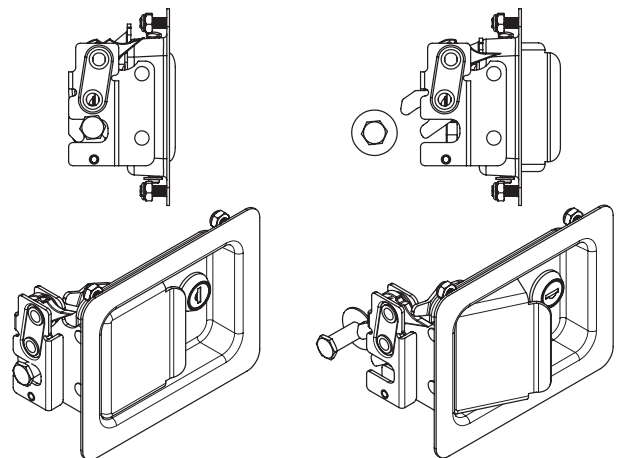
- Integrated rotary latch design
- Slam-shut operation
- Can be opened from inside by pulling cable

**▲ STRIKER BOLT SOLD SEPARATELY, SEE PAGE 619.**



**Mini Striker Bolt**

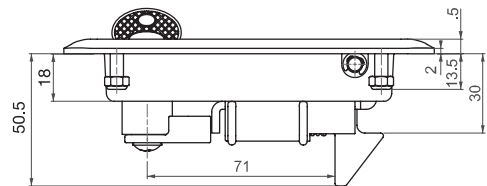
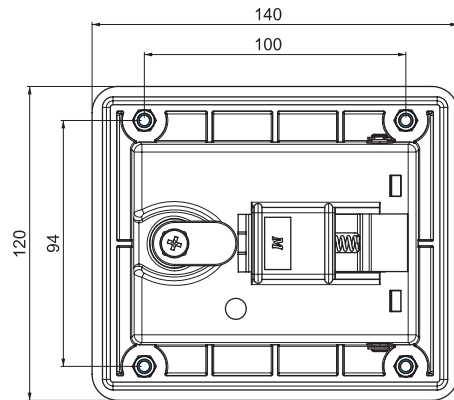
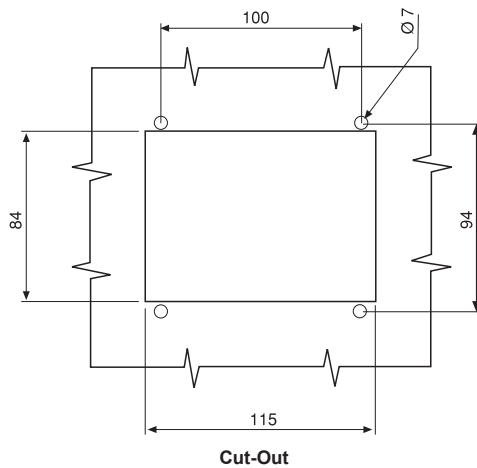
- Item No. SBI
- Ordered separately



Locked position

Unlock position

| Item No.    | Version | Cylinder Style | Cylinder Description         | Striking Plate / Bolt |
|-------------|---------|----------------|------------------------------|-----------------------|
| • 01662035  | 5       | 03             | Keyed Alike                  | SB1                   |
| • 01662325  | 5       | 32             | Keyed Different              | SB1                   |
| • 016620051 | 5       | 00             | Padlock Only                 | SB1                   |
| • 016620351 | 5       | 03             | Keyed Alike with Padlock     | SB1                   |
| • 016623251 | 5       | 32             | Keyed Different with Padlock | SB1                   |

**HEAVY DUTY LATCHES - PUSH TO CLOSE****016 Series (Continued)****Heavy Duty Latches - Push-to-Close Latch****Specifications:**

- Material:  
Body: Nylon Black (PA6 30% GF)  
Cam: See Table  
Mounting Bracket: Steel
- Body is DIN-EN ISO 1043-1 rated

**Features:**

- Mounting bracket included
- Slam-shut operation
- Please contact Essentra for key options

**⚠ STRIKE PLATE SOLD SEPARATELY, SEE TABLE.**

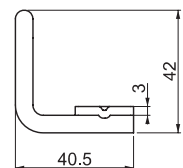
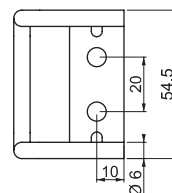
| Item No.  | Version | Cylinder Style | Cylinder Description                       | Cam Striking Plate | Cam Material |
|-----------|---------|----------------|--------------------------------------------|--------------------|--------------|
| 016200301 | Plastic | 03             | Stainless Steel Dust Cap (keyed alike)     | 016A71             | Brass        |
| 016203202 | Plastic | 32             | Stainless Steel Dust Cap (Keyed to Differ) | 016A71             | Plastic      |

**016A Series  
Cam Striking Plate****Specifications:**

- Material: See Table
- Finish: See Table

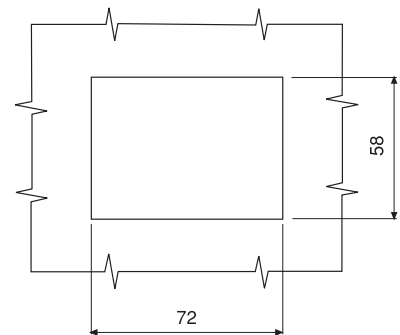
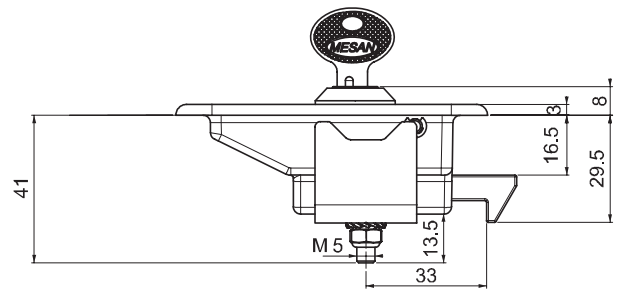
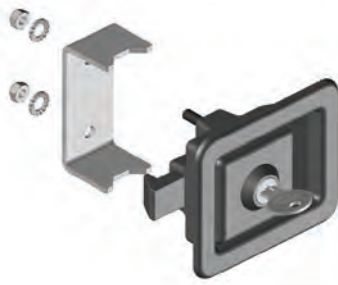
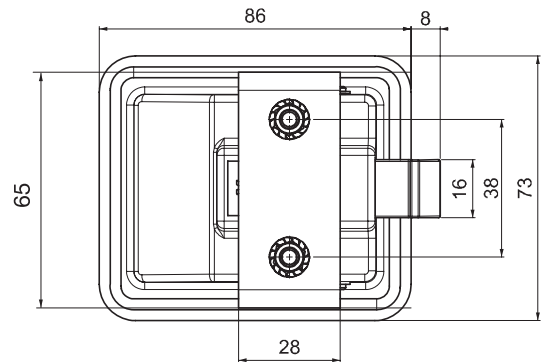
**Features:**

- Strike plate used with 016 Series



| Item No. | Material        | Finish      |
|----------|-----------------|-------------|
| 016A71   | Steel           | Zinc Plated |
| 016A740  | Stainless Steel | Natural     |

## HEAVY DUTY LATCHES - PUSH TO CLOSE


**116 Series**  
**Push-To-Close Latch**


Cut-Out

## Specifications:

- Material:  
Body: Nylon Black (PA6 30% GF)  
Cam: Delrin  
Mounting Bracket: Steel
- Body is DIN-EN ISO 1043-1 rated
- Handle is DIN-EN 1774 rated

## Features:

- Mounting bracket included
- Can be opened from inside using Cam
- Please contact Essentra for Keyed to Differ

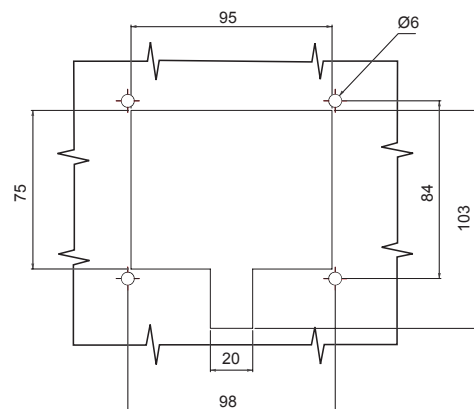
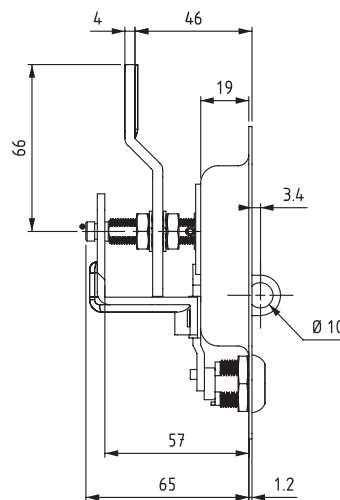
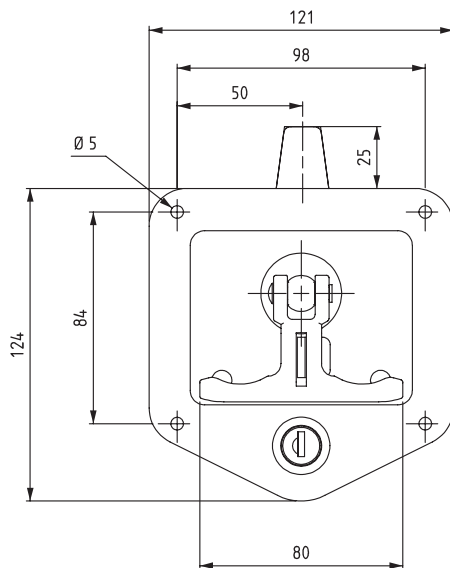
| Item No. | Cylinder Description |
|----------|----------------------|
| 11600M   | No Cylinder          |
| 11601    | Keyed Alike          |



# HEAVY DUTY LATCHES - T HANDLE PADLOCKABLE

## 315 Series

### 'T' Handle - Heavy-Duty Padlockable Latch



Cut-Out

#### Specifications:

- Material:  
Body: Stainless Steel  
Handle: Zinc Alloy  
Padlock Hasp: Stainless Steel  
Cam: Steel
- Finish: Natural
- Handle is DIN-EN 1774 rated

#### Features:

- Suitable for small case generators, truck utility and tool boxes
- Adjustable Cam for wide grip range
- Maximum padlock shackle diameter 9mm

Item  
No.  
31540

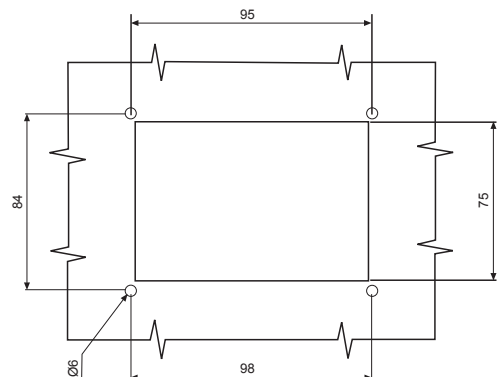
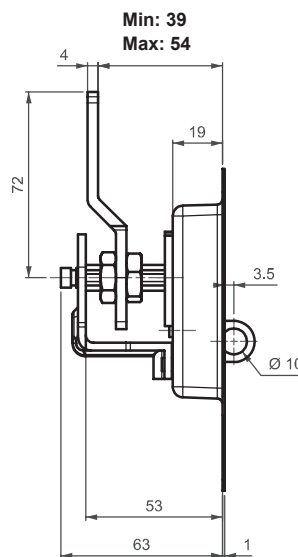
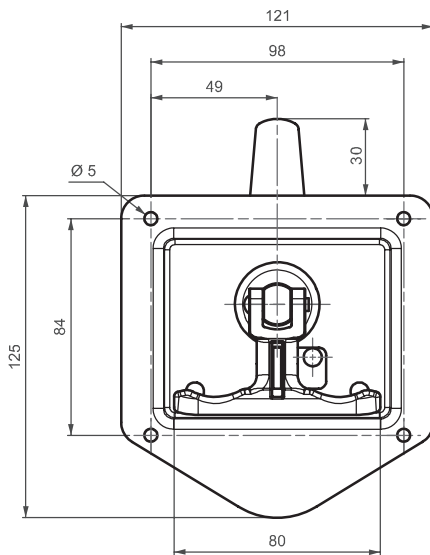
Cylinder Description  
Stainless Steel Shutter (Keyed Alike)

## HEAVY DUTY LATCHES - T HANDLE PADLOCKABLE



## 115 Series

## 'T' Handle - Heavy Duty Padlockable Latch



## Specifications:

- Material:
  - Body: Stainless Steel
  - Handle: Zinc Alloy
  - Padlock Hasp: Stainless Steel
  - Cam: Steel
- Finish: Body: Natural
  - Handle: Chrome Plated
- Handle is DIN-EN 1774 rated
- Cam included with latch/lock

## Features:

- Suitable for small case generators, truck utility and tool boxes
- Adjustable Cam for wide grip range
- Maximum padlock shackle diameter 9mm

Cut-Out

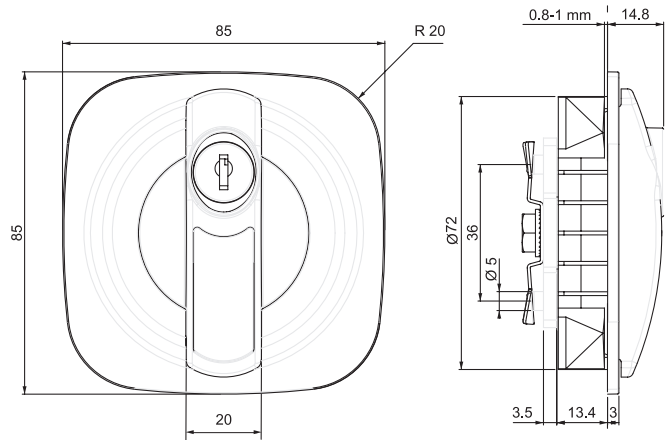
Item  
No.

115



# CABINET LATCHES

## 035 Series Steel Cabinet Latch

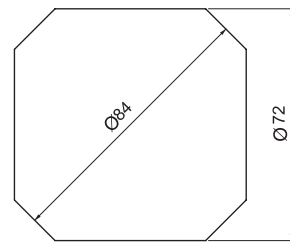


**Specifications:**

- Material:  
Body: Nylon Black (PA6 30% GF)  
Knob: Zinc Alloy  
Finish: See Table
- Zylon is DIN-EN ISO 1043-1 rated
- Zinc Alloy is DIN-EN 1774 rated
- Two keys supplied with every lock

**Features:**

- Suitable for steel cabinets
- Locking cams below provides easy rod assembly for multi-point fixing
- Clip-on style body
- Two or Three-point locking options, see 304 Series below
- Please contact Essentra for different color options

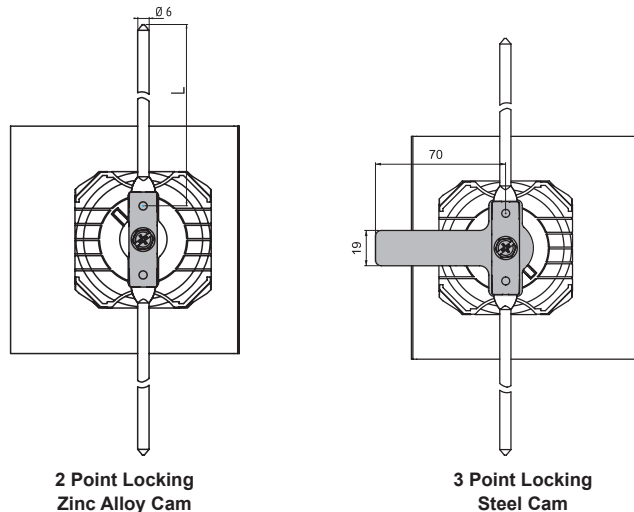
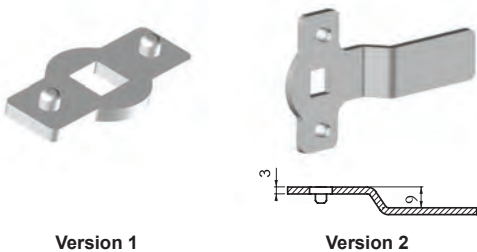


Cut Out

**⚠ CAMS SOLD SEPARATELY, SEE CABINET LATCHING CAMS BELOW.**

| Item No.    | Handle Finish       | Cylinder Description |
|-------------|---------------------|----------------------|
| 03520110100 | Chrome Plated       | Keyed Alike          |
| 03520110200 | Chrome Plated       | Keyed Differ         |
| 03520120100 | Black Powder Coated | Keyed Alike          |
| 03520120200 | Black Powder Coated | Keyed Differ         |

## 304 Series - Used with 035 Series Latches Cabinet Latching Cams



**Specifications:**

- Material: See Table

**Features:**

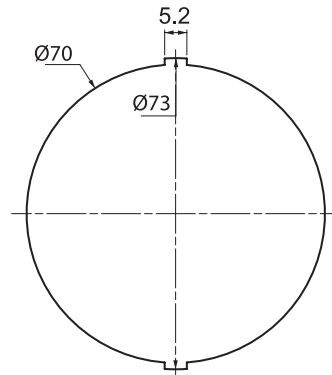
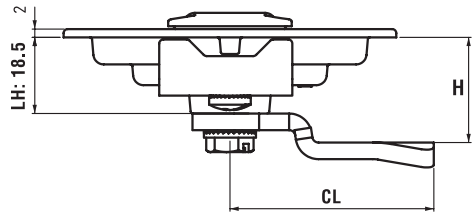
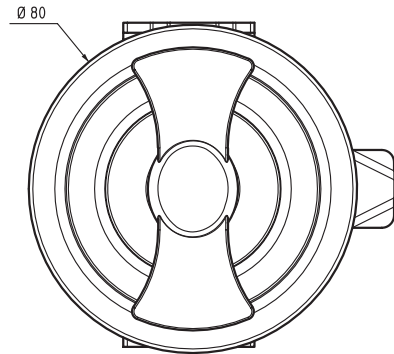
- For rod system details, Please contact Essentra for details

| Cam Item No. | Version | Description |
|--------------|---------|-------------|
| 30401034     | 1       | Zinc Alloy  |
| 30403641     | 2       | Steel       |





**013 Series**  
**Cabinet Latches - Fire Hose Locks**



**Cut-Out**

**Specifications:**

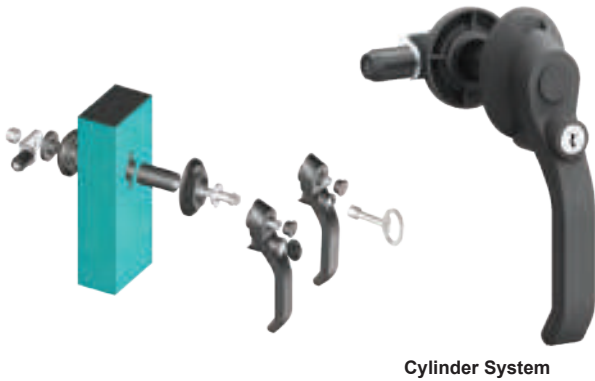
- **Material:**  
 Body: Zinc Alloy  
 Knob: Zinc Alloy  
 Cam: Steel  
 Installation Plate: Steel
- **Finish:** Chrome Plated
- Zinc Alloy is DIN-EN 1774 rated

**Features:**

- Suitable for steel cabinets
- Designed for fire-hose cabinetry
- Special installation-plate supplied for easy install
- Flush design provides flat surface on cabinet

**▲ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**

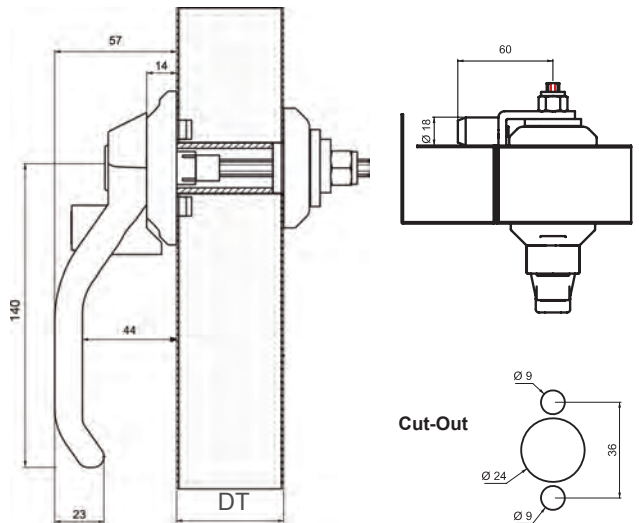
Item  
 No.  
 0132111100

**HVAC HANDLE LOCKS****012 Series****HVAC Handle - Locks****Specifications:**

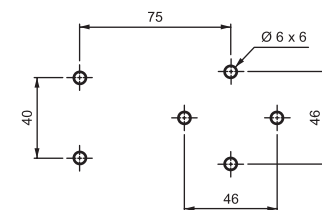
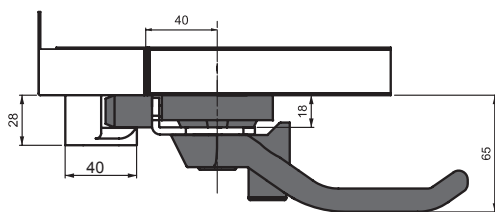
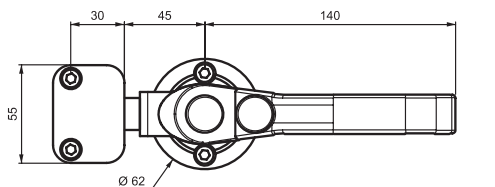
- Material:  
Body: Nylon Black (PA6 30% GF)  
Handle: Nylon Black (PA6 30%GF)  
Cam: Steel
- Body and handle are DIN-EN ISO 1043-1 rated
- Two keys supplied with every lock

**Features:**

- Removable handle for easy assembly on site
- Roller Cam requires less force to lock
- Can be used for both left and right hand doors
- Internal handle available for opening door from inside, see 012A Series
- Contact Essentra for different door thicknesses, cylinders or driver style options



| Item No.   | Door Thickness (DT) | Cylinder Description |
|------------|---------------------|----------------------|
| 0121500001 | 50                  | No Cylinder          |
| 0121600001 | 60                  | No Cylinder          |
| 0121800001 | 80                  | No Cylinder          |
| 0121500301 | 50                  | Keyed Alike          |
| 0121600301 | 60                  | Keyed Alike          |
| 0121800301 | 80                  | Keyed Alike          |

**012 Series****HVAC Handle - Locks****Specifications:**

- Material:  
Body: Nylon Black (PA6 30% GF)  
Handle: Nylon Black (PA6 30%GF)  
Cam: Steel  
Strike Plate: Zinc Alloy
- Body and handle are DIN-EN ISO 1043-1 rated

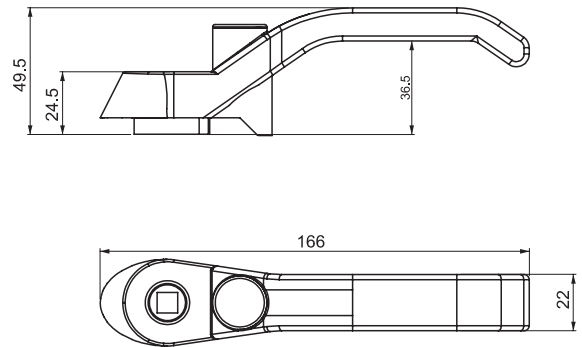
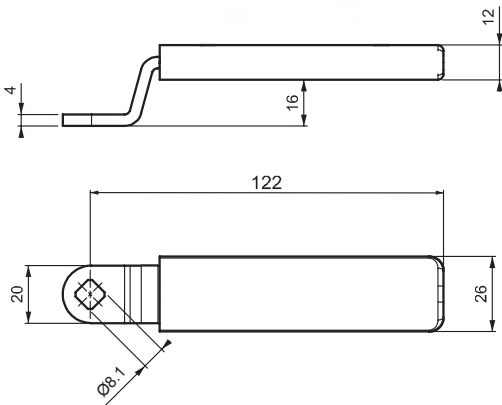
**Features:**

- Outside locking system provides safety for pressurized doors
- Roller style cam requires less force for locking

| Item No. |
|----------|
| 01220001 |



012A Series  
Internal Safety Handles



Version 1

Version 2

Specifications:

- Material: See Table
- Finish/Color: See Table

Features:

- Ideal for heating and ventilation panels
- Can be used for both left and right hand doors

| Item No. | Version | Material | Finish                    |
|----------|---------|----------|---------------------------|
| 012A1    | 1       | Steel    | Yellow Polyamide Overmold |
| 012A3    | 2       | Nylon    | Black                     |

012A Series  
Catch Plate



Specifications:

- Material: Zinc Alloy

Features:

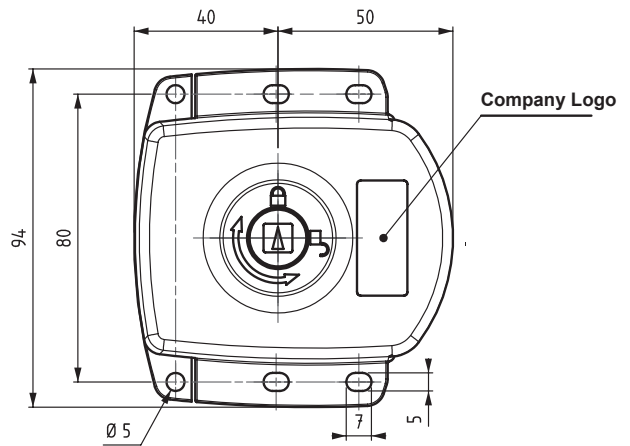
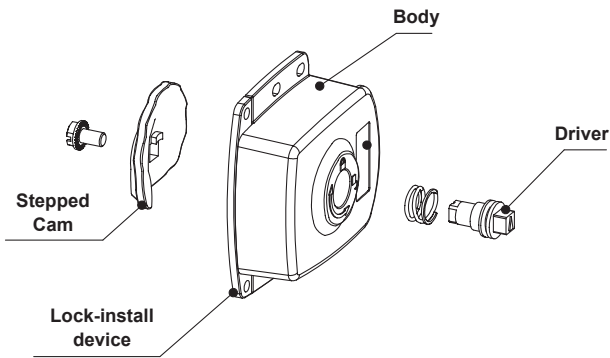
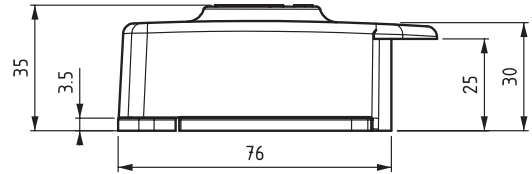
- Used with locking handles, see series 012 HVAC Locks

| Item No. |
|----------|
| 012A2    |



# HVAC LOCKS

## 612 Series HVAC Lock



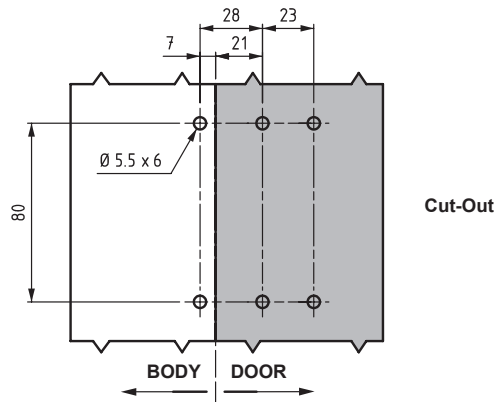
### Specifications:

- Material:
  - Body: Zinc Alloy
  - Driver: Zinc Alloy
- Finish: Black Powder Coated

### Features:

- Outside locking system provides safety for pressurized doors
- For logo applications please contact Essentra
- Available with alternate drivers and finish

**⚠ DRIVER KEY SOLD SEPARATELY. SEE PAGES 597 - 598.**



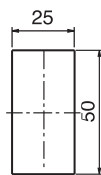
| Driver Style   |            |              |
|----------------|------------|--------------|
| 15             | 28         | 38           |
| 5mm Double Bit | 8mm Square | 8mm Triangle |
|                |            |              |

| Item No.  | Driver Type | Driver Description |
|-----------|-------------|--------------------|
| 612121215 | 15          | 5mm Double Bit     |
| 612121228 | 28          | 8mm Square         |
| 612121238 | 38          | 8mm Triangle       |

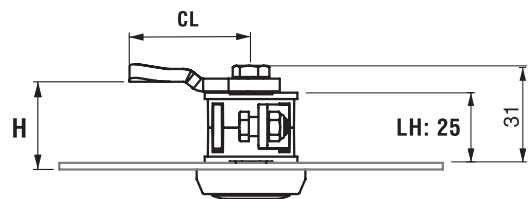
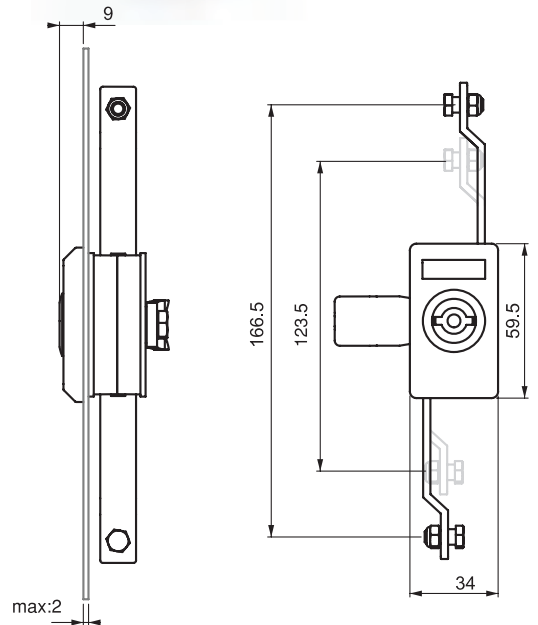
# THREE POINT ROD LATCHES



003 Series  
Three Point Rod Latch



Cut Out



**Specifications:**

- Material:  
Body: Nylon Black (PA6 30% GF)  
Mechanism: Zinc Alloy
- Finishes: Chrome Plated (Mechanism)
- Mechanism and Driver are DIN-EN 1774 rated

**Features:**

- Three point latching available with cam and rod system purchases
- Intergrated gear-box located in housing for multiple point latching
- Clip system design for ease of assembly
- Polyurethane seal provides IP 54 rating

**▲ DRIVER KEY SOLD SEPARATELY. SEE PAGES 597 - 598.**

**▲ CAMS SOLD SEPARATELY. SEE PAGES 592 - 594.**

| Driver Style   |
|----------------|
| 15             |
| 5mm Double Bit |

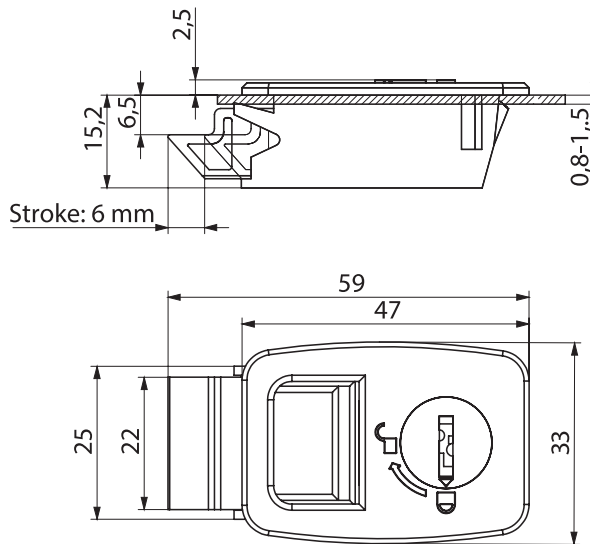
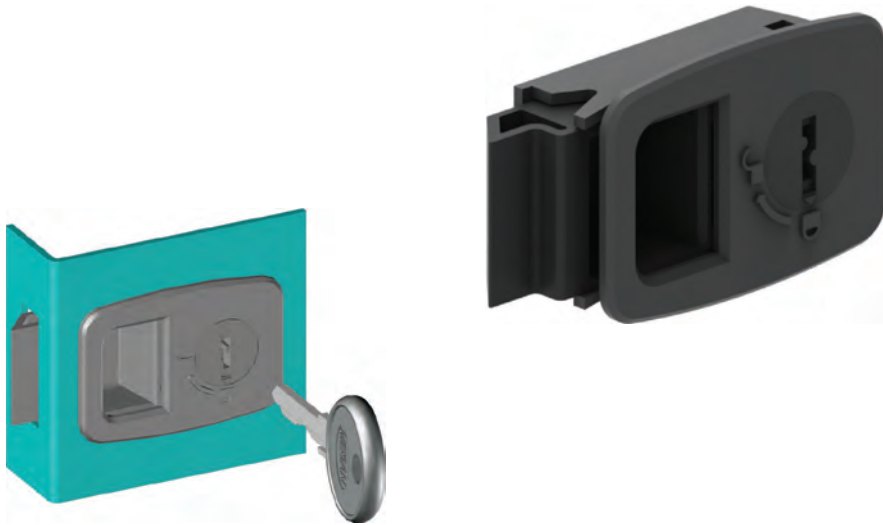


| Item No.   | Driver Style | Driver Description | Hand Operation |
|------------|--------------|--------------------|----------------|
| 0031500001 | 15           | 5 mm Double Bit    | Right          |
| 0031500002 | 15           | 5 mm Double Bit    | Left           |



# SLIDING LATCHES & LOCKS

## 671 Series Sliding Latch



### Specifications:

- Material:  
Body: Nylon Black (PA6 30% GF)  
Spring: Stainless Steel  
Cylinder: Nylon Black (PA6 30% GF)
- 2 keys supplied with every lock

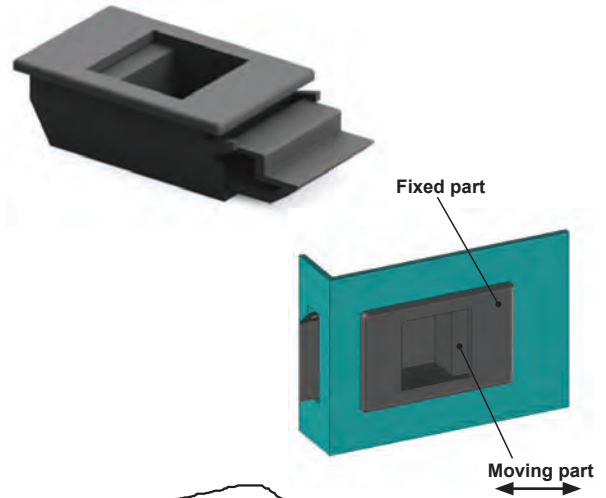
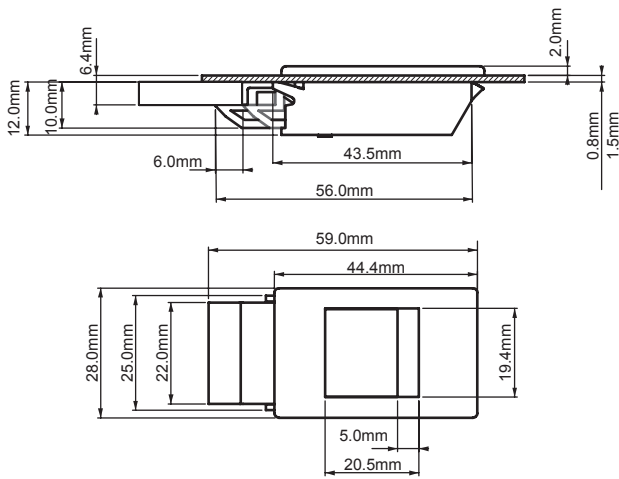
### Features:

- Two-piece design eliminates paint problem on doors
- Ideal for small metal machinery covers
- Easy assembly with clips on body
- Suitable for panel thickness between 0.8 - 1.5mm

| Item No. | Driver Style | Driver Description |
|----------|--------------|--------------------|
| 67101    | 01           | Keyed Alike        |



**271 Series**  
Sliding Lock / Latch

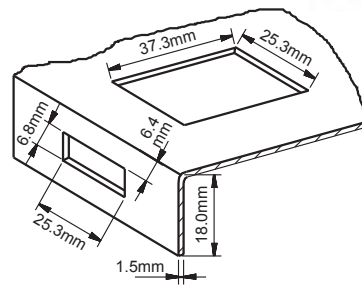


Specifications:

- Material:  
Body: Nylon Black (PA6 30% GF)  
Spring: Stainless Steel

Features:

- Two-piece design eliminates paint problem on doors
- Ideal for small metal machinery covers
- Easy assembly with clips on body
- Suitable for panel thickness between 0.8 - 1.5mm
- Key lock available, contact Essentra for details

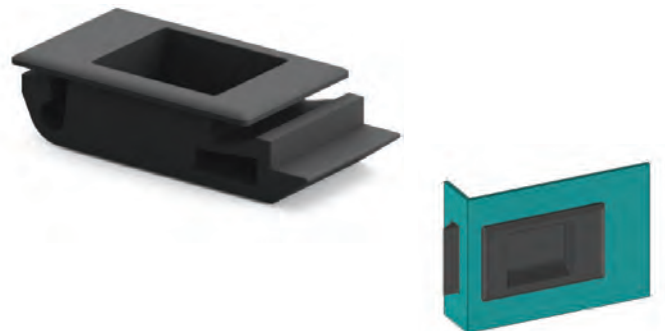
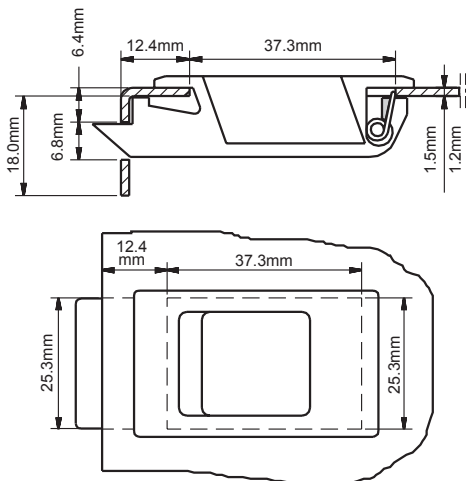


Cut-Out

Item No.

271

**071 Series**  
Sliding Lock/Latch

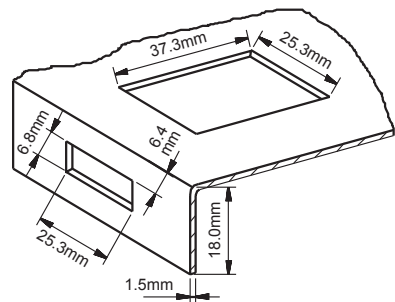


Specifications:

- Material: ABS  
Spring: Stainless Steel
- Finish: Natural

Features:

- Ideal for small metal machinery covers
- Easy Installation
- Long-lasting stainless steel spring



Cut-Out

Door Thickness (DT)

Item No.

07112

07115

mm

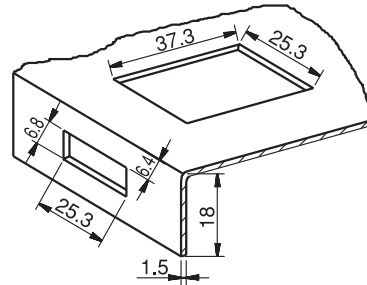
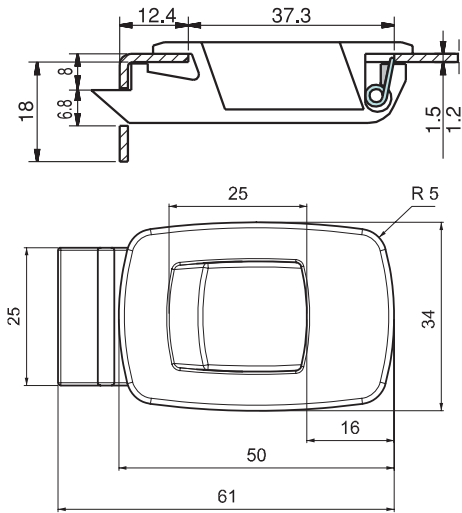
0.8 - 1.2

1.2 - 1.5



# SLIDING LATCHES & LOCKS / MINI

## 371 Series Sliding Latch



### Specifications:

- Material: ABS (Spring Stainless Steel)

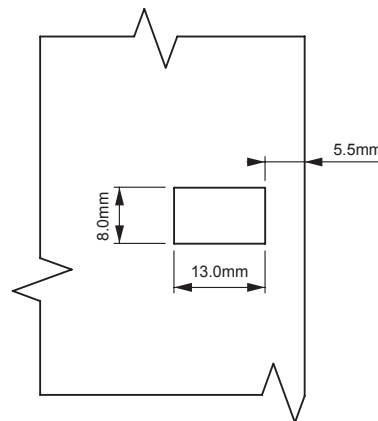
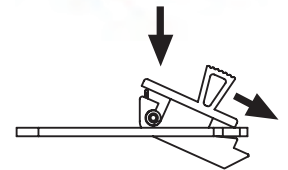
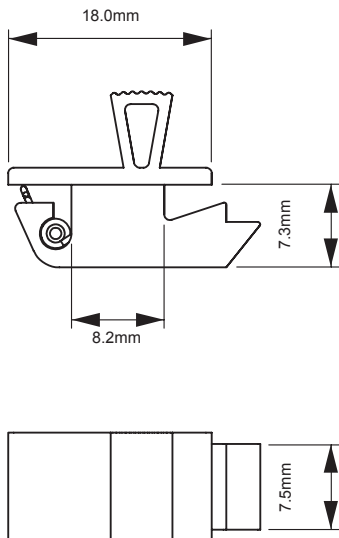
### Features:

- Ideal for small metal machinery covers
- Easy Installation
- Long-lasting stainless steel spring
- Suitable for panel thickness between 0.8 - 1.5mm

Cut-Out

| Item No. | Panel Thickness |
|----------|-----------------|
| 37112    | 0.8 - 1.2 mm    |
| 37115    | 1.2 - 1.5 mm    |

## 171 Series Mini Sliding Locks



Cut-Out

### Specifications:

- Material:  
Body: ABS, Black  
Spring: Stainless Steel

### Features:

- Suitable for small doors and inside panels

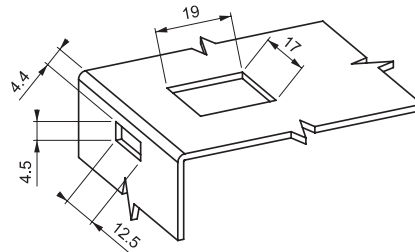
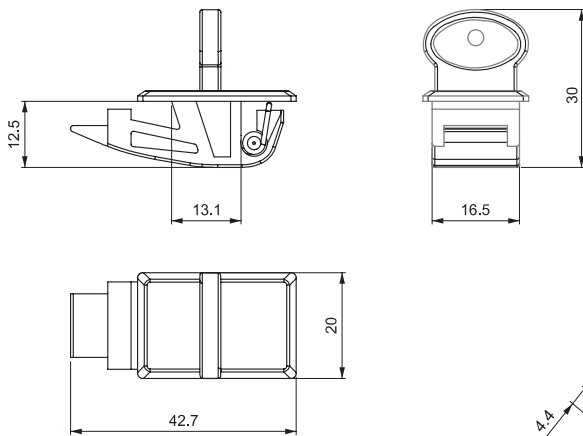
| Item No. | Door Thickness (DT) |
|----------|---------------------|
| 171      | 0.8 - 1.5 mm        |





# MINI SLIDING LATCHES & LOCKS / BRIDGE CLAMPS

## 471 Series Sliding Latch - Mini



**Specifications:**

- Material: ABS (Spring Stainless Steel)

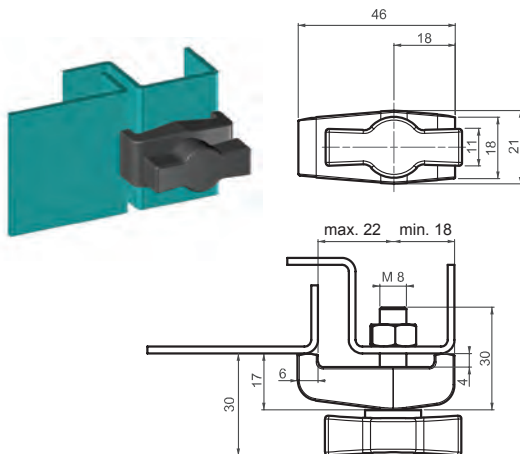
**Features:**

- Ideal for small metal machinery covers
- Easy Installation
- Long-lasting stainless steel spring
- Suitable for panel thickness between 0.8 - 1.5mm

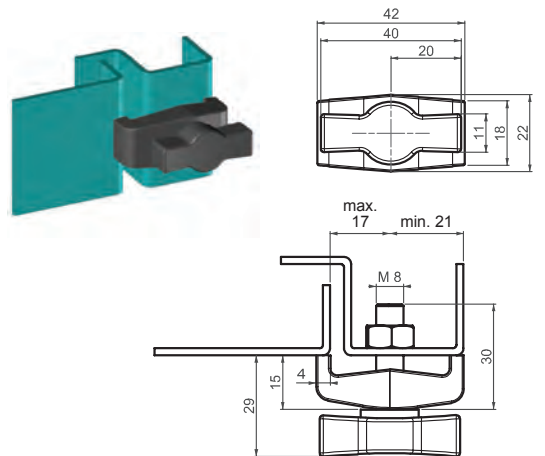
**Cut-Out**

| Item No. | Panel Thickness |
|----------|-----------------|
| 47112    | 0.8 - 1.2 mm    |

## 462 Series Bridge Clamps / Latches



**Version 1**



**Version 2**

**Specifications:**

- Material:  
Housing: Nylon Black (PA6 30% GF)  
Knob: Nylon Black (PA6 30% GF)  
Screw: Steel

**Features:**

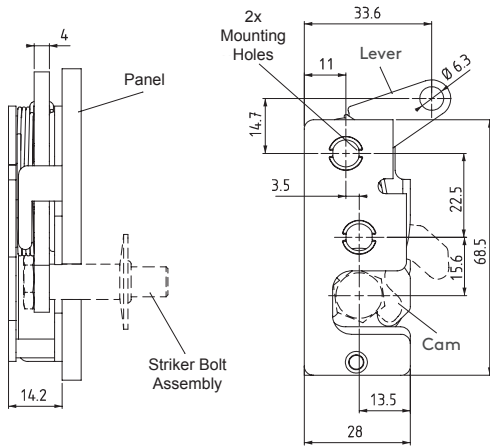
- Ideal applications for heating and ventilation panels

| Item No. | Version Type |
|----------|--------------|
| 4621     | 1            |
| 4622     | 2            |

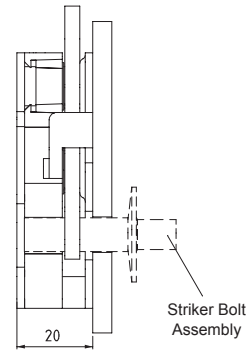


## 2800 Series

## Rotary Latches - Concealed Mini Version



Standard Version



Bumper Version

(Dimensions same as standard version except as shown)

## Specifications:

- Material: Steel
- Finish: Zinc Plated

## Features:

- Push-to-close operation
- Hand-Actuated
- Striker Bolt sold separately, see page 619
- Please contact Essentra for alternate lever types (Bottom, Top, In Line, Perpendicular and Two Point)

| Item No.    | Version  | Mounting Type | Actuation    | Hand Operation |
|-------------|----------|---------------|--------------|----------------|
| 28001411001 | Standard | 7.2mm hole    | Single Stage | Right          |
| 28001411002 | Standard | 7.2mm hole    | Single Stage | Left           |
| 28001421001 | Standard | M6 X 1 Thread | Single Stage | Right          |
| 28001421002 | Standard | M6 X 1 Thread | Single Stage | Left           |
| 28001431001 | Standard | 1/4-20 Thread | Single Stage | Right          |
| 28001431002 | Standard | 1/4-20 Thread | Single Stage | Left           |
| 28001412001 | Standard | 7.2mm hole    | Two Stage    | Right          |
| 28001412002 | Standard | 7.2mm hole    | Two Stage    | Left           |
| 28001422001 | Standard | M6 X 1 Thread | Two Stage    | Right          |
| 28001422002 | Standard | M6 X 1 Thread | Two Stage    | Left           |
| 28001432001 | Standard | 1/4-20 Thread | Two Stage    | Right          |
| 28001432002 | Standard | 1/4-20 Thread | Two Stage    | Left           |
| 28002411001 | Bumper   | 7.2mm hole    | Single Stage | Right          |
| 28002411002 | Bumper   | 7.2mm hole    | Single Stage | Left           |
| 28002421001 | Bumper   | M6 X 1 Thread | Single Stage | Right          |
| 28002421002 | Bumper   | M6 X 1 Thread | Single Stage | Left           |
| 28002431001 | Bumper   | 1/4-20 Thread | Single Stage | Right          |
| 28002431002 | Bumper   | 1/4-20 Thread | Single Stage | Left           |
| 28002412001 | Bumper   | 7.2mm hole    | Two Stage    | Right          |
| 28002412002 | Bumper   | 7.2mm hole    | Two Stage    | Left           |
| 28002422001 | Bumper   | M6 X 1 Thread | Two Stage    | Right          |
| 28002422002 | Bumper   | M6 X 1 Thread | Two Stage    | Left           |
| 28002432001 | Bumper   | 1/4-20 Thread | Two Stage    | Right          |
| 28002432002 | Bumper   | 1/4-20 Thread | Two Stage    | Left           |



# STRIKER BOLTS FOR ROTARY LATCH

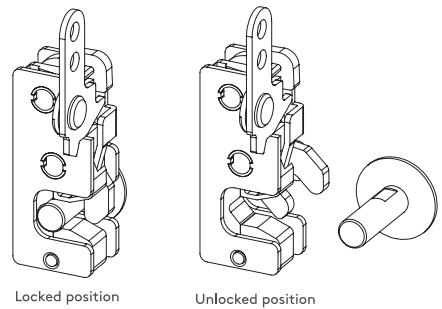
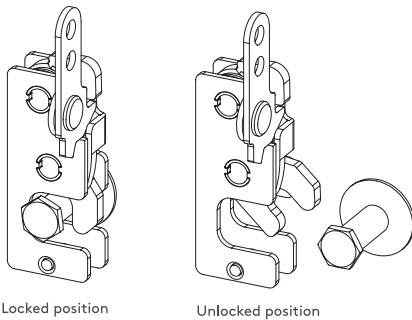
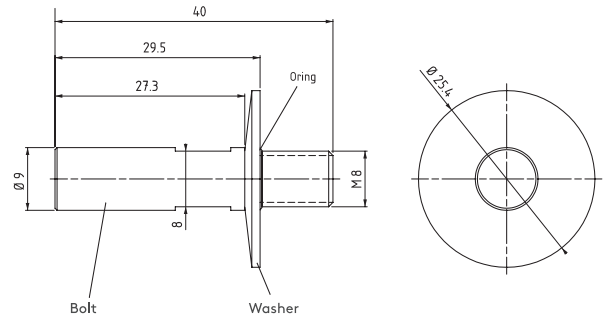
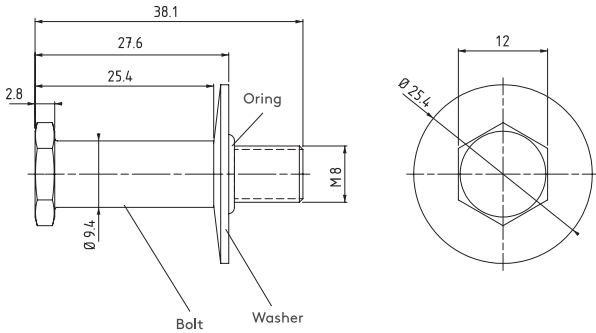
## SB Series

### Striker Bolt - For Concealed Mini Rotary Latch

Version 1



Version 2



**Specifications:**

- Material: Steel
- Finish: Zinc Plated

**Features:**

- Used with Rotary Latch system, see series 2800
- Standard version SB1 is used with 2800 Series Standard Hand Actuated Latches
- Bumper version SB2 is used with 2800 Series Bumper Hand Actuated Latches

| Item No. | Version | Description           |
|----------|---------|-----------------------|
| SB1      | 1       | Standard Rotary Latch |
| SB2      | 2       | Bumper Rotary Latch   |

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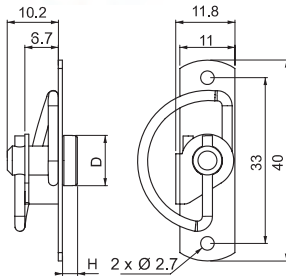
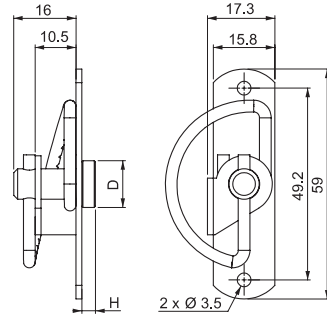
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SEND US AN EMAIL  
[sales@essentracomponents.com](mailto:sales@essentracomponents.com)



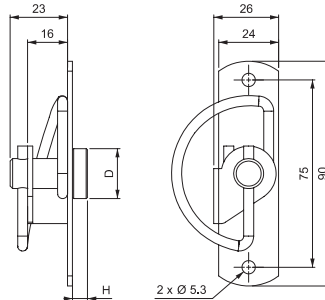
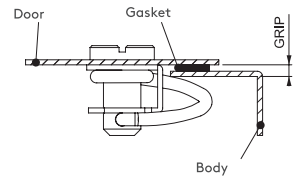
SEND US A FAX  
 866 561 6617

**SPECIALTY LATCHES - COMPRESSION SPRING LATCHES****045 Series****Compression Spring Latch****Version 1 - Small****Version 2 - Medium****Specifications:**

- Material:  
Body: See Table  
Driver: See Table  
Spring: Stainless Steel

**Features:**

- Fix small panels to frames with ease
- Quarter-turn locking feature
- For doors with a bend of 24mm

**Version 3 - Large**

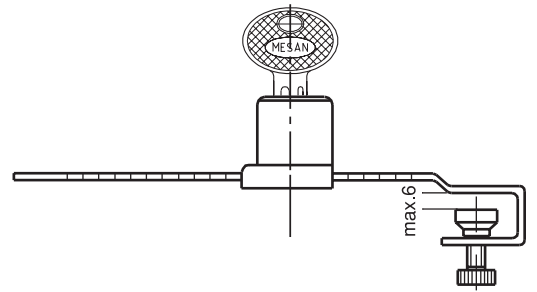
| Driver Style | Size   | Ø D  | H    |
|--------------|--------|------|------|
|              | Small  | 10.0 | 3.0  |
|              | Medium | 12.0 | 3.5  |
|              | Large  | 20.0 | 5.0  |
|              | Small  | 10.5 | 12.0 |
|              | Medium | 13.0 | 17.5 |

| Item No.   | Version | Body/Driver Material | Finish        | Driver Description | Driver Style | Cam Description |
|------------|---------|----------------------|---------------|--------------------|--------------|-----------------|
| 0451401241 | 1       | Stainless Steel      | Natural       | Slot, Small        | 12           | Smooth Spring   |
| 0451401341 | 1       | Stainless Steel      | Natural       | Knurled, Small     | 13           | Smooth Spring   |
| 0452402242 | 2       | Stainless Steel      | Natural       | Slot, Medium       | 22           | Smooth Spring   |
| 0452402252 | 2       | Stainless Steel      | Natural       | Slot, Medium       | 22           | Serrated Spring |
| 0452402342 | 2       | Stainless Steel      | Natural       | Knurled, Medium    | 23           | Smooth Spring   |
| 0452402352 | 2       | Stainless Steel      | Natural       | Knurled, Medium    | 23           | Serrated Spring |
| 0453403243 | 3       | Stainless Steel      | Natural       | Slot, Large        | 32           | Smooth Spring   |
| 0453403253 | 3       | Stainless Steel      | Natural       | Slot, Large        | 32           | Serrated Spring |
| 0451631241 | 1       | Steel                | Chrome Plated | Slot, Small        | 12           | Smooth Spring   |
| 0451631341 | 1       | Steel                | Chrome Plated | Knurled, Small     | 13           | Smooth Spring   |
| 0452632242 | 2       | Steel                | Chrome Plated | Slot, Medium       | 22           | Smooth Spring   |
| 0452632252 | 2       | Steel                | Chrome Plated | Slot, Medium       | 22           | Serrated Spring |
| 0452632342 | 2       | Steel                | Chrome Plated | Knurled, Medium    | 23           | Smooth Spring   |
| 0452632352 | 2       | Steel                | Chrome Plated | Knurled, Medium    | 23           | Serrated Spring |
| 0453633243 | 3       | Steel                | Chrome Plated | Slot, Large        | 32           | Smooth Spring   |
| 0453633253 | 3       | Steel                | Chrome Plated | Slot, Large        | 32           | Serrated Spring |



# SPECIALTY LATCHES - GLASS DOOR & FURNITURE LOCKS

## 020 Series Sliding Glass Door Latches

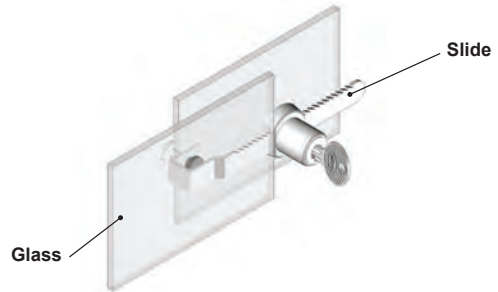


**Specifications:**

- Material:  
Body: Zinc Alloy  
Slide: Stainless Steel  
Finish: Chrome Plated  
Strike Plate: Steel, Zinc Plated
- Two keys supplied with every lock
- Zinc Alloy is DIN-EN 1774 rated

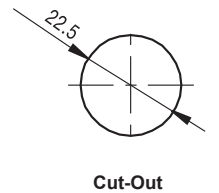
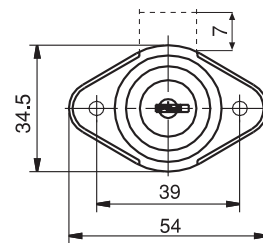
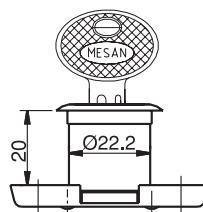
**Features:**

- Ideal application for glass cabinets and show cases

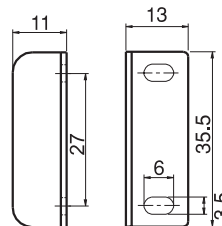


| Item No. | Cylinder Description |
|----------|----------------------|
| 02001    | Keyed Alike          |
| 02002    | Keyed to Differ      |

## 030 Series Furniture Locks



**Strike Plate**

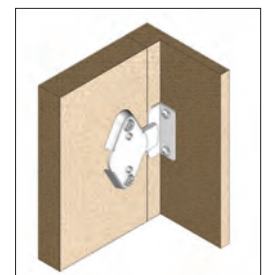


**Specifications:**

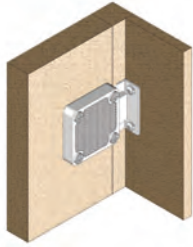
- Material:  
Body: Zinc Alloy  
Cam: Steel  
Finish: Chrome Plated  
Strike Plate: Steel, Zinc Plated
- Zinc Alloy is DIN-EN 1774 rated
- Strike plate sold separately
- Two keys supplied with every lock

**Features:**

- Ideal application for furniture latching



| Item No. | Cylinder Description | Strike Plate Item No. |
|----------|----------------------|-----------------------|
| 03001    | Keyed Alike          | 030A1                 |
| 03002    | Keyed to Differ      | 030A1                 |

**SPECIALTY LATCHES - FURNITURE & GLASS DOOR LOCKS****032 Series  
Furniture Locks****Specifications:**

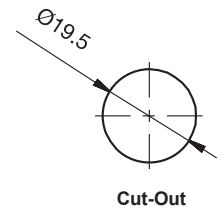
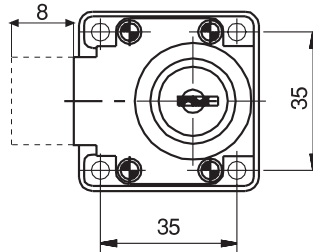
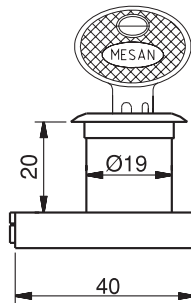
- Material:  
Body: Zinc Alloy  
Cam: Steel  
Finish: Chrome Plated  
Strike Plate: Steel, Zinc Plated
- Zinc Alloy is DIN-EN 1774 rated
- Two keys supplied with every lock

**Features:**

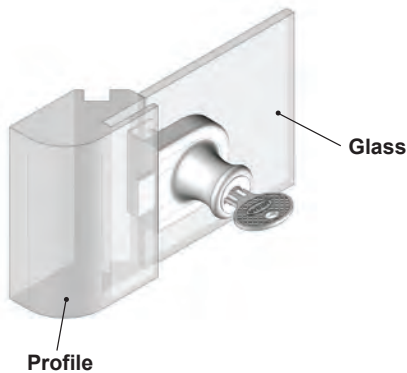
- Ideal application for furniture latching

**Strike Plate - Optional**

- Item No. 030A1
- Ordered separately

**⚠ STRIKE PLATE SOLD SEPARATELY, SEE TABLE.**

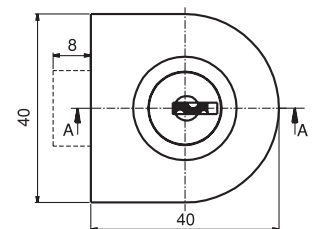
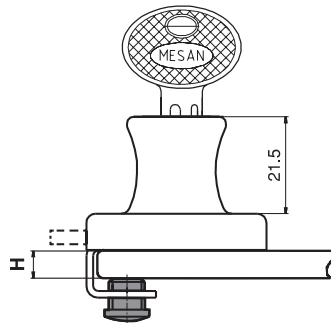
| Item No. | Cylinder Description | Strike Plate Item No. |
|----------|----------------------|-----------------------|
| 03201    | Keyed Alike          | 030A1                 |
| 03202    | Keyed to Differ      | 030A1                 |

**021 Series  
Glass Door Locks****Specifications:**

- Material:  
Body: Zinc Alloy  
Slide: Stainless Steel  
Finish: Chrome Plated
- Two keys supplied with every lock
- Zinc Alloy is DIN-EN 1774 rated

**Features:**

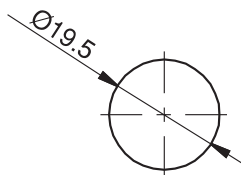
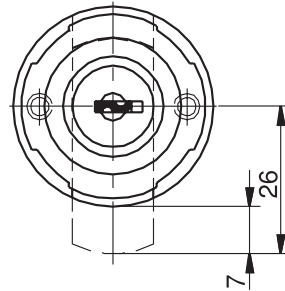
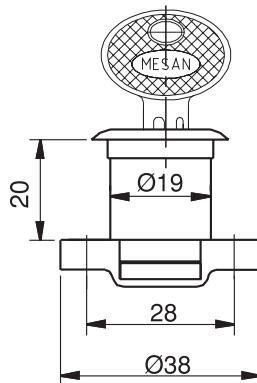
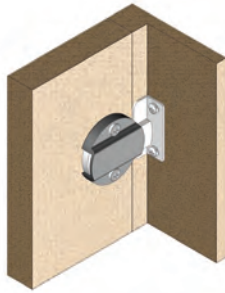
- Ideal application for glass cabinets and display cases



| Item No. | Key Type        | Glass Thickness (H) |
|----------|-----------------|---------------------|
| 02101    | Keyed Alike     | 4mm - 7mm           |
| 02102    | Keyed Different | 4mm - 7mm           |



**033 Series  
Furniture Locks**



**Cut Out**

**Specifications:**

- Material:  
Body: Nylon Black (PA6 30% GF)  
Cam: Steel  
Strike Plate: Steel, Zinc Plated
- Nylon is DIN-EN ISO 10431
- Strike plate sold separately
- Two keys supplied with every lock

**Features:**

- Ideal application for furniture latching

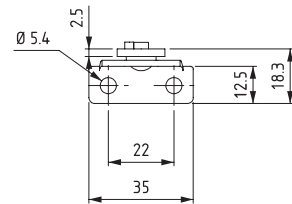
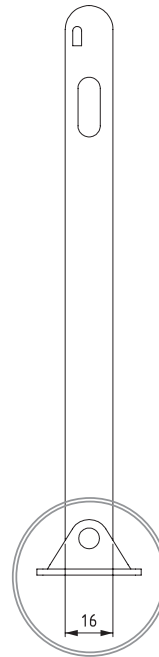
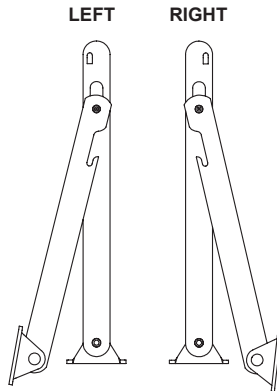
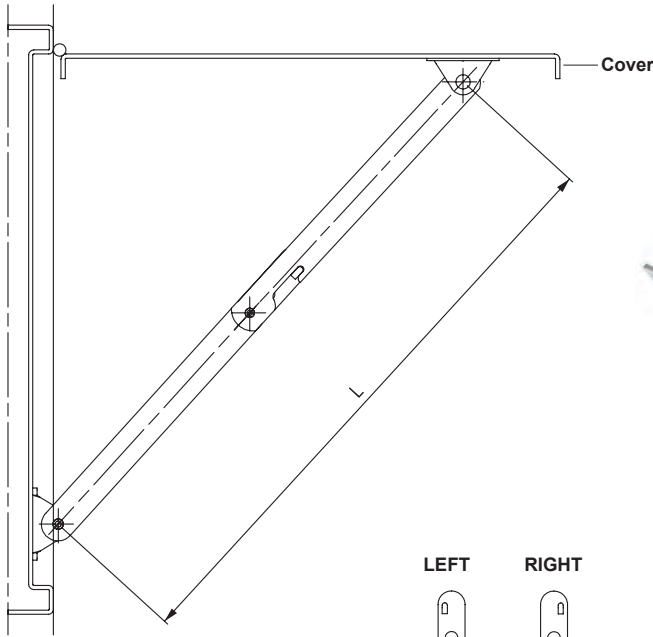
| Item No. | Cylinder Type | Cylinder Description | Strike Plate Item No. |
|----------|---------------|----------------------|-----------------------|
| 03301    | 01            | Keyed alike          | 030A1                 |



# COVER STAYS

## 079 Series Cover Stay Hinge

Body



**Specifications:**

- Material: See Table
- Finish: See Table

**Features:**

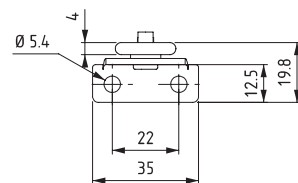
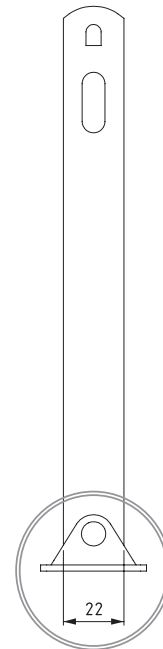
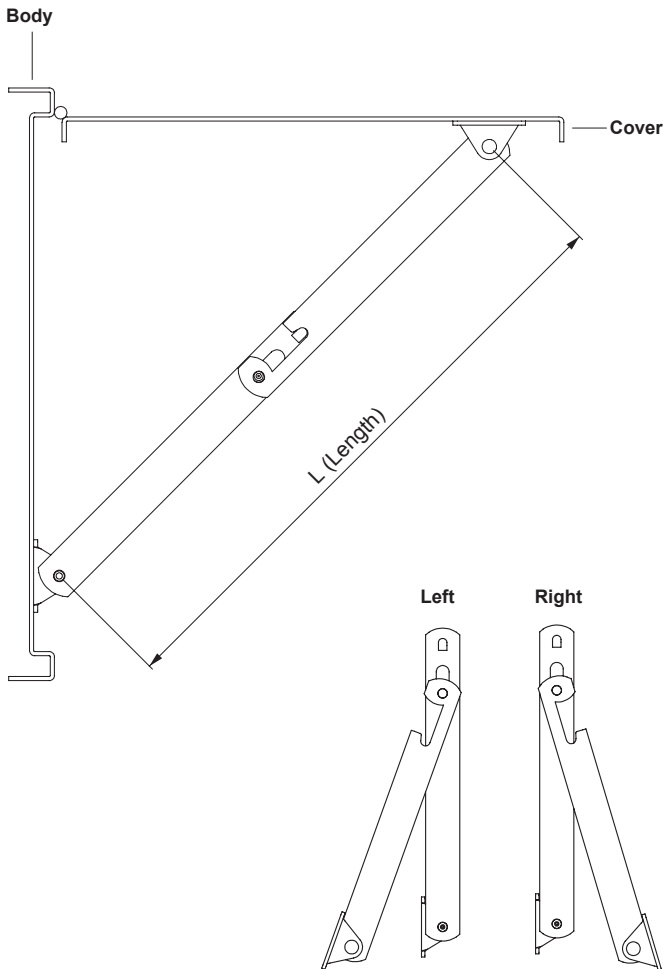
- Applications for electrical panels and machinery covers
- Suitable for left and right hand applications

| Item No.    | Material        | Finish      | Length (L) | Hand Operation |
|-------------|-----------------|-------------|------------|----------------|
| 07940135001 | Stainless Steel | Natural     | 135        | Right          |
| 07940135002 | Stainless Steel | Natural     | 135        | Left           |
| 07940202001 | Stainless Steel | Natural     | 202        | Right          |
| 07940202002 | Stainless Steel | Natural     | 202        | Left           |
| 07940292001 | Stainless Steel | Natural     | 292        | Right          |
| 07940292002 | Stainless Steel | Natural     | 292        | Left           |
| 07963135001 | Steel           | Zinc Plated | 135        | Right          |
| 07963135002 | Steel           | Zinc Plated | 135        | Left           |
| 07963202001 | Steel           | Zinc Plated | 202        | Right          |
| 07963202002 | Steel           | Zinc Plated | 202        | Left           |
| 07963292001 | Steel           | Zinc Plated | 292        | Right          |
| 07963292002 | Steel           | Zinc Plated | 292        | Left           |





**279 Series  
Cover Stay Hinge**



**Specifications:**

- Material: See Table
- Finish: See Table

**Features:**

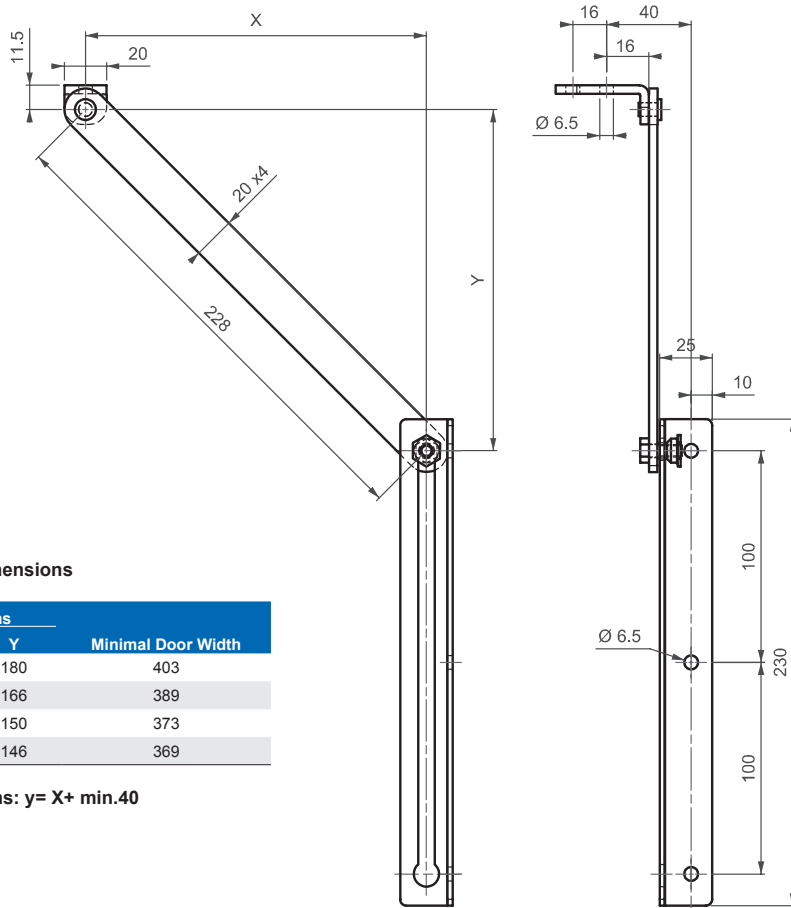
- Suitable for heavy-duty applications
- Manufactured using 4mm thick steel

| Item No.    | Material        | Finish      | Length (L) | Hand Operation |
|-------------|-----------------|-------------|------------|----------------|
| 27940135001 | Stainless Steel | Natural     | 135        | Right          |
| 27940135002 | Stainless Steel | Natural     | 135        | Left           |
| 27940202001 | Stainless Steel | Natural     | 202        | Right          |
| 27940202002 | Stainless Steel | Natural     | 202        | Left           |
| 27940292001 | Stainless Steel | Natural     | 295        | Right          |
| 27940292002 | Stainless Steel | Natural     | 292        | Left           |
| 27963135001 | Steel           | Zinc Plated | 135        | Right          |
| 27963135002 | Steel           | Zinc Plated | 135        | Left           |
| 27963202001 | Steel           | Zinc Plated | 202        | Right          |
| 27963202002 | Steel           | Zinc Plated | 202        | Left           |
| 27963292001 | Steel           | Zinc Plated | 292        | Right          |
| 27963292002 | Steel           | Zinc Plated | 292        | Left           |



# COVER STAYS

## 179 Series Cover Stay Hinge



Installation Dimensions

| Opening Angle | Dimensions |     | Minimal Door Width |
|---------------|------------|-----|--------------------|
|               | X          | Y   |                    |
| 140°          | 140        | 180 | 403                |
| 120°          | 120        | 166 | 389                |
| 110°          | 110        | 150 | 373                |
| 100°          | 100        | 146 | 369                |

For other configurations:  $y = X + \text{min.}40$

Specifications:

- Material: See Table
- Finish: See Table

Features:

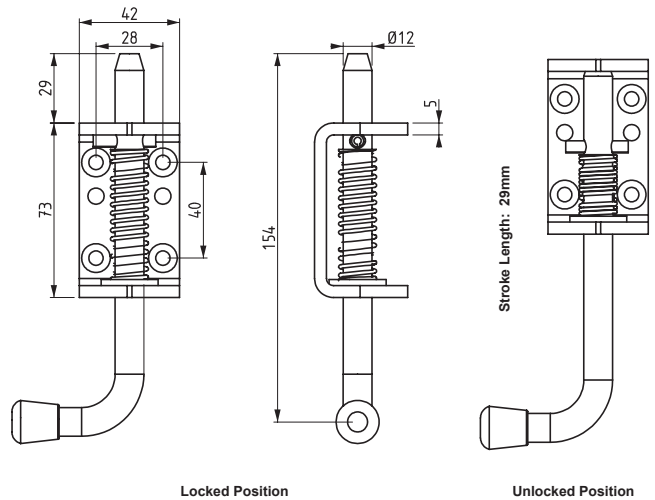
- Cover stay with automatic lock to keep the door propped open
- Suitable for left and right hand applications

| Item No. | Material        | Finish      |
|----------|-----------------|-------------|
| 17940    | Stainless Steel | Natural     |
| 17963    | Steel           | Zinc Plated |

## SPRING LOADED LATCHES

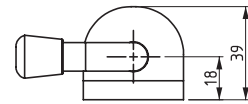


### 2750 Series Spring Loaded Latches



Locked Position

Unlocked Position



## Specifications:

- Material:  
Body: Steel  
Pin: Steel  
Finish: Zinc Plated

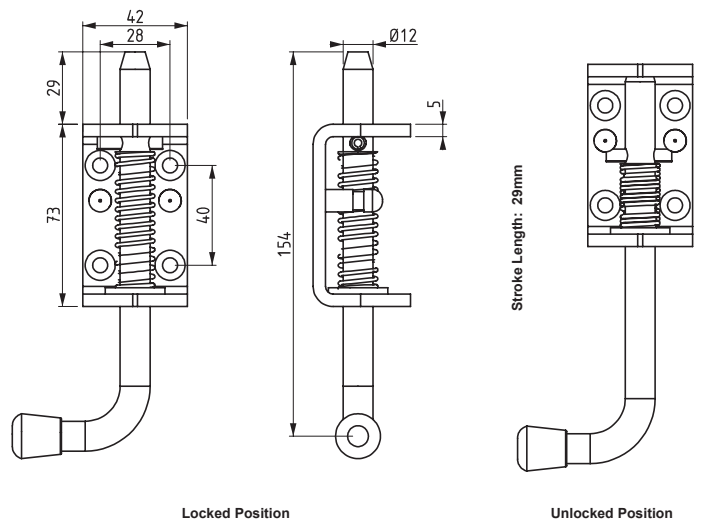
## Features:

- Ideal for metal and wood applications

Item  
No.

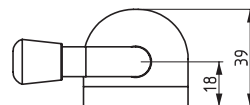
275063

### 2751 Series Spring Loaded Latches



Locked Position

Unlocked Position



## Specifications:

- Material:  
Body: Steel  
Pin: Steel  
Finish: Zinc Plated

## Features:

- Ideal for metal and wood applications

Item  
No.

275163



# DRAW LATCHES

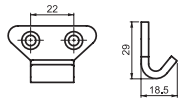
## 340 & 2700 Series Draw Latches

Specifications:

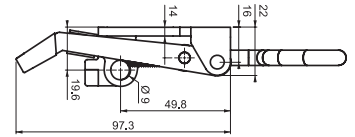
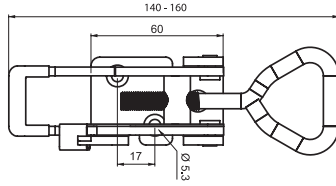
- Material: Steel
- Finish: Zinc Plated



Note: Adjustable



Catch Plate

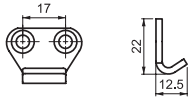


Item No.

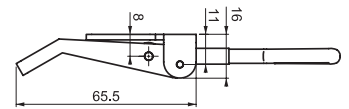
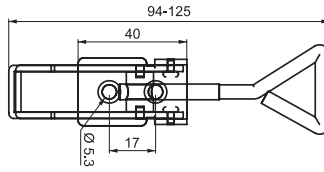
34000135



Note: Adjustable

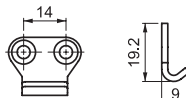


Catch Plate

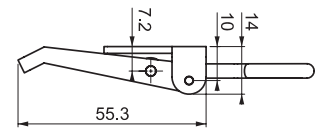
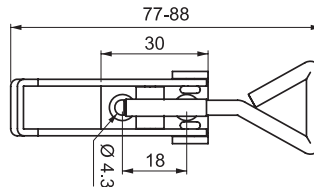


Item No.

34000133

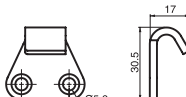


Catch Plate

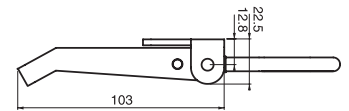
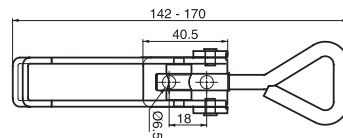


Item No.

34000131

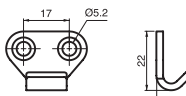


Catch Plate

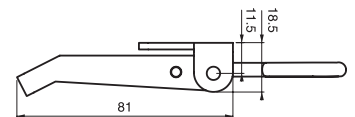
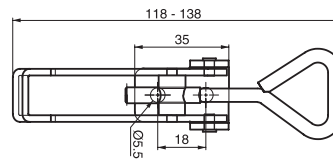


Item No.

270263

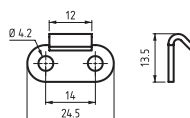


Catch Plate

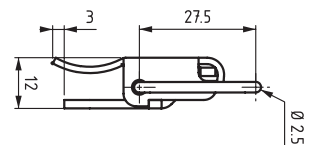
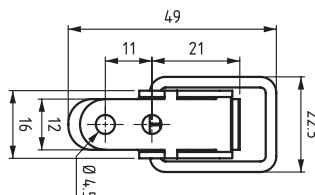


Item No.

270163



Catch Plate



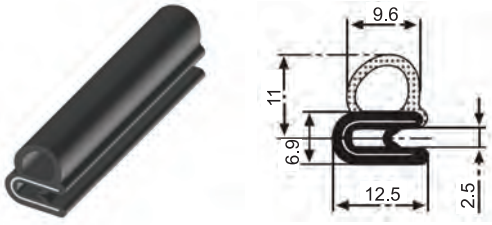
Item No.

270063

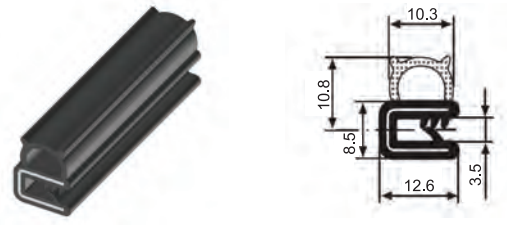


Gaskets - Profile Sealing

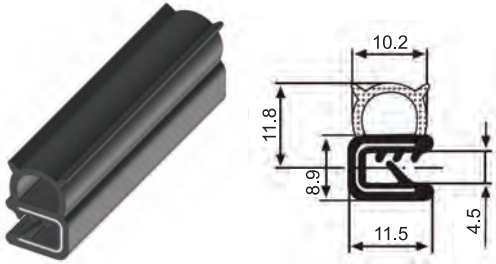
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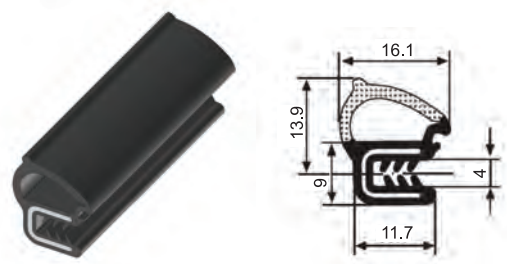
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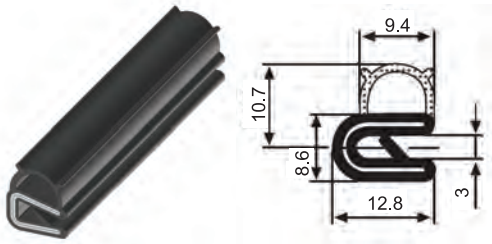
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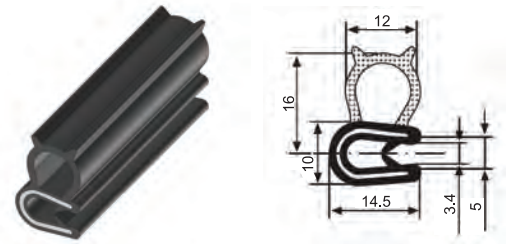
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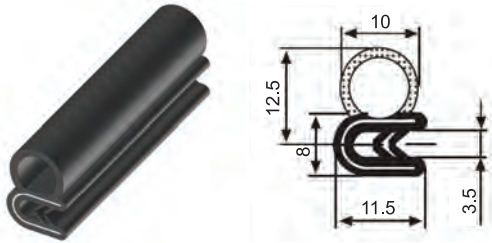
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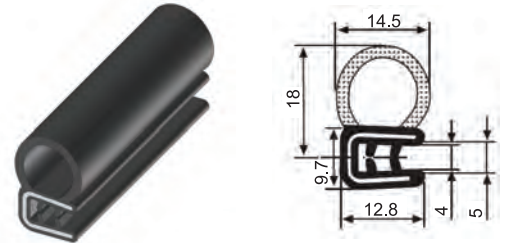
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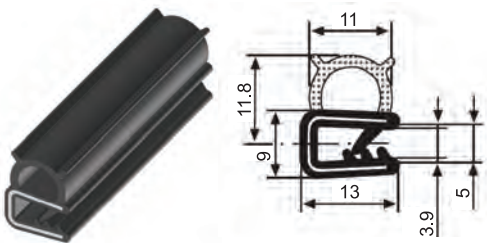
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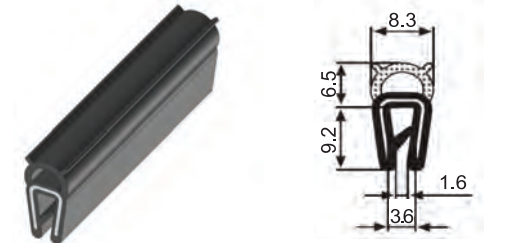
34009029



34009006



34009103

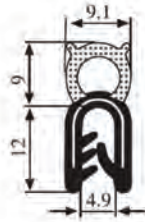


- Specifications:
- Material: EPDM
  - Color: Black

| Item No. | Grip Range |     | Roll Length |  | Pack Qty. |
|----------|------------|-----|-------------|--|-----------|
|          | mm         | ft  | m           |  |           |
| 34009001 | 1.0 - 2.0  | 328 | 100         |  | 1         |
| 34009002 | 1.0 - 3.0  | 328 | 100         |  | 1         |
| 34009003 | 1.0 - 2.5  | 328 | 100         |  | 1         |
| 34009004 | 1.0 - 2.0  | 328 | 100         |  | 1         |
| 34009006 | 1.0 - 3.0  | 328 | 100         |  | 1         |
| 34009007 | 1.0 - 2.0  | 328 | 100         |  | 1         |
| 34009010 | 1.5 - 3.0  | 164 | 50          |  | 1         |
| 34009014 | 1.0 - 3.0  | 164 | 50          |  | 1         |
| 34009029 | 1.5 - 3.5  | 164 | 50          |  | 1         |
| 34009103 | 1.0 - 2.0  | 328 | 100         |  | 1         |

**GASKETS****Gaskets - Profile Sealing**

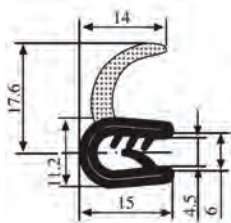
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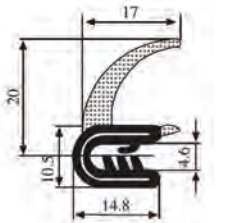
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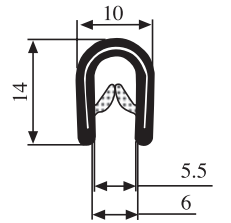
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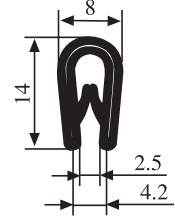
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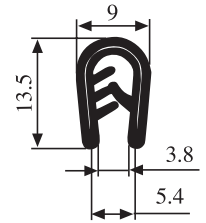
34009516



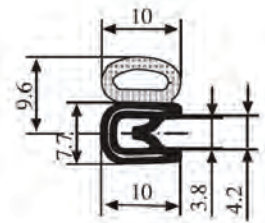
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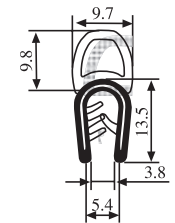
34009523



34009701



34009802



## Specifications:

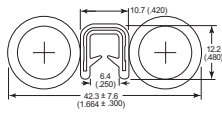
- Material: See Table
- Color: Black

| Item No. | Material | Grip Range |     | Roll Length |  | Pack Qty. |
|----------|----------|------------|-----|-------------|--|-----------|
|          |          | mm         | ft  | m           |  |           |
| 34009105 | EPDM     | 1.0 - 3.5  | 328 | 100         |  | 1         |
| 34009107 | EPDM     | 1.0 - 3.5  | 328 | 100         |  | 1         |
| 34009202 | EPDM     | 2.0 - 4.0  | 164 | 50          |  | 1         |
| 34009203 | EPDM     | 1.0 - 3.5  | 164 | 50          |  | 1         |
| 34009516 | PVC      | 1.0 - 4.0  | 492 | 150         |  | 1         |
| 34009522 | PVC      | 1.0 - 3.0  | 492 | 150         |  | 1         |
| 34009523 | PVC      | 1.5 - 4.0  | 492 | 150         |  | 1         |
| 34009701 | PVC/EPDM | 1.0 - 2.0  | 328 | 100*        |  | 1         |
| 34009802 | PVC/EPDM | 1.5 - 4.0  | 328 | 100         |  | 1         |

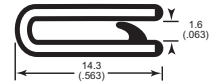
\*Roll Length is 2 separate 50m rolls



**GASK Series**  
Gaskets - Profile Sealing



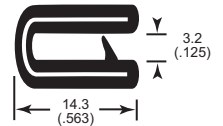
**GASK1050A**



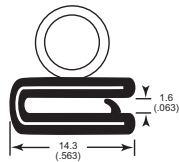
**GASK3200A**



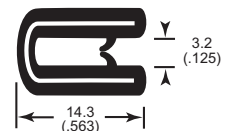
**GASK2200A**



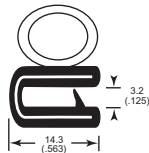
**GASK3300A**



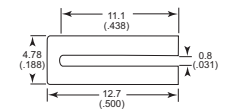
**GASK2300A**



**GASK3500A**



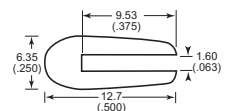
**GASK2400A**



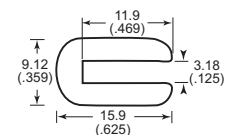
**GASK4100A**



**GASK3100A**



**GASK4200A**



**GASK4300A**

Specifications:

- Material: EPDM OR PVC

Features:

- Internal wire inserts allows for firm clip, except item numbers GASK2200A and GASK2400A
- Can be used as a protective edge on sheet metal
- PVC is best if enclosure will be sealed for long periods

| Item No.  | Material              | Grip | Roll Length | UOM |
|-----------|-----------------------|------|-------------|-----|
| GASK1050A | EPDM & PVC            | 6.40 | 200         | ft  |
| GASK2200A | EPDM & PVC over Metal | 3.20 | 250         | ft  |
| GASK2300A | EPDM & PVC over Metal | 1.60 | 250         | ft  |
| GASK2400A | EPDM & PVC over Metal | 3.20 | 250         | ft  |
| GASK3100A | PVC over Metal        | 1.60 | 250         | ft  |
| GASK3200A | PVC over Metal        | 1.60 | 250         | ft  |
| GASK3300A | PVC over Metal        | 3.20 | 250         | ft  |
| GASK3500A | PVC over Metal        | 3.20 | 250         | ft  |
| GASK4100A | Neoprene              | 0.80 | 500         | ft  |
| GASK4200A | Neoprene              | 1.60 | 500         | ft  |
| GASK4300A | Neoprene              | 3.18 | 250         | ft  |
| GASK5000A | EPDM                  | 3.20 | 20          | m   |

**GASKETS****PRGAS Series  
Gaskets - Profile Sealing**

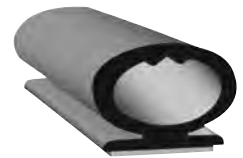
Type 1



Type 2



Type 3



Type 4

**Specifications:**

- Material: EPDM Foam with adhesive backing
- Temperature range: 20° to 150° F
- Flammability: FMVSS 302 & UL 50 rated
- Adhesive is pressure sensitive acrylic
- Mating surface should be free of contaminants and cleaned prior with denatured alcohol

**Features:**

- Recommended for max 25-50% compression
- Suitable for both indoor and outdoor applications
- Excellent resistance to water adsorption, ozone and UV aging

| Item No.   | Type | Material         | Width | Height |
|------------|------|------------------|-------|--------|
| PRGAS1010A | 1    | EPDM Foam Rubber | 12.7  | 12.7   |
| PRGAS1500A | 2    | EPDM Foam Rubber | 19.1  | 14.3   |
| PRGAS2000A | 3    | EPDM Foam Rubber | 15.9  | 9.5    |
| PRGAS3000A | 4    | EPDM Foam Rubber | 8.9   | 12.4   |

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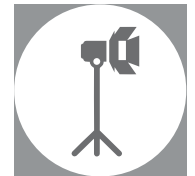
Fitness



Marine



Industrial Manufacturing



Lighting



HVAC



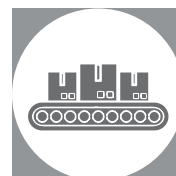
Medical



Science &amp; Laboratory



Audio &amp; Visual



Packaging



Sporting Goods





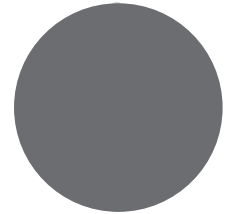
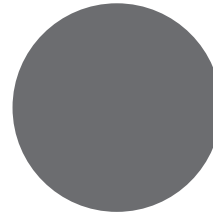
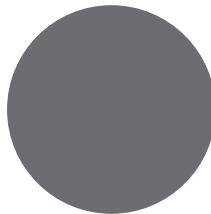
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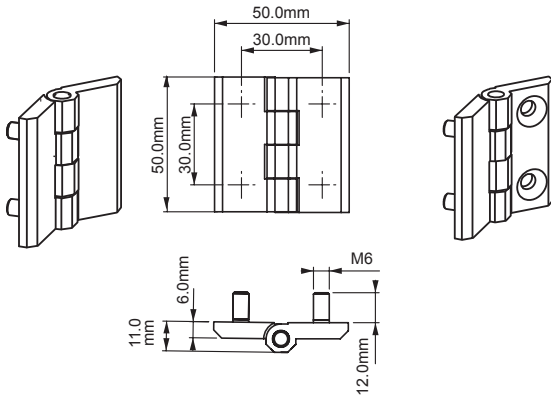
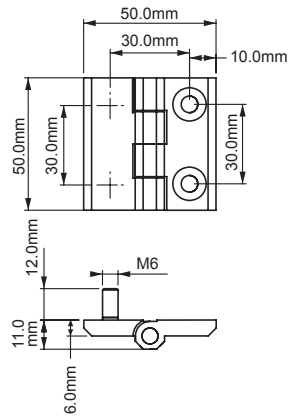
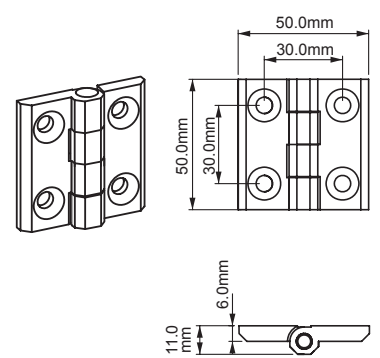
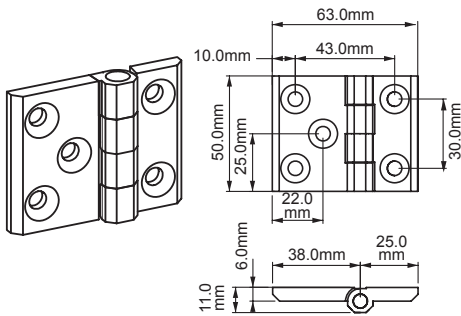
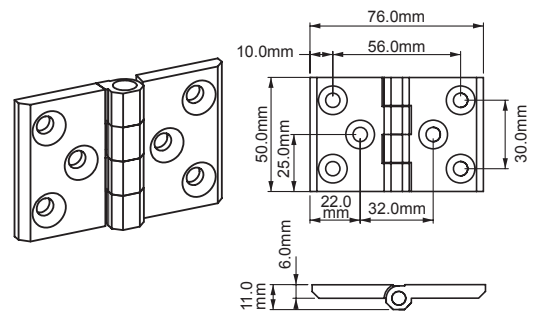
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ESSENTIAL SOLUTIONS

DELIVERED

**SURFACE MOUNT HINGES****099 Series  
Surface Mount Hinges****Version 1****Version 2****Version 4****Version 5****Version 6****Specifications:**

- Material: See Table
- Pin Material: Stainless Steel
- Finish: See Table

**Features:**

- Generally used for plain/flush-mounted doors
- Maximum hinge rotation 270°
- Suitable for left and right hand applications
- Available in three sizes, through-hole and stud version

| Item No. | Material        | Finish              | Version |
|----------|-----------------|---------------------|---------|
| 099111   | Zinc Alloy      | Chrome Plated       | 1       |
| 099112   | Zinc Alloy      | Chrome Plated       | 2       |
| 099114   | Zinc Alloy      | Chrome Plated       | 4       |
| 099115   | Zinc Alloy      | Chrome Plated       | 5       |
| 099116   | Zinc Alloy      | Chrome Plated       | 6       |
| 099121   | Zinc Alloy      | Black Powder Coated | 1       |
| 099122   | Zinc Alloy      | Black Powder Coated | 2       |
| 099124   | Zinc Alloy      | Black Powder Coated | 4       |
| 099125   | Zinc Alloy      | Black Powder Coated | 5       |
| 099126   | Zinc Alloy      | Black Powder Coated | 6       |
| 099404   | Stainless Steel | Electropolished     | 4       |

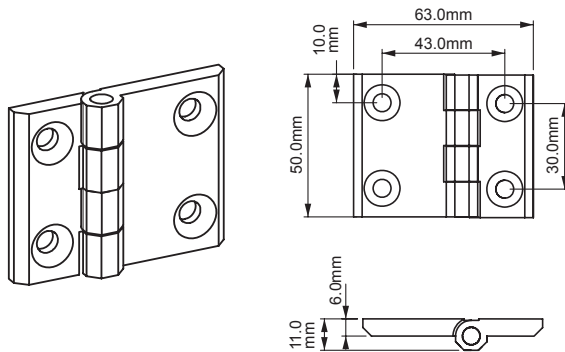
(Continued on next page &gt; )



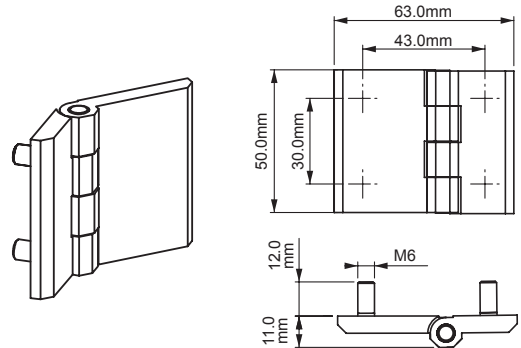
**099 Series**  
Surface Mount Hinges (Continued)



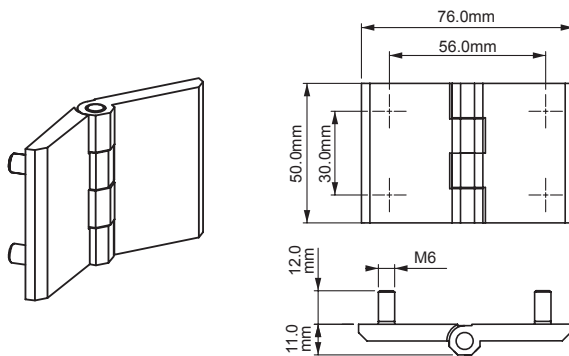
Version 7



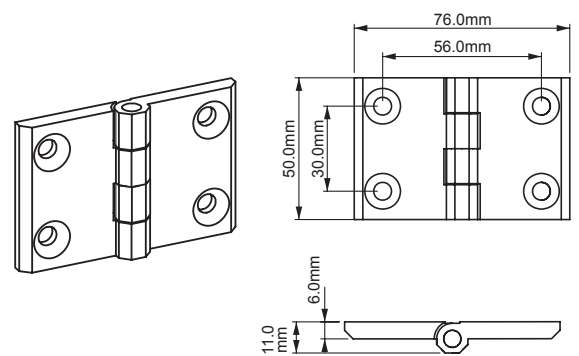
Version 8



VERSION 9



Version 10



## Specifications:

- Material: See Table
- Pin Material: Stainless Steel
- Finish: See Table

## Features:

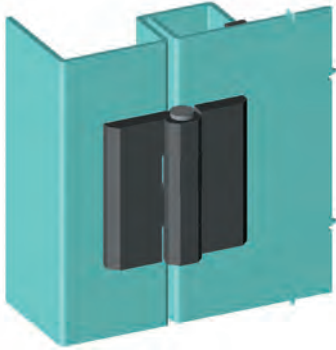
- Generally used for plain/flush-mounted doors
- Maximum hinge rotation 270°
- Suitable for left and right hand applications
- Available in three sizes, through-hole and stud version

| Item No. | Material        | Finish              | Version |
|----------|-----------------|---------------------|---------|
| 099117   | Zinc Alloy      | Chrome Plated       | 7       |
| 099118   | Zinc Alloy      | Chrome Plated       | 8       |
| 099119   | Zinc Alloy      | Chrome Plated       | 9       |
| 0991110  | Zinc Alloy      | Chrome Plated       | 10      |
| 099127   | Zinc Alloy      | Black Powder Coated | 7       |
| 099128   | Zinc Alloy      | Black Powder Coated | 8       |
| 099129   | Zinc Alloy      | Black Powder Coated | 9       |
| 0991210  | Zinc Alloy      | Black Powder Coated | 10      |
| 099407   | Stainless Steel | Electropolished     | 7       |
| 0994010  | Stainless Steel | Electropolished     | 10      |

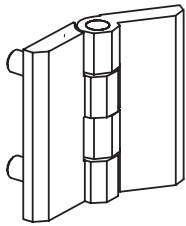


# SURFACE MOUNT HINGES

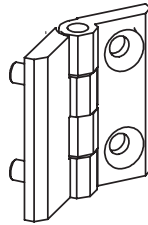
## 199 Series Surface Mount Hinges



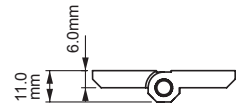
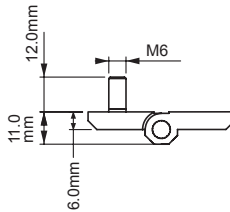
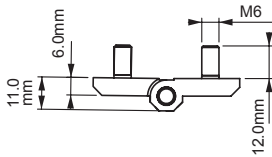
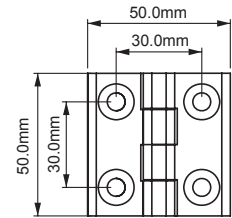
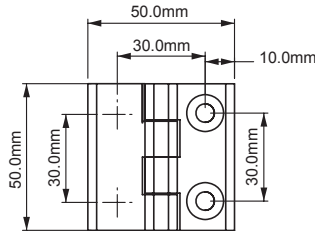
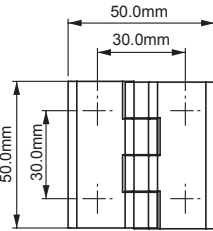
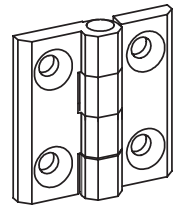
Version 1



Version 2



Version 3



**Specifications:**

- Material:  
Body: Nylon Black (PA6 30% GF)  
Pin: Stainless Steel

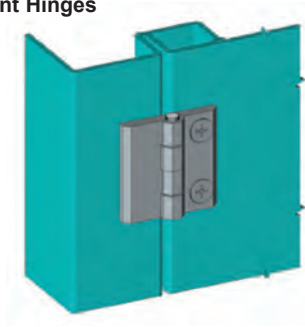
**Features:**

- Generally used for plain/flush-mounted doors
- Maximum hinge rotation 270°
- Suitable for left and right hand applications

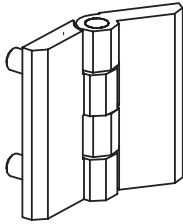
| Item No. | Version |
|----------|---------|
| 199201   | 1       |
| 199202   | 2       |
| 199203M  | 3       |



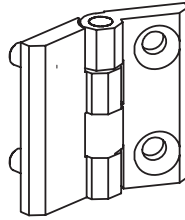
**299 Series  
Surface Mount Hinges**



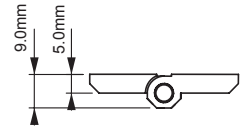
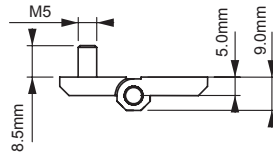
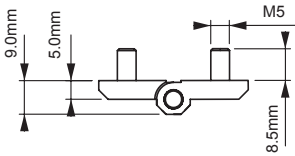
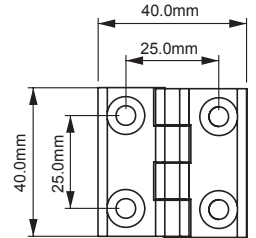
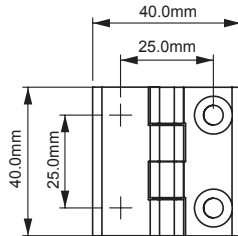
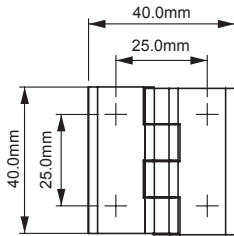
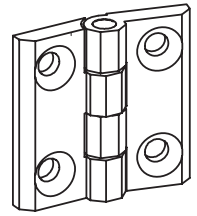
**Version 1**



**Version 2**



**Version 3**



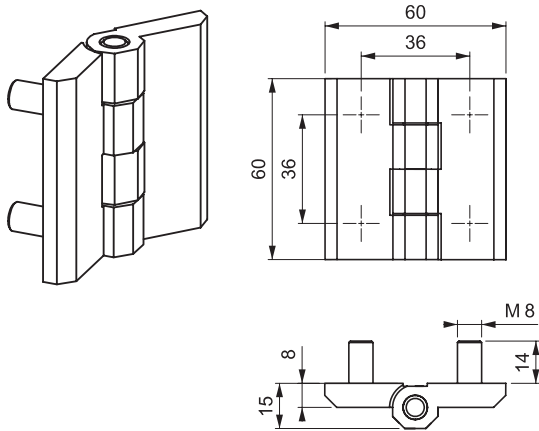
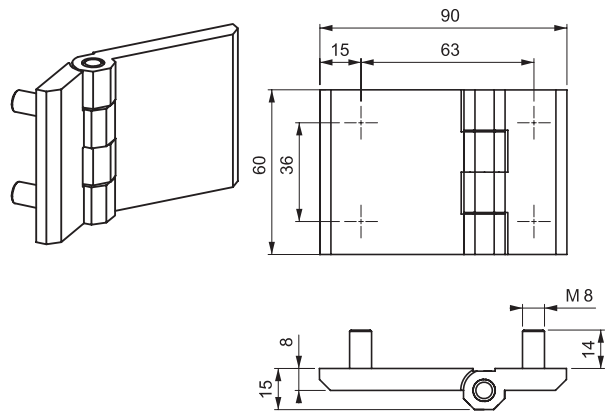
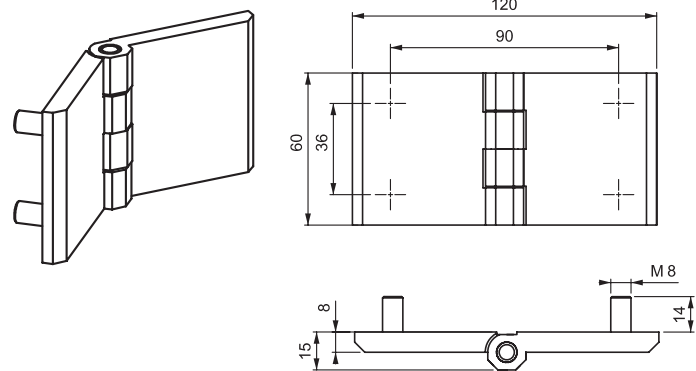
**Specifications:**

- Material:  
Body: See Table  
Pin: Stainless Steel
- Body is DIN-EN 1774 rated

**Features:**

- Generally used for plain/flush-mounted doors
- Maximum hinge rotation 270°
- Suitable for left and right hand applications

| Item Number | Version | Material        | Color / Finish      |
|-------------|---------|-----------------|---------------------|
| 299201      | 1       | Nylon           | Black               |
| 299202      | 2       | Nylon           | Black               |
| 299203      | 3       | Nylon           | Black               |
| 299111      | 1       | Zinc Alloy      | Chrome Plated       |
| 299112      | 2       | Zinc Alloy      | Chrome Plated       |
| 299113      | 3       | Zinc Alloy      | Chrome Plated       |
| 299121      | 1       | Zinc Alloy      | Black Powder Coated |
| 299122      | 2       | Zinc Alloy      | Black Powder Coated |
| 299123      | 3       | Zinc Alloy      | Black Powder Coated |
| 299403      | 3       | Stainless Steel | Electropolished     |

**SURFACE MOUNT HINGES****399 Series  
Surface Mount Hinges****Version 1****Version 2****Version 3****Specifications:**

- Material: Zinc Alloy
- Pin Material: Stainless Steel
- Finish: See Table

**Features:**

- Generally used for plain/flush-mounted isolated heavy doors
- Maximum hinge rotation 270°
- Suitable for left and right hand applications
- Please contact Essentra for Stainless Steel versions

| Item No. | Finish              | Version |
|----------|---------------------|---------|
| 399111   | Chrome Plated       | 1       |
| 399112   | Chrome Plated       | 2       |
| 399113   | Chrome Plated       | 3       |
| 399121   | Black Powder Coated | 1       |
| 399122   | Black Powder Coated | 2       |
| 399123   | Black Powder Coated | 3       |

(Continued on next page &gt; )

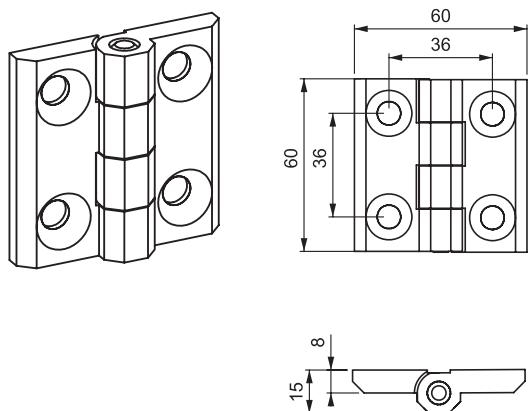
# SURFACE MOUNT HINGES



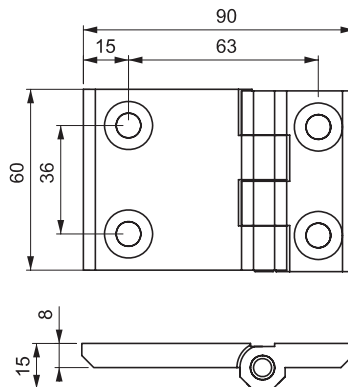
## 399 Series Surface Mount Hinges (Continued)



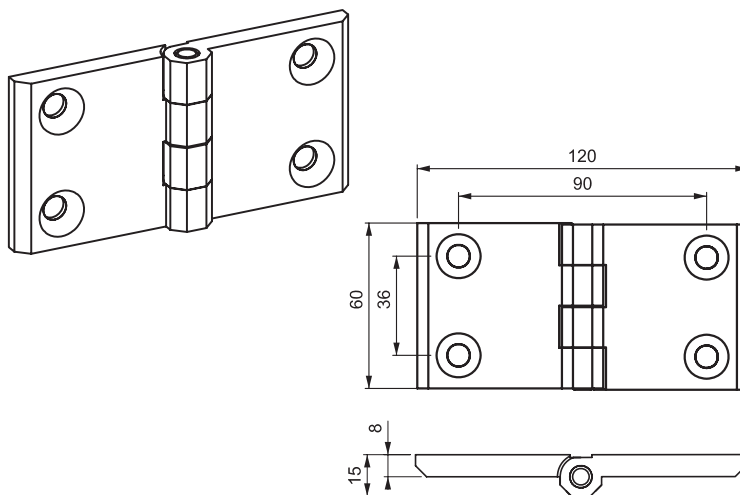
Version 4



Version 5



Version 6



**Specifications:**

- Material: Zinc Alloy
- Pin Material: Stainless Steel
- Finish: See Table

**Features:**

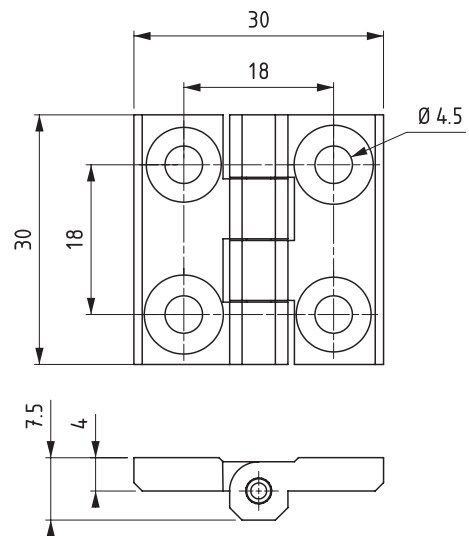
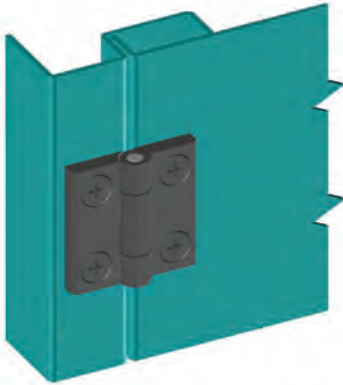
- Generally used for plain/flush-mounted isolated heavy doors
- Maximum hinge rotation 270°
- Suitable for left and right hand applications
- Please contact Essentra for Stainless Steel versions

| Item No. | Finish              | Version |
|----------|---------------------|---------|
| 399114   | Chrome Plated       | 4       |
| 399115   | Chrome Plated       | 5       |
| 399116   | Chrome Plated       | 6       |
| 399124   | Black Powder Coated | 4       |
| 399125   | Black Powder Coated | 5       |
| 399126   | Black Powder Coated | 6       |



# LEAF HINGES - MINI FLUSH MOUNT

1299 Series  
Mini Leaf Hinge - Flush Mount



Specifications:

- Material:  
Body: Zinc Alloy  
Pin: Stainless Steel

Features:

- Generally used for plain/small flush mounted doors
- Maximum hinge rotation 270°
- Suitable for left and right hand applications

| Item No. | Material   | Color               |
|----------|------------|---------------------|
| 129911   | Zinc Alloy | Chrome Plated       |
| 129912   | Zinc Alloy | Black Powder Coated |

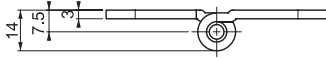
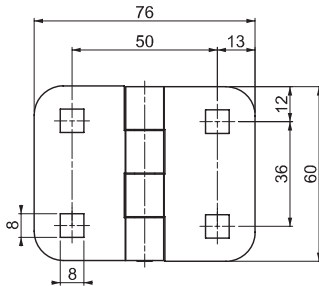
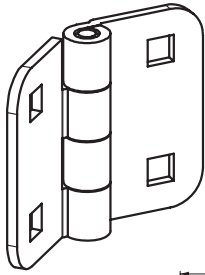




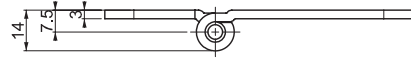
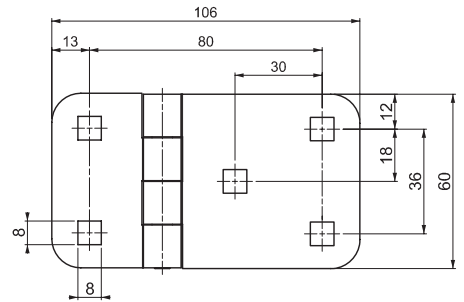
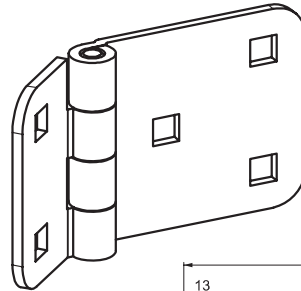
499 Series  
Leaf Hinge



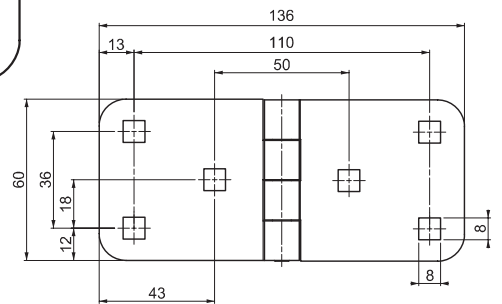
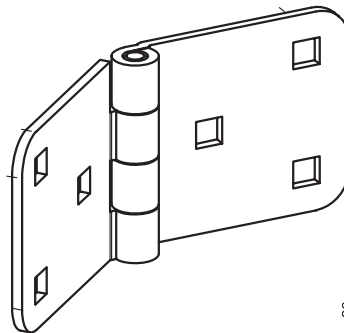
Version 1



Version 2



Version 3



Specifications:

- Material: Steel
- Pin Material: Stainless Steel
- Finish: Black Powder Coated

Features:

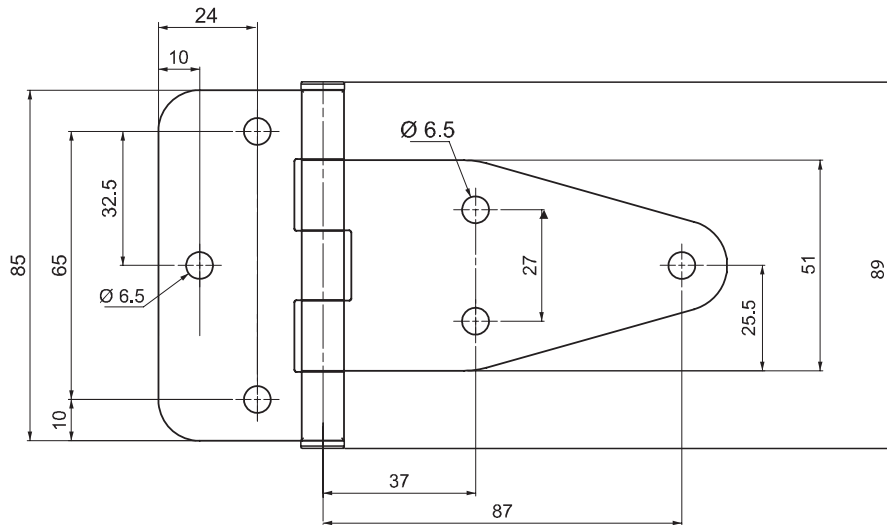
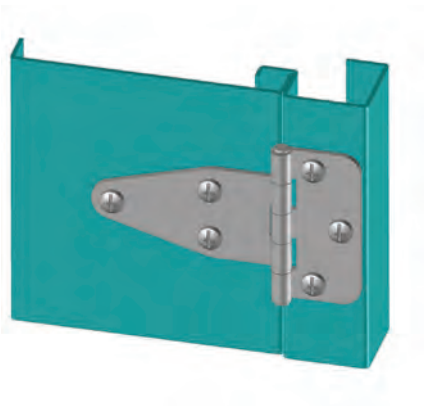
- Generally used for plain/flush-mounted, isolated heavy doors
- Maximum hinge rotation 270°
- Ideal application for generators, machinery covers and electric panels
- M8 X 12mm coach bolts supplied
- Designed for left and right hand applications

| Item No. | Version |
|----------|---------|
| 499621M  | 1       |
| 499622M  | 2       |
| 499623M  | 3       |



# LEAF HINGES

## 599 Series Leaf Hinge



### Specifications:

- Material:  
Body: See Table  
Pin: Stainless Steel  
Finish: See Table
- Bolts are not supplied

### Features:

- Applications: Generators, machinery covers, electric panels
- Maximum hinge rotation 180°
- Both parts are attached by screws or nuts and bolts
- Please contact Essentra for Zinc Plated version

| Item No. | Material        | Finish              |
|----------|-----------------|---------------------|
| 59962    | Steel           | Black Powder Coated |
| 59940    | Stainless Steel | Natural             |



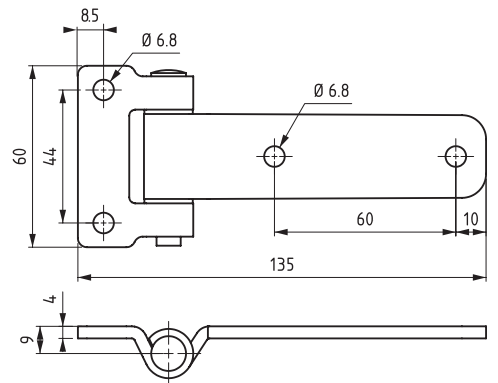
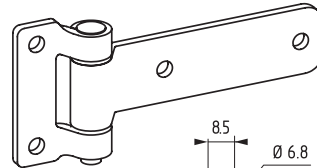
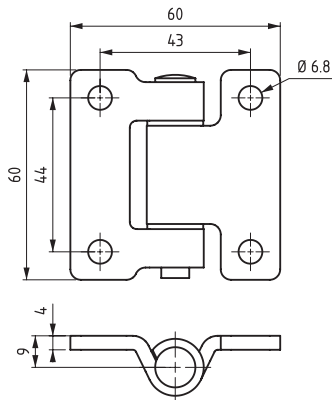
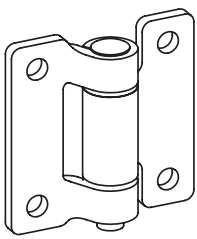
1599 Series  
Leaf Hinge



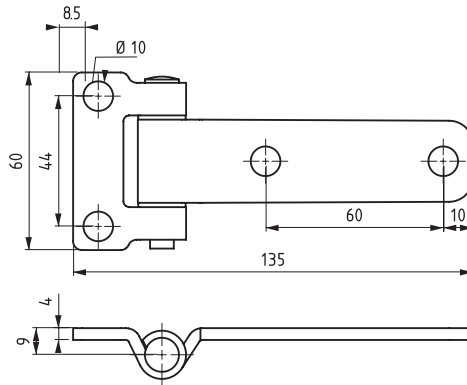
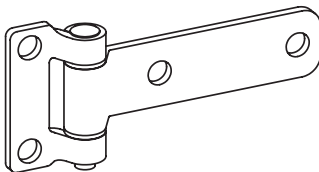
Version 1



Version 2



Version 3



Specifications:

- Material:  
Body: Steel  
Pin: Stainless Steel
- Finish: See Table

Features:

- Generally used for plain/flush mounted, isolated, heavy doors
- Maximum hinge rotation 180°
- Both parts are attached by screws or nuts and bolts
- Applications: Generators, machinery covers, electric panels
- Please contact Essentra for Stainless Steel versions

| Item No. | Finish              | Version |
|----------|---------------------|---------|
| 1599621  | Black Powder Coated | 1       |
| 1599622  | Black Powder Coated | 2       |
| 1599623  | Black Powder Coated | 3       |
| 1599631  | Zinc Plated         | 1       |
| 1599632  | Zinc Plated         | 2       |
| 1599633  | Zinc Plated         | 3       |

(Continued on next page > )



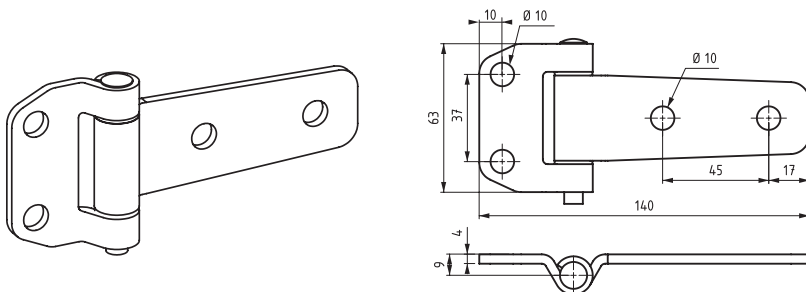
## LEAF HINGES

## 1599 Series

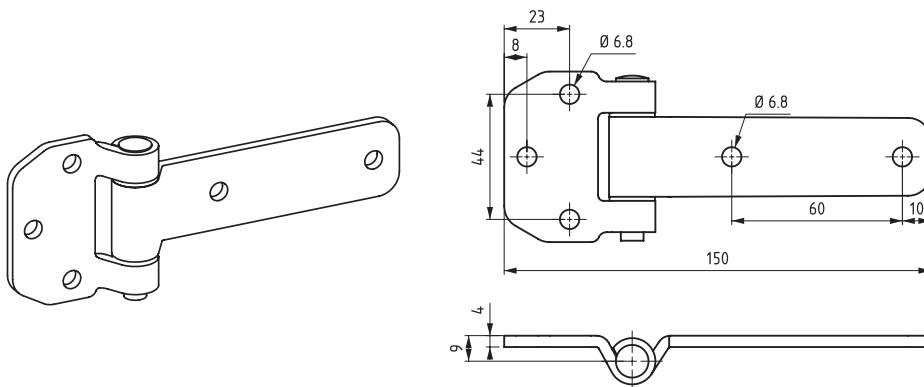
## Leaf Hinge (Continued)



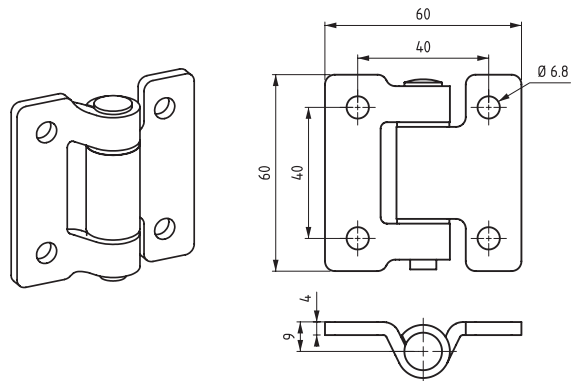
Version 4



Version 5



Version 6



## Specifications:

- Material:  
Body: Steel  
Pin: Stainless Steel
- Finish: See Table

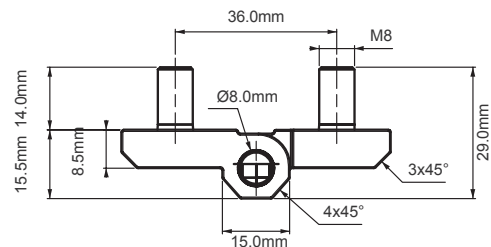
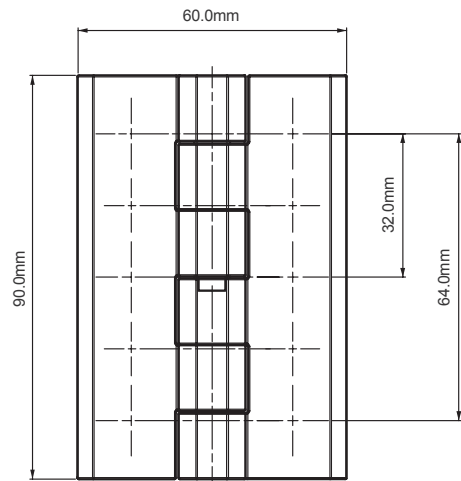
## Features:

- Generally used for plain/flush mounted, isolated, heavy doors
- Maximum hinge rotation 180°
- Both parts are attached by screws or nuts and bolts
- Applications: Generators, machinery covers, electric panels
- Please contact Essentra for Stainless Steel versions

| Item No. | Finish              | Version |
|----------|---------------------|---------|
| 1599624  | Black Powder Coated | 4       |
| 1599625  | Black Powder Coated | 5       |
| 1599626  | Black Powder Coated | 6       |
| 1599634  | Zinc Plated         | 4       |
| 1599635  | Zinc Plated         | 5       |
| 1599636  | Zinc Plated         | 6       |



### 900 Series Leaf Hinge



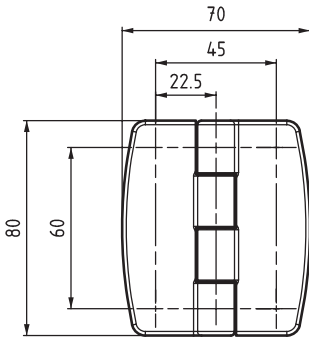
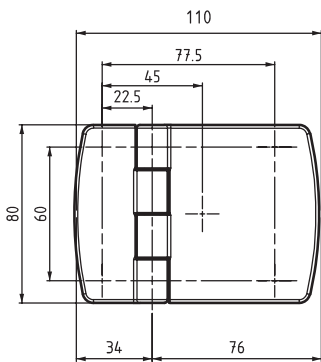
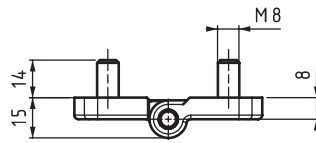
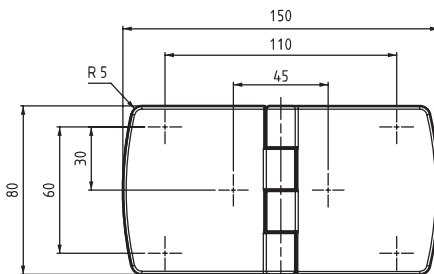
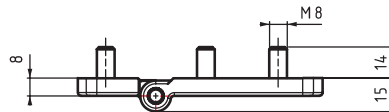
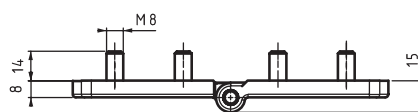
#### Specifications:

- Material: Zinc Alloy
- Pin Material: Stainless Steel
- Screw: Steel
- Finish: See Table

#### Features:

- Generally used for plain flush mounted doors and insulated panels
- Maximum hinge rotation 270°
- Installation with 6 M8 bolts
- Ideal for electric panels and machinery cover applications

| Item No. | Finish              |
|----------|---------------------|
| 90011    | Chrome Plated       |
| 90012    | Black Powder Coated |

**LEAF & FLAG HINGES - FLUSH MOUNT****1399 Series****Leaf & Flag Hinges- Flush Mount****Version 1****Version 2****Version 3****Specifications:**

- Material: Zinc Alloy
- Pin Material: Stainless Steel
- Stainless Steel (AISI 304) hinge pin

**Features:**

- Generally used for plain/flush-mounted isolated heavy doors
- Stud versions fitted with M8 X 14 mm threaded stud
- Maximum hinge rotation 270°
- Suitable for left and right hand applications
- Please contact Essentra for Stainless Steel versions

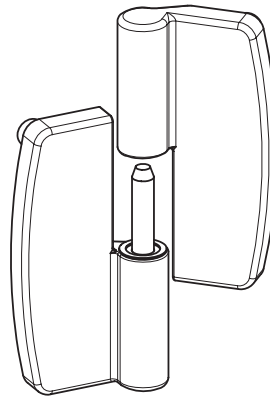
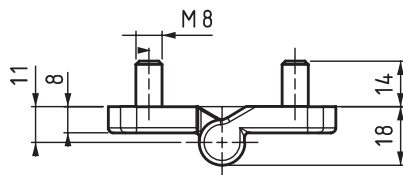
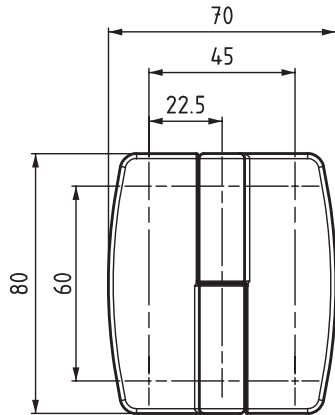


| Item No. | Finish              | Version |
|----------|---------------------|---------|
| 1399111  | Chrome Plated       | 1       |
| 1399112  | Chrome Plated       | 2       |
| 1399113  | Chrome Plated       | 3       |
| 1399121  | Black Powder Coated | 1       |
| 1399122  | Black Powder Coated | 2       |
| 1399123  | Black Powder Coated | 3       |

## LEAF &amp; FLAG HINGES - FLUSH MOUNT



1699 Series  
Leaf & Flag Hinges - Flush Mount



## Specifications:

- Material: Zinc Alloy  
Pin: Stainless Steel
- Stainless Steel (AISI 304) hinge pin

## Features:

- Lift-Off feature for ease of door and panel removal
- Concealed mounting screws prevent external access
- Designed for plain/flush mounted doors
- Maximum hinge rotation 180°



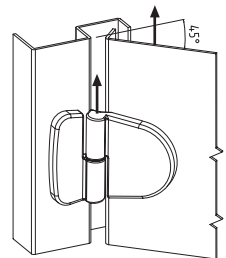
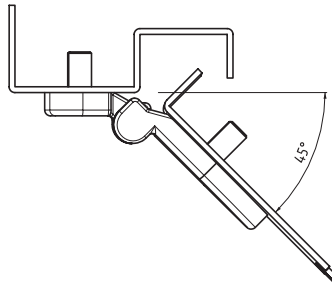
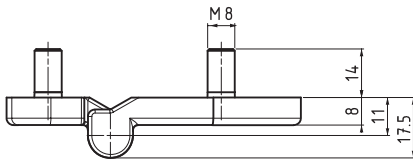
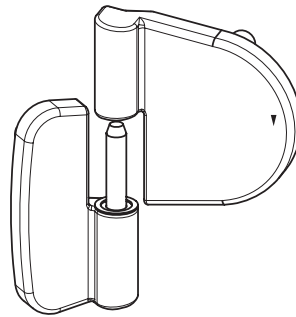
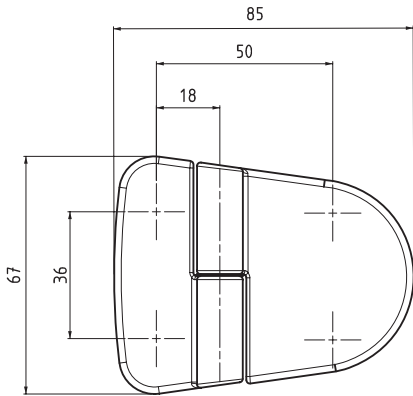
| Item No.   | Finish              | Hand Operation |
|------------|---------------------|----------------|
| 1699111001 | Chrome Plated       | Right          |
| 1699111002 | Chrome Plated       | Left           |
| 1699121001 | Black Powder Coated | Right          |
| 1699122002 | Black Powder Coated | Left           |



# LEAF & FLAG HINGES - FLUSH MOUNT

1499 Series

Leaf & Flag Hinge - Flush Mount



**Specifications:**

- Material: Zinc Alloy
- Pin: Stainless Steel
- Stainless Steel (AISI 304) hinge pin

**Features:**

- Lift-Off feature for ease of door and panel removal
- Concealed mounting screws prevent external access
- Designed for plain/flush mounted doors
- Maximum hinge rotation 180°

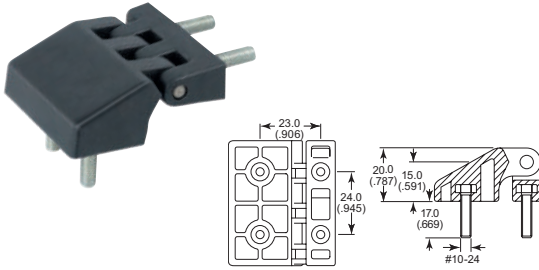
| Item No.  | Finish              | Hand Operation |
|-----------|---------------------|----------------|
| 149911001 | Chrome Plated       | Right          |
| 149911002 | Chrome Plated       | Left           |
| 149912001 | Black Powder Coated | Right          |
| 149912002 | Black Powder Coated | Left           |



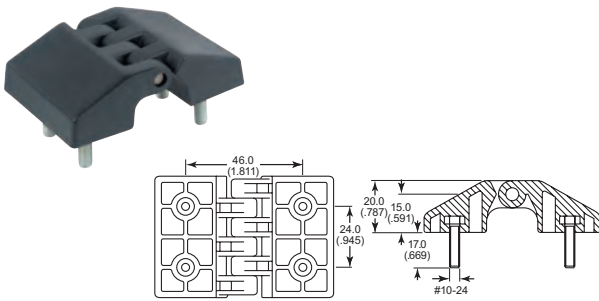


**HISF Series**  
**Surface Mount Hinges - Various**

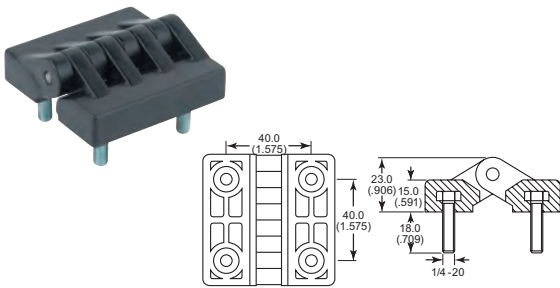
**Type 1**



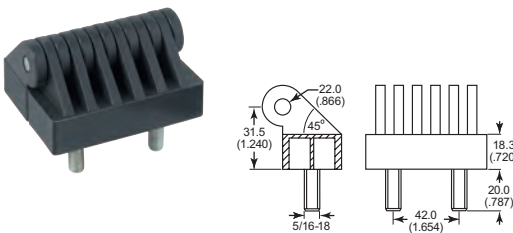
**Type 2**



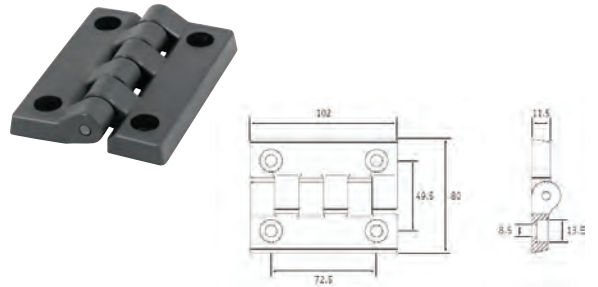
**Type 3**



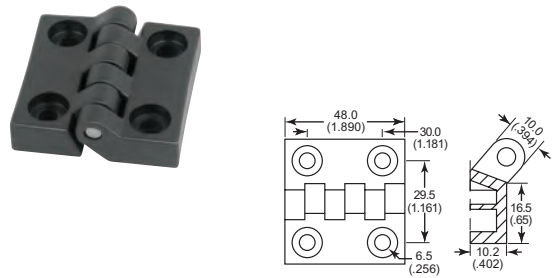
**Type 4**



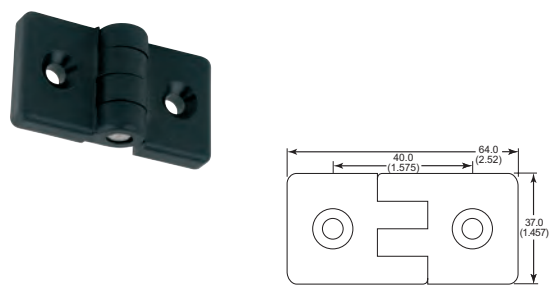
**Type 5**



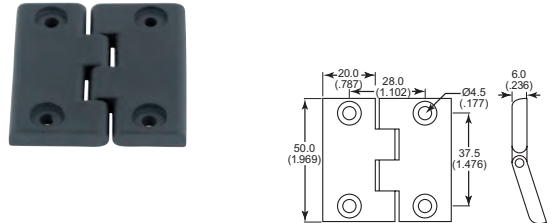
**Type 6**



**Type 7**



**Type 8**



**Specifications:**

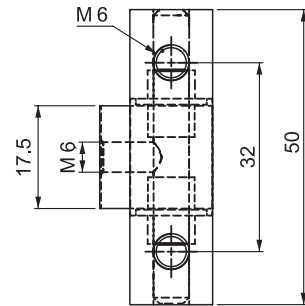
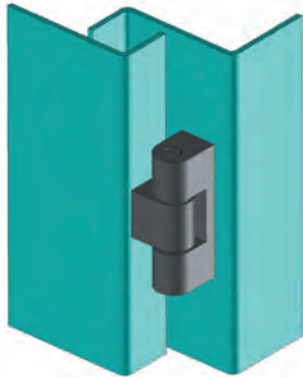
- Material: Nylon Black (PA, Glass-Filled)

**Features:**

- Offered with threaded studs or thru hole versions

| Item No. | Type |
|----------|------|
| HISF010A | 1    |
| HISF020A | 2    |
| HISF030A | 3    |
| HISF040A | 4    |

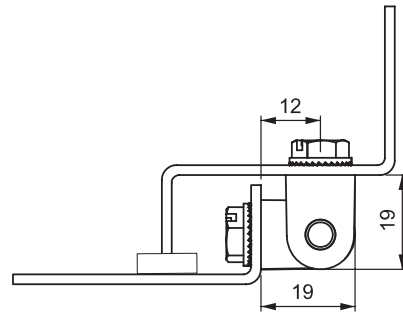
| Item No. | Type |
|----------|------|
| HISF210A | 5    |
| HISF220A | 6    |
| HISF230A | 7    |
| HISF240A | 8    |

**SIDE MOUNT HINGES / BEARING HINGES****693 Series  
Side Mount Hinge****Specifications:**

- Material: Zinc Alloy
- Finish: See Table
- Pin: Stainless Steel
- Zinc Alloy is DIN-EN 1774 rated

**Features:**

- Comes fully assembled
- Maximum hinge rotation 180°
- Ideal for electric panels and machinery cover applications

Item  
No.

69311

69312

Finish

Chrome Plated

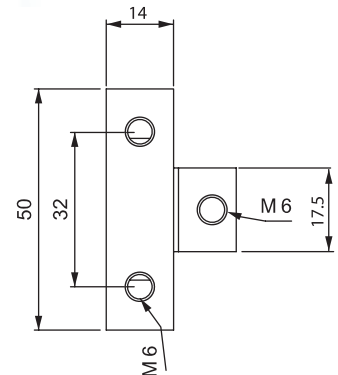
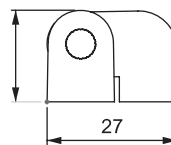
Black Powder Coated

**693 Series  
Bearing Hinge****Specifications:**

- Material: Zinc Alloy
- Pin: Stainless Steel
- Bearing: Delrin
- Finish: See Table
- DIN-EN 1774 rated

**Features:**

- Ideal for electric panels and machinery cover applications
- Maximum hinge rotation 180°

Item  
No.

693112

693122

Finish

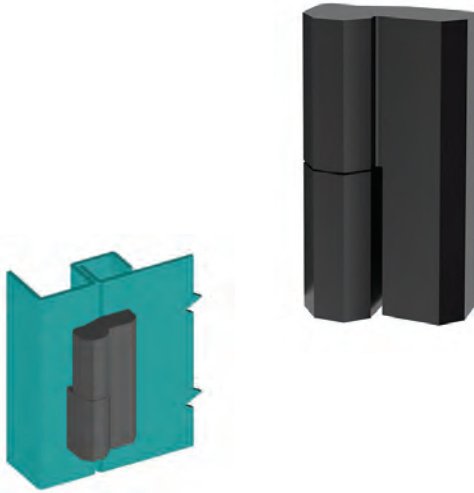
Chrome Plated

Black Powder Coated

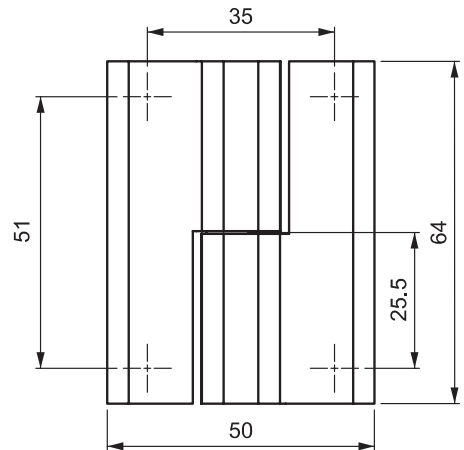
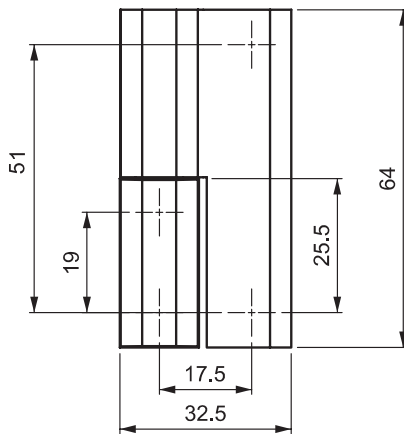
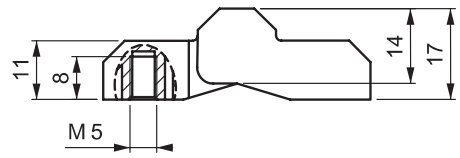
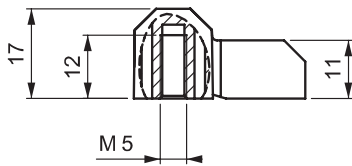
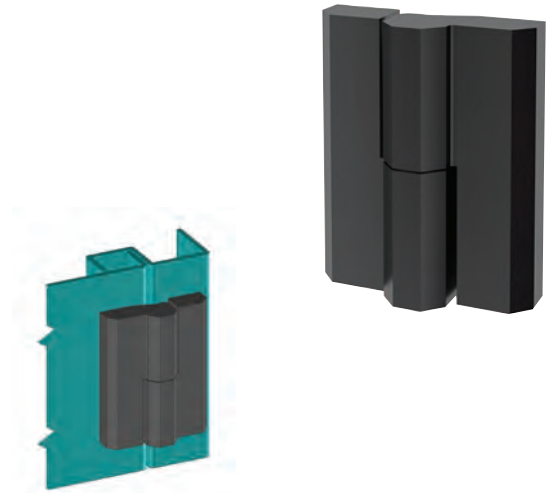
## SURFACE MOUNT HINGES - LIFT-OFF


**699 Series**  
**Surface Mount Hinge - Lift-Off**

Version 1



Version 2



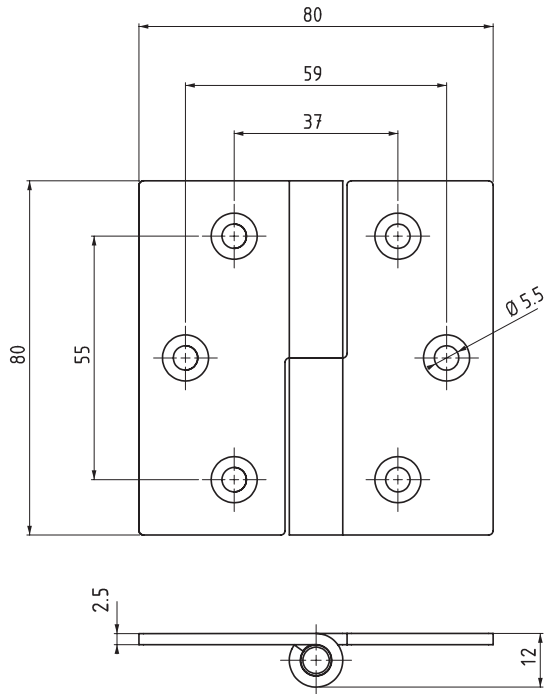
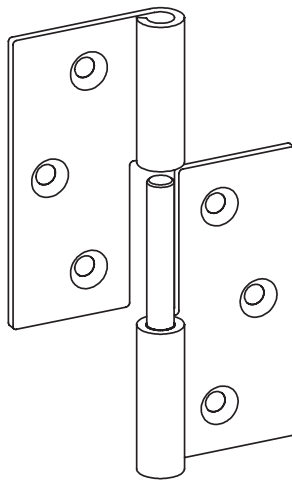
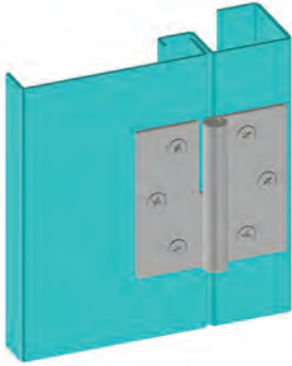
## Specifications:

- Material: Zinc Alloy  
Pin Material: Stainless Steel
- Finish: See Table

## Features:

- Concealed mounting screws prevent external access to hinge
- Hinge rotation 180°
- Ideal for electric panels and machinery cover applications

| Item No.  | Finish              | Version | Hand Operation |
|-----------|---------------------|---------|----------------|
| 699111001 | Chrome Plated       | 1       | Right          |
| 699111002 | Chrome Plated       | 1       | Left           |
| 699112001 | Chrome Plated       | 2       | Right          |
| 699112002 | Chrome Plated       | 2       | Left           |
| 699121001 | Black Powder Coated | 1       | Right          |
| 699121002 | Black Powder Coated | 1       | Left           |
| 699122001 | Black Powder Coated | 2       | Right          |
| 699122002 | Black Powder Coated | 2       | Left           |

**SURFACE MOUNT HINGES - LIFT-OFF****4299 Series****Surface Mount Hinge - Lift-Off****Specifications:**

- Material: See Table
- Pin: Stainless Steel
- Finish: See Table

**Features:**

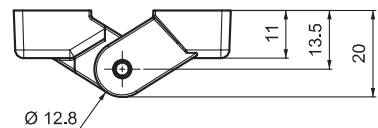
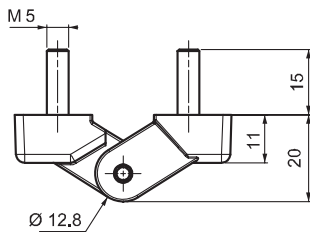
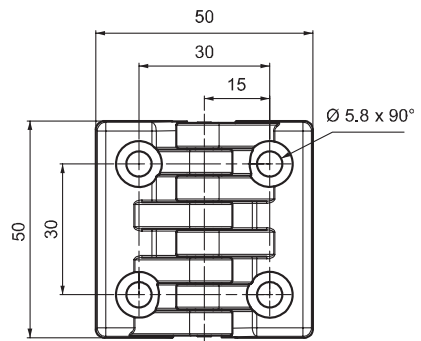
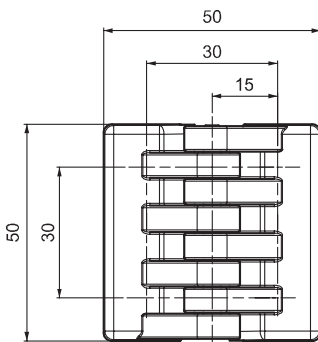
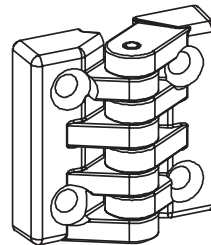
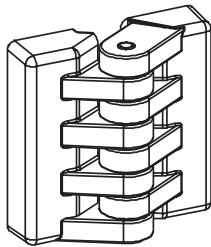
- Designed for plain flush-mounted doors
- Hinge rotation 270°

| Item No.  | Material        | Finish      | Hand Operation |
|-----------|-----------------|-------------|----------------|
| 429963001 | Stainless Steel | Natural     | Right          |
| 429963002 | Stainless Steel | Natural     | Left           |
| 429940001 | Steel           | Zinc Plated | Right          |
| 429940002 | Steel           | Zinc Plated | Left           |



# SURFACE MOUNT BUTT HINGES

## 1199 Series Butt Hinge Surface Mounting



Version 1

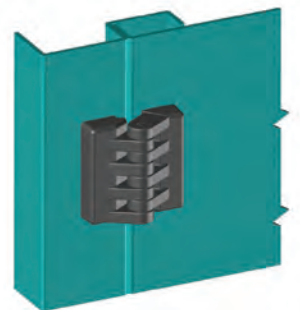
Version 2

**Specifications:**

- Material: See Table  
Body: Nylon (PA6 30% GF)  
Pin: Stainless Steel

**Features:**

- Ideal use for plain/flush mounted doors
- Stud and thru hole options available
- Hinge rotation 180°



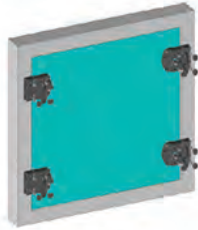
| Item No. | Version |
|----------|---------|
| 1199201  | 1       |
| 1199202  | 2       |



# SURFACE MOUNT HINGES - LIFT-OFF LATCHES & LOCKS

## 712 Series

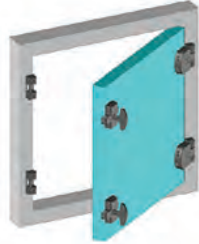
### Surface Mount Hinge - Lift-Off Latch/Lock



**Assembly:**  
Functional locking hinge  
can be mounted left or right  
side of door.



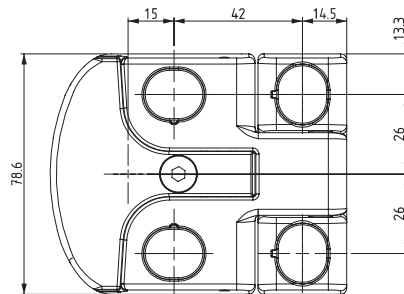
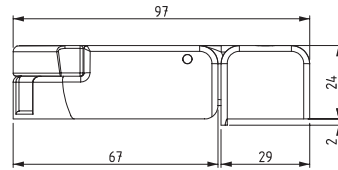
**Right Cover Application:**  
right hinge - left lock



**Left Cover Application:**  
left hinge - right lock



**Removing the door:**  
• lift the handle  
• remove the door

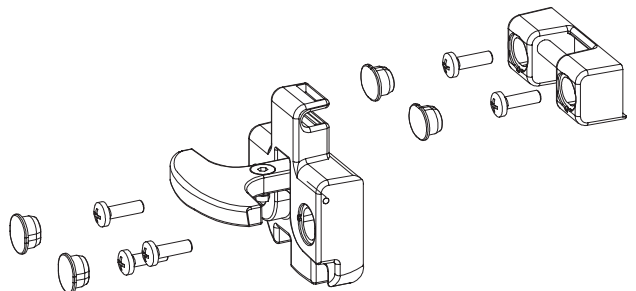


#### Specifications:

- Material: Nylon Black (PA6 30% GF)
- M8 Thread
- Fastening bolts are not included
- Plastic cover plugs are provided with purchase

#### Features:

- Universal lock and hinge design
- Hex head driver insert used to secure hinges (4mm hex head)
- Hinge rotation 180°
- Door can be completely removed by unlocking the hinge



Item  
No.

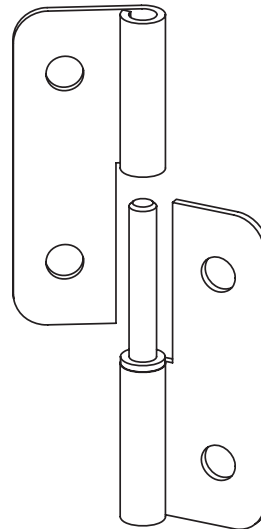
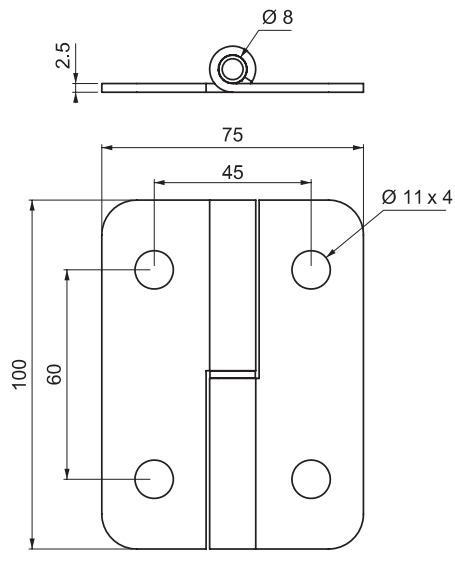
71220M

## SURFACE MOUNT HINGES - HEAVY DUTY LIFT-OFF



## 899 Series

## Surface Mount Hinge - Heavy Duty Lift-Off



## Specifications:

- Material: See Table
- Pin Material: See Table
- Finish: See Table

## Features:

- Ideal for electric panels and machinery cover applications
- Hinge rotation 180°

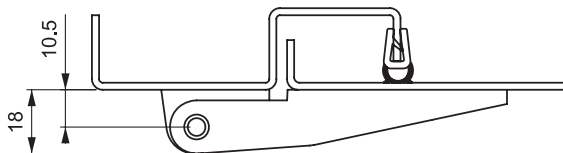
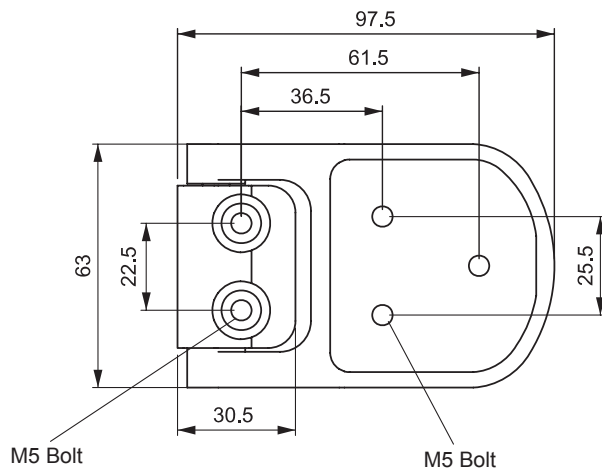
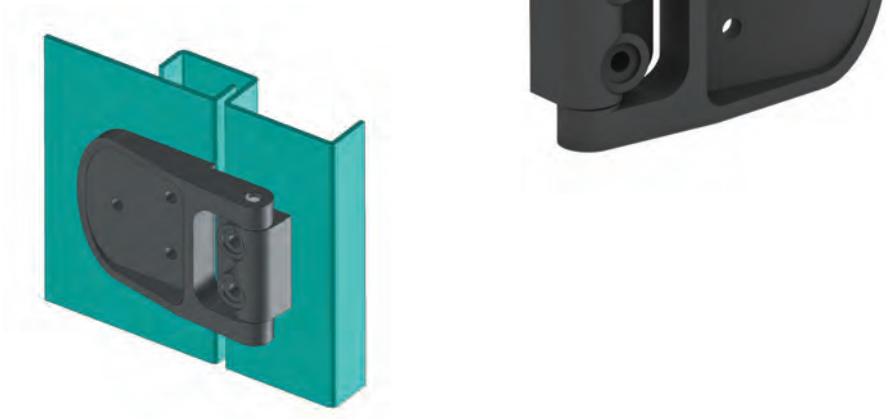
| Item No. | Material        | Finish              | Hand Operation |
|----------|-----------------|---------------------|----------------|
| 89940001 | Stainless Steel | Natural             | Right          |
| 89940002 | Stainless Steel | Natural             | Left           |
| 89962001 | Steel           | Black Powder Coated | Right          |
| 89962002 | Steel           | Black Powder Coated | Left           |
| 89963001 | Steel           | Zinc Plated         | Right          |
| 89963002 | Steel           | Zinc Plated         | Left           |



# SURFACE MOUNT HINGES - HEAVY DUTY

## 300 Series

### Surface Mount Hinge - Heavy Duty



#### Specifications:

- Material:  
Body: Nylon (PA6 30% GF)  
Pin: Stainless Steel
- Finish: Zinc Plated
- Color: Black

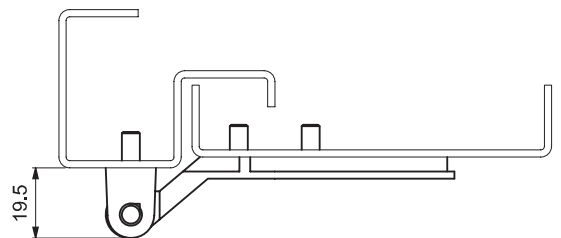
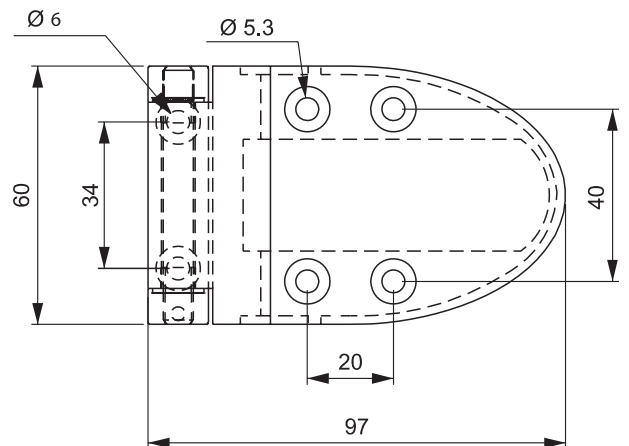
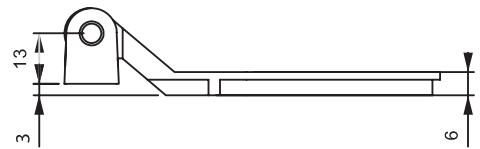
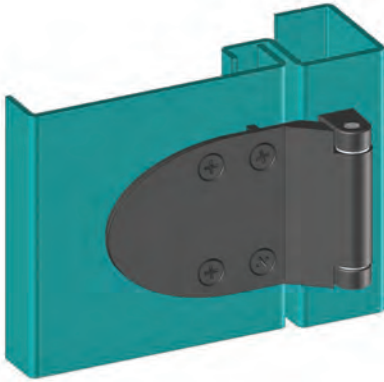
#### Features:

- Central air conditioning units, electrical panels and machinery covers
- Hinge rotation 180°

| Item No. |
|----------|
| 300M     |



## SURFACE MOUNT HINGES - HEAVY DUTY

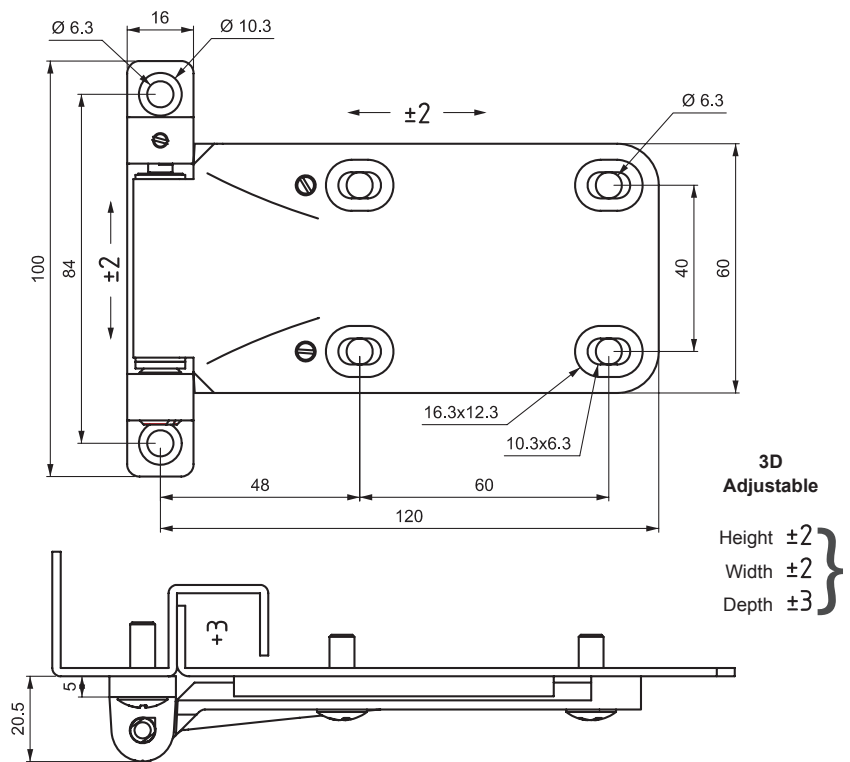
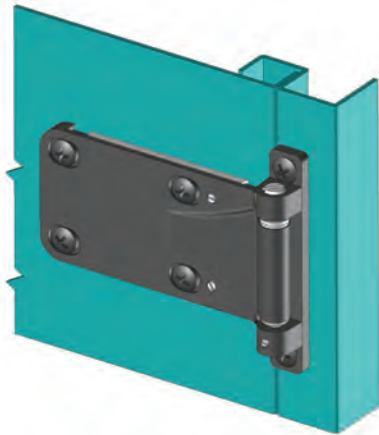

**500 Series**  
**Surface Mount Hinge - Heavy Duty**
**Specifications:**

- Material:  
Body: Zinc Alloy  
Pin: Stainless Steel  
Bearing: Delrin  
Cover: Nylon (PA6 30% GF)
- Finish: Black Powder Coated

**Features:**

- Used on HVAC units, flush-mounted and heavy duty style doors
- Hinge rotation 180°
- Supplied with Nylon hinge cover and stainless steel pin

Item  
No.  
50012

**SURFACE MOUNT HINGES - HEAVY DUTY ADJUSTABLE****800 Series****Surface Mount Hinge - Heavy Duty Adjustable****Specifications:**

- Material:
  - Body: Zinc Alloy
  - Pin: Steel
  - Bearing: Delrin
- Finish: Black Powder Coated
- Body is DIN-EN 1774 rated

**Features:**

- Applications: HVAC, electrical panels, machinery covers
- Suitable for three-dimensional door adjustment
  - Adjustments to height and width +/- 2mm and depth adjustment up to +/- 3mm
- Can be used for flush mount applications

Item No.

80012001

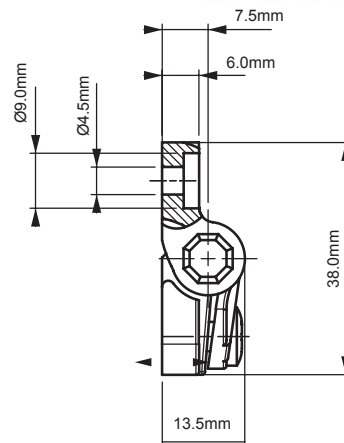
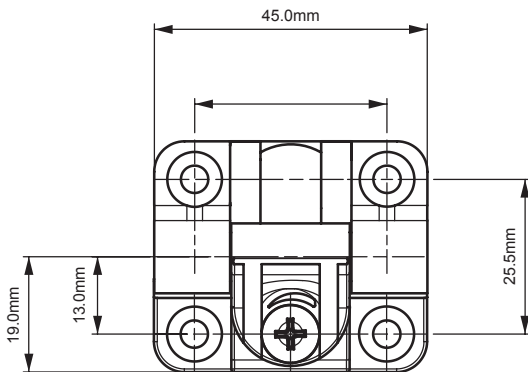
80012002

Hand Operation

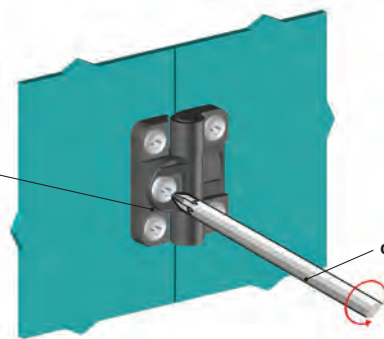
Left

Right

## SURFACE MOUNT HINGES - ADJUSTABLE


**2399 Series**  
**Surface Mount Hinge - Adjustable**


Torque  
Adjustment  
Bolt



Torque setting  
can be adjusted

**Specifications:**

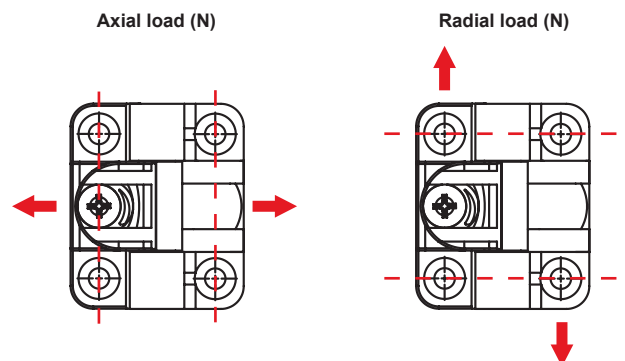
- Material:  
Body: Nylon (PA6 30% GF)  
Screw and Nuts: Stainless Steel
- Finish: Black Powder Coated
- Nylon is DIN-EN ISO 1043-1 rated

**Features:**

- Hinge torque can be adjusted with screw
- Hinge rotation 180°
- Provide position control
- Hinge can be secured by using M4 Nuts and Bolts
- Contact Essentra for alternate colors

**Performance Details**

- Axial Load: (N)
- Working Load: 700
- Breaking Load weight: 1100
- Radial Load: (N)
- Working Load: 1400
- Breaking Load weight: 1800
- Torque Value: 0.8 Nm
- Working Temperature: 23°F to 149°F (-5°C to 65°C)



Item  
No.

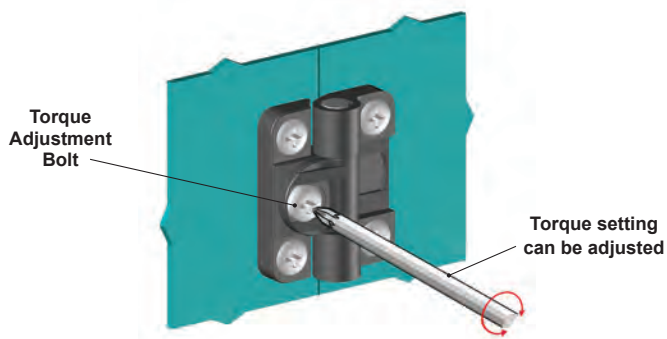
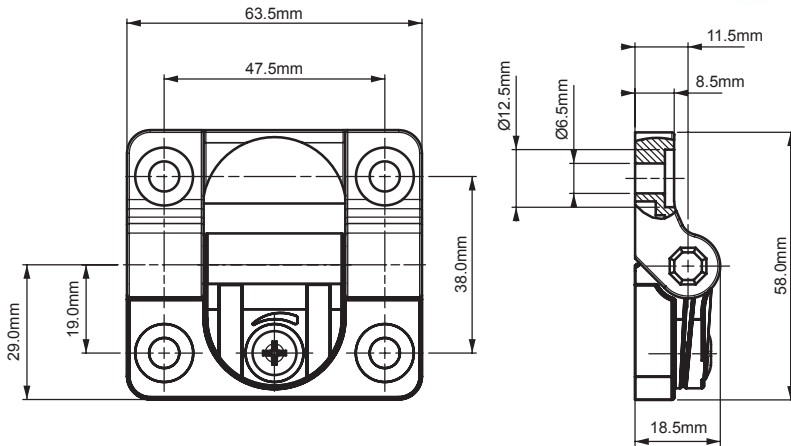
239920



# SURFACE MOUNT HINGES - ADJUSTABLE

## 2499 Series

### Surface Mount Hinge - Adjustable



#### Specifications:

- Material:
  - Body: Nylon (PA6 30% GF)
  - Screw and Nuts: Stainless Steel (AISI 304)
- Finish: Black Powder Coated
- Nylon compliant to DIN-EN ISO 1043-1

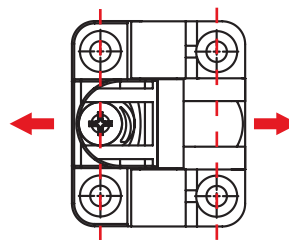
#### Features:

- Hinge torque can be adjusted with screw
- Hinge rotation 180°
- Provide position control
- Installed using M6 screws
- Hinge is secured by using M6 screws

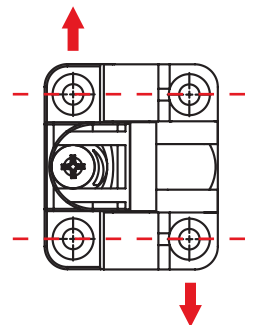
#### Performance Details

- Axial Load: (N)
- Working Load: 1500
- Breaking Load weight: 2350
- Radial Load: (N)
- Working Load: 2250
- Breaking Load weight: 3200
- Torque Value: 4.0 Nm
- Working Temperature: 23°F to 149°F (-5°C to 65°C)

Axial load (N)



Radial load (N)

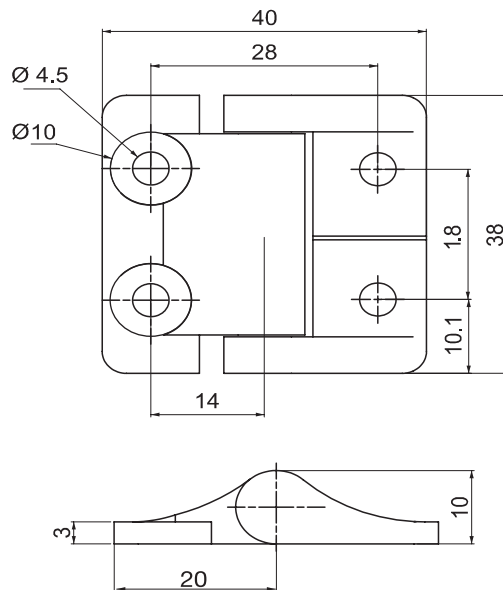


|          |
|----------|
| Item No. |
|----------|

249920



**2099 Series  
Torque Hinge**



**Specifications:**

- Material: Zinc Alloy
- Pin: Steel
- Finish: Black Powder Coated

**Features:**

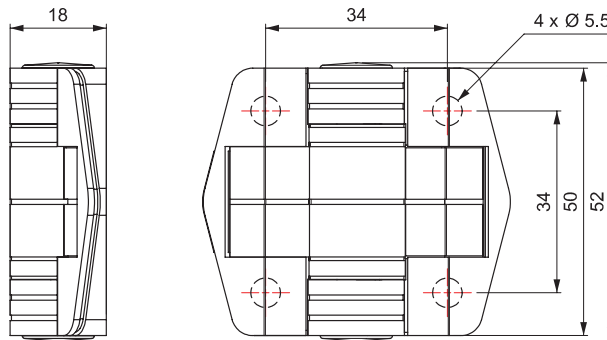
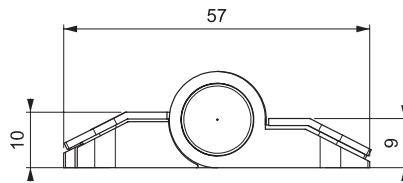
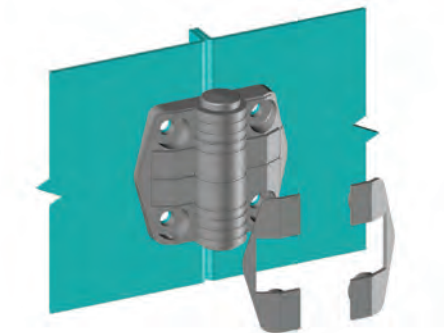
- 2.3 Nm symmetric torque
- Over 25,000 cycle life within +/- 20% of static torque spec
- Requires M5 or equivalent screws for mounting

Item  
No.  
209912



# INDEXING (DETENT) HINGES

## 2599 Series Indexing (Detent) Hinge



### Specifications:

- Material: Nylon Black (PA6 30% GF)
- Pin: Steel (EKN6222)

### Features:

- Contact Essentra for different angle or torque
- Indexing feature allows the hinge to hold its position at the specified angle

| Item No. | Force (N - m) | Position |
|----------|---------------|----------|
| 25992010 | Non-indexed   |          |
| 25992021 | 0.7           | 80°      |
| 25992022 | 1.1           |          |
| 25992023 | 1.7           |          |
| 25992031 | 0.7           | 115°     |
| 25992032 | 1.1           |          |
| 25992033 | 1.7           |          |
| 25992041 | 0.7           | 150°     |
| 25992042 | 1.1           |          |
| 25992043 | 1.7           |          |



**090 Series**  
**Side Hinge (10mm) - Version 1**

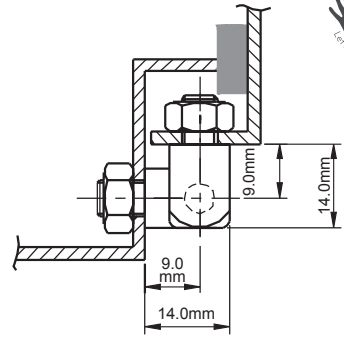
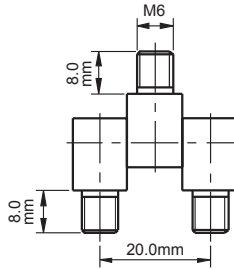


**Specifications:**

- Material: Brass
- Finish: See Table

**Features:**

- Brass 10mm parts supplied separated
- For different dimensions contact Essentra



**091 Series**  
**Side Hinge (12mm) - Version 2**

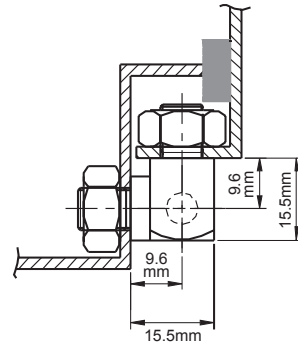
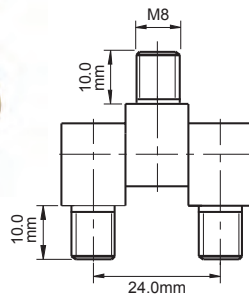


**Specifications:**

- Material: Brass
- Finish: See Table

**Features:**

- Three 12mm brass parts supplied separated
- For different dimensions contact Essentra



**092 Series**  
**Side Hinge (12mm) - Version 3**

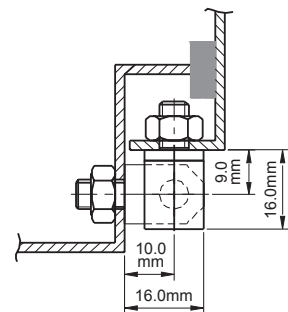
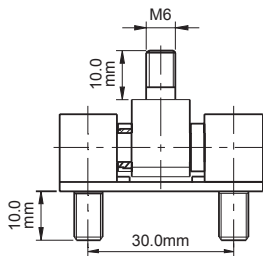


**Specifications:**

- Material: Brass
- Finish: See Table

**Features:**

- Three 12mm brass parts supplied separated
- For different dimensions contact Essentra



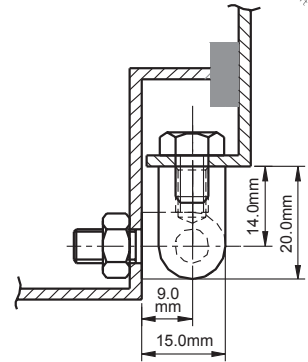
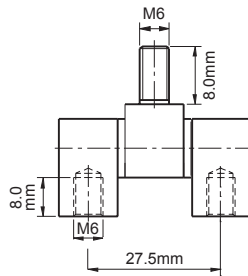
| Item Number | Hinge Rotation | Finish        | Thread (A) | Version |
|-------------|----------------|---------------|------------|---------|
| 09030       | 180°           | No Finish     | M6         | 1       |
| 09034       | 180°           | Nickel        | M6         | 1       |
| 09130       | 180°           | No Finish     | M8         | 2       |
| 09134       | 180°           | Nickel Plated | M8         | 2       |
| 092306180   | 180°           | No Finish     | M6         | 3       |
| 09230690    | 90°            | No Finish     | M6         | 3       |
| 092308180   | 180°           | No Finish     | M8         | 3       |
| 09230890    | 90°            | No Finish     | M8         | 3       |
| 092316180   | 180°           | Chrome        | M6         | 3       |
| 09231690    | 90°            | Chrome        | M6         | 3       |
| 092318180   | 180°           | Chrome        | M8         | 3       |
| 09231890    | 90°            | Chrome        | M8         | 3       |

**SIDE MOUNT HINGES****192 Series****Side Hinge (12mm) - Version 1****Specifications:**

- Material: Brass
- Finish: See Table

**Features:**

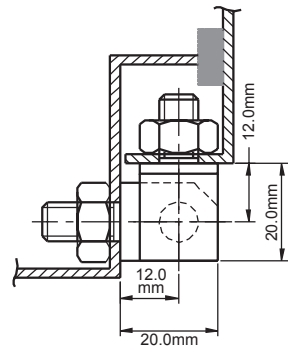
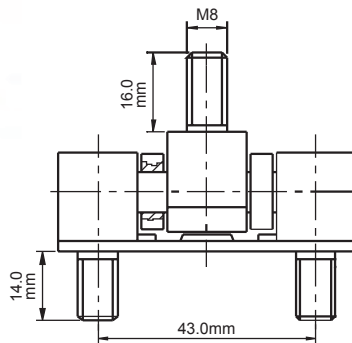
- Side-mounted hinge
- 12mm brass parts supplied separated
- Parts tightly fitted

**093 Series****Side Hinge (16mm) - Version 2****Specifications:**

- Material: Brass
- Finish: See Table

**Features:**

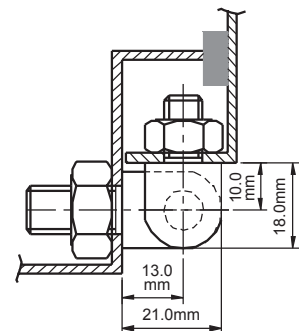
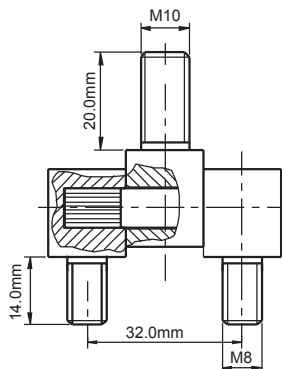
- Side-mounted hinge
- 16mm brass parts supplied separated
- Parts assembled by installation plate

**193 Series****Side Hinge (16mm) Version 3****Specifications:**

- Material: Brass
- Finish: See Table

**Features:**

- Side-mounted hinge
- 16mm brass parts supplied separated
- Parts tightly fitted

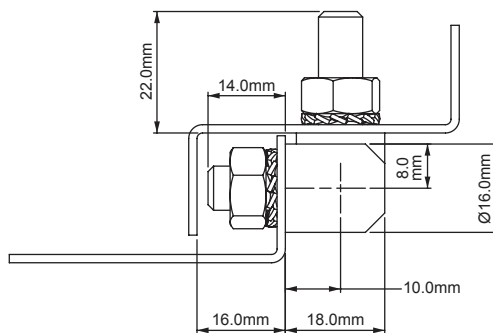
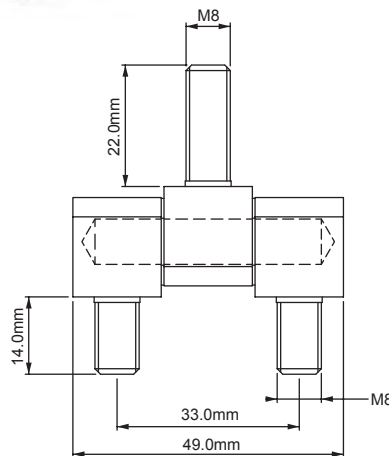
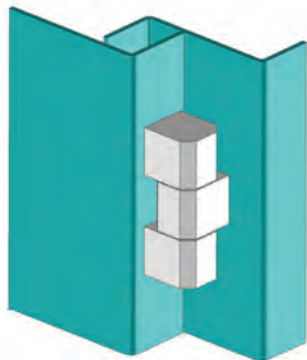
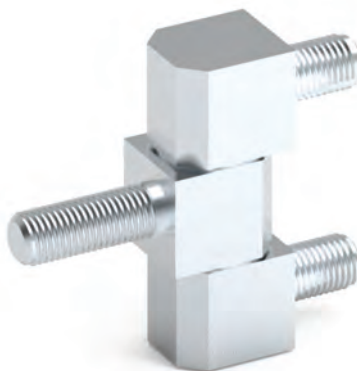


| Item No. | Hinge Rotation | Finish    | Thread   | Version |
|----------|----------------|-----------|----------|---------|
| 19231    | 180°           | Chrome    | M6       | 1       |
| 09330    | 100°           | No Finish | M8       | 2       |
| 09331    | 100°           | Chrome    | M8       | 2       |
| 19331    | 180°           | Chrome    | M8 / M10 | 3       |





**793 Series  
Side Hinge**



**Specifications:**

- Material: Steel
- Finish: Zinc Plated
- Nuts and washers are not supplied

**Features:**

- For medium voltage and heavy door panels
- Maximum hinge rotation 180°
- Ideal for electric panels and machinery cover applications

Item  
No.

**79363**



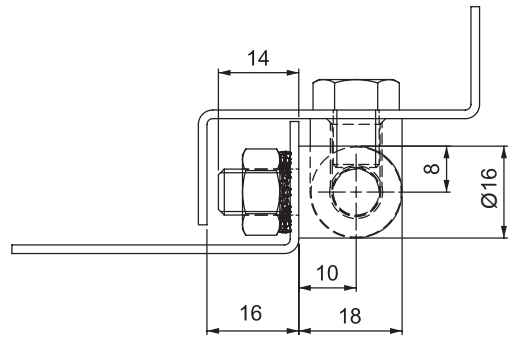
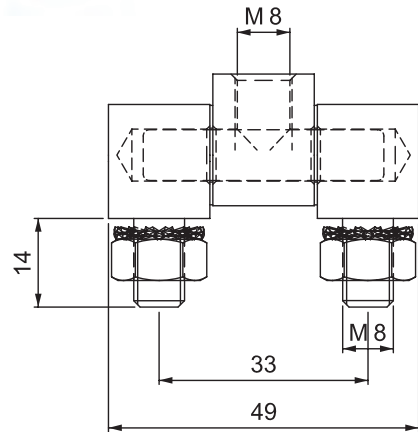
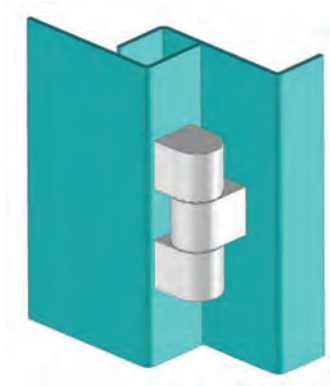
# CUSTOM SOLUTIONS AVAILABLE

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# SIDE MOUNT HINGES

893 Series  
Side Hinge



**Specifications:**

- Material: C45 Steel
- Finish: Zinc Plated
- Nuts and washers are not supplied

**Features:**

- For medium voltage and heavy door panels
- Maximum hinge rotation 180°
- Assembly screws supplied
- Ideal for electric panels and machinery cover applications

Item No.

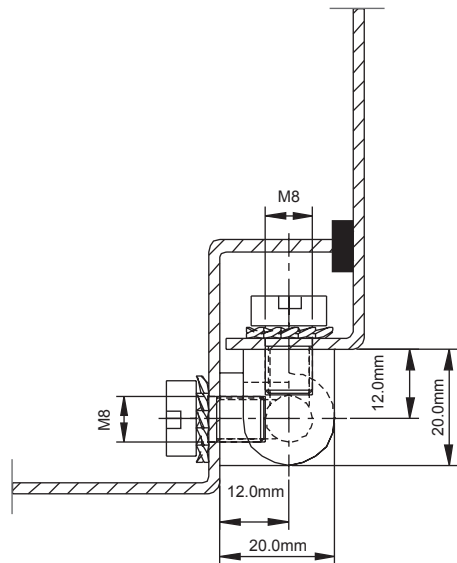
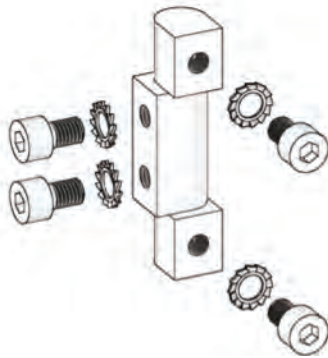
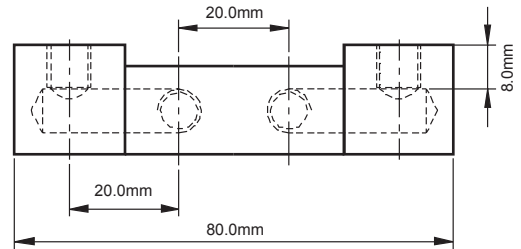
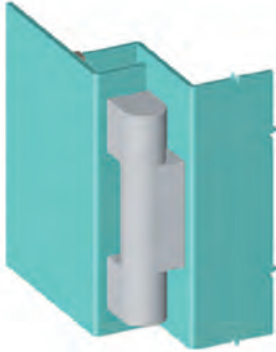
89363M

## GASKETING & SEALS



See pages 630 - 633 or visit [www.essentracomponents.com](http://www.essentracomponents.com)

## SIDE MOUNT HINGES - LIFT-OFF


**393 Series**  
**Side Hinge - Lift-Off**


## Specifications:

- Material: Brass
- Finish: Chrome
- Brass is DIN 17672 rated

## Features:

- For medium voltage and heavy door panels
- Maximum hinge rotation 180°
- Assembled using special screws (supplied)
- Ideal for electric panels and machinery cover applications

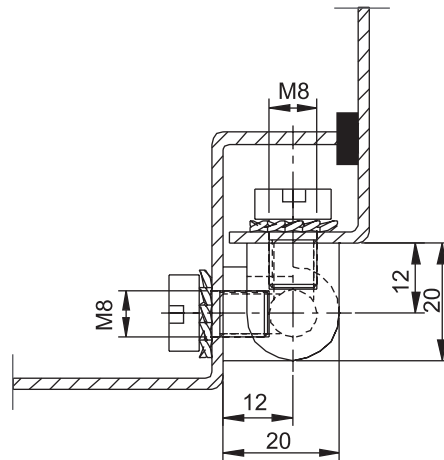
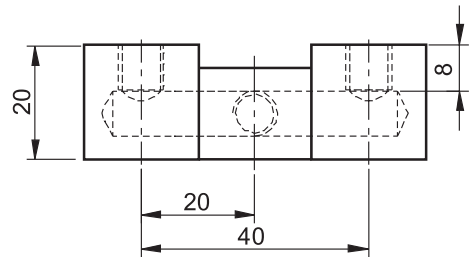
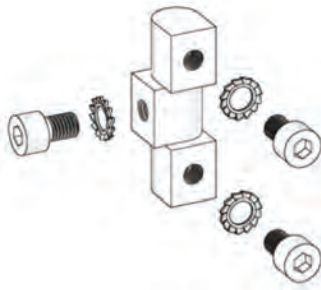
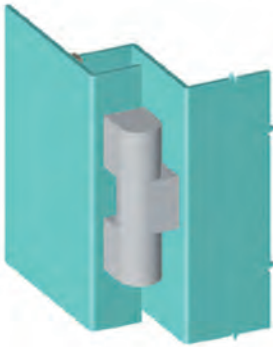
Item  
No.  
39331

Thread  
M8



# SIDE MOUNT HINGES

## 293 Series Side Hinge



### Specifications:

- Material: Brass
- Finish: Chrome Plated
- Compliant to DIN 17672

### Features:

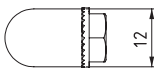
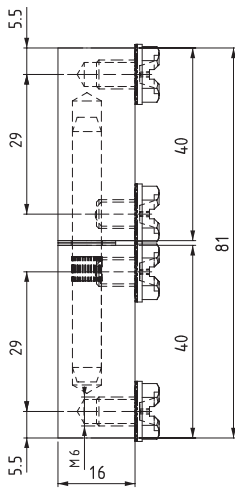
- For medium voltage and heavy door panels
- Hinge parts produced from hardened steel
- Ideal for electric panels and machinery cover applications
- Suitable for left and right hand applications
- Bolts and washers are included

| Item No. | Hinge Rotation | Material | Finish | Thread |
|----------|----------------|----------|--------|--------|
| 29331    | 180°           | Brass    | Chrome | M8     |

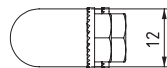
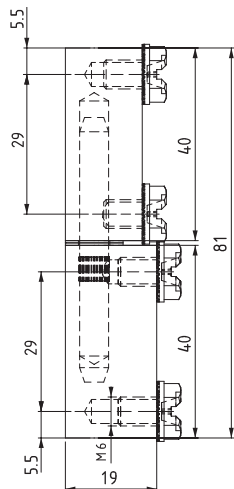
# SIDE MOUNT HINGES - LIFT-OFF



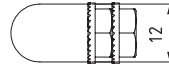
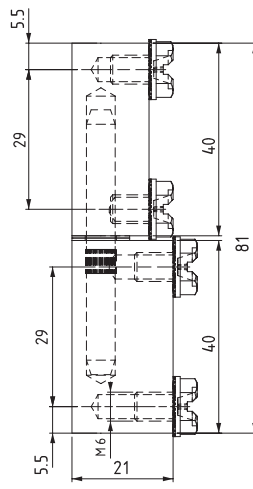
## 993 Series Lift-Off Side Hinge



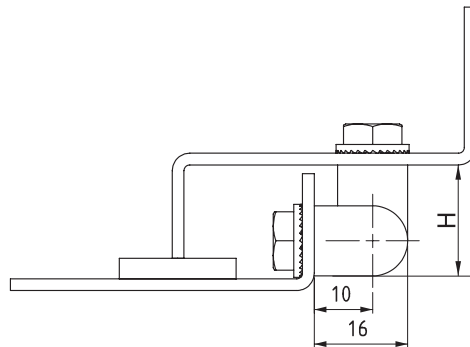
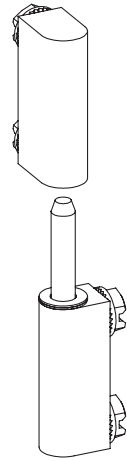
Version 1



Version 2



Version 3



**Specifications:**

- Material:  
Body: Brass
- Finish: Chrome

**Features:**

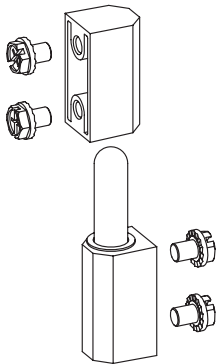
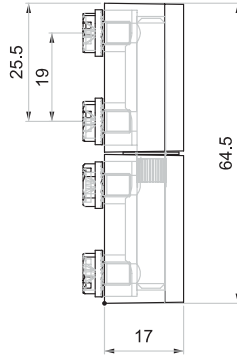
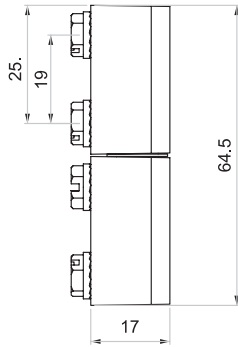
- Fastening bolts are supplied
- Maximum hinge rotation 180°

| Item No. | Height (H) | Version |
|----------|------------|---------|
| 9933116  | 16         | 1       |
| 9933119  | 19         | 2       |
| 9933121  | 21         | 3       |

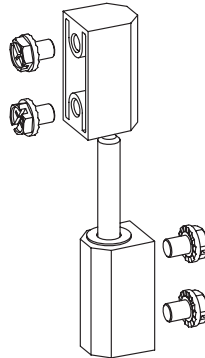


# SIDE MOUNT HINGES - LIFT-OFF

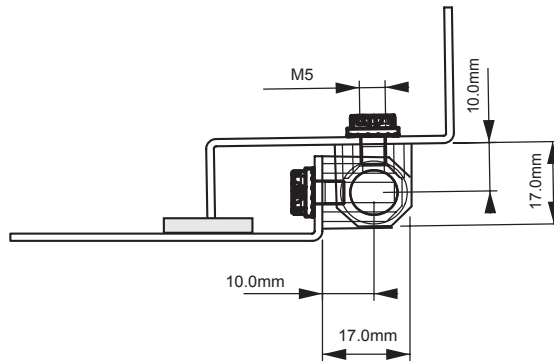
## 493 Series Side Hinge - Lift-Off



Version 1



Version 2

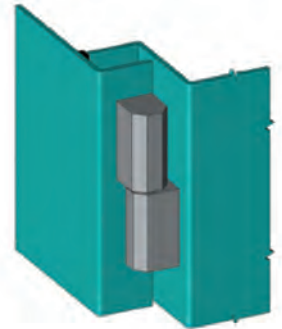


**Specifications:**

- Material:  
Body: Zinc Alloy  
Pin: See Table  
Finish: See Table

**Features:**

- Lift-off Hinge
- Version 2 is recommended for heavy doors due to Stainless Steel Pin
- Ideal for electric panels and machinery cover applications
- Maximum hinge rotation 180°
- Bolts are included with hinge

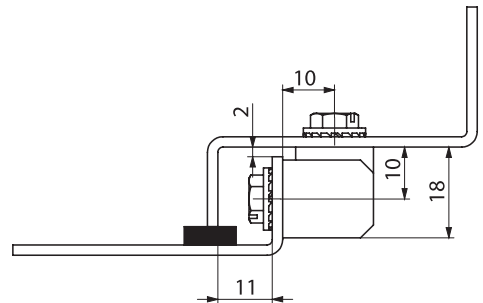
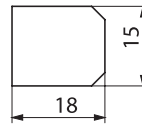
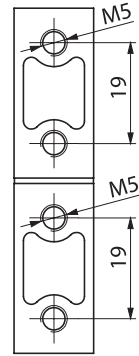
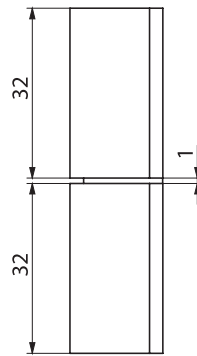
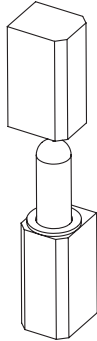
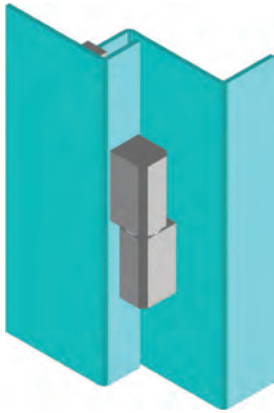


| Item No.  | Version | Pin Material    | Material / Finish   |
|-----------|---------|-----------------|---------------------|
| 493111M   | 1       | Zinc Alloy      | Chrome Plated       |
| • 493112M | 2       | Stainless Steel | Black Powder Coated |
| 493121M   | 1       | Zinc Alloy      | Black Powder Coated |
| • 493122M | 2       | Stainless Steel | Black Powder Coated |

SIDE MOUNT HINGES - LIFT-OFF



1293 Series  
Side Hinge - Lift-Off



Specifications:

- Material: Steel
- Body: Stainless Steel (AISI 304)
- Pin: Stainless Steel (AISI 303)
- Bolts are provided

Features:

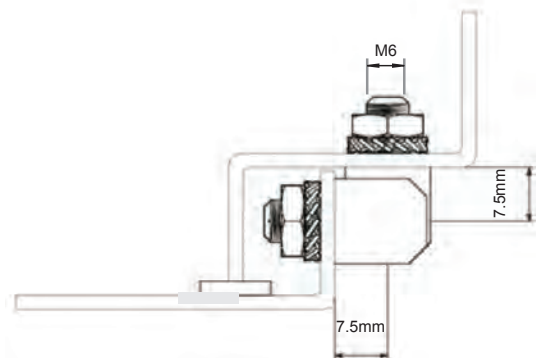
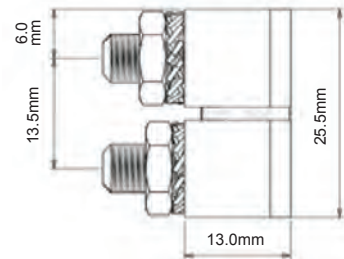
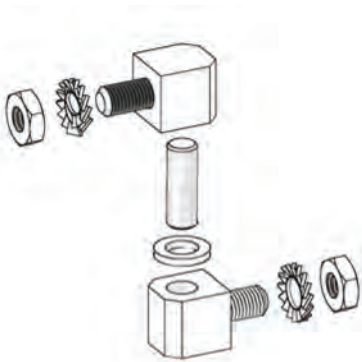
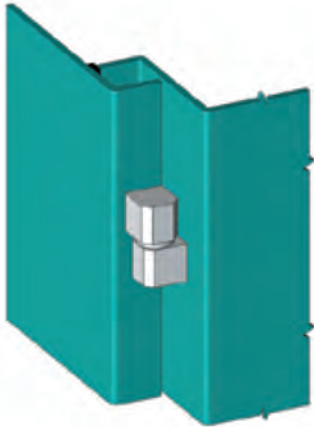
- Lift off feature

| Item No. | Hinge Rotation |
|----------|----------------|
| 129340   | 180°           |



# SIDE MOUNT HINGES - LIFT-OFF

191 Series  
Side Hinge - Lift-Off



**Specifications:**

- Material: Steel
- Finish: Zinc Plated

**Features:**

- 12mm blocks
- Ideal for electric panels and machinery cover applications
- Maximum hinge rotation 180°
- Nuts and washers are included

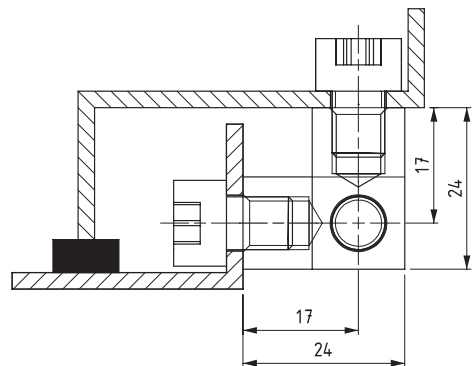
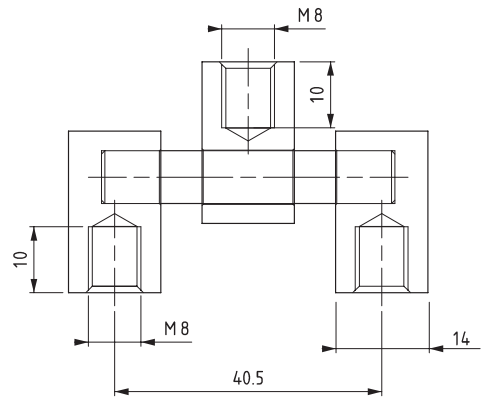
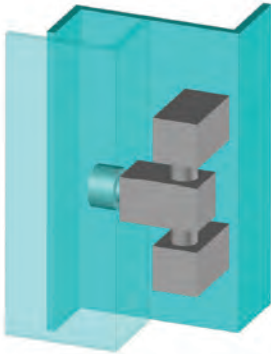
Item No.

19163M





**1093 Series  
 Side Hinge**



**Specifications:**

- Material: Steel  
 Body: Brass  
 Pin: Steel
- Finish: Chrome plated

**Features:**

- Side mounted hinge
- Pin length can be modified

| Item No. | Hinge Rotation |
|----------|----------------|
| 109331   | 180°           |

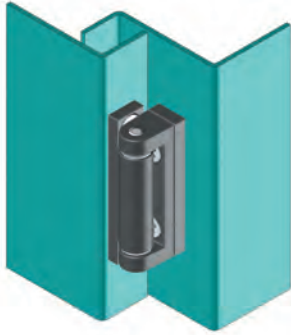


# SIDE MOUNT HINGES

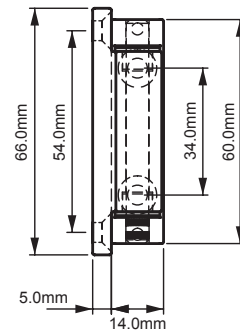
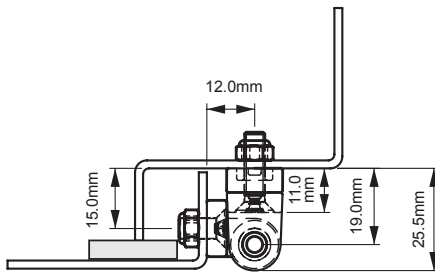
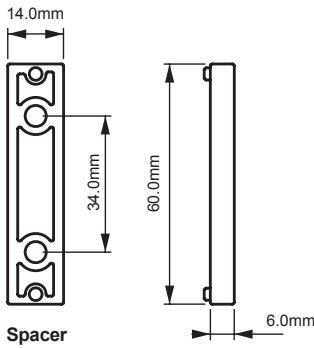
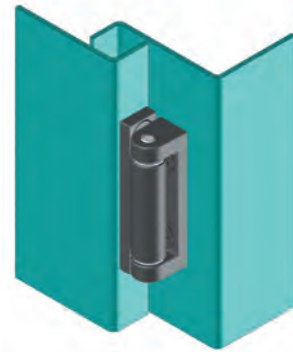
## 593 Series Side Hinge



Version 1 - with Spacer



Version 2 - without Spacer

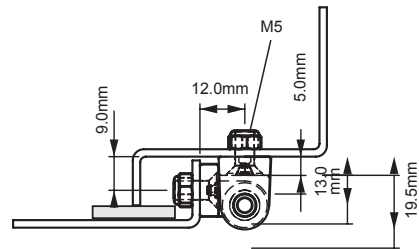


**Specifications:**

- Material: Zinc Alloy
- Pin: Stainless Steel
- Finish: See Table
- DIN-EN 1774 rated
- Bolts are not supplied

**Features:**

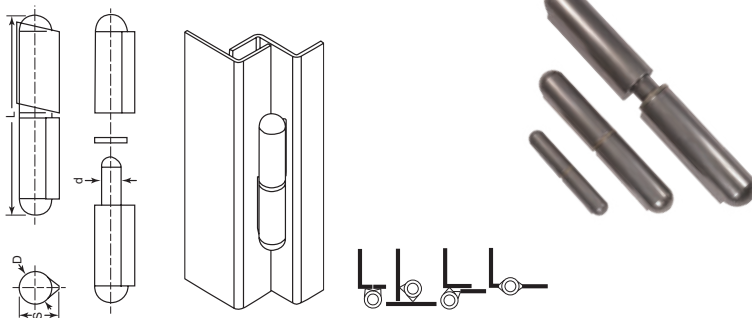
- Ideal for electric panels and machinery cover applications
- Maximum hinge rotation 180°
- Spacer bar available for different dimensions



| Item No. | Finish              | Version |
|----------|---------------------|---------|
| 5931125  | Chrome Plated       | 1       |
| 5931225  | Black Powder Coated | 1       |
| 5931119  | Chrome Plated       | 2       |
| 5931219  | Black Powder Coated | 2       |



**HIW Series**  
**Weld-On Bullet Hinges**



**Specifications:**

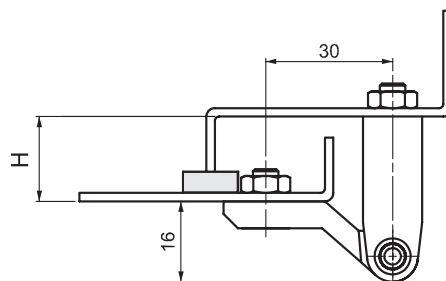
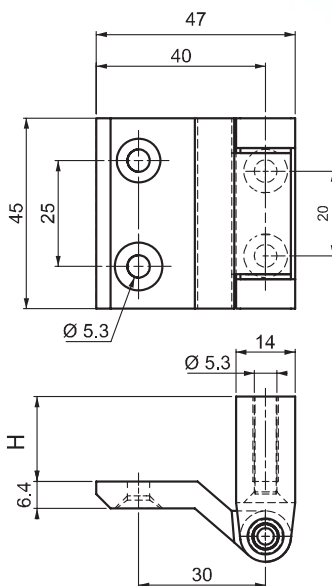
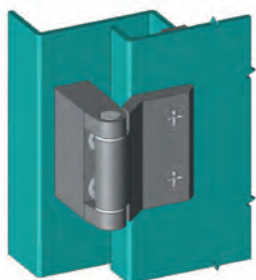
- Material: See Table

**Features:**

- Flat surfaces for easy welding
- Can be mounted in several configurations

| Item No. |                      |           |                 | L     |       | D     |      | d     |      | S     |      |
|----------|----------------------|-----------|-----------------|-------|-------|-------|------|-------|------|-------|------|
| Steel    | Steel with Brass Pin | Aluminum  | Stainless Steel | in    | mm    | in    | mm   | in    | mm   | in    | mm   |
| HIW488A  | HIW497A              | —         | —               | 1.575 | 40.0  | 0.315 | 8.0  | 0.197 | 5.0  | 0.394 | 10.0 |
| HIW489A  | HIW498A              | —         | —               | 1.969 | 50.0  | 0.315 | 8.0  | 0.197 | 5.0  | 0.394 | 10.0 |
| HIW490A  | HIW499A              | HIWAL506A | HIWSS510A       | 2.362 | 60.0  | 0.394 | 10.0 | 0.236 | 6.0  | 0.492 | 12.5 |
| HIW491A  | HIW500A              | —         | —               | 2.756 | 70.0  | 0.453 | 11.5 | 0.236 | 6.0  | 0.520 | 13.2 |
| HIW492A  | HIW501A              | HIWAL507A | HIWSS511A       | 3.150 | 80.0  | 0.512 | 13.0 | 0.315 | 8.0  | 0.630 | 16.0 |
| HIW493A  | HIW502A              | HIWAL508A | HIWSS512A       | 3.937 | 100.0 | 0.630 | 16.0 | 0.394 | 10.0 | 0.787 | 20.0 |
| HIW494A  | HIW503A              | HIWAL509A | HIWSS513A       | 4.724 | 120.0 | 0.630 | 16.0 | 0.394 | 10.0 | 0.787 | 20.0 |
| HIW495A  | HIW504A              | —         | —               | 5.906 | 150.0 | 0.787 | 20.0 | 0.512 | 13.0 | 0.984 | 25.0 |
| HIW496A  | HIW505A              | —         | —               | 7.087 | 180.0 | 0.787 | 20.0 | 0.512 | 13.0 | 0.984 | 25.0 |

**100 Series**  
**Corner Hinge**



**Specifications:**

- Material: Zinc Alloy
- Pin Material: Stainless Steel
- Bearing: Delrin
- Finish: Black Powder Coated
- Hinge Pin: Stainless Steel
- Bolts are not provided

**Features:**

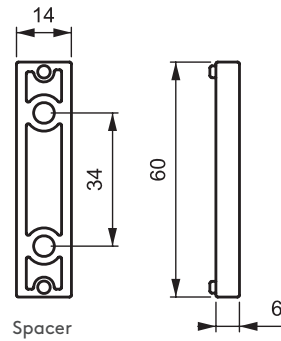
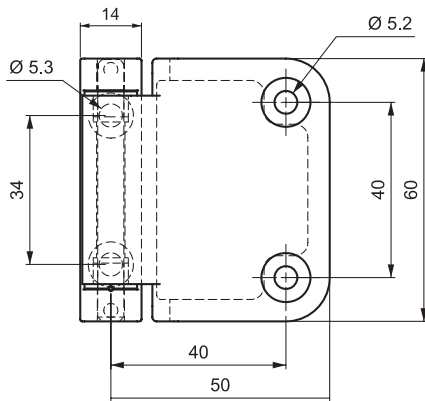
- Generally used for plain/flush-mounted doors
- Stud versions fitted with M6x12mm threaded stud
- Maximum hinge rotation 180°
- Please contact Essentra for alternate heights

| Item No. | H<br>Height (mm) |
|----------|------------------|
| 1001200  | 0                |
| 100125   | 5                |
| 100127   | 7                |
| 1001210  | 10               |
| 1001225  | 25               |



# CORNER MOUNT HINGES - HVAC

**600 Series**  
HVAC Hinge Offset Surface Mount

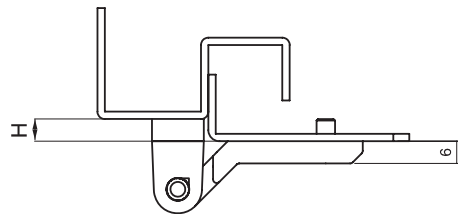


**Specifications:**

- Material:  
Body: Refer to chart  
Pin: Stainless Steel, Steel  
Bearing: Delrin
- Finish: Refer to chart

**Features:**

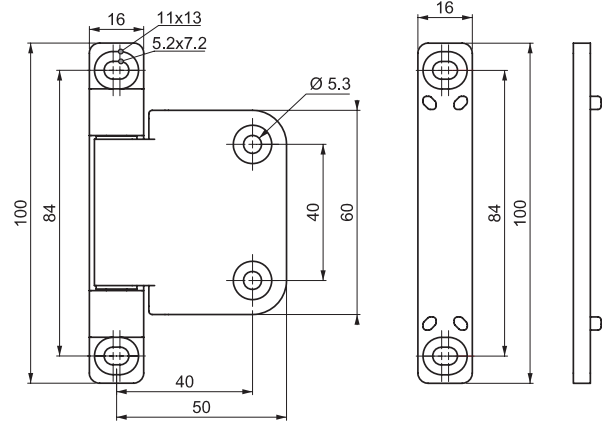
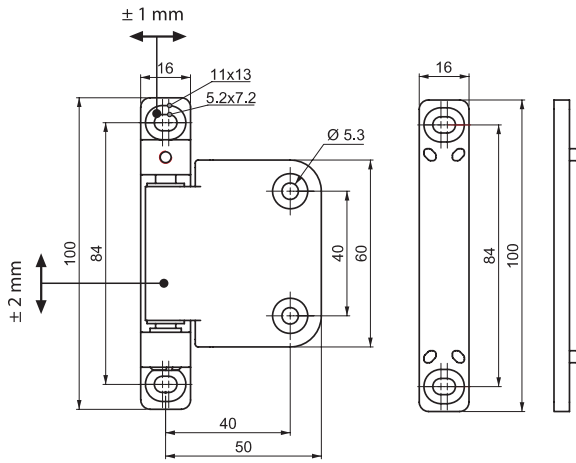
- Central air conditioning units, electrical panels and machinery covers
- Suitable for left and right hand applications
- Designed for plain flush mounted /doors



| Item No. | Material        | Hinge Rotation | Finish  |
|----------|-----------------|----------------|---------|
| 60012003 | Zinc Alloy      | 180°           | Black   |
| 60040003 | Stainless Steel | 180°           | Natural |



600 Series  
HVAC Hinge - Corner Mount

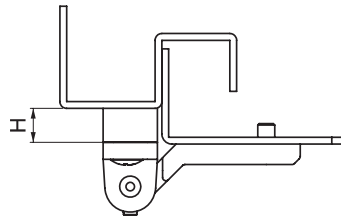


Specifications:

- Material:  
Body: Zinc Alloy  
Pin: Steel  
Bearing: Delrin
- Finish: Black Powder Coated

Features:

- Central air conditioning units, electrical panels and machinery covers
- Suitable for left and right hand applications
- Designed for plain flush mounted /doors



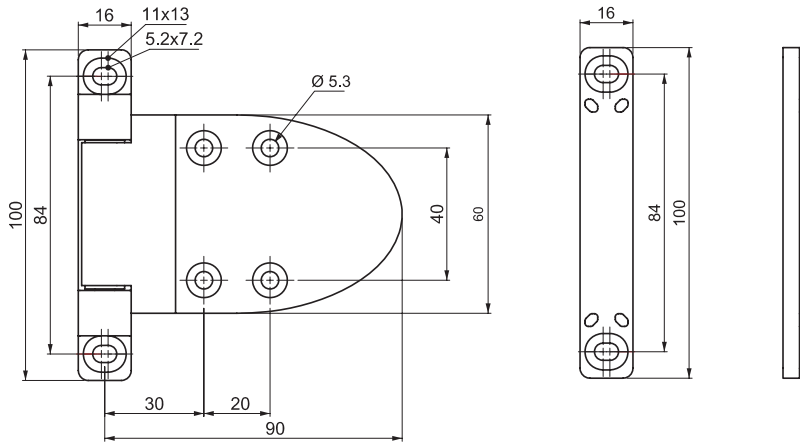
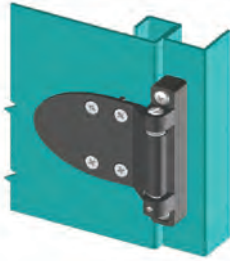
| Item No.    | Material | Hinge Rotation | Finish     |
|-------------|----------|----------------|------------|
| 60012001001 | 180°     | Black          | Right Hand |
| 60012001002 | 180°     | Natural        | Left Hand  |



# CORNER MOUNT HINGES - HVAC

## 700 Series

### HVAC Hinge - Flush Mount Offset

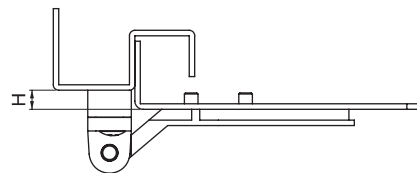


#### Specifications:

- Material:
  - Body: Zinc Alloy
  - Pin: Steel
  - Bearing: Delrin
- Finish: Black Powder Coated
- Hinge Rotation 180°

#### Features:

- Designed for plain, flush mounted doors (no offset)
- Hinge comes fully assembled to reduce assembly time
- For offset options please consult factory for details



Item No. 70012002

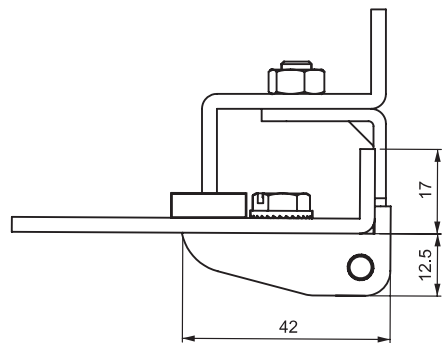
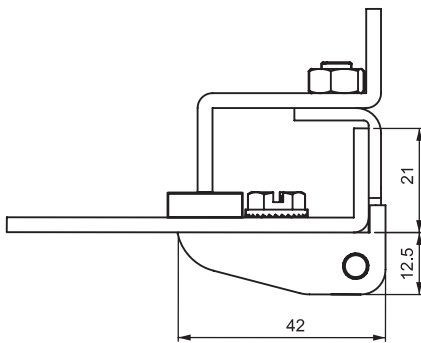
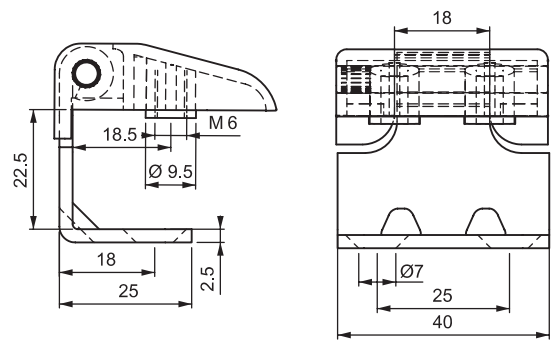
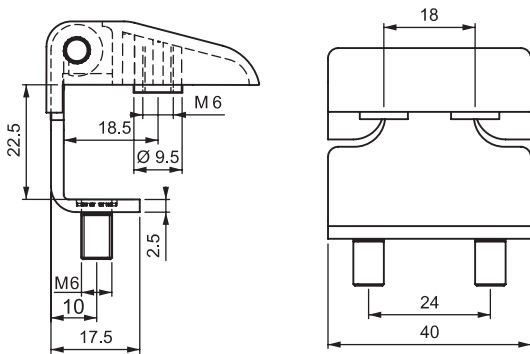


200 Series  
Corner Hinge

Version 1 - Stud and Through Hole



Version 2 - Through Hole

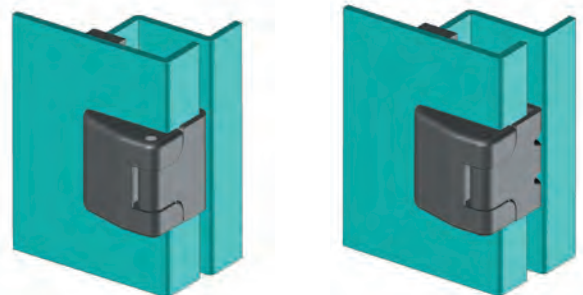


Specifications:

- Material:  
Frame Part: Zinc Alloy  
Frame Part: Steel
- Pin: Steel
- Finish: Black Powder Coated

Features:

- For door corners with 21mm bend
- M6 bolt supplied with stud version
- Fastened with M6 screws
- Hinge rotation 180°

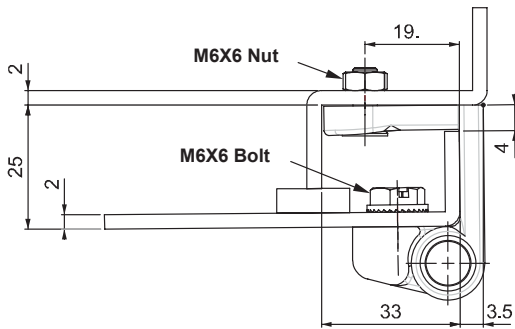
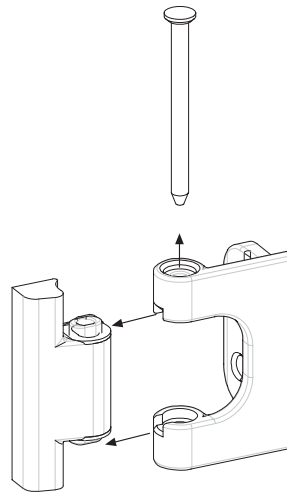
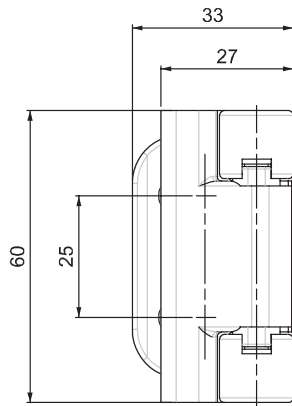


| Item No. | Version | Through Hole / Stud |
|----------|---------|---------------------|
| 20012171 | 1       | Stud                |
| 20012170 | 1       | Through Hole        |
| 20012250 | 2       | Through Hole        |



# CORNER MOUNT HINGES

498 Series  
Corner Hinge



**Specifications:**

- Material:  
Body: Zinc Alloy, Nylon Black (PA6 30% GF)  
Pin: Plastic
- Finish: Plack Powder Coated

**Features:**

- For door corners with 25 mm bend
- Hinge rotations 180°
- Removable pin for easy door removal
- Bolts are not supplied with hinge

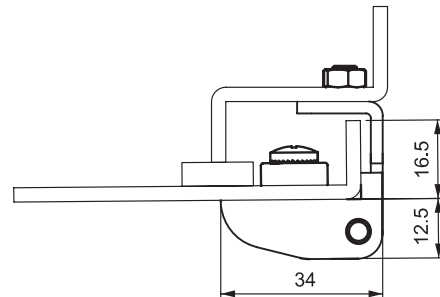
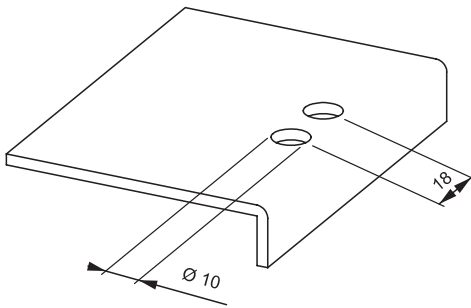
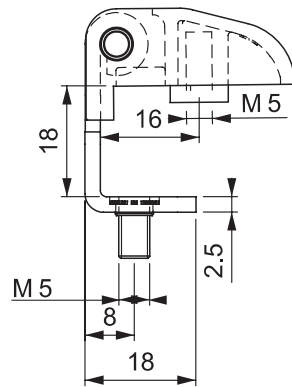
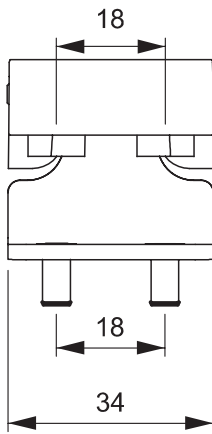


| Item No. |
|----------|
| 49812    |





400 Series  
Corner Hinge



Specifications:

- Material:  
Body: See Table  
Installation Bracket: Steel Pin: Steel
- Finish: See Table

Features:

- For door corners with 16.5mm bend
- M5 bolts supplied for stud version
- Nylon mounting bracket supplied for installation
- Hinge rotation 180°

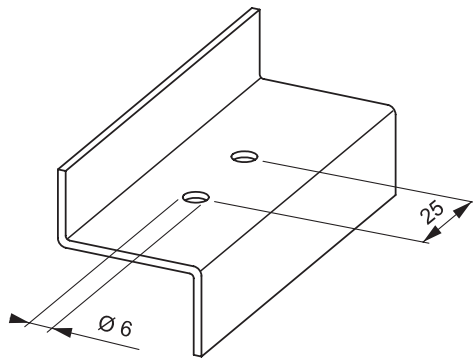
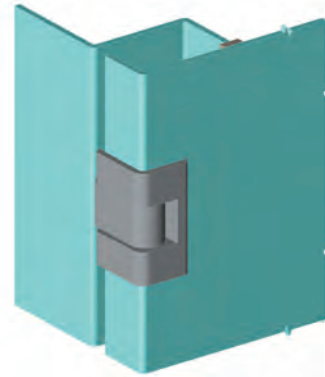
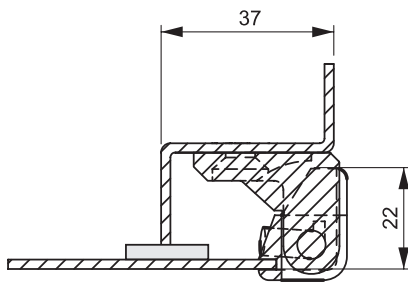
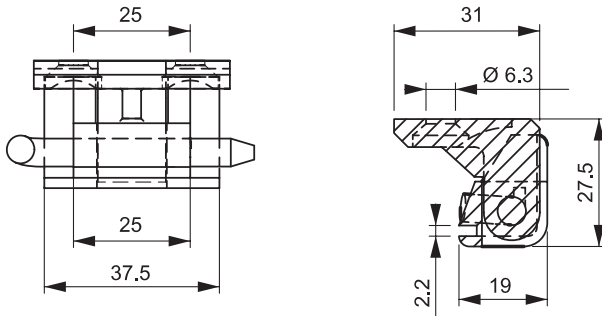


| Item No. | Through Hole / Stud | Body Material | Finish / Color      |
|----------|---------------------|---------------|---------------------|
| 40012181 | Stud                | Zinc Alloy    | Black Powder Coated |
| 40020181 | Through Hole        | Nylon         | Black               |

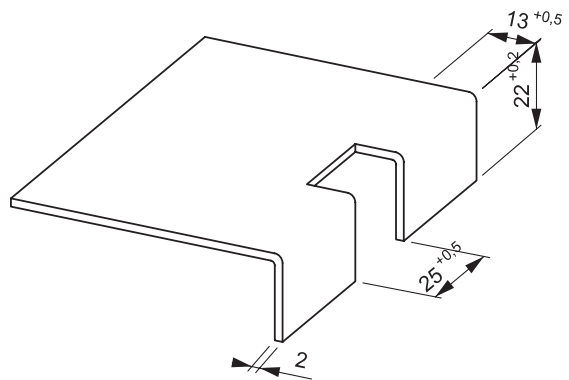


# CORNER MOUNT HINGES

## 098 Series Corner Hinge



Cut-Out



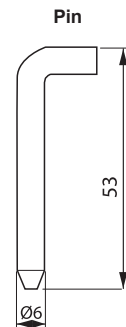
Cut-Out

### Specifications:

- Material:
  - Body: Zinc Alloy
  - Pin: Steel
- Finish: See Table
- Bolts are not supplied with hinge

### Features:

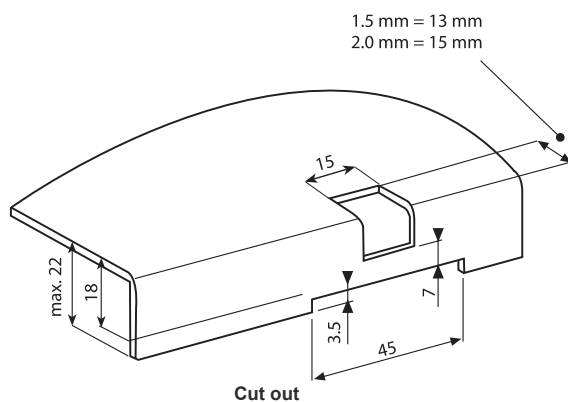
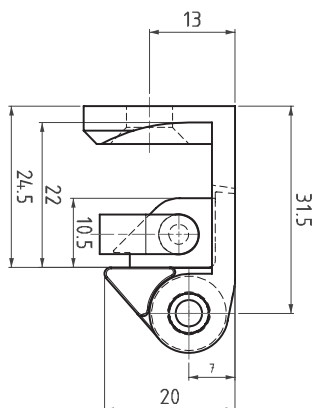
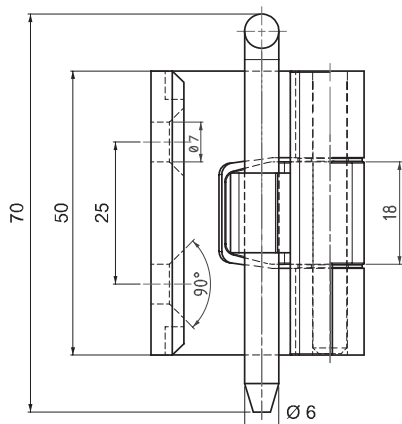
- Suitable for steel panels with a thickness between 1.5 - 2.0mm
- Hinge rotation 180°



| Item No. | Finish              |
|----------|---------------------|
| 098112   | Chrome Plated       |
| 098122   | Black Powder Coated |



398 Series  
Corner Hinge



Specifications:

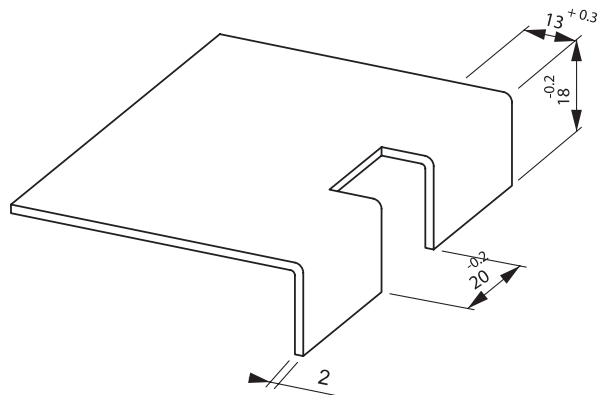
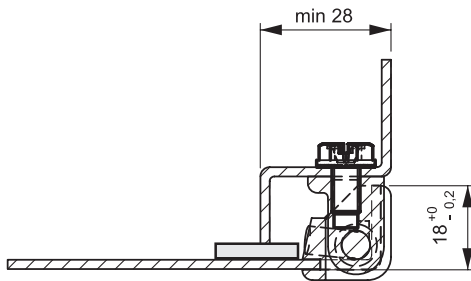
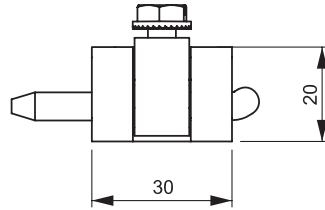
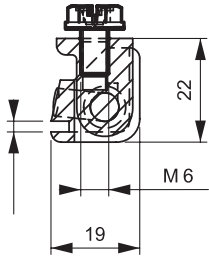
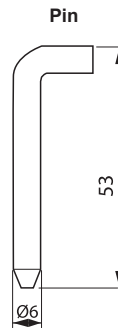
- Material:  
Body: Zinc Alloy  
Pin: Steel
- Finish: Chrome Plated, Black Powder Coated
- Bolts are not supplied with hinge

Features:

- Suitable for 25 mm bend in door
- Single hinge pin
- Suitable for left and right hand applications



| Item No. | Hinge Rotation | Finish              | Color |
|----------|----------------|---------------------|-------|
| 398122   | 180°           | Black Powder Coated | Black |

**CORNER MOUNT HINGES****097 Series  
Corner Hinge****Cut-Out****Specifications:**

- Material:  
Base: See Table  
Pin: Steel  
Finish: See Table

**Features:**

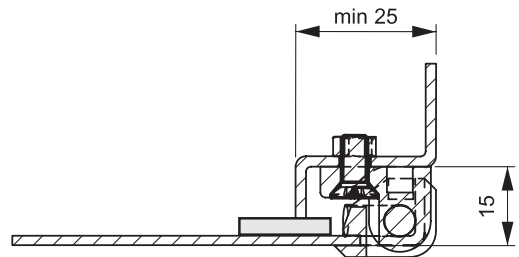
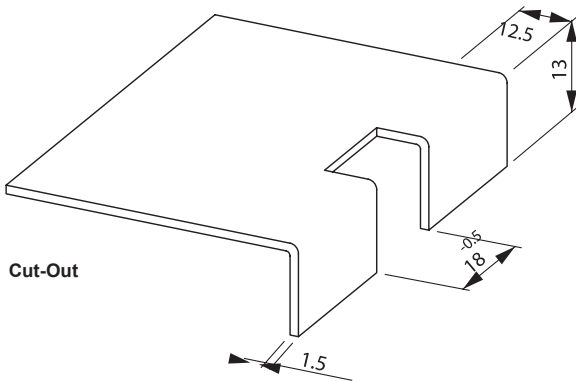
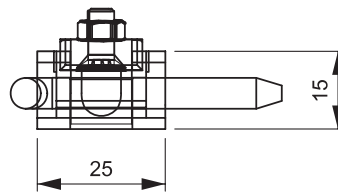
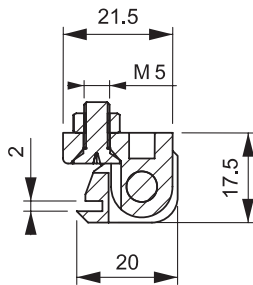
- Hinge rotation 180°
- Please contact Essentra for alternate pin styles or thicker panel options



| Item No. | Base Material   | Base Finish         | Panel Thickness |
|----------|-----------------|---------------------|-----------------|
|          |                 |                     | mm              |
| 09711215 | Zinc Alloy      | Chrome Plated       | 1.0 - 1.2       |
| 09711222 | Zinc Alloy      | Chrome Plated       | 1.5 - 2.0       |
| 09712215 | Zinc Alloy      | Black Powder Coated | 1.0 - 1.2       |
| 09712222 | Zinc Alloy      | Black Powder Coated | 1.5 - 2.0       |
| 09740215 | Stainless Steel | Electropolished     | 1.0 - 1.2       |
| 09740222 | Stainless Steel | Electropolished     | 1.5 - 2.0       |



197 Series  
Corner Hinge



Specifications:

- Material:  
Body: Nylon, Black (PA6 30% GF)  
Pin: Delrin Steel

Features:

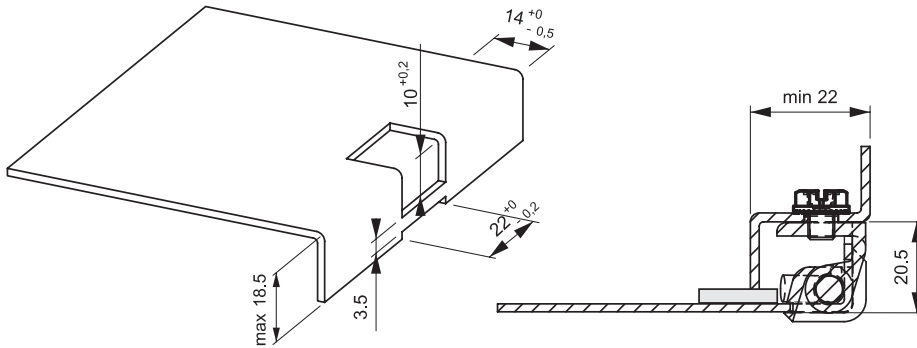
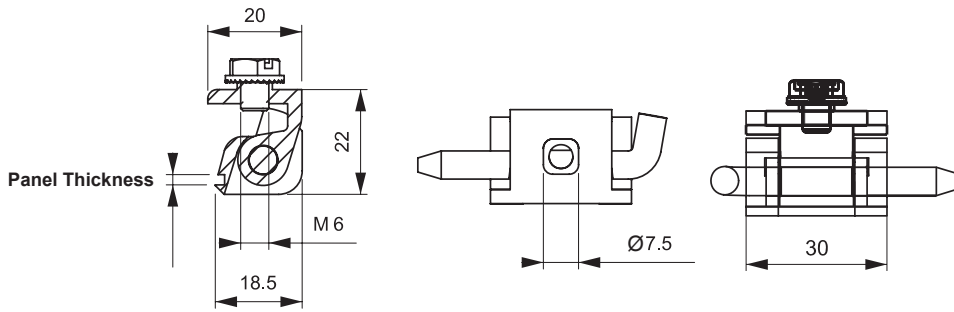
- Suitable for steel panels with a max thickness of 1.5mm
- Hinge rotation 180°
- For alternate pin options contact Essentra

Item  
No.  
197201



# CORNER MOUNT HINGES

## 297 Series Corner Hinge



Cut-Out

1.0 - 1.5mm Panel Thickness  
Version 1

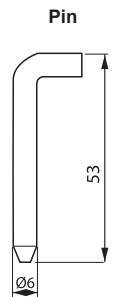
1.5 - 2.2mm Panel Thickness  
Version 2

Specifications:

- Material:  
Base: Zinc Alloy  
Pin: Steel
- Finish: See Table

Features:

- Hinge rotation 180°
- Please contact Essentra for alternate pin styles

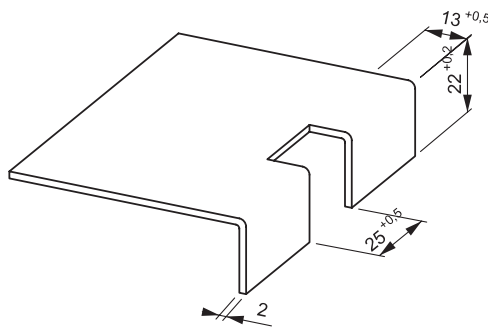
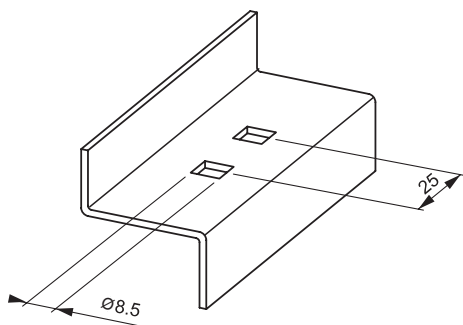
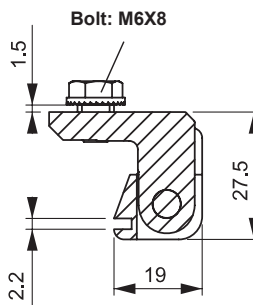
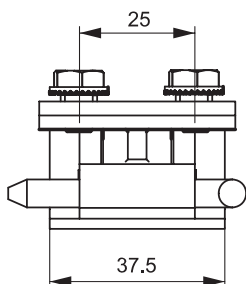
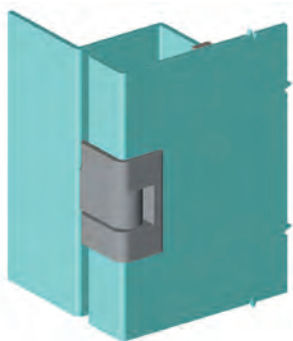


| Item No. | Base Finish         | Version | Panel Thickness (mm) |
|----------|---------------------|---------|----------------------|
| 29711215 | Chrome Plated       | 1       | 1.0 - 1.5            |
| 29711222 | Chrome Plated       | 2       | 1.5 - 2.2            |
| 29712215 | Black Powder Coated | 1       | 1.0 - 1.5            |
| 29712222 | Black Powder Coated | 2       | 1.5 - 2.2            |

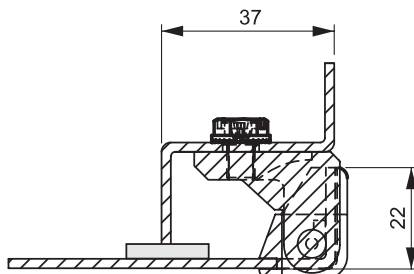
# CORNER MOUNT HINGES



## 298 Series Corner Hinge



Cut-Out



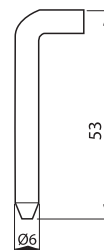
**Specifications:**

- Material:  
Body: Zinc Alloy  
Pin: Steel
- Finish: Black Powder Coated

**Features:**

- Ideal application for large electrical panels
- Hinge rotation 180°
- Corner Hinge, suitable for steel panels with a thickness between 1.5 - 2.0mm
- Includes M6 threaded studs for fastening

Pin



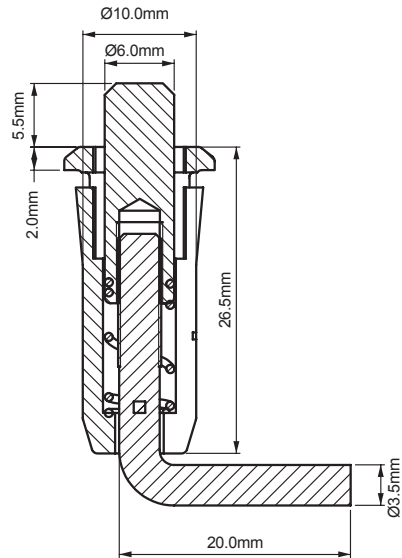
Item No.

298122



# CONCEALED HINGES - SPRING LOADED

## 389 Series Concealed Hinge - Spring Loaded



**Specifications:**

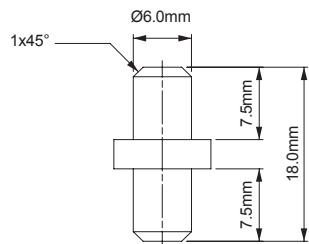
- Material: Nylon (PA6 30% GF)
- Pin Material: Steel
- Color: Black
- Compliant to DIN-EN ISO 1043-1 (Nylon)

**Features:**

- For internally mounted doors
- Hinge rotation  $110^\circ$
- Spring-loaded hinge for easy door removal
- Clip installation for easy assembly
- See Bottom Pivot Pin below for mating hinge pin - 320 Series

| Item No. |
|----------|
| 389      |

## 320 Series Bottom Pivot Pin

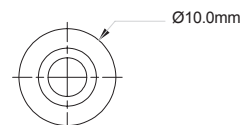


**Specifications:**

- Material: Steel
- Finish: Zinc Plated

**Features:**

- Used with 089, 189, and 389 Series



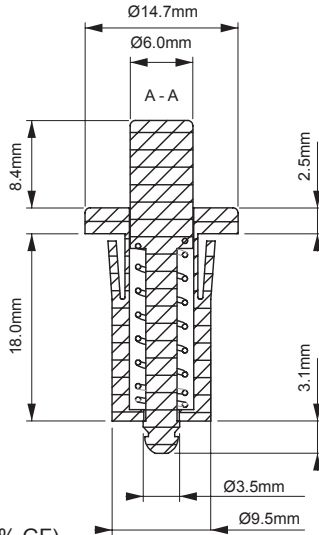
| Item No. | Description      | Used With             |
|----------|------------------|-----------------------|
| 32003192 | Bottom Pivot Pin | 089, 189 & 389 Series |



# CONCEALED HINGES - SPRING LOADED



## 089 Series Concealed Hinge

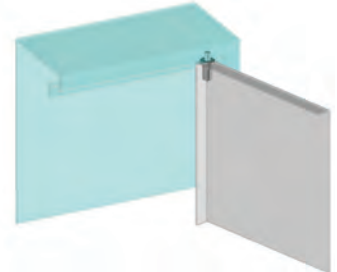


**Specifications:**

- Material:  
Body: Nylon (PA6 30% GF)  
Pin: Steel

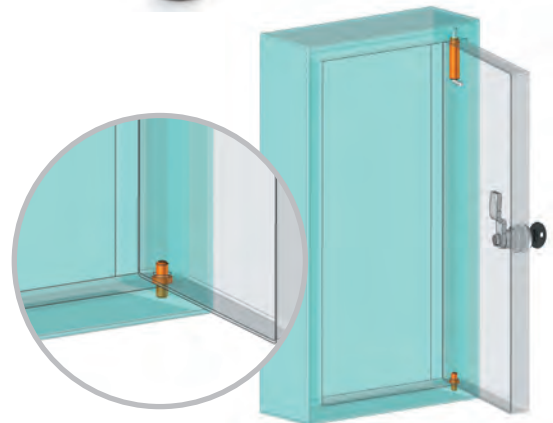
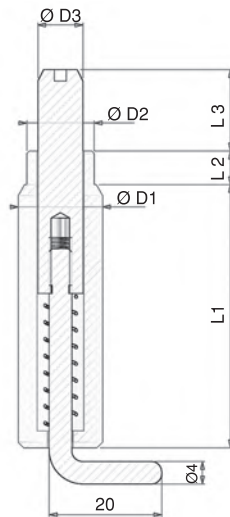
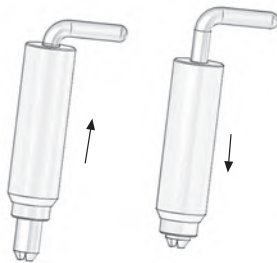
**Features:**

- For internally mounted doors
- Hinge rotation 110°
- Spring loaded hinge for easy door removal
- Clip installation for easy assembly
- See Bottom Pivot Pin on page 688 for mating hinge pin - 320 Series



|          |
|----------|
| Item No. |
| 089      |

## 189 Series Spring Loaded Hinge



**Specifications:**

- Material: Steel
- Body Finish: Copper Plated
- Other Materials: Zinc Plated

**Features:**

- For internally mounted doors
- Hinge rotation 110°
- Spring loaded hinge for easy door removal
- Body is copper plated for easy welding

| Item No. | D1 | D2  | D3 | L1 | L2  | L3   |
|----------|----|-----|----|----|-----|------|
| 18910    | 10 | 8.5 | 6  | 38 | 3.5 | 10   |
| 18912    | 12 | 9   | 6  | 38 | 3.5 | 10   |
| 18915    | 15 | 12  | 9  | 47 | 6   | 14.5 |

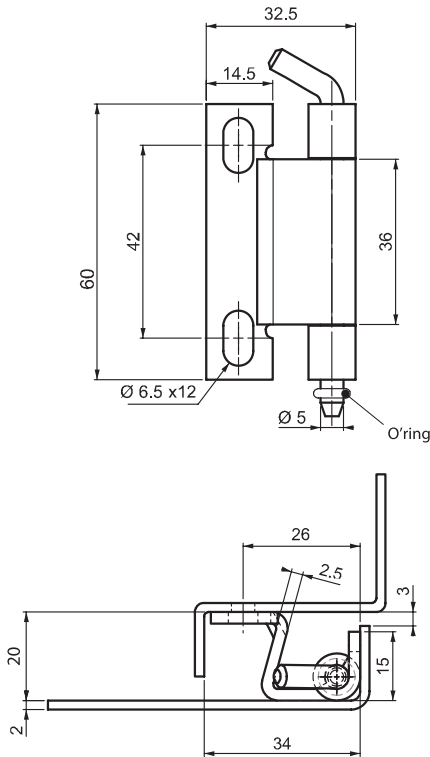


# CONCEALED HINGES

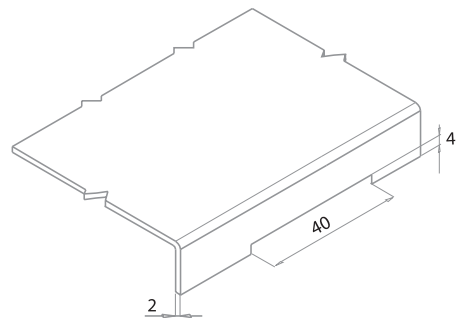
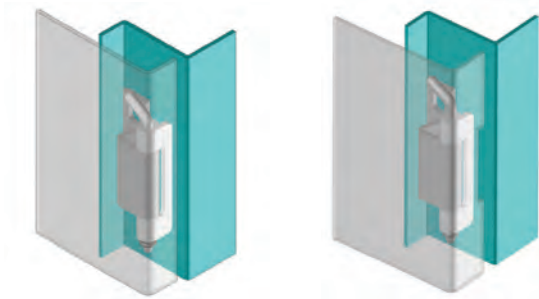
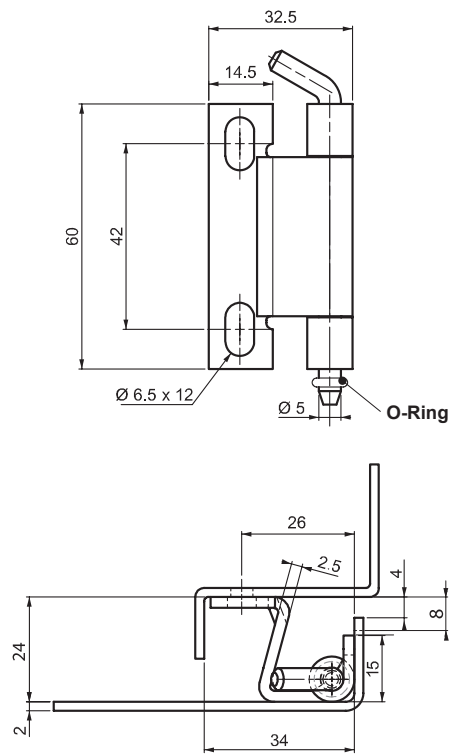
## 295 Series Concealed Hinges



Version 1



Version 2



**Specifications:**

- Material: See Table

**Features:**

- For doors with a bend between 20 - 24mm
- Hinge rotation 120°
- Frame part is screwed on, door part is welded on
- O-Ring acts as retainer ring for pin: remove O-Ring to pull pin from hinge for door or panel removal

| Item No. | Hinge Rotation | Material        | Finish          | Version |
|----------|----------------|-----------------|-----------------|---------|
| 295401   | 120°           | Stainless Steel | Stainless Steel | 1       |
| 295402   | 120°           | Stainless Steel | Stainless Steel | 2       |
| 295631   | 120°           | Steel           | Zinc Plated     | 1       |
| 295632   | 120°           | Steel           | Zinc Plated     | 2       |

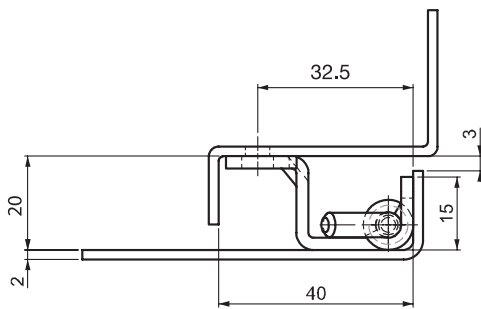
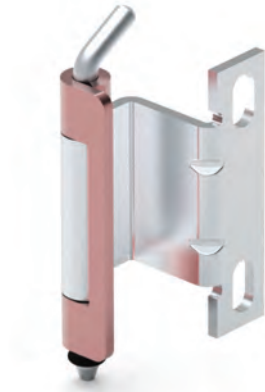
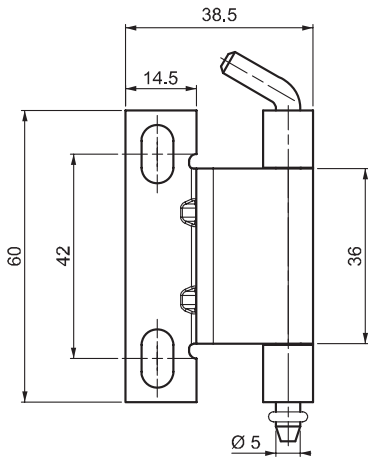
(Continued on next page > )



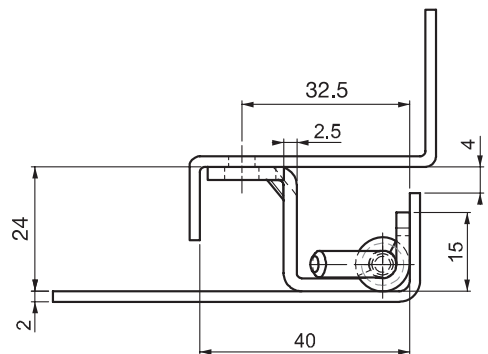
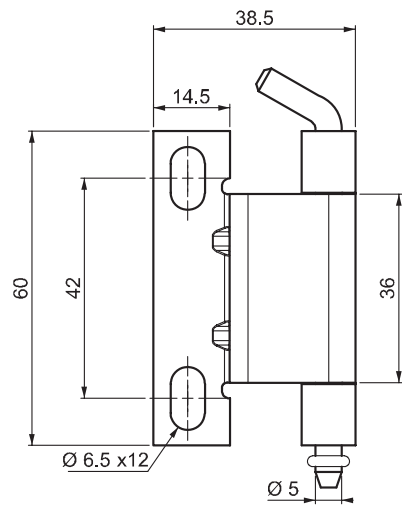
**295 Series (Continued)  
 Concealed Hinges**



**Version 3**



**Version 4**



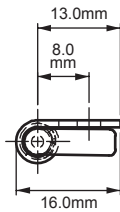
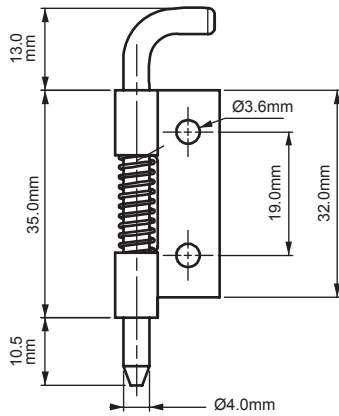
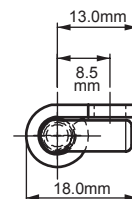
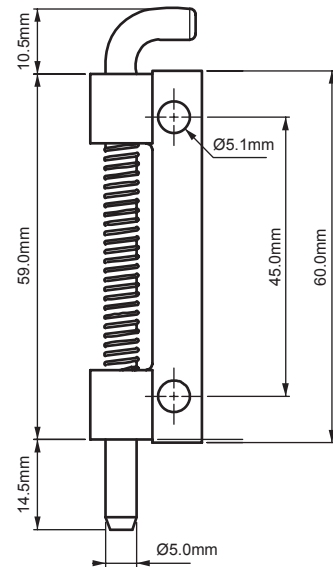
**Specifications:**

- Material: See Table
- Finish: See Table

**Features:**

- For doors with a bend between 20 - 24mm
- Hinge rotation 120°
- Frame part is screwed on, door part is welded on
- O-Ring acts as retainer ring for pin: remove O-Ring to pull pin from hinge for door or panel removal

| Item No. | Material        | Finish          | Version |
|----------|-----------------|-----------------|---------|
| 295403   | Stainless Steel | Stainless Steel | 3       |
| 295404   | Stainless Steel | Stainless Steel | 4       |
| 295633   | Steel           | Zinc Plated     | 3       |
| 295634   | Steel           | Zinc Plated     | 4       |

**CONCEALED HINGES****289 Series  
Concealed Hinges****Version 1****Version 2****Specifications:**

- Material: See Table
- Finish: See Table
- Bolts are not supplied

**Features:**

- For internally mounted doors
- Hinge rotation 135°
- Spring loaded hinge for easy door removal
- Both versions can be secured by screws or welding application

| Item No.  | Material        | Finish      | Version | Hand  |
|-----------|-----------------|-------------|---------|-------|
| 289631001 | Steel           | Zinc Plated | 1       | Right |
| 289631002 | Steel           | Zinc Plated | 1       | Left  |
| 289632001 | Steel           | Zinc Plated | 2       | Right |
| 289632002 | Steel           | Zinc Plated | 2       | Left  |
| 289401001 | Stainless Steel | Natural     | 1       | Right |
| 289401002 | Stainless Steel | Natural     | 1       | Left  |
| 289402001 | Stainless Steel | Natural     | 2       | Right |
| 289402002 | Stainless Steel | Natural     | 2       | Left  |

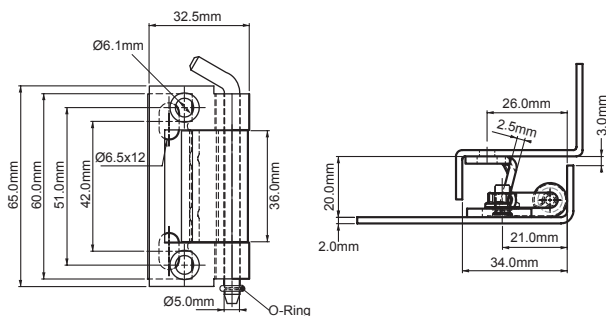
# CONCEALED HINGES



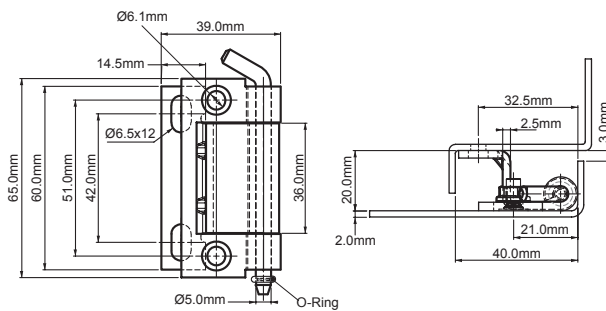
## 395 Series Concealed Hinges



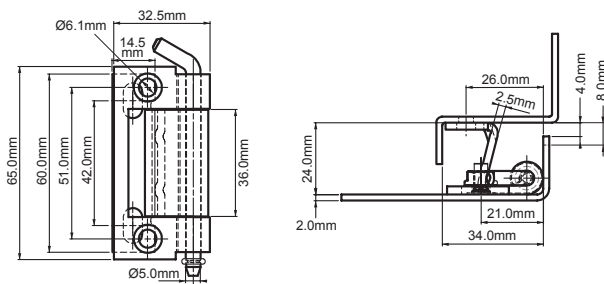
**Version 1**



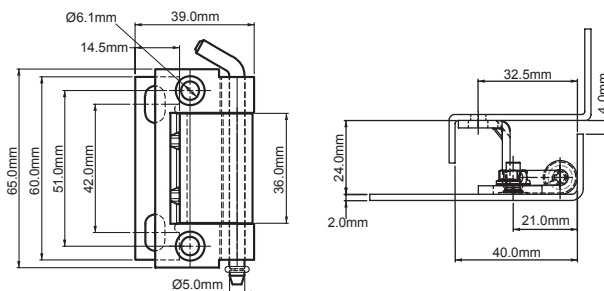
**Version 3**



**Version 2**



**Version 4**



**Specifications:**

- Material: See Table
- Finish: See Table

**Features:**

- For doors with bend between 20mm and 24mm
- Hinge rotation 120°
- Ideal for electric panels and machinery cover applications
- Frame part screwed on, door part welded on
- Bolts are not included
- O-Ring acts as retainer ring for pin: remove O-Ring to pull pin from hinge for door or panel removal

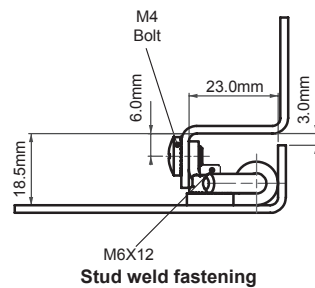
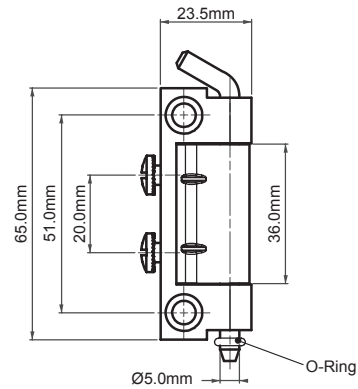
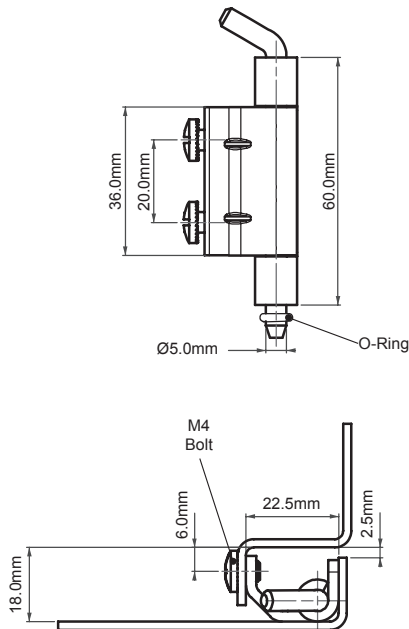
| Item No. | Material        | Finish      | Version |
|----------|-----------------|-------------|---------|
| 395631   | Steel           | Zinc Plated | 1       |
| 395632   | Steel           | Zinc Plated | 2       |
| 395633   | Steel           | Zinc Plated | 3       |
| 395634   | Steel           | Zinc Plated | 4       |
| 395401   | Stainless Steel | Natural     | 1       |
| 395402   | Stainless Steel | Natural     | 2       |
| 395403   | Stainless Steel | Natural     | 3       |
| 395404   | Stainless Steel | Natural     | 4       |

**695 Series  
Concealed Hinge**

Version 1



Version 2

**Specifications:**

- Material: See Table
- Finish: See Table
- Bolts are not included

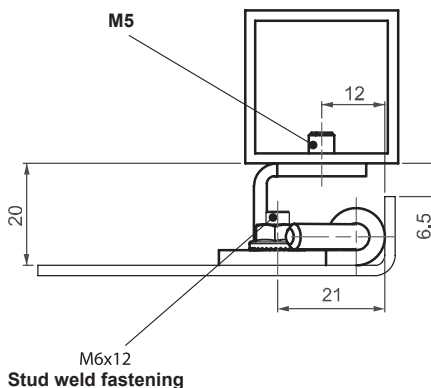
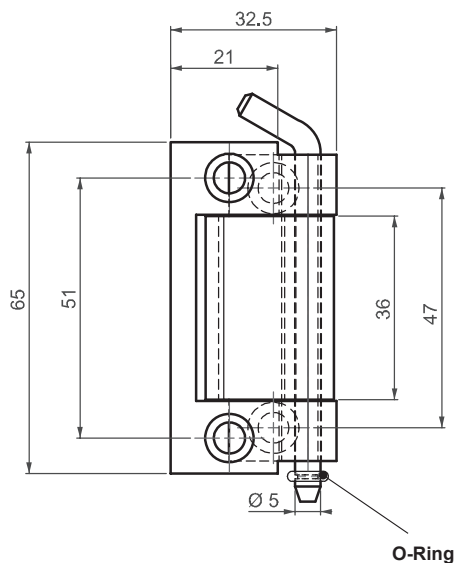
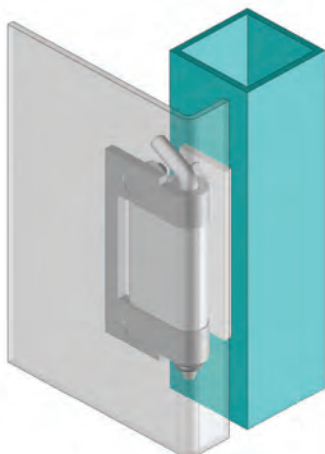
**Features:**

- For doors with bend of 18mm
- Hinge rotation 120°
- Ideal for electric panels and machinery cover applications
- Frame part screwed on and door part can be welded or screwed on
- O-Ring acts as retainer ring for pin: remove O-Ring to pull pin from hinge for door or panel removal

| Item No. | Material        | Finish                                   | Version |
|----------|-----------------|------------------------------------------|---------|
| 695631   | Steel           | Zinc Plated (weld part is copper plated) | 1       |
| 695632   | Steel           | Zinc Plated                              | 2       |
| 695401   | Stainless Steel | Natural                                  | 1       |
| 695402   | Stainless Steel | Natural                                  | 2       |



795 Series  
Concealed Hinge



Specifications:

- Material: See Table
- Finish: See Table

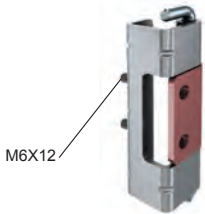
Features:

- For internally mounted doors
- Hinge rotation 135°
- Spring loaded hinge for easy door removal
- Both versions are either screwed on or welded
- Bolts are not supplied
- O-Ring acts as retainer ring for pin: remove O-Ring to pull pin from hinge for door or panel removal

| Item No. | Material        | Finish      |
|----------|-----------------|-------------|
| 79540    | Stainless Steel | Natural     |
| 79563    | Steel           | Zinc Plated |

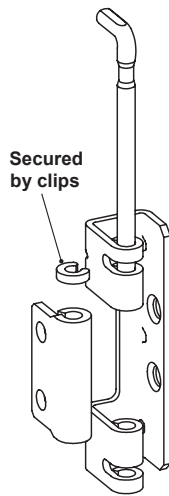
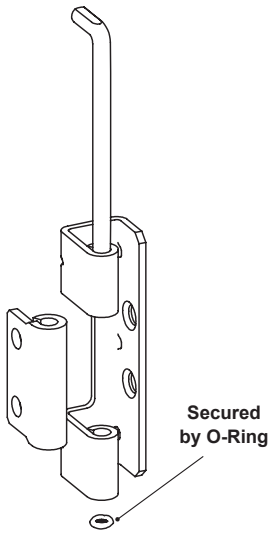
995 Series  
Concealed Hinge

Stud version



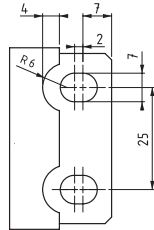
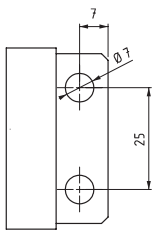
Version 3

Version 4

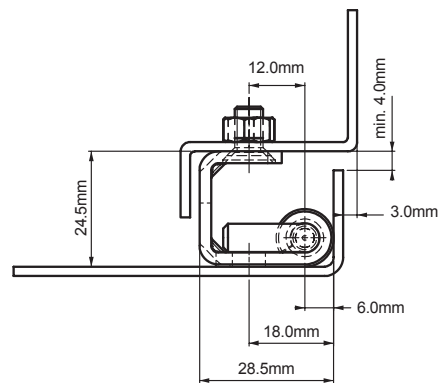
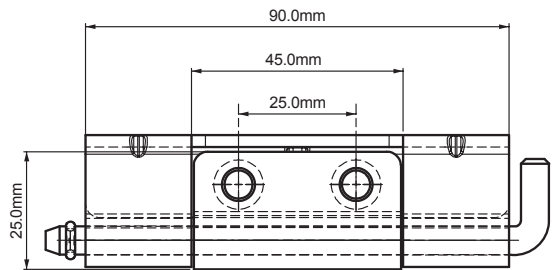
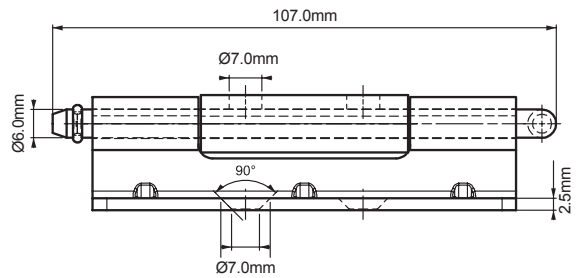


Type 1

Type 2



Middle Parts



## Specifications:

- Material: Steel
- Finish: Zinc Plated
- Welded Part: Copper Plated
- Bolts are not supplied

## Features:

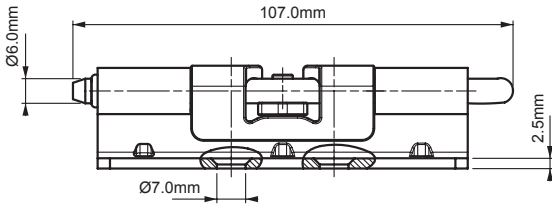
- Suitable for doors with 25mm bend
- Hinge rotation 110°
- Ideal for electric panels and machinery cover applications
- Side part can be mounted with M5 screw
- For Type 2 Middle Parts, please contact Essentra for details
- O-Ring acts as retainer ring for pin: remove O-Ring to pull pin from hinge for door or panel removal

| Item Number | Version | Middle Type | Securing Method |
|-------------|---------|-------------|-----------------|
| 99563310    | 3       | 1           | Hole            |
| 99563311    | 3       | 1           | Stud            |
| 99563410    | 4       | 1           | Hole            |
| 99563411    | 4       | 1           | Stud            |

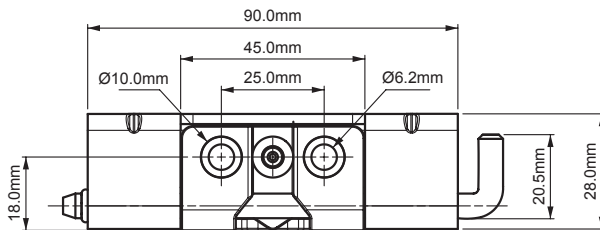




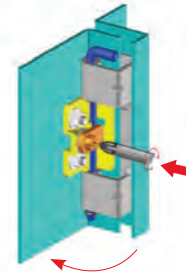
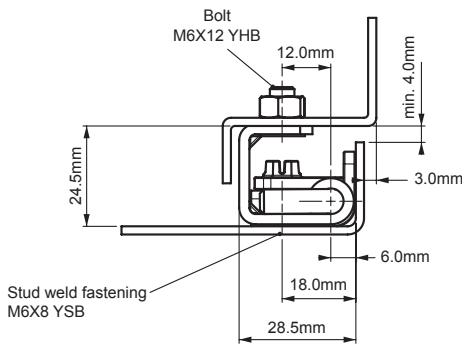
**995 Series  
 Concealed Hinge**



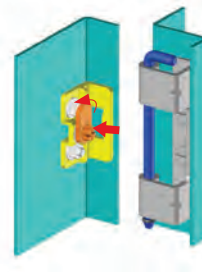
**Position 1 - Closed door**



**Position 2 - After the door is opened, cam is rotated 90° with a screwdriver**



**Position 3 - The cover is removed**



**Specifications:**

- Material: Steel
- Finish: Zinc Plated
- Welded part (Zinc Alloy) compliant to DIN-EN 1774
- Bolts or nuts are not supplied

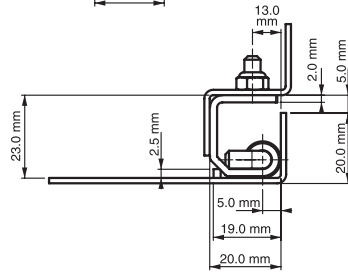
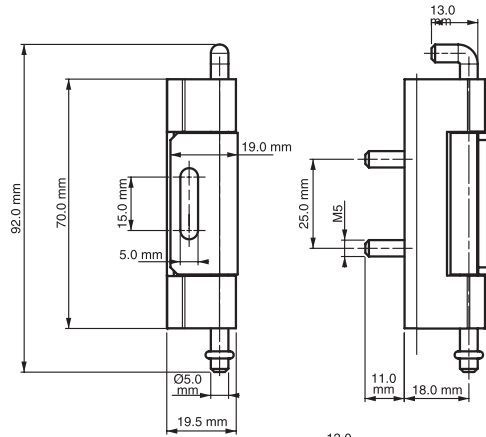
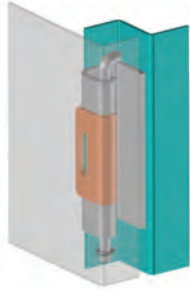
**Features:**

- Suitable for heavy-duty applications
- Suitable for doors with 25mm bend
- Hinge rotation 110°
- Ideal for electric panels and machinery cover applications
- Door can be removed with a screwdriver

| Item Number | Securing Method |
|-------------|-----------------|
| 9956320     | Hole            |
| 9956321     | Stud            |



1095 Series  
Concealed Hinge



Specifications:

- Material:  
Body: Steel  
Pin: Steel  
Body Finish: Zinc Plated  
Fixed Parts: Copper Plated

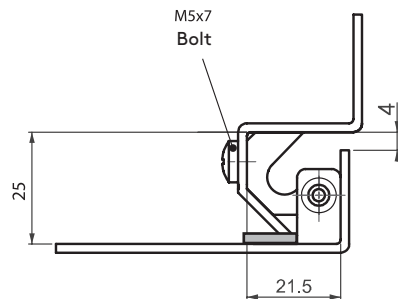
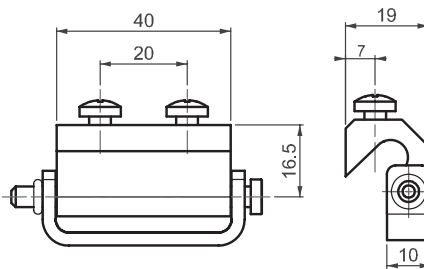
Features:

- For doors with a bend of 23mm
- Hinge rotation 110°
- Easily installed to panel or door profile
- Suitable for left and right hand applications
- Ideal for electric panels and machinery cover applications

Item Number

109563

094 Series  
Concealed Hinge



Specifications:

- Material: Zinc Alloy, Aluminum  
Steel Body: Zinc Plated  
Welded Part: Copper Plated

Features:

- For doors with 25 mm bend
- Middle part is copper plated for optional welding

Item Number

09413

Hinge  
Rotation

110°

Material

ZINC ALLOY

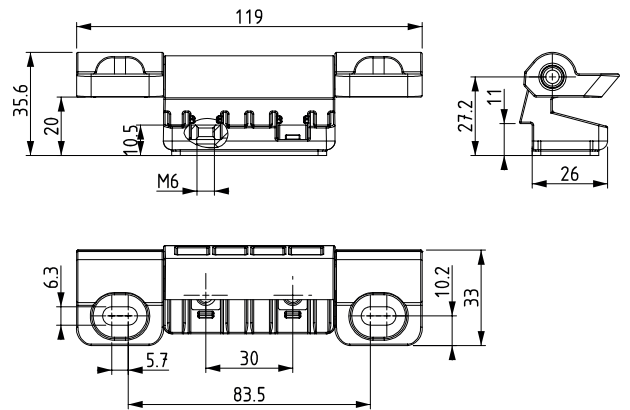
Finish

Zinc Plated



# CONCEALED HINGES / CONTINUOUS PLASTIC HINGES

## 394 Series Concealed Hinge



**Specifications:**

- Material:  
Frame Part: Nylon Black (PA6 30% GF)  
Door Part: Nylon Black (PA6 30% GF)
- Bolts are not supplied with hinge

**Features:**

- Suitable for lightweight panels, vehicle tool boxes and other applications
- Hinge rotation 90°
- Fastened with M6 screws

| Item No. |
|----------|
| 394      |

## HIPC Series Continuous Plastic Hinges

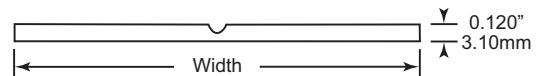


**Specifications:**

- Material: Modified Polyolefin Copolymer
- Color: See Table

**Features:**

- Resistant to salt water, oil, solvents, dilute acids, alkalis and most chemicals
- Has UV Protection

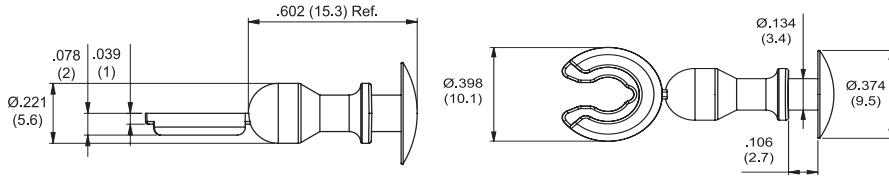
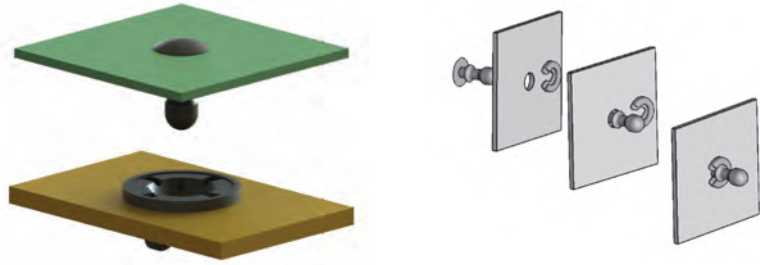


| Item No.  | Color | Width |      | Roll Length |       |
|-----------|-------|-------|------|-------------|-------|
|           |       | in    | mm   | ft          | m     |
| HIPC1125B | Black | 1.125 | 28.6 | 50          | 15.24 |
| HIPC1125G | Grey  | 1.125 | 28.6 | 50          | 15.24 |
| HIPC1125W | White | 1.125 | 28.6 | 50          | 15.24 |
| HIPC1500B | Black | 1.500 | 38.1 | 50          | 15.24 |
| HIPC1500G | Grey  | 1.500 | 38.1 | 50          | 15.24 |
| HIPC1500W | White | 1.500 | 38.1 | 50          | 15.24 |
| HIPC2000B | Black | 2.000 | 50.8 | 50          | 15.24 |
| HIPC2000G | Grey  | 2.000 | 50.8 | 50          | 15.24 |
| HIPC2000W | White | 2.000 | 50.8 | 50          | 15.24 |

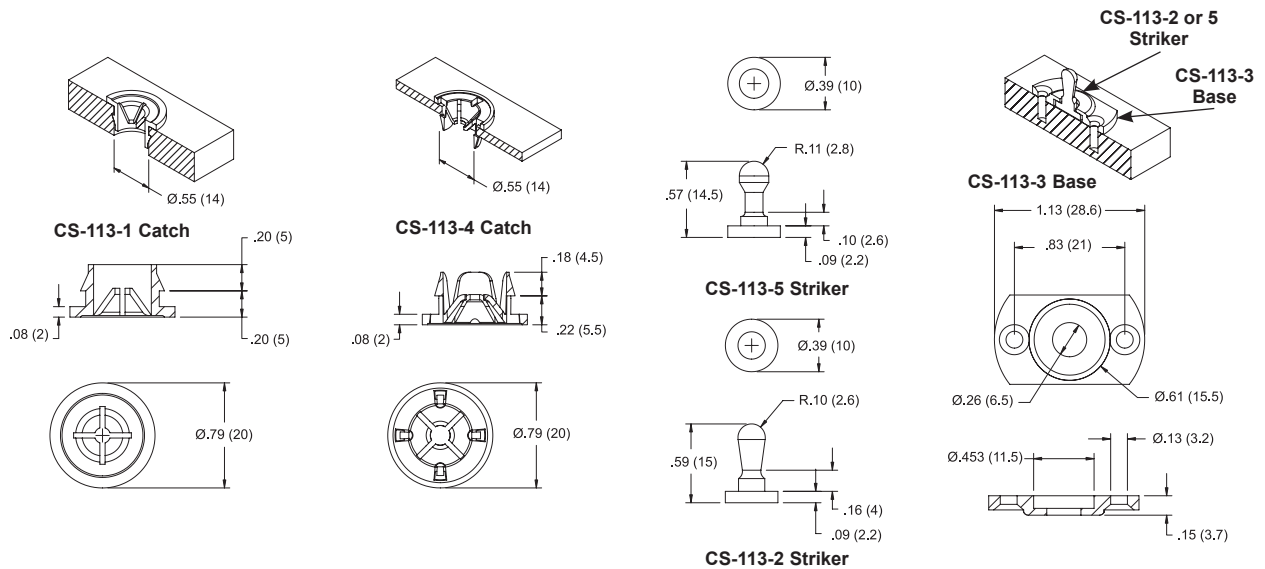


# CATCHES & STRIKERS

## CS Series Panel Catch and Striker



CS-113-6 Striker



**Specifications:**

- Material: See Table
- Color: See Table

**Features:**

- Quick installation whenever latching is needed
- Striker is mounted with the striker base (CS-113-3) and screwed into the door or mounted to outside of removable panel (CS-113-6)
- The catch is designed for mounting in wood cabinets (CS-113-1) or into a panel (CS-113-4)

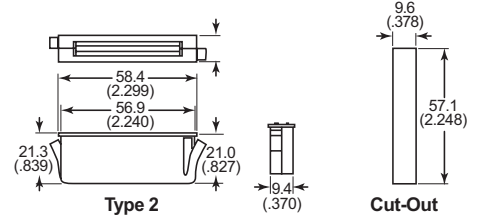
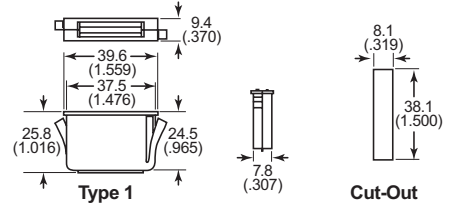
| Item No.                                                                                                                 |                                                                             |                                       |                                       |                                                                                                                             |                                     |
|--------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|---------------------------------------|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| CS-113-1                                                                                                                 | CS-113-4                                                                    | CS-113-2                              | CS-113-5                              | CS-113-6                                                                                                                    | CS-113-3                            |
| To press-fit into a .551 (14) Ø Hole, in a .394 (10) min. thick board of pliable material (i.e. wood, fiber-board, etc.) | To snap-lock in a .551 (14) Ø Hole, in a .125 (3.2) nominal panel thickness | Mounted with the use of CS-113-3 Base | Mounted with the use of CS-113-3 Base | To fit a .23-.25 (5.8 - 6.4) Ø Hole, in a .062 (1.6) thick panel<br>Striker comes as one part including the retainer washer | Use #4, #5 or M3 countersunk screw. |

| Item No. | Color   | Catch/Striker | Ø Hole (in)   | Ø Hole (mm)   | Material                  | Material UL Rating | Bulk Pack Qty. |
|----------|---------|---------------|---------------|---------------|---------------------------|--------------------|----------------|
| CS-113-1 | Black   | Catch         | 0.551         | 14            | Supertough Nylon 6/6      | UL94 HB            | 500            |
| CS-113-4 | Natural | Catch         | 0.551         | 14            | Nylon 6                   | UL94 V-2           | 500            |
| CS-113-5 | Natural | Striker       | CS-113-3 Base | CS-113-3 Base | Nylon 6/6                 | UL94 V-2           | 500            |
| CS-113-2 | Black   | Striker       | CS-113-3 Base | CS-113-3 Base | Supertough Nylon 6/6      | UL94 HB            | 500            |
| CS-113-3 | Black   | Catch         | 0.260         | 6.5           | Acetal                    | UL94 HB            | 500            |
| CS-113-6 | Natural | Striker       | .230-.250     | 5.8-6.4       | Impact Modified Nylon 6/6 | UL94 HB            | 500            |



# CATCHES & STRIKERS

## MAGS Series Magnetic Catches



**Specifications:**

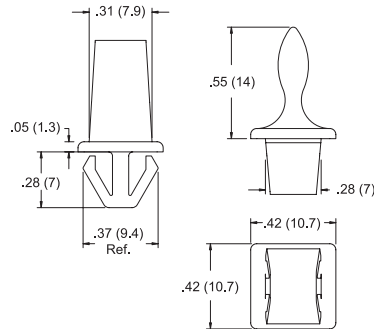
- Material: Polypropylene Shell

**Features:**

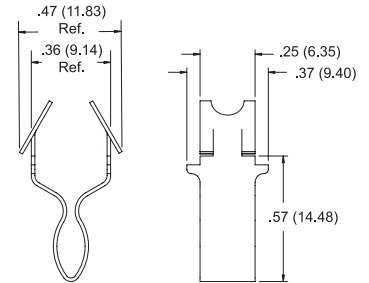
- Snap in design for quick installation
- Fits panel thickness of 0.020in (0.5mm) to 0.080in (2mm)

| Item No. | Type | Bulk Pack Qty. |
|----------|------|----------------|
| MAGS257A | 1    | 20             |
| MAGS259A | 2    | 20             |

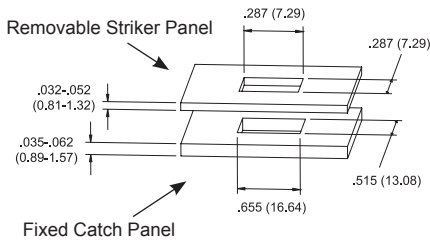
## DCS Series Metal & Plastic Catch and Striker



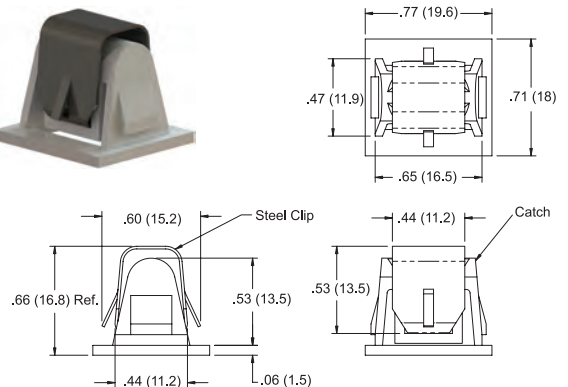
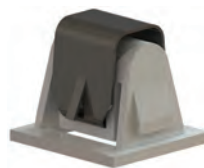
**DCS-1**



**DCS-4**



**Mounting Holes**



**DCS-7**

**Specifications:**

- Material: See Table
- Color: See Table

**Features:**

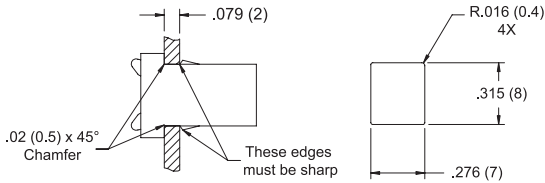
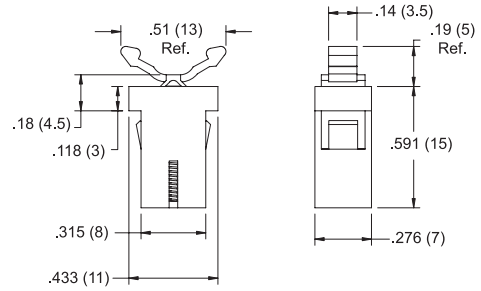
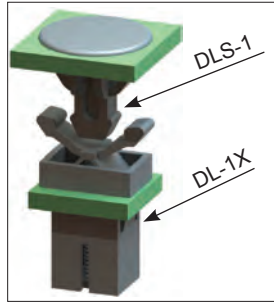
- Rugged latching device for metal cabinet doors and access panels

| Item No. | Color   | Catch/Striker | Material                | Material UL Rating | Bulk Pack Qty. |
|----------|---------|---------------|-------------------------|--------------------|----------------|
| DCS-1    | Natural | Striker       | Acetal                  | UL94 HB            | 500            |
| DCS-4    | Steel   | Striker       | Plated Steel            | —                  | 500            |
| DCS-7    | Natural | Catch         | Nylon 6/6, Plated Steel | UL94 V-2           | 500            |

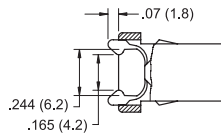


# PANEL FASTENERS - DOOR LATCHES

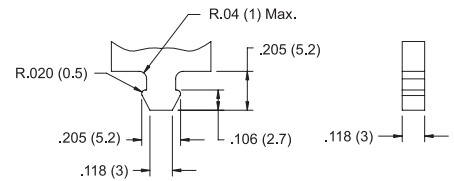
## DL Series Door Latch



**Mounting Hole**



**Locked Position**



**Striker Configuration**

**Specifications:**

- Material: UL94 HB Acetel
- Color: Black

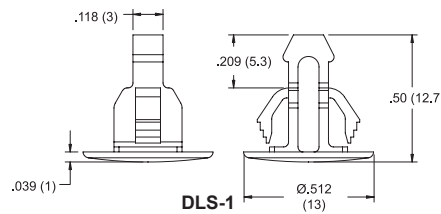
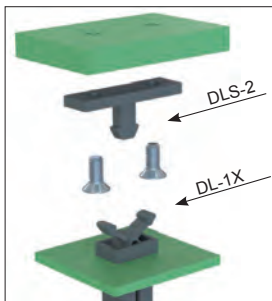
**Features:**

- Effective latching device, ideal for lightweight doors
- Snaps in from the front of the panel and locks securely in place
- Audible lock and release
- Supplied in released position

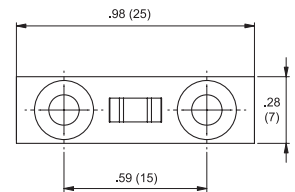
|                                                             |
|-------------------------------------------------------------|
| Locking Stroke = .21 (5.4)                                  |
| Release Stroke = .05 (1.3)                                  |
| Locking Stroke Force = 16 oz. ± 6.3 oz. (500 gr. ± 200 gr.) |
| Retention Force (Locked) = 32.2 oz. (1 kg.) Min.            |
| Continuous Working Temperature = 14 to 140°F (-10 to 60°C)  |
| Storage Temperature = -40°F to 176°F (-40°C to 80°C)        |
| Life Cycle = 50,000 operations                              |

| Item No. | Bulk Pack Qty. |
|----------|----------------|
| DL-1X    | 500            |

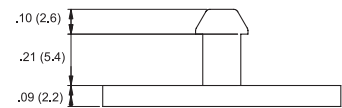
## DLS Series Door Latch Striker



**DLS-1**



**DLS-2**



**Specifications:**

- Material: UL94 HB Acetel
- Color: Black

**Features:**

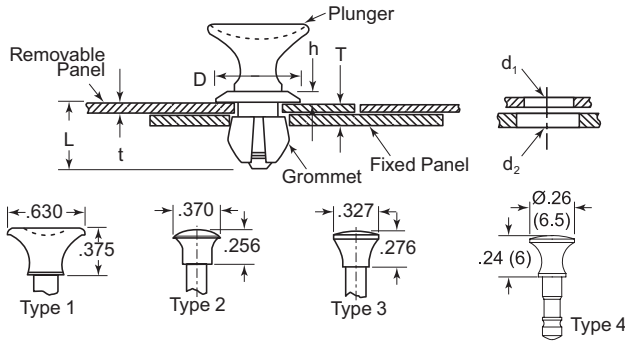
- Designed as a striker to be used with part number DL-1X shown above

| Item No. | Mounting Hole                        | Panel Thickness         | Bulk Pack Qty. |
|----------|--------------------------------------|-------------------------|----------------|
| DLS-1    | .276 x .315 (7 x 8) Rectangular Hole | .028 - .079 (0.7 - 2.0) | 1000           |
| DLS-2    | #4 or M3 Countersunk Screws          | N/A                     | 1000           |

# PANEL FASTENERS - SNAP LATCH RIVETS



## RSL Series Snap Latch Rivet



### Specifications:

- Material:  
Plunger: Nylon 6  
Grommet: Polycarbonate
- Color: See Table

### Features:

- Designed for fast and easy installation or removal by hand by snapping in and out of place
- Ideal for applications that require maintenance work
- Offered in three different head styles and four different grommets for various panel thicknesses and hole sizes
- Grommet and Plunger require mating part and are sold separately, see table for details



### Plunger

| Item No.  |           | Item No. |               | Panel Thickness T |             | Removal Panel Hole d1 |          | Mating Grommet |      | Bulk Pack Qty. |
|-----------|-----------|----------|---------------|-------------------|-------------|-----------------------|----------|----------------|------|----------------|
| Black     | White     | Type     | in            | mm                | in (+0.004) | mm (+0.1)             | Black    | White          |      |                |
| RSLP100B  | RSLP100W  | 1        | 0.059 - 0.146 | 1.5 - 3.7         | 0.299       | 7.60                  | RSLG100B | RSLG100W       | 1000 |                |
| SLPL-1L-B | SLPL-1L-W | 1        | 0.079 - 0.165 | 2.0 - 4.2         | 0.299       | 7.60                  | SLG-1L-B | SLG-1L-W       | 1000 |                |
| SLPL-2L-B | SLPL-2L-W | 1        | 0.118 - 0.205 | 3.0 - 5.2         | 0.299       | 7.60                  | SLG-2L-B | SLG-2L-W       | 1000 |                |
| RSLP120B  | RSLP120W  | 1        | 0.228 - 0.319 | 5.8 - 8.1         | 0.299       | 7.60                  | RSLG120B | RSLG120W       | 1000 |                |
| RSLP200B  | RSLP200W  | 2        | 0.059 - 0.146 | 1.5 - 3.7         | 0.299       | 7.60                  | RSLG100B | RSLG100W       | 1000 |                |
| SLPB-1L-B | SLPB-1L-W | 2        | 0.079 - 0.165 | 2.0 - 4.2         | 0.299       | 7.60                  | SLG-1L-B | SLG-1L-W       | 1000 |                |
| SLPB-2L-B | SLPB-2L-W | 2        | 0.118 - 0.205 | 3.0 - 5.2         | 0.299       | 7.60                  | SLG-2L-B | SLG-2L-W       | 1000 |                |
| RSLP215B  | RSLP215W  | 2        | 0.181 - 0.272 | 4.6 - 6.9         | 0.299       | 7.60                  | RSLG115B | RSLG115W       | 1000 |                |
| RSLP220B  | RSLP220W  | 2        | 0.228 - 0.319 | 5.8 - 8.1         | 0.299       | 7.60                  | RSLG120B | RSLG120W       | 1000 |                |
| SLPB-1M-B | SLPB-1M-W | 3        | 0.059 - 0.146 | 1.5 - 3.7         | 0.237       | 6.00                  | SLG-1M-B | SLG-1M-W       | 1000 |                |
| SLPB-2M-B | SLPB-2M-W | 3        | 0.079 - 0.165 | 2.0 - 4.2         | 0.237       | 6.00                  | SLG-2M-B | SLG-2M-W       | 1000 |                |
| SLPB-3M-B | SLPB-3M-W | 3        | 0.118 - 0.205 | 3.0 - 5.2         | 0.237       | 6.00                  | SLG-3M-B | SLG-3M-W       | 1000 |                |
| RSLP315B  | RSLP315W  | 3        | 0.181 - 0.272 | 4.6 - 6.9         | 0.237       | 6.00                  | RSLG140B | RSLG140W       | 1000 |                |
| SLPB-1S-B | SLPB-1S-W | 4        | 0.079 - 0.158 | 2.0 - 4.0         | 0.179       | 4.55                  | SLG-1S-B | SLG-1S-W       | 1000 |                |
| SLPB-2S-B | SLPB-2S-W | 4        | 0.098 - 0.177 | 2.5 - 4.5         | 0.179       | 4.55                  | SLG-2S-B | SLG-2S-W       | 1000 |                |

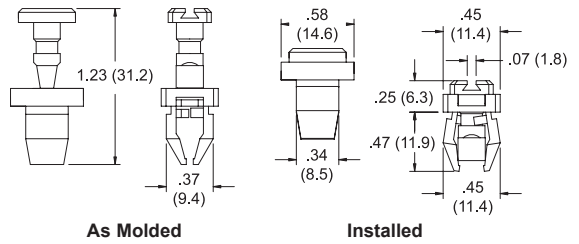
### Grommets

| Item No. |          | Item No. |     | Panel Thickness t |           | Fixed Panel Hole d2 |      | D     |      | L     |     | h    |    | Bulk Pack Qty. |
|----------|----------|----------|-----|-------------------|-----------|---------------------|------|-------|------|-------|-----|------|----|----------------|
| Black    | White    | in       | mm  | in (+0.004)       | mm (+0.1) | in                  | mm   | in    | mm   | in    | mm  | in   | mm |                |
| RSLG100B | RSLG100W | 0.043    | 1.1 | 0.319             | 8.1       | 0.425               | 10.8 | 0.339 | 8.6  | 0.079 | 2.0 | 1000 |    |                |
| SLG-1L-B | SLG-1L-W | 0.063    | 1.6 | 0.319             | 8.1       | 0.425               | 10.8 | 0.354 | 9.0  | 0.079 | 2.0 | 1000 |    |                |
| SLG-2L-B | SLG-2L-W | 0.098    | 2.5 | 0.319             | 8.1       | 0.425               | 10.8 | 0.394 | 10.0 | 0.079 | 2.0 | 1000 |    |                |
| RSLG115B | RSLG115W | 0.161    | 4.1 | 0.319             | 8.1       | 0.425               | 10.8 | 0.461 | 11.7 | 0.079 | 2.0 | 1000 |    |                |
| RSLG120B | RSLG120W | 0.209    | 5.3 | 0.319             | 8.1       | 0.425               | 10.8 | 0.508 | 12.9 | 0.079 | 2.0 | 1000 |    |                |
| SLG-1M-B | SLG-1M-W | 0.043    | 1.1 | 0.253             | 6.4       | 0.335               | 8.5  | 0.315 | 8.0  | 0.071 | 1.8 | 1000 |    |                |
| SLG-2M-B | SLG-2M-W | 0.063    | 1.6 | 0.253             | 6.4       | 0.335               | 8.5  | 0.335 | 8.5  | 0.071 | 1.8 | 1000 |    |                |
| SLG-3M-B | SLG-3M-W | 0.098    | 2.5 | 0.253             | 6.4       | 0.335               | 8.5  | 0.374 | 9.5  | 0.071 | 1.8 | 1000 |    |                |
| RSLG140B | RSLG140W | 0.161    | 4.1 | 0.253             | 6.4       | 0.335               | 8.5  | 0.433 | 11.0 | 0.071 | 1.8 | 1000 |    |                |
| SLG-1S-B | SLG-1S-W | 0.039    | 1.0 | 0.187             | 4.7       | 0.256               | 6.5  | 0.299 | 7.6  | 0.047 | 1.2 | 1000 |    |                |
| SLG-2S-B | SLG-2S-W | 0.059    | 1.5 | 0.187             | 4.7       | 0.256               | 6.5  | 0.319 | 8.1  | 0.047 | 1.2 | 1000 |    |                |



# QUARTER TURN PANEL FASTENERS

## FQT Series Quarter Turn Panel Fastener

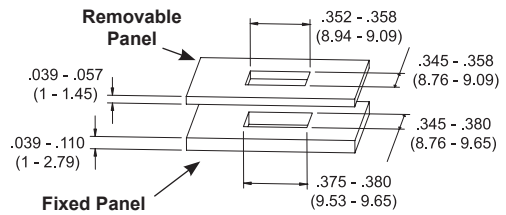


**Specifications:**

- Material: UL94 HB Acetal
- Color: See Table

**Features:**

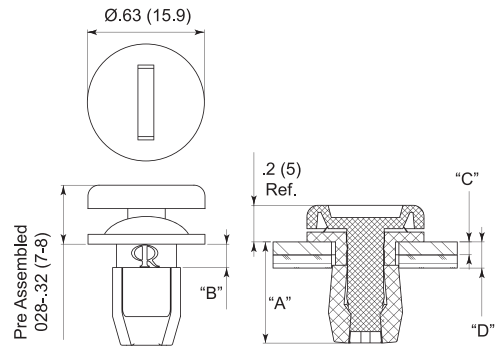
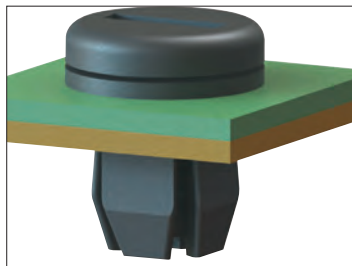
- Joins together one fixed panel and one removable panel
- Installed by driving the plunger into the grommet with a hammer, locking the two panels together
- Panels are easily separated using a screwdriver to rotate the plunger a quarter turn
- Supplied as one piece to reduce hardware and cost



**Mounting Hole**

| Item No. | Color | Bulk Pack Qty. |
|----------|-------|----------------|
| FQT-1    | White | 1000           |
| FQT-1BK  | Black | 1000           |

## QTPF Series Quarter Turn Panel Fastener

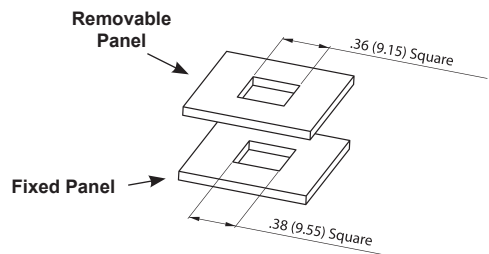


**Specifications:**

- Material: UL94 HB Acetal
- Color: Black

**Features:**

- Joins together one fixed panel and one removable panel
- Using a flat-head screwdriver or coin, a quarter-turn releases the fixed panel while retaining the fastener in the removable panel
- Pre-assembled to reduce hardware and cost



**Mounting Hole**

| Item No. | A    |      | B    |     | Removable Panel Thickness (C) |           | Total Panel Thickness (D) |           | Bulk Pack Qty. |
|----------|------|------|------|-----|-------------------------------|-----------|---------------------------|-----------|----------------|
|          | in   | mm   | in   | mm  | in                            | mm        | in                        | mm        |                |
| QTPF-1BK | 0.48 | 12.3 | 0.07 | 1.7 | 0.02 - 0.06                   | 0.5 - 1.6 | 0.08 - 0.20               | 2.0 - 5.0 | 100            |
| QTPF-2BK | 0.54 | 13.7 | 0.12 | 3.1 | 0.07 - 0.12                   | 1.8 - 3.1 | 0.16 - 0.24               | 4.0 - 6.2 | 100            |





## MONITORING & ACCESS CONTROL CONCEPT

The security of IT cabinets in server rooms and data centers is becoming more important worldwide. The reason is that a typical IT infrastructure supports the entire organization and stores the know-how of the company.

We have developed an integrated access control system called ELS.

This new system enables you to monitor and control your IT environment in a very efficient way. Sensors detect door access, variations in temperature, security and other variables to give you immediate notification and greater control over your network, all at a great value. Cabinet doors can be opened by RFID cards, a key pad or remote control units.

This solution manages who can open which cabinet doors and when, and allows you to get a detailed report for each cabinet.

### BASIC FEATURES:

- Provides environmental monitoring, access control and a management system
- Prevents unauthorized access
- Allows doors to be opened using a proximity card, keypad or via a web interface
- Accommodates sensors to monitor temperature, humidity, smoke, the presence of water or liquids, etc.
- Automatically generates an audio alert
- Records all the security information you need every time the door to a server cabinet is opened – whom, where, when



### APPLICATIONS

Server Cabinets | Data Centers | Electric Panels | Telecommunications | Kiosks | GSM Cabinets





## SYSTEM OVERVIEW

- IP monitoring of environmental conditions in the rack cabinet
- Control of physical access to the rack cabinet
- User interface via proximity card reader or keypad
- Electronic lock access authorization

### Monitoring and Access Control Units



ACU: Access Control Unit  
AIK: Access Interface Keypad  
AIP: Access Interface Proximity

### Standalone Access Interfaces



S-AIK: Access Interface Keypad  
S-AIP: Access Interface Proximity

### Other Electromechanical Locks



### Electronic Swinghandles





**3402 Series  
 ACU Access Control Unit**



1 2 3

1. LED indicator
2. USB 2.0
3. Ethernet port 10/100
4. Power input (12VDC 3A)



4 5 6 7 5 6 7

5. 2x access interface inputs
6. 2x lock outputs
7. 2x dry contact inputs



**Management Software**

**Dry Contact Inputs**

- Dry contact inputs to monitor changes in the environment
- Inputs can be used as sensor input for detecting the state of the door (open / closed)

**Access Interfaces**

- 2x access interface inputs allow access by entering a code number or presenting a proximity card.
- Possible to connect 3414 - AIK and 3415 - AIP devices (see page 710)

**Lock Outputs**

- 2x lock outputs to control physical access to the cabinet
- Possible to connect wide range of locks.

**Specifications**

- Can connect up to 18 access interfaces to one ACU
- Can control up to 32 swinghandles with one ACU
- Management software:
  - User-friendly interface
  - Supports SMS and email notifications
  - Monitor all door and handle status in one screen
  - Control all connected swinghandles remotely
  - Configure network settings and user-administrative settings
  - Add and remove users
  - View and delete logs
  - MS SQL database
  - Easy configuration with ELS Configuration Software
- Up to two AIs (3414 and 3415) can be connected to the ACU

**Features**

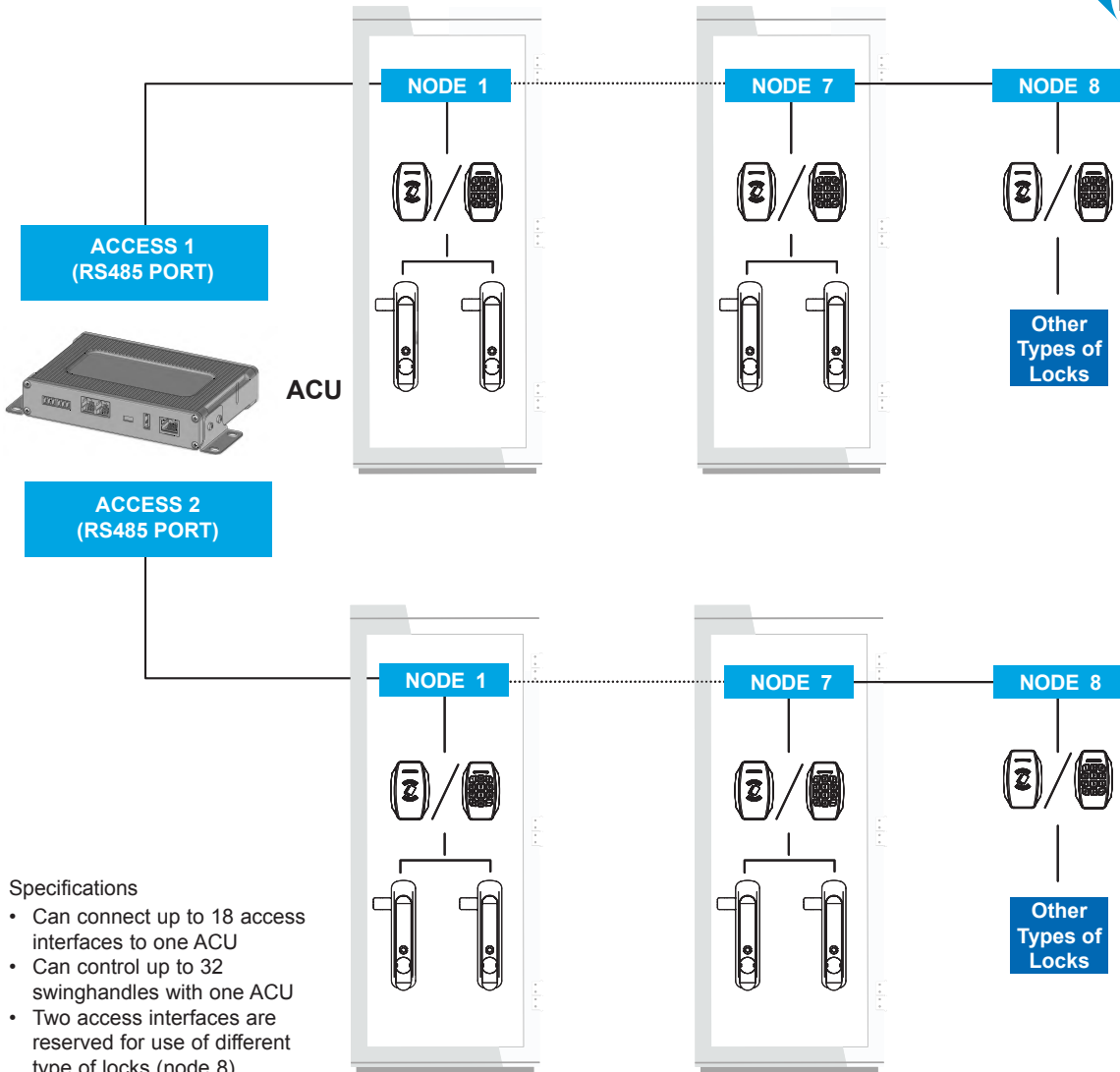
- Intelligent device for controlling electronic locks and monitoring door status
- Control of physical access to the rack cabinet
- Monitors and manages security conditions over IP
- User database
- Management software for monitoring and configuring the unit
- Can connect to a sensor for detecting the state of the door (open/closed)
- Applications: data centers, co-location centers, web hosting facilities, telecom racks or any site that needs to be monitored

|                 |
|-----------------|
| <b>Item No.</b> |
| <b>3402</b>     |



# ACCESS CONTROL UNITS

## 3402 Series (continued) ACU Access Control Unit System Overview



### Specifications

- Can connect up to 18 access interfaces to one ACU
- Can control up to 32 swinghandles with one ACU
- Two access interfaces are reserved for use of different type of locks (node 8)

## 3403 Series Electronic Swinghandle Connection Cable



### Specifications

- Used to connect electronic swinghandles to standalone access interfaces
- The same connectors are crimped on both ends of the cable

| Item No. | Length<br>m |
|----------|-------------|
| 34030039 | 0.4         |
| 34030006 | 4.0         |
| 34030064 | 6.0         |

## 3400 Series ACU - AI Connection Cable



### Specifications

- Used to connect access interfaces (3414 & 3415 on page 710) to monitor access control unit

| Item No. |
|----------|
| 34030040 |



### 3416 Series S-AIK Standalone Access Interface Keypad



12 VDC 1A  
Adapter

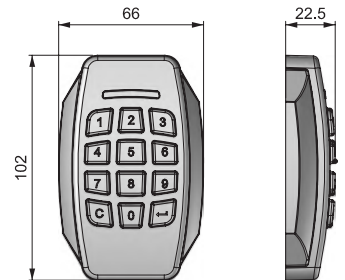


#### Specifications

- Material:  
Cover: ABS  
Body: Zinc Alloy
- 12 Volt DC supply Voltage
- Two level password (master and user)
- Two lock outputs to control physical access to the cabinet
- Possible to connect wide range of locks including electronic swinghandles

#### Features

- User-interface device that allows access by entering a code number or presenting a proximity card
- Can control locks separately
- Beep tones and LEDs on the AI device inform users about the acceptance or rejection of an operation
- Colored status indicators signals:
  - Signal 1: Ready = Blue
  - Signal 2: Error = Red
  - Signal 3: Ok = Green
  - Signal 3: Menu = Yellow



Item  
No.  
3416

### 3417 Series S-AIP Standalone Access Interface Keypad



12 VDC 1A  
Adapter

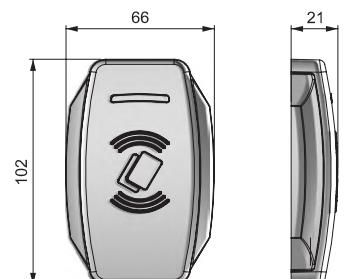


#### Specifications

- Material:  
Cover: ABS  
Body: Zinc Alloy
- 12 Volt DC supply Voltage
- Two level card management system (master and user)
- Two lock outputs to control physical access to the cabinet
- Possible to connect wide range of locks including electronic swinghandles
- RFID card: 13.56Mhz MIFARE - Standard ISO144443A; available printed or unprinted, ordered separately

#### Features

- User-interface device that allows access by presenting a proximity card
- Can control locks separately
- Beep tones and LEDs on the AI device inform users about the acceptance or rejection of an operation
- Colored status indicators signals:
  - Signal 1: Ready = Blue
  - Signal 2: Error = Red
  - Signal 3: Ok = Green
  - Signal 3: Menu = Yellow
- Printed RFID 34002639. Unprinted RFID 34002640



Item  
No.  
3417



## ACCESS INTERFACES / ACCESSORIES

**3414 Series  
Access Interface Keypad**

## Specifications

- Use with ACU Item 3402 (page 707)

## Features

- User-interface device that allows access by entering a code number or presenting a proximity card
- Beep tones and LEDs on the AI device inform users about the acceptance or rejection of an operation



Item  
No.  
3414

**3415 Series  
Access Interface Proximity**

## Specifications

- Use with ACU Items 3402 (page 707) and to control swinghandles
- RFID card: 13.56Mhz MIFARE - Standard ISO14443A; available printed or unprinted, ordered separately

## Features

- User-interface device that allows access by presenting a proximity card
- Beep tones and LEDs on the AI device inform users about the acceptance or rejection of an operation
- Order Separately RFID cards: 34002639 (printed), 34002640 (unprinted)



Item  
No.  
3415

**3400 Series  
AC-DC Power Supply**

## Specifications

- 12 Volt DC 3 Amper
- Universal input voltage range
- Up to 35 W continuous power

## Features

- Interchangeable AC blades for global use
- Used with monitoring access control units
- Europe blade included; please contact Essentra for other blades



Item  
No.  
34002625

**3403 Series  
AC-DC Power Supply**

## Specifications

- 12 Volt DC 3 Amper
- Universal input voltage range
- Up to 35 W continuous power

## Features

- Used with standalone access interfaces



Item  
No.  
34030041

**3403 Series  
RS 485 Repeater**

## Specifications

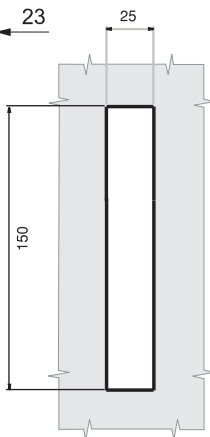
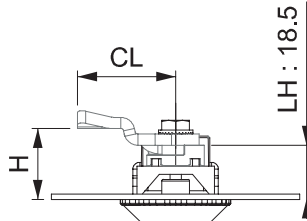
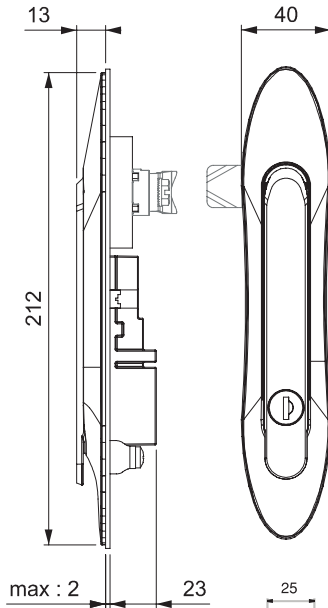
- Used to connect access interfaces (3414 & 3415 above) to each other



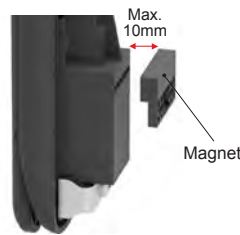
Item  
No.  
34030063



**3101 Series**  
All Metal Electronic Swinghandles



**Cut-Out**



Open-close position of door can be monitored; max distance between the magnet and the lock is 10 mm



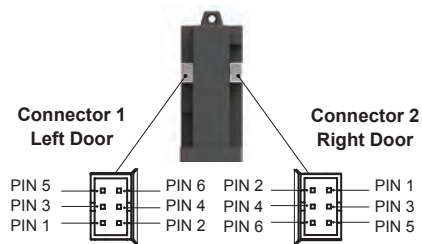
**Specifications**

- Material:  
Body: Zinc Alloy DIN-EN 1774-ZnAl4Cu1  
Handle: Zinc Alloy DIN-EN 1774-ZnAl4Cu1  
Cam: Steel  
Seal: Polyurethane
- Finish: Black Powder Coated
- Operating voltage: 12 VDC
- Operating temperature: -10°C to 60°C
- Standby: 6mA
- Lock / Unlock: 75mA
- Maximum Current: 400mA

**Features**

- High security to protect your organization's data
- All metal construction
- Compatible with Access Control Systems
- Ability to work mechanically in case of power outage
- Capable to inform door and handle status
- Elegant design
- Applications: rack cabinets, server rooms, telecommunication, kiosks, GSM network cabinets
- Two keys supplied with each latch

**▲ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591.**



**Pin Detail**  
Both connectors have same function

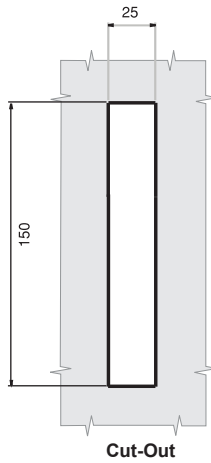
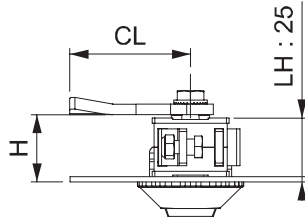
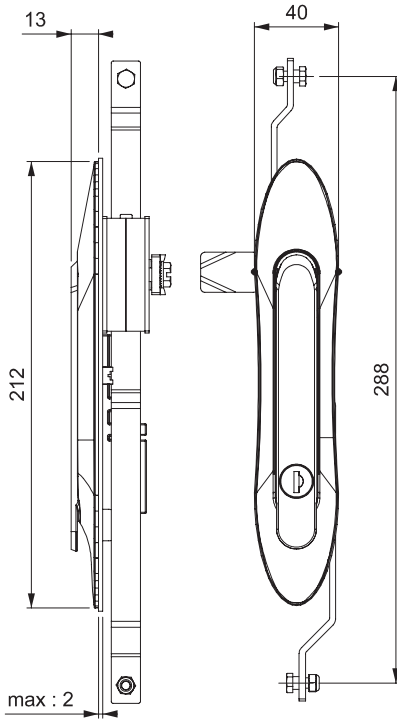


| Item No.     | Cylinder Description                    |
|--------------|-----------------------------------------|
| 310112123200 | Stainless Steel Dust Cap (Keyed Differ) |
| 310112124000 | Stainless Steel Dust Cap (Keyed Alike)  |



# ELECTRONIC SWINGHANDLES

## 3102 Series All Metal Electronic Swinghandles

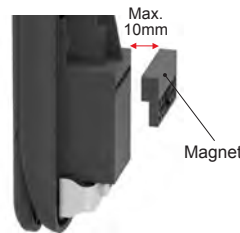


### Specifications

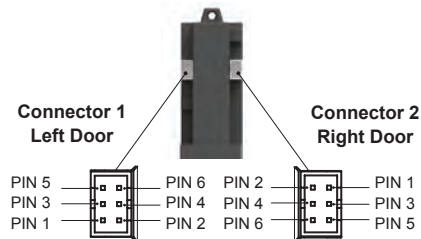
- Material:  
Body: Zinc Alloy DIN-EN 1774-ZnAl4Cu1  
Handle: Zinc Alloy DIN-EN 1774-ZnAl4Cu1  
Cam: Steel  
Seal: Polyurethane
- Finish: Black Powder Coated
- Operating voltage: 12 VDC
- Operating temperature: -10°C to 60°C
- Standby: 6mA
- Lock / Unlock: 75mA
- Maximum Current: 400mA

### Features

- High security to protect your organization's data
- All metal construction
- Compatible with Access Control Systems
- Ability to work mechanically in case of power outage
- Capable to inform door and handle status
- Elegant design
- Applications: rack cabinets, server rooms, telecommunication, kiosks, GSM network cabinets
- Two keys supplied with each latch



Open-close position of door can be monitored; max distance between the magnet and the lock is 10 mm



Pin Detail  
Both connectors have same function

**⚠ CAMS SOLD SEPARATELY. SEE PAGES 592 - 593.**

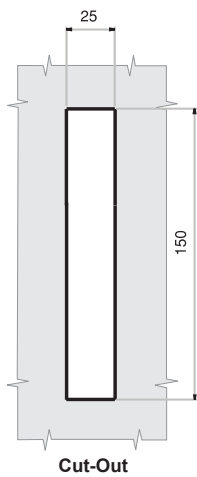
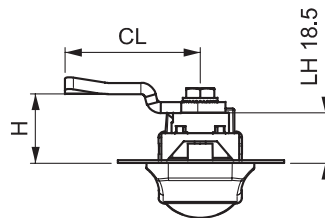
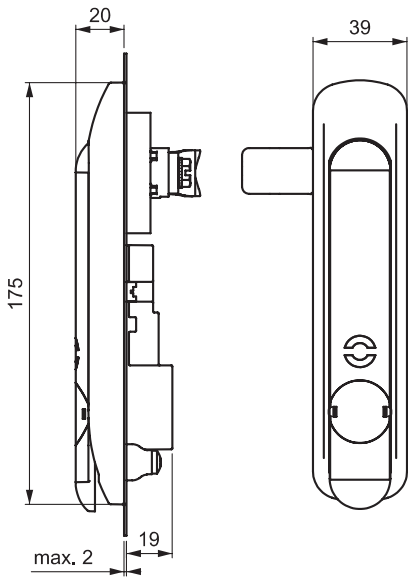
| Item No.     | Cylinder Description                    |
|--------------|-----------------------------------------|
| 310212123200 | Stainless Steel Dust Cap (Keyed Differ) |
| 310212124000 | Stainless Steel Dust Cap (Keyed Alike)  |



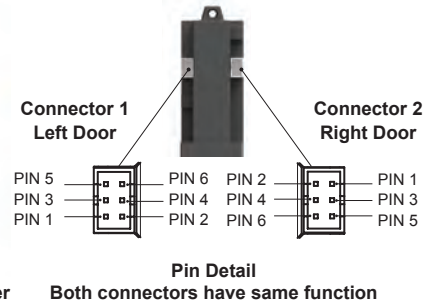
# ELECTRONIC SWINGHANDLES



## 3103 Series Electronic Swinghandles with LED Indicators



Open-close position of door can be monitored; max distance between the magnet and the lock is 10 mm



### Specifications

- Material:
  - Body: Polyamide DIN-EN ISO 1043-1 PA6 GFR 30
  - Handle: Polyamide DIN-EN ISO 1043-1 PA6 GFR 30
  - Cam: Steel
- Operating voltage: 12 VDC
- Operating temperature: -10°C to 60°C
- Standby: 6mA
- Lock / Unlock: 75mA
- Maximum Current: 400mA

### Features

- High security to protect your organization's data
- LED indicators
- Compatible with Access Control Systems
- Ability to work mechanically in case of power outage
- Capable to inform door and handle status
- Applications: rack cabinets, server rooms, telecommunication, kiosks, GSM network cabinets
- Two keys supplied with each latch

**⚠ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591, 594.**

### Lock Warning Signs

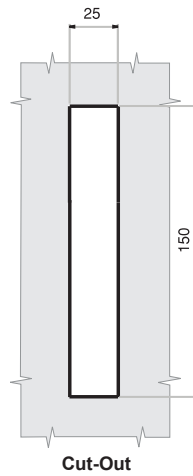
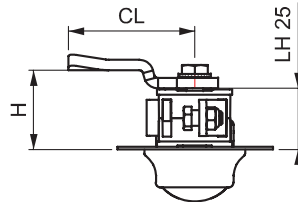
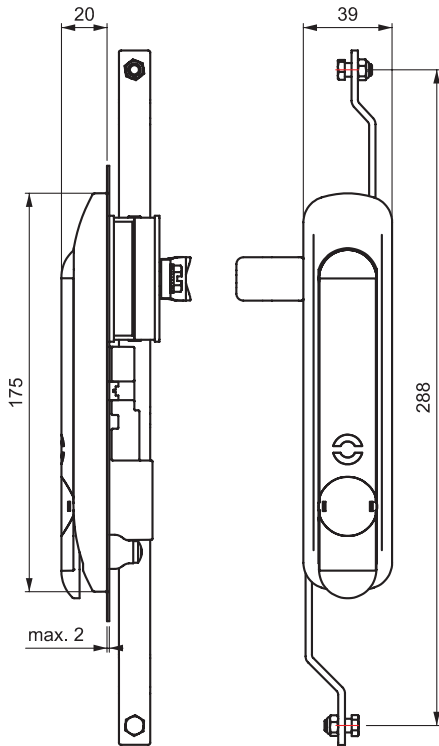
|          |  |                         |                      |
|----------|--|-------------------------|----------------------|
| Signal 1 |  | While opening the lock  | LED 1 blinks fast    |
| Signal 2 |  | While closing the lock  | LED 2 blinks fast    |
| Signal 3 |  | When the lock is open   | Both LEDs blink fast |
| Signal 4 |  | When the handle is open | Both LEDs not lit    |
| Signal 5 |  | Error                   | Both LEDs blink slow |
| Signal 6 |  | Ready                   | Both LEDs are lit    |

| Item No.     | Cylinder Description                    |
|--------------|-----------------------------------------|
| 310320203200 | Stainless Steel Dust Cap (Keyed Differ) |
| 310320204000 | Stainless Steel Dust Cap (Keyed Alike)  |



# ELECTRONIC SWINGHANDLES

## 3104 Series Electronic Swinghandles with LED Indicators



### Specifications

- Material:  
Body: Polyamide DIN-EN ISO 1043-1 PA6 GFR 30  
Handle: Polyamide DIN-EN ISO 1043-1 PA6 GFR 30  
Cam: Steel
- Operating voltage: 12 VDC
- Operating temperature: -10°C to 60°C
- Standby: 6mA
- Lock / Unlock: 75mA
- Maximum Current: 400mA

### Features

- High security to protect your organization's data
- LED indicators
- Compatible with Access Control Systems
- Ability to work mechanically in case of power outage
- Capable to inform door and handle status
- Applications: rack cabinets, server rooms, telecommunication, kiosks, GSM network cabinets
- Two keys supplied with each latch

**⚠ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591, 594.**

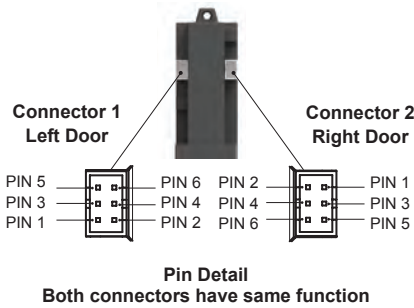
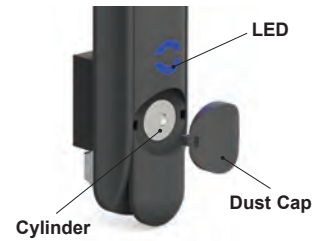
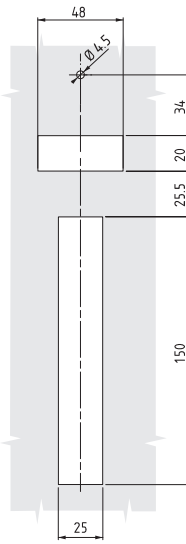
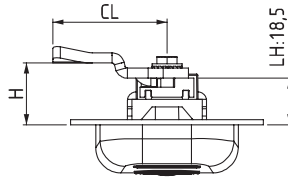
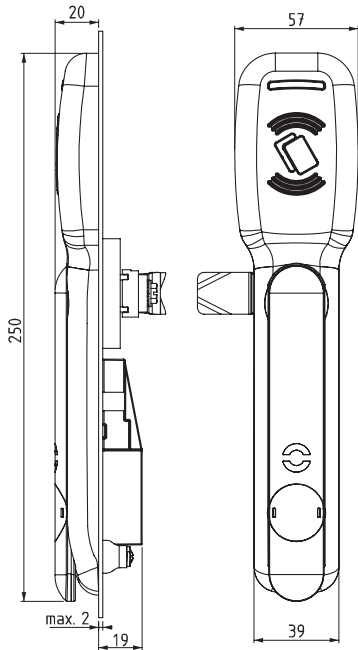
### Lock Warning Signs

|          |  |                         |                      |
|----------|--|-------------------------|----------------------|
| Signal 1 |  | While opening the lock  | LED 1 blinks fast    |
| Signal 2 |  | While closing the lock  | LED 2 blinks fast    |
| Signal 3 |  | When the lock is open   | Both LEDs blink fast |
| Signal 4 |  | When the handle is open | Both LEDs not lit    |
| Signal 5 |  | Error                   | Both LEDs blink slow |
| Signal 6 |  | Ready                   | Both LEDs are lit    |

| Item No.     | Cylinder Description                    |
|--------------|-----------------------------------------|
| 310420203200 | Stainless Steel Dust Cap (Keyed Differ) |
| 310420204000 | Stainless Steel Dust Cap (Keyed Alike)  |



**3111 Series**  
Electronic Swinghandles with RFID Reader



**Specifications**

- Material:  
Body: Polyamide DIN-EN ISO 1043-1 PA6 GFR 30  
Handle: Polyamide DIN-EN ISO 1043-1 PA6 GFR 30  
Cam: Steel
- Operating voltage: 12 VDC
- Operating temperature: -10°C to 60°C
- Standby: 6mA
- Lock / Unlock: 75mA
- Maximum Current: 400mA

**Features**

- High security to protect your organization's data
- Integrated RFID reader
- LED indicators on both lock and reader
- Ability to work mechanically in case of power outage
- Capable to inform door and handle status
- Supports RS 485 protocol; for other protocols please contact Essentra
- Applications: rack cabinets, server rooms, telecommunication, kiosks, GSM network cabinets
- Two keys supplied with each latch

**⚠ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591, 594.**

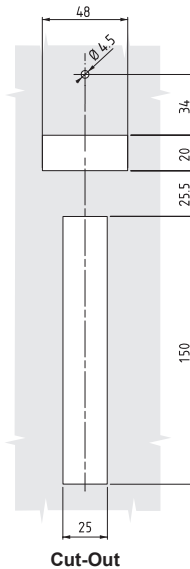
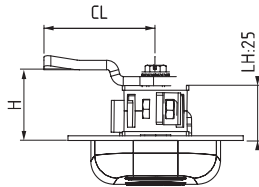
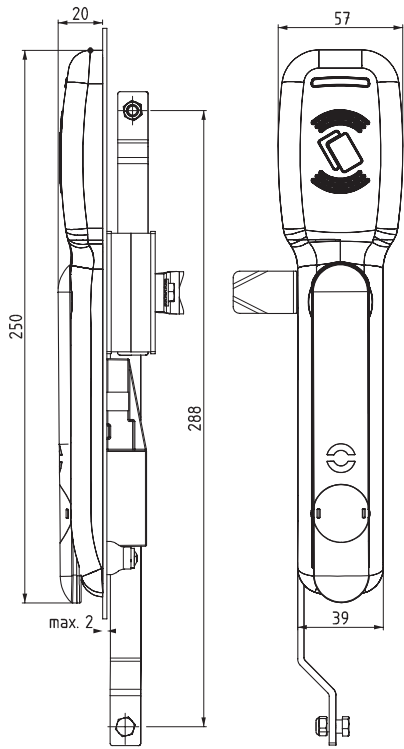
| Lock Warning Signs |  |                         |                      |
|--------------------|--|-------------------------|----------------------|
| Signal 1           |  | While opening the lock  | LED 1 blinks fast    |
| Signal 2           |  | While closing the lock  | LED 2 blinks fast    |
| Signal 3           |  | When the lock is open   | Both LEDs blink fast |
| Signal 4           |  | When the handle is open | Both LEDs not lit    |
| Signal 5           |  | Error                   | Both LEDs blink slow |
| Signal 6           |  | Ready                   | Both LEDs are lit    |

| Item No.     | Cylinder Description                    |
|--------------|-----------------------------------------|
| 311120203200 | Stainless Steel Dust Cap (Keyed Differ) |
| 311120204000 | Stainless Steel Dust Cap (Keyed Alike)  |

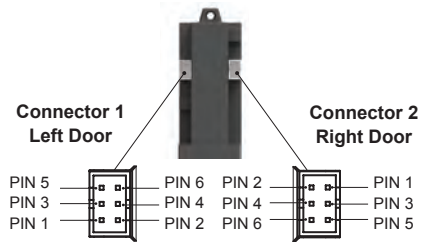
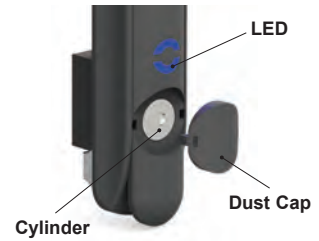


# ELECTRONIC SWINGHANDLES

## 3112 Series Electronic Swinghandles with RFID Reader



Open-close position of door can be monitored; max distance between the magnet and the lock is 10 mm



Pin Detail  
Both connectors have same function

### Specifications

- Material:  
Body: Polyamide DIN-EN ISO 1043-1 PA6 GFR 30  
Handle: Polyamide DIN-EN ISO 1043-1 PA6 GFR 30  
Cam: Steel
- Operating voltage: 12 VDC
- Operating temperature: -10°C to 60°C
- Standby: 6mA
- Lock / Unlock: 75mA
- Maximum Current: 400mA

### Features

- High security to protect your organization's data
- Integrated RFID reader
- LED indicators on both lock and reader
- Ability to work mechanically in case of power outage
- Capable to inform door and handle status
- Supports RS 485 protocol; for other protocols please contact Essentra
- Applications: rack cabinets, server rooms, telecommunication, kiosks, GSM network cabinets
- Two keys supplied with each latch

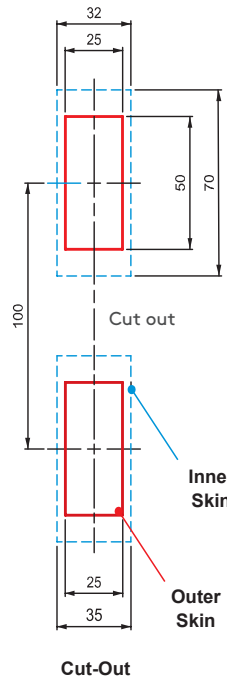
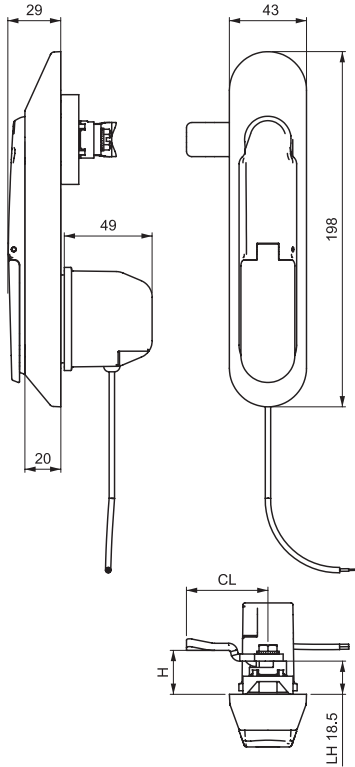
**⚠ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591, 594.**

| Lock Warning Signs |  |                         |                      |
|--------------------|--|-------------------------|----------------------|
| Signal 1           |  | While opening the lock  | LED 1 blinks fast    |
| Signal 2           |  | While closing the lock  | LED 2 blinks fast    |
| Signal 3           |  | When the lock is open   | Both LEDs blink fast |
| Signal 4           |  | When the handle is open | Both LEDs not lit    |
| Signal 5           |  | Error                   | Both LEDs blink slow |
| Signal 6           |  | Ready                   | Both LEDs are lit    |

| Item No.     | Cylinder Description                    |
|--------------|-----------------------------------------|
| 311220203200 | Stainless Steel Dust Cap (Keyed Differ) |
| 311220204000 | Stainless Steel Dust Cap (Keyed Alike)  |



**3105 & 3106 Series**  
**Electronic Swinghandles Standard/Electromechanical**



**Assembly application**



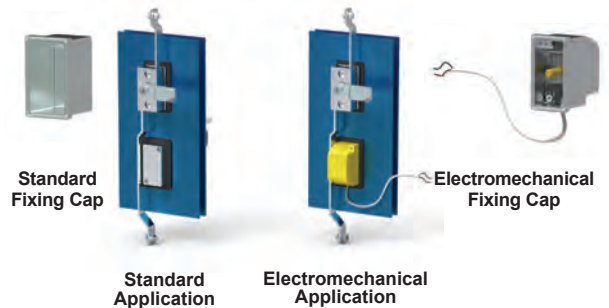
**Specifications**

- Material:  
 Body: Zinc Alloy DIN-EN 1774-ZnAl4Cu1  
 Cover: Zinc Alloy DIN-EN 1774-ZnAl4Cu  
 Mechanism: Zinc Alloy DIN-EN 1774-ZnAl4Cu1  
 Gasket: Polyurethane
- Finish: Black Powder Coated
- Voltage: 48 VDC
- Current: 500 mA
- High temperature resistance: 150°C
- Suitable to DIN V ENV 1630: 1999-04/WK2 standard

**Features**

- High security to protect your organization's data
- Compatible with access control systems
- All metal construction
- Special geometry provides anti-vandalism safety
- Improved corrosion resistance
- Double O-Ring used for handle provides improved IP rating
- High-security cylinder available
- Better IP rating with moving dust cap
- Applications: outdoor cabinets, telecommunication, kiosks, ATMs, electrical enclosures
- Two keys supplied with each latch

Simply changing the cover assembly is enough to switch from standard to electromechanical application



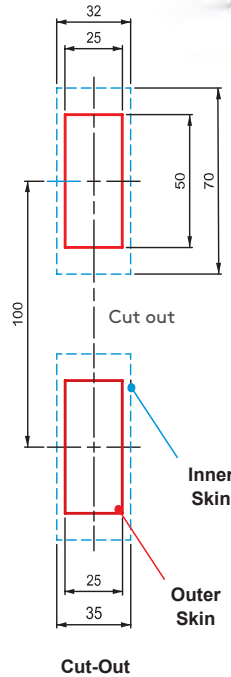
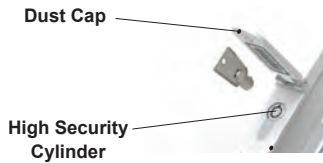
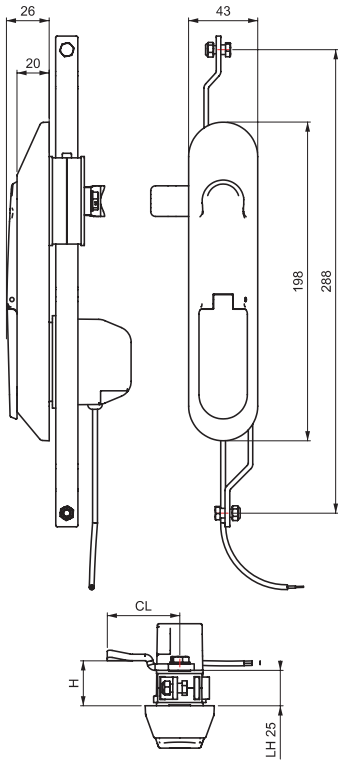
**⚠ CAMS SOLD SEPARATELY. SEE PAGES 590 - 591, 594.**

| Item No.      | Assembly Application | Cylinder Description      |
|---------------|----------------------|---------------------------|
| 3105112122200 | Inner Skin           | Zinc Alloy (Keyed Alike)  |
| 3105112122300 | Inner Skin           | Zinc Alloy (Keyed Differ) |
| 3105312122200 | Outer Skin           | Zinc Alloy (Keyed Alike)  |
| 3105312122300 | Outer Skin           | Zinc Alloy (Keyed Differ) |

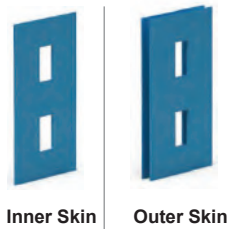


# ELECTRONIC SWINGHANDLES

## 3106 Series Electronic Swinghandles Standard/Electromechanical



### Assembly application



### Specifications

- Material:  
Body: Zinc Alloy DIN-EN 1774-ZnAl4Cu1  
Cover: Zinc Alloy DIN-EN 1774-ZnAl4Cu  
Mechanism: Zinc Alloy DIN-EN 1774-ZnAl4Cu1  
Gasket: Polyurethane
- Voltage: 48 VDC
- Current: 500 mA
- High temperature resistance: 150°C
- Suitable to DIN V ENV 1630: 1999-04/WK2 standard

### Features

- High security to protect your organization's data
- Compatible with access control systems
- All metal construction
- Special geometry provides anti-vandalism safety
- Improved corrosion resistance
- Double O-Ring used for handle provides improved IP rating
- High-security cylinder available
- Better IP rating with moving dust cap
- Applications: outdoor cabinets, telecommunication, kiosks, ATMs, electrical enclosures
- Two keys supplied with each latch

### Lock Operating Principle Electronical and Mechanical



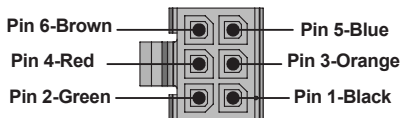
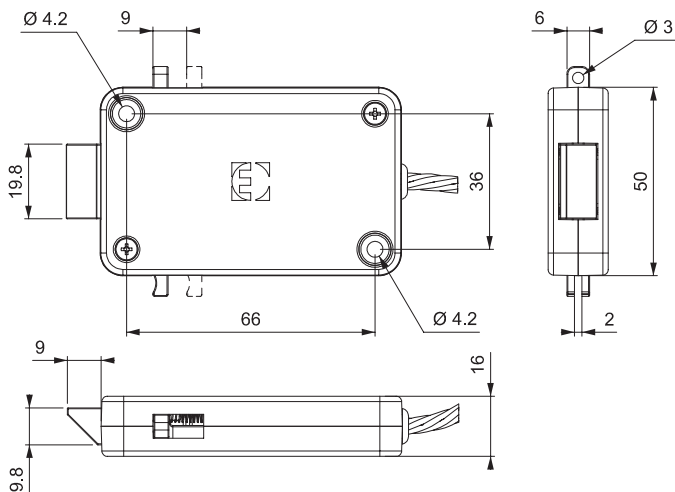
Electronic access options, remote control, card reader, etc., activate the lock. It is then ready to be opened by the mechanical key

**⚠ CAMS SOLD SEPARATELY. SEE PAGES 592 - 593.**

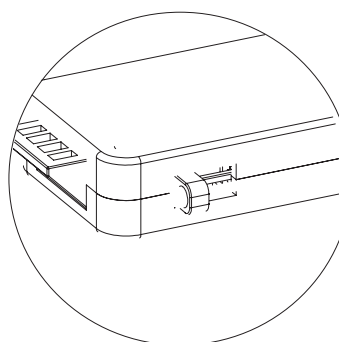
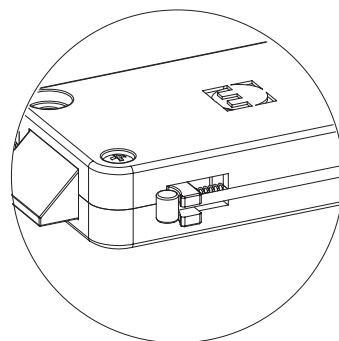
| Item No.      | Assembly Application | Cylinder Description      |
|---------------|----------------------|---------------------------|
| 3106112122200 | Inner Skin           | Zinc Alloy (Keyed Alike)  |
| 3106112122300 | Inner Skin           | Zinc Alloy (Keyed Differ) |
| 3106312122200 | Outer Skin           | Zinc Alloy (Keyed Alike)  |
| 3106312122300 | Outer Skin           | Zinc Alloy (Keyed Differ) |



**3341 Series  
Electronic Keeper**



| Pins  | Colors |                 |
|-------|--------|-----------------|
| Pin 1 | Black  | GND             |
| Pin 2 | Green  | 12 Volt DC      |
| Pin 3 | Orange | Signal          |
| Pin 4 | Red    | Microswitch COM |
| Pin 5 | Blue   | Microswitch NO  |
| Pin 6 | Brown  | N/A             |



Two different mechanical override option

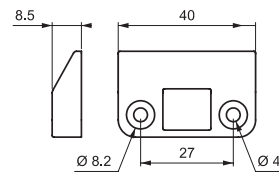
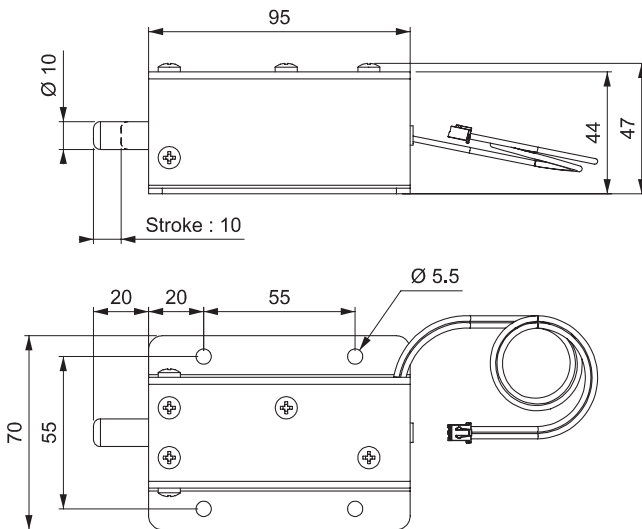
**Specifications**

- Material:  
Body: Plastic  
Cam: Zinc Alloy
- Cable length: 180 mm
- Operating voltage: 12 volt
- Current: Max 500 mA
- Stroke: 9 mm

**Features**

- Push to close
- 12 Volt DC supply voltage
- Two different mechanical override option
- Auto-locking
- Internal microswitch
- Microprocessor controlled gear motor
- Compatible with access control systems

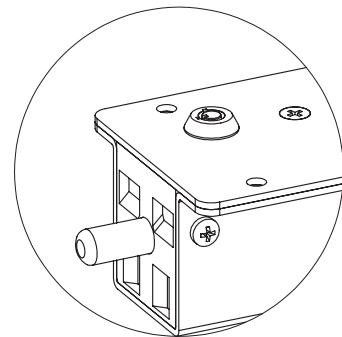
Item No.  
3341

**3311 Series  
Solenoid Lock****Bracket**  
Code: 30302223**Specifications**

- Material:  
Body: Steel  
Plunger: Steel  
Bracket: Delrin
- Operating Voltage: 24 VDC
- Current Consumption: 550 mA
- Power Consumption: 13, 2 W
- Operating Temperature Range: -5°C to 40°C
- Cable Length: 30cm
- Stroke: 10mm

**Features**

- Compatible with Access Control Systems
- Push to close with a special bracket
- Mechanical override option (version 2)
- Auto-locking
- DC type solenoid
- Resistance of solenoid varies with applied voltage
- Solenoid becomes hot (around 80°C) when continuously energized; precautions should be taken to prevent burns
- Please contact Essentra for different voltages, strokes or AC type of solenoids

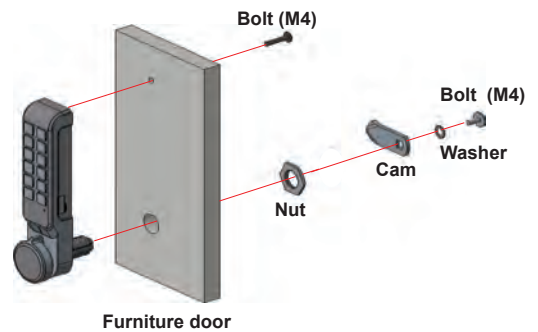
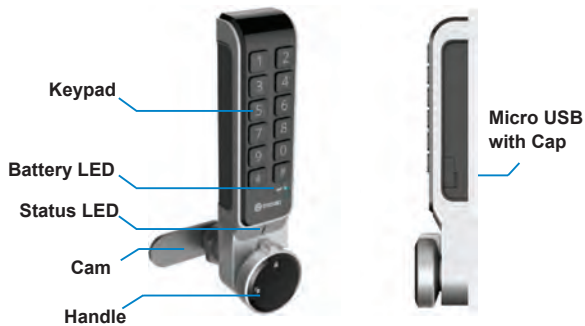
**Mechanical override  
with high security cylinder**

| Item No. | Type | Mechanical Override Option |
|----------|------|----------------------------|
| 33111    | 1    | No                         |
| 33112    | 2    | Yes                        |





### 3204 Series Keypad Electronic Cabinet Locks

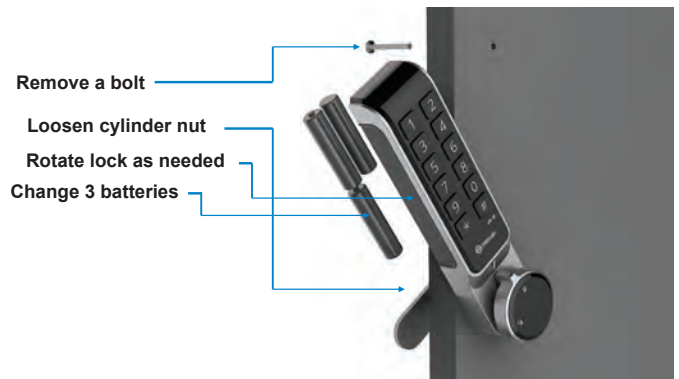


#### Specifications

- Material:
  - Body: Aluminum
  - Handle: Aluminum
  - Panel: Plastic
  - Cam: Steel
- Operating voltage: 3x1.5 V = 4.5 V
- Power source: 3 AAA alkali batteries
- Battery life: Approx. 1.5 years with 10 daily uses
- Password combination: 4 to 12 digits
- Work temperature: -20°C to 70°C
- Work humidity: 0 to 90% RH
- High-security

#### Features

- Electronic solution for improving security
- Ability to open with a password without a card and key
- Elegant design suitable for office environments; stylish visual-warning LEDs
- Multi-user support
- Micro USB emergency power supply
- Low battery level indicator
- For general or specialized use
- Easy installation, easy to use
- Security alarm
- Melody yes/no adjustment
- Applications: various cabinets or lockers in sauna areas, spas, gyms, offices, schools

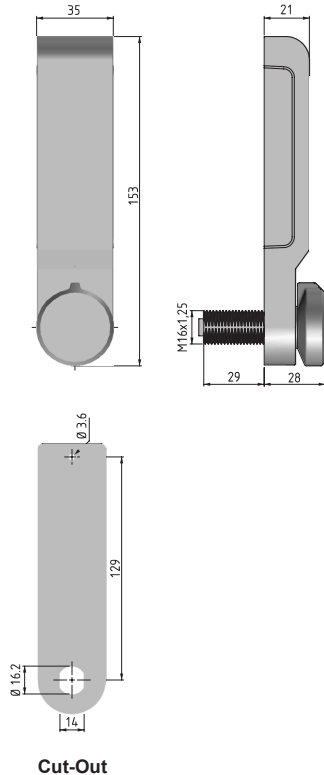


Changing Batteries



**⚠ CAMS SOLD SEPARATELY. SEE PAGE 571, STYLE 1.**

| Item No. | Position   |
|----------|------------|
| 3204100  | Horizontal |
| 3204200  | Vertical   |

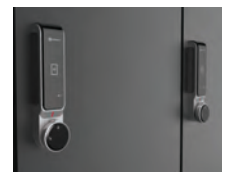
**ELECTRONIC CABINET LOCKS****3205 Series  
RFID Card Reader Electronic Cabinet Locks****Specifications**

- Material:
  - Body: Aluminum
  - Handle: Aluminum
  - Panel: Plastic
  - Cam: Steel
- Operating voltage: 3x1.5 V = 4.5 V
- Power source: 3 AAA alkali batteries
- Battery life: Approx. 1.5 years with 10 daily uses
- Work temperature: -20°C to 70°C
- Work humidity: 0 to 90% RH
- High-security
- RFID Card 13.56Mhz MIFARE - Standard ISO14443A available printed or unprinted, ordered separately

**Features**

- Electronic solution for improving security
- Ability to open with a RFID card without a key
- Elegant design suitable for office environments; stylish visual-warning LEDs
- Multi-user support
- Micro USB emergency power supply
- Low battery level indicator
- For general or specialized use
- Easy installation, easy to use
- Security alarm
- Melody yes/no adjustment
- Applications: various cabinets or lockers in sauna areas, spas, gyms, offices, schools
- Order Separately RFID cards: 34002639 (Printed), 34002640 (Unprinted)

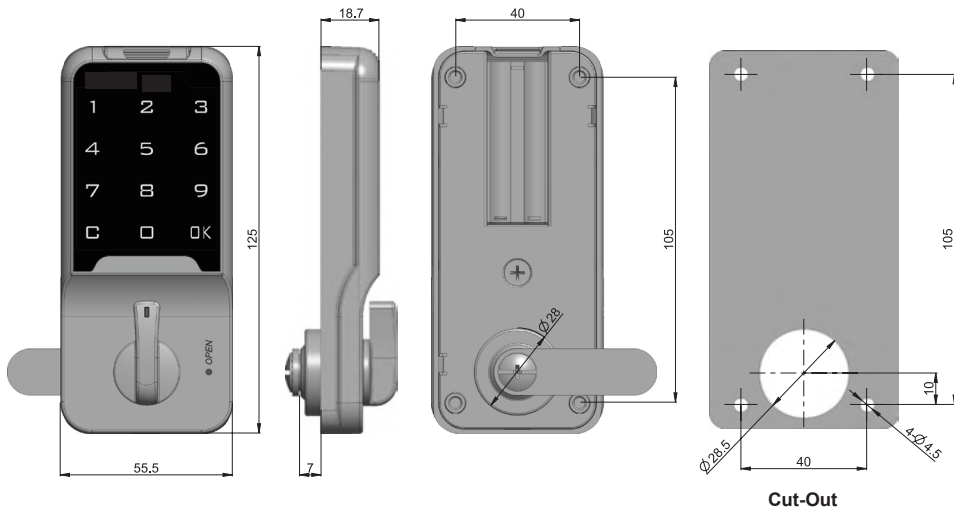
**⚠ CAMS SOLD SEPARATELY. SEE PAGE 571, STYLE 1.**



| Item No. | Position   |
|----------|------------|
| 3205100  | Horizontal |
| 3205200  | Vertical   |



### 3211 Series Touch Panel Electronic Cabinet Locks



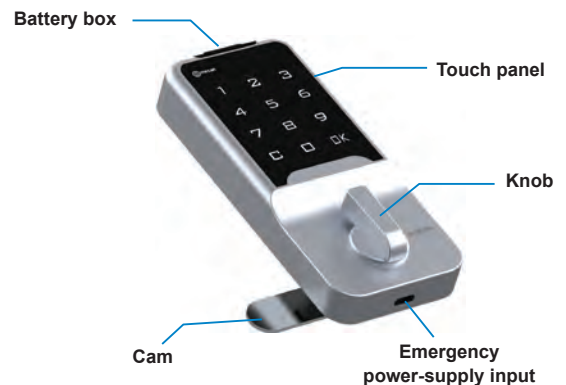
#### Specifications

- Material:
  - Body: Aluminum
  - Handle: Aluminum
  - Cam: Steel
- Operating voltage: 2x1.5 V = 4.5 V
- Power source: 2 AAA alkali batteries
- Battery life: Approx. 1.5 years with 10 daily uses
- Password combination: 1 to 15 digits
- Work temperature: -20°C to 70°C
- Work humidity: 0 to 90% RH
- High-security

#### Features

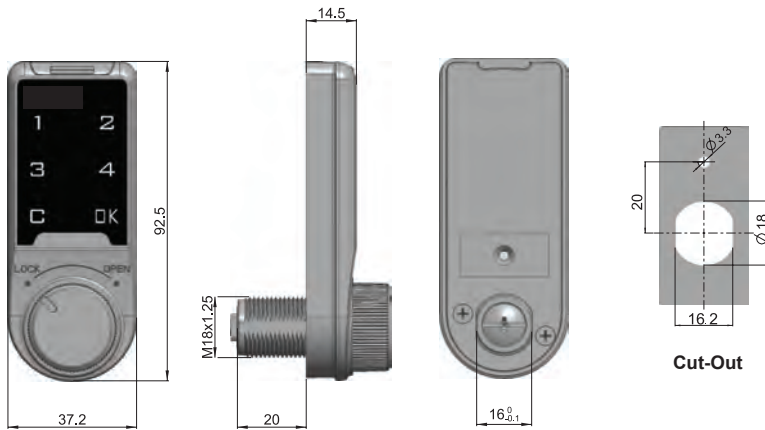
- Electronic solution for improving security
- Ability to open with a password without a card and key
- Elegant design suitable for office environments; stylish visual-warning LEDs
- Micro USB emergency power supply
- When the password has been forgotten, it is possible to remote control and USB-Key for solving the password
- Low battery level indicator
- For general or specialized use
- Auto-alarm will be activated when input wrong password 4 times and the lock will be dead for 60 seconds
- Easy installation, easy to use
- Melody yes/no adjustment
- Applications: various cabinets or lockers in sauna areas, spas, gyms, offices, schools

**⚠ CAMS SOLD SEPARATELY. SEE PAGE 571, STYLE 1.**



Item  
No.

321100

**ELECTRONIC CABINET LOCKS****3212 Series  
Touch Panel Electronic Cabinet Locks****Specifications**

- Material:  
Body: Aluminum  
Handle: Aluminum  
Cam: Steel
- Operating voltage: 2 V
- Power source: Cr2032 battery
- Battery life: Approx. 1.5 years with 10 daily uses
- Password combination: 1 to 15 digits
- Work temperature: -20°C to 70°C
- Work humidity: 0 to 90% RH
- High-security

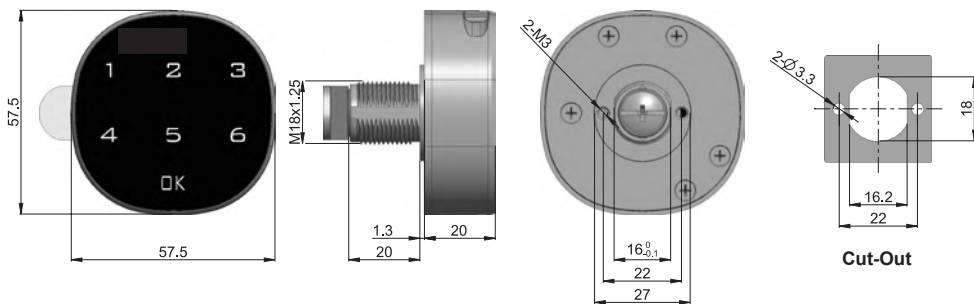
**Features**

- Electronic solution for improving security
- Ability to open with a password without a card and key
- Elegant design suitable for office environments; stylish visual-warning LEDs
- Micro USB emergency power supply
- When the password has been forgotten, it is possible to remote control and USB-Key for solving the password
- Low battery level indicator
- For general or specialized use
- Auto-alarm will be activated when input wrong password 4 times and the lock will be dead for 60 seconds
- Easy installation, easy to use
- Melody yes/no adjustment
- Applications: various cabinets or lockers in sauna areas, spas, gyms, offices, schools

**⚠ CAMS SOLD SEPARATELY. SEE PAGE 571, STYLE 1.**Item  
No.  
**321200**



### 3213 Series Touch Panel Electronic Cabinet Locks



#### Specifications

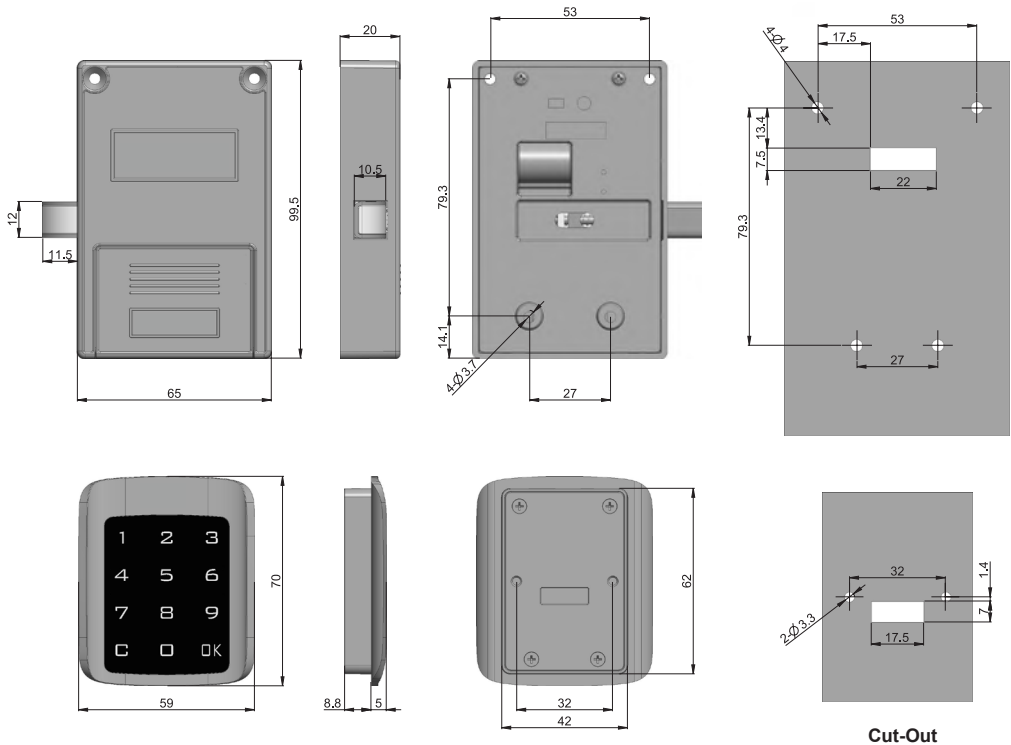
- Material:  
Body: Aluminum  
Cam: Steel
- Operating voltage: 3 V
- Power source: Cr2032 battery
- Battery life: Approx. 1.5 years with 10 daily uses
- Password combination: 1 to 15 digits
- Work temperature: -20°C to 70°C
- Work humidity: 0 to 90% RH
- High-security

#### Features

- Electronic solution for improving security
- Ability to open with a password without a card and key
- Elegant design suitable for office environments; stylish visual-warning LEDs
- Micro USB emergency power supply
- When the password has been forgotten, it is possible to remote control and USB-Key for solving the password
- Low battery level indicator
- For general or specialized use
- Auto-alarm will be activated when input wrong password 4 times and the lock will be dead for 60 seconds
- Easy installation, easy to use
- Melody yes/no adjustment
- Applications: various cabinets or lockers in sauna areas, spas, gyms, offices, schools

**⚠ CAMS SOLD SEPARATELY. SEE PAGE 571, STYLE 1.**

Item  
No.  
321300

**3214 Series  
Touch Panel Electronic Cabinet Locks****Specifications**

- Material:  
Body: Plastic  
Cam: Steel
- Operating voltage: 3x1.5 V = 4.5 V
- Power source: 3xAAA Alkali battery
- Battery life: Approx. 1.5 years with 10 daily uses
- Password combination: 1 to 15 digits
- Work temperature: -20°C to 70°C
- Work humidity: 0 to 90% RH
- High-security

**Features**

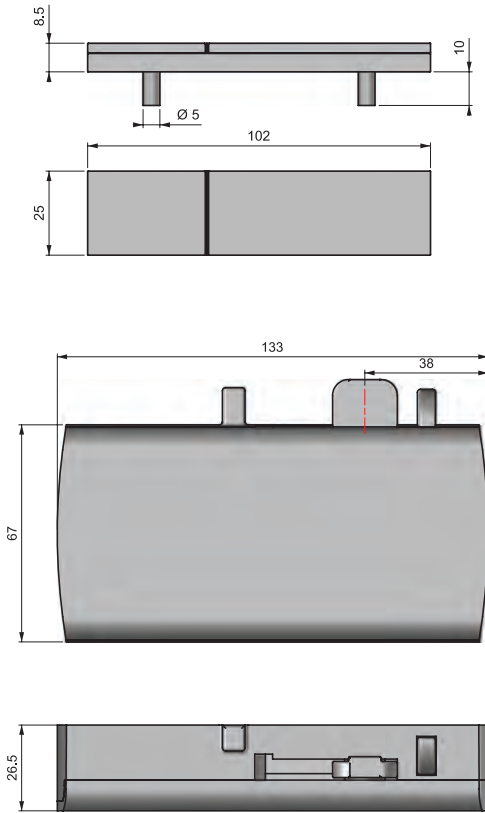
- Electronic solution for improving security
- Ability to open with a password without a card and key
- Elegant design suitable for office environments; stylish visual-warning LEDs
- Micro USB emergency power supply
- When the password has been forgotten, it is possible to remote control and USB-Key for solving the password
- Low battery level indicator
- For general or specialized use
- Auto-alarm will be activated when input wrong password 4 times and the lock will be dead for 60 seconds
- Easy installation, easy to use
- Melody yes/no adjustment
- Applications: various cabinets or lockers in sauna areas, spas, gyms, offices, schools

Item  
No.

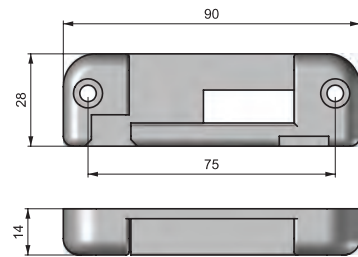
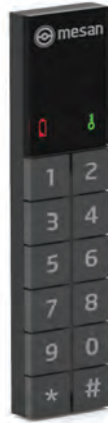
3214



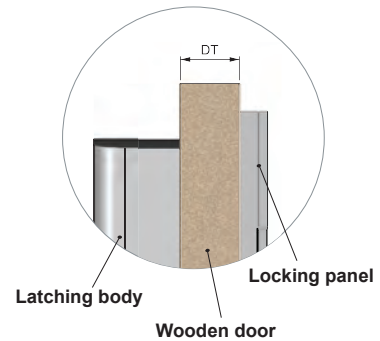
**3202 Series  
Keypad Electronic Cabinet Locks**



**Latching body**



**Bracket**

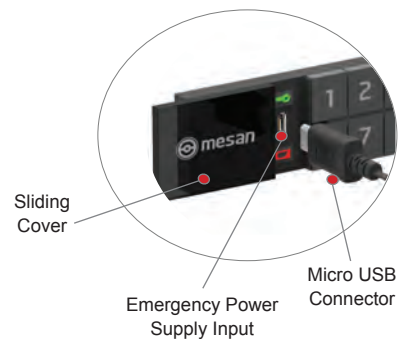


**Specifications**

- Material:  
Body: Plastic  
Latching Body: Plastic  
Gasket: Rubber  
Cam: Steel
- Operating voltage: 3x1.5 V = 4.5 V
- Power source: 3xAAA Alkali battery
- Battery life: Approx. 1.5 years with 10 daily uses
- Password combination: 4 to 12 digits
- Work temperature: -15°C to 55°C
- Work humidity: 0 to 90% RH
- High-security

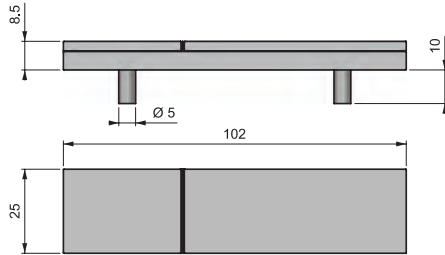
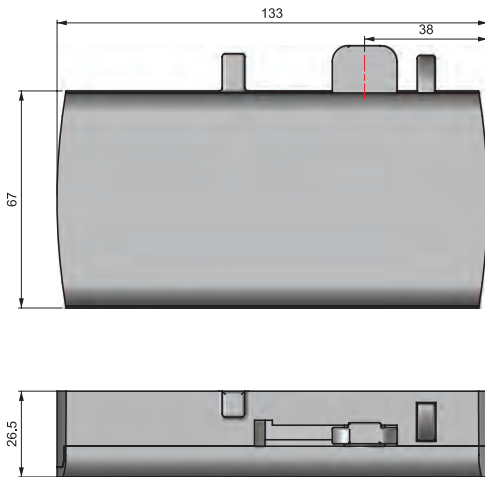
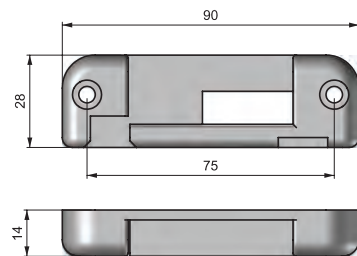
**Features**

- Electronic solution for improving security
- Ability to open with a password without a card and key
- Elegant design suitable for office environments; stylish visual-warning LEDs
- Multi-user support
- Micro USB emergency power supply input behind sliding cover
- When the password has been forgotten, it is possible to remote control and USB-Key for solving the password
- Low battery level indicator
- For general or specialized use
- Security alarm
- Easy installation, easy to use
- Melody yes/no adjustment
- Applications: various cabinets or lockers in sauna areas, spas, gyms, offices, schools



**When battery is dead, slide the cover and the lock can be opened with the Micro USB connector.**

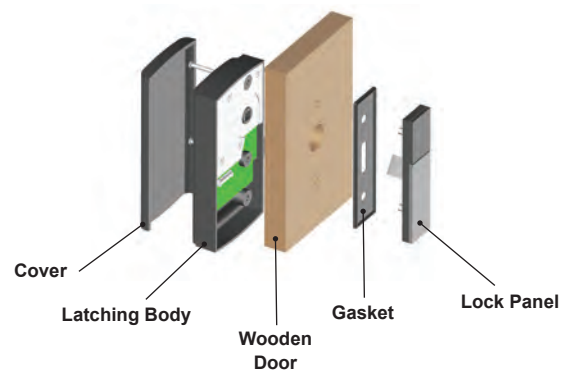
| Item No. | Position   | Door Thickness |     |
|----------|------------|----------------|-----|
|          |            | Min            | Max |
| 32021    | Horizontal | 11             | 27  |
| 32032    | Vertical   | 11             | 27  |

**3203 Series  
Keypad Electronic Cabinet Locks****Lock panel****Latching body****Bracket****Specifications**

- Material:  
Body: Plastic  
Latching Body: Plastic  
Gasket: Rubber  
Cam: Steel
- Operating voltage: 3x1.5 V = 4.5 V
- Power source: 3xAAA Alkali battery
- Battery life: Approx. 1.5 years with 10 daily uses
- Work temperature: -15°C to 55°C
- Work humidity: 0 to 90% RH
- RFID Card 13.56Mhz MIFARE - Standard ISO14443A available printed or unprinted, ordered separately
- High-security

**Features**

- Electronic solution for improving security
- Ability to open with a RFID card without key
- Elegant design suitable for office environments; stylish visual-warning LEDs
- Multi-user support
- Micro USB emergency power supply input behind sliding cover
- Low battery level indicator
- For general or specialized use
- Security alarm
- Easy installation, easy to use
- Melody yes/no adjustment
- Instructions for use, installation dimensions, and more information is available in instruction book included with the lock
- Applications: various cabinets or lockers in sauna areas, spas, gyms, offices, schools

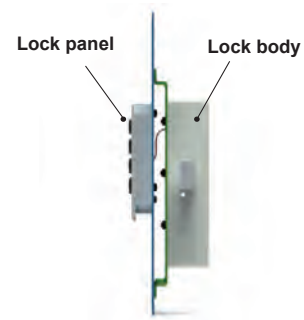
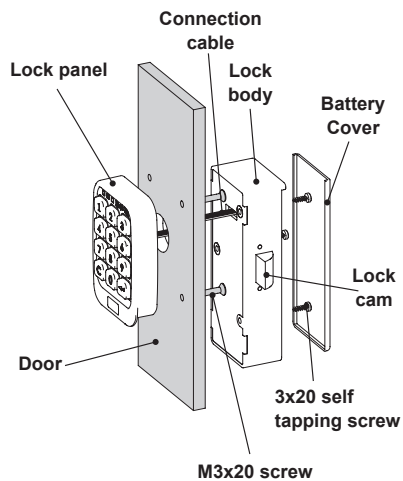
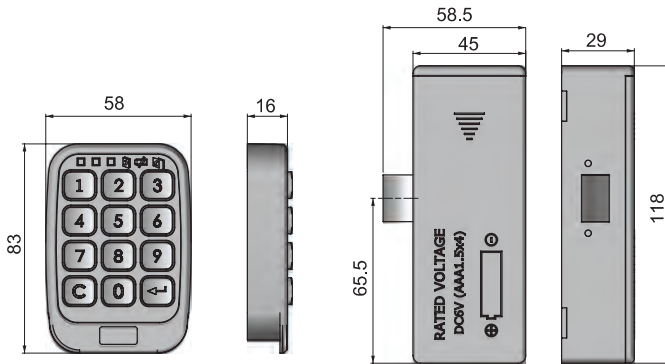


| Item No. | Position   | Door Thickness (mm) |     |
|----------|------------|---------------------|-----|
|          |            | Min                 | Max |
| 32031    | Horizontal | 11                  | 27  |
| 32032    | Vertical   | 11                  | 27  |





### 3201 Series Keypad Electronic Cabinet Lock



#### Specifications

- Material:
  - Lock Panel: Zinc Only
  - Keys: Plastic
  - Lock Body: Plastic
  - Cam: Zinc Only
- Digital password:  $\geq 4$ ,  $\leq 10$
- Power source: 4 AAA alkaline batteries
- Static current:  $< 220\text{mA}$
- Alarm power:  $< 4.7\text{V}$
- Memory capacity: 4160 bit
- Work temperature:  $-25^{\circ}\text{C}$  to  $65^{\circ}\text{C}$
- Store temperature:  $-25^{\circ}\text{C}$  to  $85^{\circ}\text{C}$
- Store time:  $> 10$  years
- Change: 1,000,000 times
- Work humidity: 5 to 95% RH (no condensation)

#### Features

- Electronic solution for improving security
- Input password to open door; no need for card or key
- Two types:
  - Public with temporary password
  - Private with permanent password
- Two management levels:
  - Master code
  - User code
- Low power alarm; the lock will indicate when the battery has insufficient power
- Emergency open; external power supply can be used via a socket in the lock if sufficient battery power is not available
- Applications: various cabinets or lockers in sauna areas, spas, gyms, offices, schools
- Instructions for use, installation dimensions, etc. included in the instruction book with the lock

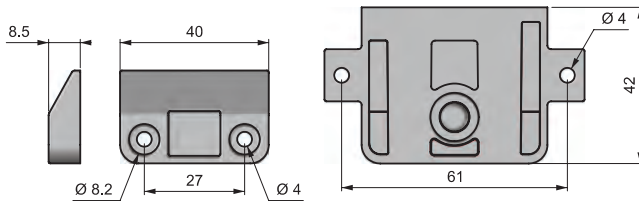
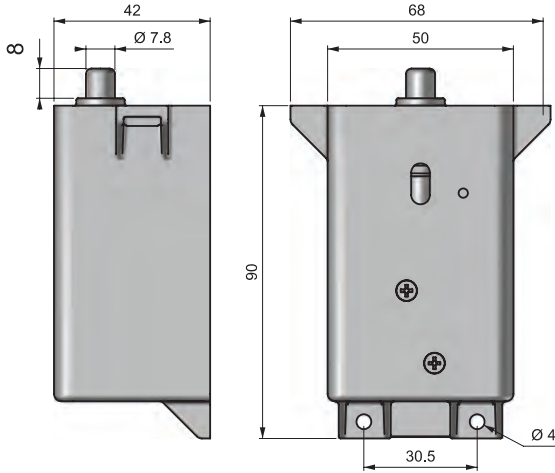


External power socket

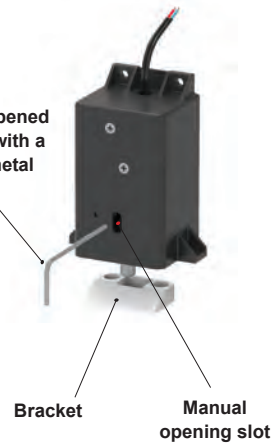


External power supply  
product code:  
340.0.2643  
(Order separately)

Item  
No.  
3201

**3301 Series****Remote Control Electronic Cabinet Lock**

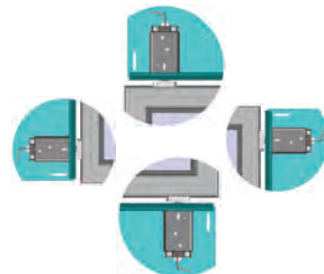
Lock can be opened mechanically with a piece of thin metal

**Specifications**

- Material:
  - Body: Plastic
  - Plunger: Steel
  - Bracket: Delrin
- Input voltage: 12 V to 18 V
- Output current: 650 mA x2
- Working voltage: 220 V AC (with a special transformer)
- RF frequency: 433.92 MHz
- Work temperature: -25°C to 70°C
- Control: Microprocessor
- Cable length: 70 cm
- Alert type: Buzzer
- Stroke: 8 mm
- Identification: Master, remote control
- Locking security: Watchdog

**Features**

- Electronic solution for improving security
- Open and close remote control
- Manual opening in case of power outage
- New remote control identification with a master remote control
- More than one lock can be controlled by one remote control or vice versa
- More than one remote control can control one lock
- Applications: coolers, fridges, electric panels, cabinets

**Multidirectional Application**

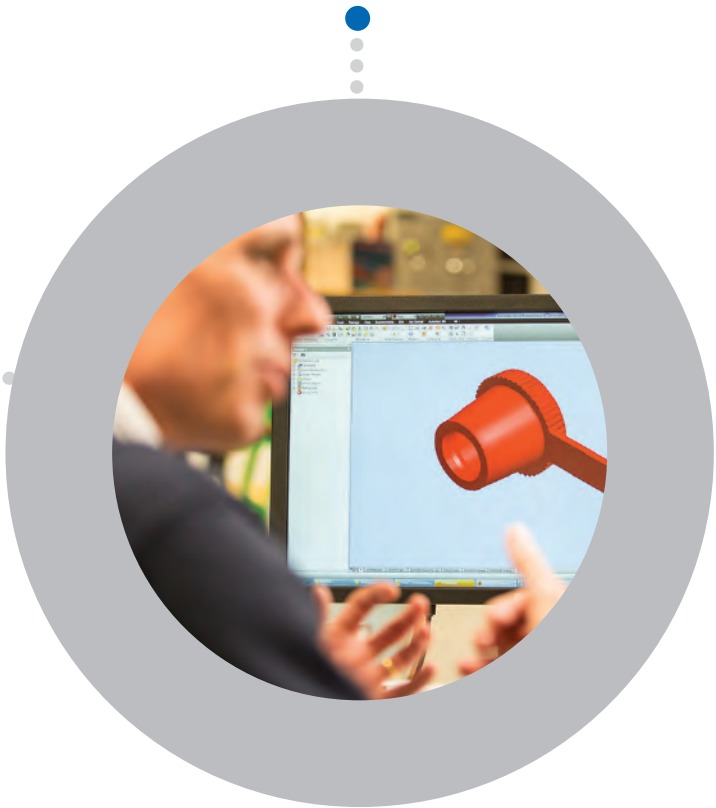
Item

No.

3301



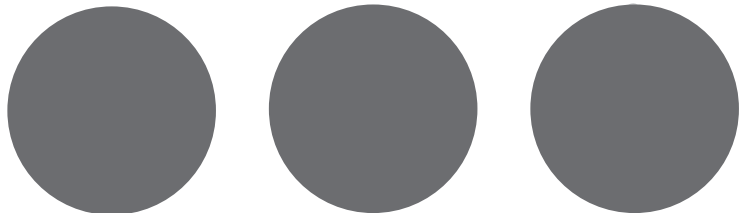
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# PINS & LANYARDS





|                                                                                    |                                 |           |
|------------------------------------------------------------------------------------|---------------------------------|-----------|
|    | DETENT PINS .....               | 734 - 736 |
|    | KNOB DETENT PINS .....          | 736       |
|    | WIRE LOCK PINS .....            | 737       |
|    | LYNCH PINS .....                | 737       |
|    | POSITIVE LOCKING PINS.....      | 738 - 740 |
|    | PIN RECEPTACLES .....           | 740       |
|   | POP PINS.....                   | 741       |
|  | SPRING LOADED PLUNGER PINS..... | 741 - 743 |
|  | WIRE ROPE LANYARDS .....        | 744       |
|  | COILED LANYARDS .....           | 745       |

# PINS & LANYARDS



# RING DETENT PINS

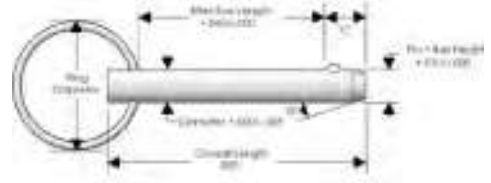
## RD Series Ring Detent Pins

### Specifications

- Pin Material: Stainless Steel

### Features

- Economical and convenient way to adjust or remove accessories on equipment
- Equipped with pull ring for rapid release
- Chamfered tip assists in quickly locating hole



| Item No.        | Pin Diameter |  | Effective Length |  | Ball Position C |  | Overall Length |  | Pin & Ball Height |  | Ring OD |  |
|-----------------|--------------|--|------------------|--|-----------------|--|----------------|--|-------------------|--|---------|--|
|                 | in           |  | in               |  | in              |  | in             |  | in                |  | in      |  |
| RD3160500----70 | 3/16         |  | 0.500            |  | 0.200           |  | 0.887          |  | 0.204             |  | 1.000   |  |
| RD3160750----70 | 3/16         |  | 0.750            |  | 0.200           |  | 1.137          |  | 0.204             |  | 1.000   |  |
| RD3161000----70 | 3/16         |  | 1.000            |  | 0.200           |  | 1.387          |  | 0.204             |  | 1.000   |  |
| RD3161125----70 | 3/16         |  | 1.125            |  | 0.200           |  | 1.512          |  | 0.204             |  | 1.000   |  |
| RD3161250----70 | 3/16         |  | 1.250            |  | 0.200           |  | 1.637          |  | 0.204             |  | 1.000   |  |
| RD3161500----70 | 3/16         |  | 1.500            |  | 0.200           |  | 1.887          |  | 0.204             |  | 1.000   |  |
| RD3161750----70 | 3/16         |  | 1.750            |  | 0.200           |  | 2.000          |  | 0.204             |  | 1.000   |  |
| RD3162000----70 | 3/16         |  | 2.000            |  | 0.200           |  | 2.387          |  | 0.204             |  | 1.000   |  |
| RD3163000----70 | 3/16         |  | 3.000            |  | 0.200           |  | 3.387          |  | 0.204             |  | 1.000   |  |
| RD4X0500----70  | 1/4          |  | 0.500            |  | 0.312           |  | 1.062          |  | 0.286             |  | 1.000   |  |
| RD4X0750----70  | 1/4          |  | 0.750            |  | 0.312           |  | 1.312          |  | 0.286             |  | 1.000   |  |
| RD4X1000----70  | 1/4          |  | 1.000            |  | 0.312           |  | 1.562          |  | 0.286             |  | 1.000   |  |
| RD4X1250----70  | 1/4          |  | 1.250            |  | 0.312           |  | 1.812          |  | 0.286             |  | 1.000   |  |
| RD4X1500----70  | 1/4          |  | 1.500            |  | 0.312           |  | 2.062          |  | 0.286             |  | 1.000   |  |
| RD4X1750----70  | 1/4          |  | 1.750            |  | 0.312           |  | 2.312          |  | 0.286             |  | 1.000   |  |
| RD4X2000----70  | 1/4          |  | 2.000            |  | 0.312           |  | 2.562          |  | 0.286             |  | 1.000   |  |
| RD4X2250----70  | 1/4          |  | 2.250            |  | 0.312           |  | 2.812          |  | 0.286             |  | 1.000   |  |
| RD4X2500----70  | 1/4          |  | 2.500            |  | 0.312           |  | 3.062          |  | 0.286             |  | 1.000   |  |
| RD4X3000----70  | 1/4          |  | 3.000            |  | 0.312           |  | 3.562          |  | 0.286             |  | 1.000   |  |
| RD5X1000----70  | 5/16         |  | 1.000            |  | 0.375           |  | 1.625          |  | 0.358             |  | 1.000   |  |
| RD5X1500----70  | 5/16         |  | 1.500            |  | 0.375           |  | 2.125          |  | 0.358             |  | 1.000   |  |
| RD5X2000----70  | 5/16         |  | 2.000            |  | 0.375           |  | 2.625          |  | 0.358             |  | 1.000   |  |
| RD5X2500----70  | 5/16         |  | 2.500            |  | 0.375           |  | 3.125          |  | 0.358             |  | 1.000   |  |
| RD5X3000----70  | 5/16         |  | 3.000            |  | 0.375           |  | 3.625          |  | 0.358             |  | 1.000   |  |
| RD5X3500----70  | 5/16         |  | 3.500            |  | 0.375           |  | 4.125          |  | 0.358             |  | 1.000   |  |
| RD5X4000----70  | 5/16         |  | 4.000            |  | 0.375           |  | 4.625          |  | 0.358             |  | 1.000   |  |
| RD6X0750----70  | 3/8          |  | 0.750            |  | 0.375           |  | 1.375          |  | 0.426             |  | 1.000   |  |
| RD6X1000----70  | 3/8          |  | 1.000            |  | 0.375           |  | 1.625          |  | 0.426             |  | 1.000   |  |
| RD6X1250----70  | 3/8          |  | 1.250            |  | 0.375           |  | 1.875          |  | 0.426             |  | 1.000   |  |
| RD6X1500----70  | 3/8          |  | 1.500            |  | 0.375           |  | 2.125          |  | 0.426             |  | 1.000   |  |
| RD6X1750----70  | 3/8          |  | 1.750            |  | 0.375           |  | 2.375          |  | 0.426             |  | 1.000   |  |
| RD6X2000----70  | 3/8          |  | 2.000            |  | 0.375           |  | 2.625          |  | 0.426             |  | 1.000   |  |
| RD6X2250----70  | 3/8          |  | 2.250            |  | 0.375           |  | 2.875          |  | 0.426             |  | 1.000   |  |
| RD6X2500----70  | 3/8          |  | 2.500            |  | 0.375           |  | 3.125          |  | 0.426             |  | 1.000   |  |
| RD6X2750----70  | 3/8          |  | 2.750            |  | 0.375           |  | 3.375          |  | 0.426             |  | 1.000   |  |
| RD6X3000----70  | 3/8          |  | 3.000            |  | 0.375           |  | 3.625          |  | 0.426             |  | 1.000   |  |
| RD6X3500----70  | 3/8          |  | 3.500            |  | 0.375           |  | 4.125          |  | 0.426             |  | 1.000   |  |
| RD6X4000----70  | 3/8          |  | 4.000            |  | 0.375           |  | 4.625          |  | 0.426             |  | 1.000   |  |
| RD6X4500----70  | 3/8          |  | 4.500            |  | 0.375           |  | 5.125          |  | 0.426             |  | 1.000   |  |
| RD6X5000----70  | 3/8          |  | 5.000            |  | 0.375           |  | 5.625          |  | 0.426             |  | 1.380   |  |
| RD8X0750----70  | 1/2          |  | 0.750            |  | 0.625           |  | 1.550          |  | 0.570             |  | 1.380   |  |
| RD8X1000----70  | 1/2          |  | 1.000            |  | 0.625           |  | 1.750          |  | 0.570             |  | 1.380   |  |
| RD8X1250----70  | 1/2          |  | 1.250            |  | 0.625           |  | 2.000          |  | 0.570             |  | 1.380   |  |
| RD8X1500----70  | 1/2          |  | 1.500            |  | 0.625           |  | 2.250          |  | 0.570             |  | 1.380   |  |
| RD8X1750----70  | 1/2          |  | 1.750            |  | 0.625           |  | 2.500          |  | 0.570             |  | 1.380   |  |
| RD8X2000----70  | 1/2          |  | 2.000            |  | 0.625           |  | 2.750          |  | 0.570             |  | 1.380   |  |
| RD8X2500----70  | 1/2          |  | 2.500            |  | 0.625           |  | 3.250          |  | 0.570             |  | 1.380   |  |
| RD8X3000----70  | 1/2          |  | 3.000            |  | 0.625           |  | 3.750          |  | 0.570             |  | 1.380   |  |
| RD8X3500----70  | 1/2          |  | 3.500            |  | 0.625           |  | 4.250          |  | 0.570             |  | 1.380   |  |
| RD8X4000----70  | 1/2          |  | 4.000            |  | 0.625           |  | 4.750          |  | 0.570             |  | 1.380   |  |
| RD8X4500----70  | 1/2          |  | 4.500            |  | 0.625           |  | 5.250          |  | 0.570             |  | 1.380   |  |
| RD8X5000----70  | 1/2          |  | 5.000            |  | 0.625           |  | 5.750          |  | 0.570             |  | 1.380   |  |
| RD8X6000----70  | 1/2          |  | 6.000            |  | 0.625           |  | 6.750          |  | 0.570             |  | 1.380   |  |

Note: Other configurations, materials, and customizations available upon request.

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# RING DETENT PINS



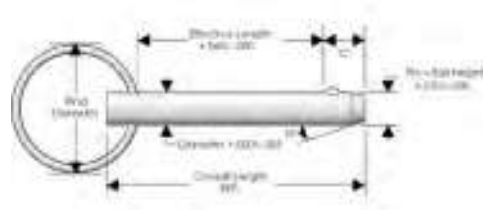
## RD Series Ring Detent Pins

### Specifications

- Pin Material: Grade 2 Low Carbon Steel
- Plating: Clear Zinc

### Features

- Economical and convenient way to adjust or remove accessories on equipment
- Equipped with pull ring for rapid release
- Chamfered tip assists in quickly locating hole



| Item No.        | Pin Diameter | Effective Length | Ball Position "C" | Overall Length | Pin & Ball Height | Ring OD |
|-----------------|--------------|------------------|-------------------|----------------|-------------------|---------|
|                 | in           | in               | in                | in             | in                | in      |
| RD3160500----2R | 3/16         | 0.500            | 0.200             | 0.887          | 0.204             | 1.000   |
| RD3160750----21 | 3/16         | 0.750            | 0.200             | 1.137          | 0.204             | 1.000   |
| RD3161000----21 | 3/16         | 1.000            | 0.200             | 1.387          | 0.204             | 1.000   |
| RD3161250----21 | 3/16         | 1.250            | 0.200             | 1.637          | 0.204             | 1.000   |
| RD3161375----70 | 3/16         | 1.375            | 0.200             | 1.750          | 0.204             | 1.000   |
| RD3161500----21 | 3/16         | 1.500            | 0.200             | 1.887          | 0.204             | 1.000   |
| RD3162000----21 | 3/16         | 2.000            | 0.200             | 2.387          | 0.204             | 1.000   |
| RD3162500----21 | 3/16         | 2.500            | 0.200             | 2.887          | 0.204             | 1.000   |
| RD3163000----21 | 3/16         | 3.000            | 0.200             | 3.387          | 0.204             | 1.000   |
| RD4X0500----21  | 1/4          | 0.500            | 0.312             | 1.062          | 0.286             | 1.000   |
| RD4X0750----2R  | 1/4          | 0.750            | 0.312             | 1.312          | 0.286             | 1.000   |
| RD4X1000----2R  | 1/4          | 1.000            | 0.312             | 1.562          | 0.286             | 1.000   |
| RD4X1250----2R  | 1/4          | 1.250            | 0.312             | 1.812          | 0.286             | 1.000   |
| RD4X1500----2R  | 1/4          | 1.500            | 0.312             | 2.062          | 0.286             | 1.000   |
| RD4X1750----2R  | 1/4          | 1.750            | 0.312             | 2.312          | 0.286             | 1.000   |
| RD4X2000----2R  | 1/4          | 2.000            | 0.312             | 2.562          | 0.286             | 1.000   |
| RD4X2250----21  | 1/4          | 2.250            | 0.312             | 2.812          | 0.286             | 1.000   |
| RD4X2500----21  | 1/4          | 2.500            | 0.312             | 3.062          | 0.286             | 1.000   |
| RD4X2750----21  | 1/4          | 2.750            | 0.312             | 3.312          | 0.286             | 1.000   |
| RD4X3000----2R  | 1/4          | 3.000            | 0.312             | 3.562          | 0.286             | 1.000   |
| RD5X1000----21  | 5/16         | 1.000            | 0.375             | 1.625          | 0.358             | 1.000   |
| RD5X1250----21  | 5/16         | 1.250            | 0.375             | 1.875          | 0.358             | 1.000   |
| RD5X1500----21  | 5/16         | 1.500            | 0.375             | 2.125          | 0.358             | 1.000   |
| RD5X1750----21  | 5/16         | 1.750            | 0.375             | 2.375          | 0.358             | 1.000   |
| RD5X2000----21  | 5/16         | 2.000            | 0.375             | 2.625          | 0.358             | 1.000   |
| RD5X2250----21  | 5/16         | 2.250            | 0.375             | 2.875          | 0.358             | 1.000   |
| RD5X2500----21  | 5/16         | 2.500            | 0.375             | 3.125          | 0.358             | 1.000   |
| RD5X2750----21  | 5/16         | 2.750            | 0.375             | 3.375          | 0.358             | 1.000   |
| RD5X3000----21  | 5/16         | 3.000            | 0.375             | 3.625          | 0.358             | 1.000   |
| RD6X0750----2R  | 3/8          | 0.750            | 0.375             | 1.375          | 0.426             | 1.000   |
| RD6X1000----21  | 3/8          | 1.000            | 0.375             | 1.625          | 0.426             | 1.000   |
| RD6X1500----2R  | 3/8          | 1.500            | 0.375             | 2.125          | 0.426             | 1.000   |
| RD6X1750----2R  | 3/8          | 1.750            | 0.375             | 2.250          | 0.426             | 1.000   |
| RD6X2000----21  | 3/8          | 2.000            | 0.375             | 2.625          | 0.426             | 1.000   |
| RD6X2500----21  | 3/8          | 2.500            | 0.375             | 3.125          | 0.426             | 1.000   |
| RD6X3000----21  | 3/8          | 3.000            | 0.375             | 3.625          | 0.426             | 1.000   |
| RD6X3500----21  | 3/8          | 3.500            | 0.375             | 4.125          | 0.426             | 1.000   |
| RD6X4000----21  | 3/8          | 4.000            | 0.375             | 4.625          | 0.426             | 1.000   |
| RD6X4500----21  | 3/8          | 4.500            | 0.375             | 5.125          | 0.426             | 1.000   |
| RD6X5000----21  | 3/8          | 5.000            | 0.375             | 5.625          | 0.426             | 1.380   |
| RD8X1000----21  | 1/2          | 1.000            | 0.625             | 1.750          | 0.570             | 1.380   |
| RD8X1500----21  | 1/2          | 1.500            | 0.625             | 2.250          | 0.570             | 1.380   |
| RD8X2000----2R  | 1/2          | 2.000            | 0.625             | 2.750          | 0.570             | 1.380   |
| RD8X2500----21  | 1/2          | 2.500            | 0.625             | 3.250          | 0.570             | 1.380   |
| RD8X3000----2R  | 1/2          | 3.000            | 0.625             | 3.750          | 0.570             | 1.380   |
| RD8X3500----21  | 1/2          | 3.500            | 0.625             | 4.250          | 0.570             | 1.380   |
| RD8X4000----21  | 1/2          | 4.000            | 0.625             | 4.750          | 0.570             | 1.380   |
| RD8X4500----21  | 1/2          | 4.500            | 0.625             | 5.250          | 0.570             | 1.380   |
| RD8X5000----2R  | 1/2          | 5.000            | 0.625             | 5.750          | 0.570             | 1.380   |
| RD8X5500----21  | 1/2          | 5.500            | 0.625             | 6.250          | 0.570             | 1.380   |
| RD8X6000----2R  | 1/2          | 6.000            | 0.625             | 6.750          | 0.570             | 1.380   |

Note: Other configurations, materials, and customizations available upon request.

## CABLE GLANDS, GROMMETS & CONDUIT

800 847 0486 | [www.essentracomponents.com](http://www.essentracomponents.com)



# KNOB DETENT PINS

## TD Series

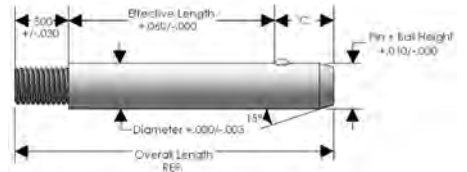
### Threaded Detent Pins

#### Specifications

- Pin Material: Grade 2 Low Carbon Steel
- Plating: Clear Zinc

#### Features

- Economical and convenient way to adjust or remove accessories on equipment
- Threaded end allows you to attach the pin to your choice of mating threaded component
- Chamfered tip assists in quickly locating hole



| Item No.       | Pin Diameter | Effective Length | Ball Position C | Overall Length | Pin & Ball Height | Thread Pitch   |
|----------------|--------------|------------------|-----------------|----------------|-------------------|----------------|
|                | in           | in               | in              | in             | in                |                |
| TD4C1000----21 | 1/4          | 1.000            | 0.250           | 1.750          | 0.286             | 1/4-20 UNC 2A  |
| TD4C1500----2R | 1/4          | 1.500            | 0.250           | 2.250          | 0.286             | 1/4-20 UNC 2A  |
| TD4C1750----21 | 1/4          | 1.750            | 0.250           | 2.500          | 0.286             | 1/4-20 UNC 2A  |
| TD4C2000----2R | 1/4          | 2.000            | 0.250           | 2.750          | 0.286             | 1/4-20 UNC 2A  |
| TD4C2500----21 | 1/4          | 2.500            | 0.250           | 3.250          | 0.286             | 1/4-20 UNC 2A  |
| TD4C2750----2R | 1/4          | 2.750            | 0.250           | 3.500          | 0.286             | 1/4-20 UNC 2A  |
| TD4C3000----2R | 1/4          | 3.000            | 0.250           | 3.750          | 0.286             | 1/4-20 UNC 2A  |
| TD4C3750----21 | 1/4          | 3.750            | 0.250           | 4.500          | 0.286             | 1/4-20 UNC 2A  |
| TD4C4000----21 | 1/4          | 4.000            | 0.250           | 4.750          | 0.286             | 1/4-20 UNC 2A  |
| TD5C2750----21 | 5/16         | 2.750            | 0.375           | 3.500          | 0.358             | 5/16-18 UNC 2A |
| TD5C3000----21 | 5/16         | 3.000            | 0.375           | 3.750          | 0.358             | 5/16-18 UNC 2A |
| TD6C1000----21 | 3/8          | 1.000            | 0.375           | 1.850          | 0.426             | 3/8-16 UNC 2A  |
| TD6C1500----21 | 3/8          | 1.500            | 0.375           | 2.375          | 0.426             | 3/8-16 UNC 2A  |
| TD6C2000----21 | 3/8          | 2.000            | 0.375           | 2.875          | 0.426             | 3/8-16 UNC 2A  |
| TD6C2125----2R | 3/8          | 2.125            | 0.375           | 3.000          | 0.426             | 3/8-16 UNC 2A  |
| TD6C2500----21 | 3/8          | 2.500            | 0.375           | 3.375          | 0.426             | 3/8-16 UNC 2A  |
| TD6C3000----21 | 3/8          | 3.000            | 0.375           | 3.875          | 0.426             | 3/8-16 UNC 2A  |
| TD6C3125----2R | 3/8          | 3.125            | 0.375           | 4.000          | 0.426             | 3/8-16 UNC 2A  |
| TD8C2500----2R | 1/2          | 2.500            | 0.500           | 3.500          | 0.570             | 3/8-16 UNC 2A  |
| TD8C3250----21 | 1/2          | 3.250            | 0.500           | 4.250          | 0.570             | 3/8-16 UNC 2A  |

Note: Other configurations, materials, and customizations available upon request.

## KD Series

### Knob Detent Pins



Type 1

Type 2

Type 3

#### Specifications

- Pin Material: Grade 2 Low Carbon Steel
- Plating: Clear Zinc
- Knob Material: Polypropylene
- At Rest Lanyard Length (in): 6.000

#### Features

- Convenient way to adjust or remove accessories on equipment
- Easy to grasp knob allows for a comfortable grip for rapid release
- Chamfered tip assists in quickly locating hole
- May be equipped with a flexible expandable coiled lanyard for loss prevention



Lanyard Assembly

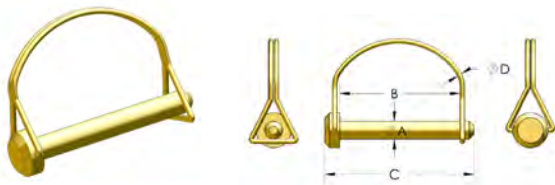
| Item No.        | Pin Diameter | Effective / Grip Length | Knob Type | Knob Diameter | Lanyard |
|-----------------|--------------|-------------------------|-----------|---------------|---------|
|                 | in           | in                      |           | in            |         |
| KN4X1750T5-D-21 | 1/4          | 1.500                   | Type 1    | 2.000         | No      |
| KN4X2250B3-D-21 | 1/4          | 2.000                   | Type 3    | 1.360         | No      |
| KN4X2250TR6DL21 | 1/4          | 2.000                   | Type 2    | 2.250         | Yes     |
| KN4X3250B3-D-21 | 1/4          | 3.000                   | Type 3    | 1.360         | No      |
| KN4X3250T5-D-21 | 1/4          | 3.000                   | Type 1    | 2.000         | No      |
| KN4X3250TR6DL21 | 1/4          | 3.000                   | Type 2    | 2.250         | Yes     |
| KN4X4000T5-D-21 | 1/4          | 3.750                   | Type 1    | 2.000         | No      |
| KN4X4250TR6DL21 | 1/4          | 4.000                   | Type 2    | 2.250         | Yes     |
| KN6X2000T5-D-21 | 3/8          | 1.625                   | Type 1    | 2.000         | No      |
| KN6X2500B3-D-21 | 3/8          | 2.125                   | Type 3    | 1.360         | No      |
| KN6X2500TR6DL21 | 3/8          | 2.125                   | Type 2    | 2.250         | Yes     |
| KN6X3500TR6DL21 | 3/8          | 3.125                   | Type 2    | 2.250         | Yes     |
| KN6X3500B3-D-21 | 3/8          | 3.125                   | Type 3    | 1.360         | No      |
| KN8X3750B3-D-21 | 1/2          | 3.250                   | Type 3    | 1.360         | No      |
| KN8X3750TR6DL21 | 1/2          | 3.250                   | Type 2    | 2.250         | Yes     |

Note: Other configurations, materials, and customizations available upon request.





**WL Series  
Wire Lock Pins**



Round



Square

**Specifications**

- Pin Material: See Table
- Plating: See Table

**Features**

- Convenient way to adjust or remove accessories on equipment
- Combine the benefits of a pin and cotter combination in a single, dependable assembly
- Simply pull the wire loop over the pin to lock it in place
- Available for round or square tubing

**Round Wire Lock Pins**

| Item No.         | A<br>in | B<br>in | C<br>in | D<br>in | Pin Material  | Plating Material      |
|------------------|---------|---------|---------|---------|---------------|-----------------------|
| WL3X1750RND--23  | 3/16    | 1.750   | 2.300   | .092    | Grade 2 Steel | Black Hexavalent Zinc |
| WL4X1750RND--Y2R | 1/4     | 1.750   | 2.500   | .092    | Grade 2 Steel | Yellow Trivalent Zinc |
| WL4X2312RND--Y2R | 1/4     | 2.312   | 2.875   | .092    | Grade 2 Steel | Yellow Trivalent Zinc |
| WL5X2375RND--Y2R | 5/16    | 2.380   | 3.000   | .092    | Grade 2 Steel | Yellow Trivalent Zinc |
| WL6X2250RND--Y2R | 3/8     | 2.250   | 3.125   | .092    | Grade 2 Steel | Yellow Trivalent Zinc |

**Square Wire Lock Pins**

| Item No.         | A<br>in | B<br>in | C<br>in | D<br>in | Pin Material  | Plating Material      |
|------------------|---------|---------|---------|---------|---------------|-----------------------|
| WL4X2250SQ---Y2R | 1/4     | 2.250   | 3.200   | .092    | Grade 2 Steel | Yellow Trivalent Zinc |
| WL5X2375SQ---Y2R | 5/16    | 2.380   | 3.000   | .092    | Grade 2 Steel | Yellow Trivalent Zinc |
| WL6X2250SQ---Y2R | 3/8     | 2.250   | 3.125   | .092    | Grade 2 Steel | Yellow Trivalent Zinc |

Note: Other configurations, materials, and customizations available upon request.

**LP Series  
Lynch Pins**

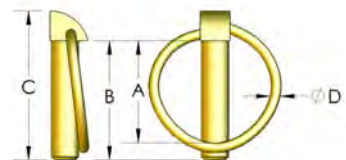


**Specifications**

- Pin Material: Grade 2 Low Carbon Steel
- Plating: Steel Zinc & Yellow CR+3 Trivalent Zinc

**Features**

- Self-locking ring snaps into place to securely hold the assembly
- Convenient way to adjust or remove accessories on equipment
- Allows for fast and rapid removal
- Lynch Pins are forged steel for maximum strength and plated zinc with yellow dichromate for corrosion resistance

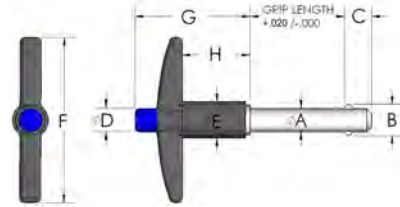


| Item No.          | Pin Diameter<br>in | A<br>(±0.125) | B<br>(±0.125) | C<br>(±0.125) | D<br>(±0.016) |
|-------------------|--------------------|---------------|---------------|---------------|---------------|
| LP3/16X1-1/8-Y2R  | 3/16               | 1.125         | 1.422         | 1.750         | 0.125         |
| LP1/4X1-7/16-Y2R  | 1/4                | 1.438         | 1.750         | 2.125         | 0.109         |
| LP5/16X1-1/2-Y2R  | 5/16               | 1.500         | 1.781         | 2.156         | 0.125         |
| LP7/16X1-15/32Y2R | 7/16               | 1.469         | 1.750         | 2.219         | 0.156         |
| LP7/16X1-19/32Y2R | 7/16               | 1.594         | 2.000         | 2.500         | 0.172         |



# POSITIVE LOCKING PINS

## PL Series T-Handle Positive Locking Pins



### Specifications

- Pin Material: See Table
- Handle Material: Black Cast Aluminum
- Button Material: Black Aluminum

### Features

- Secure method of making adjustments on equipment
- Ball detents will not collapse in without pushing of the button
- Ring allows for easy attachment of optional wire lanyard
- Can be attached to a wire rope lanyard for loss prevention

| Item No.        | Pin Diameter |       | Grip Length |       | A     |       | B                 | C     | D     | E     | F     | G     | H     | Pin Material    | Plating Material |
|-----------------|--------------|-------|-------------|-------|-------|-------|-------------------|-------|-------|-------|-------|-------|-------|-----------------|------------------|
|                 | in           | (#10) | in          | Min   | Max   | ±.005 | + .000 /<br>-.040 | in    | in    | in    | in    | in    | in    |                 |                  |
| PL3X0500T----01 | 3/16         | (#10) | 0.500       | 0.187 | 0.189 | 0.220 | 0.260             | 0.250 | 0.500 | 1.813 | 1.250 | 0.750 | 0.750 | Steel           | Zinc Plated      |
| PL3X0500T----X0 | 3/16         | (#10) | 0.500       | 0.187 | 0.189 | 0.220 | 0.260             | 0.250 | 0.500 | 1.813 | 1.250 | 0.750 | 0.750 | Stainless Steel | Plain            |
| PL3X1000T----01 | 3/16         | (#10) | 1.000       | 0.187 | 0.189 | 0.220 | 0.260             | 0.250 | 0.500 | 1.813 | 1.250 | 0.750 | 0.750 | Steel           | Zinc Plated      |
| PL3X1000T----X0 | 3/16         | (#10) | 1.000       | 0.187 | 0.189 | 0.220 | 0.260             | 0.250 | 0.500 | 1.813 | 1.250 | 0.750 | 0.750 | Stainless Steel | Plain            |
| PL3X1500T----01 | 3/16         | (#10) | 1.500       | 0.187 | 0.189 | 0.220 | 0.260             | 0.250 | 0.500 | 1.813 | 1.250 | 0.750 | 0.750 | Steel           | Zinc Plated      |
| PL3X1500T----X0 | 3/16         | (#10) | 1.500       | 0.187 | 0.189 | 0.220 | 0.260             | 0.250 | 0.500 | 1.813 | 1.250 | 0.750 | 0.750 | Stainless Steel | Plain            |
| PL3X2000T----01 | 3/16         | (#10) | 2.000       | 0.187 | 0.189 | 0.220 | 0.260             | 0.250 | 0.500 | 1.813 | 1.250 | 0.750 | 0.750 | Steel           | Zinc Plated      |
| PL3X2000T----X0 | 3/16         | (#10) | 2.000       | 0.187 | 0.189 | 0.220 | 0.260             | 0.250 | 0.500 | 1.813 | 1.250 | 0.750 | 0.750 | Stainless Steel | Plain            |
| PL4X0500T----01 | 1/4          |       | 0.500       | 0.247 | 0.249 | 0.289 | 0.290             | 0.250 | 0.500 | 1.813 | 1.250 | 0.750 | 0.750 | Steel           | Zinc Plated      |
| PL4X0500T----X0 | 1/4          |       | 0.500       | 0.247 | 0.249 | 0.289 | 0.290             | 0.250 | 0.500 | 1.813 | 1.250 | 0.750 | 0.750 | Stainless Steel | Plain            |
| PL4X1000T----01 | 1/4          |       | 1.000       | 0.247 | 0.249 | 0.289 | 0.290             | 0.250 | 0.500 | 1.813 | 1.250 | 0.750 | 0.750 | Steel           | Zinc Plated      |
| PL4X1000T----X0 | 1/4          |       | 1.000       | 0.247 | 0.249 | 0.289 | 0.290             | 0.250 | 0.500 | 1.813 | 1.250 | 0.750 | 0.750 | Stainless Steel | Plain            |
| PL4X1500T----01 | 1/4          |       | 1.500       | 0.247 | 0.249 | 0.289 | 0.290             | 0.250 | 0.500 | 1.813 | 1.250 | 0.750 | 0.750 | Steel           | Zinc Plated      |
| PL4X1500T----X0 | 1/4          |       | 1.500       | 0.247 | 0.249 | 0.289 | 0.290             | 0.250 | 0.500 | 1.813 | 1.250 | 0.750 | 0.750 | Stainless Steel | Plain            |
| PL4X2000T----01 | 1/4          |       | 2.000       | 0.247 | 0.249 | 0.289 | 0.290             | 0.250 | 0.500 | 1.813 | 1.250 | 0.750 | 0.750 | Steel           | Zinc Plated      |
| PL4X2000T----X0 | 1/4          |       | 2.000       | 0.247 | 0.249 | 0.289 | 0.290             | 0.250 | 0.500 | 1.813 | 1.250 | 0.750 | 0.750 | Stainless Steel | Plain            |
| PL5X1000T----01 | 5/16         |       | 1.000       | 0.310 | 0.311 | 0.375 | 0.330             | 0.250 | 0.500 | 1.813 | 1.250 | 0.750 | 0.750 | Steel           | Zinc Plated      |
| PL5X1000T----X0 | 5/16         |       | 1.000       | 0.310 | 0.311 | 0.375 | 0.330             | 0.250 | 0.500 | 1.813 | 1.250 | 0.750 | 0.750 | Stainless Steel | Plain            |
| PL5X1500T----01 | 5/16         |       | 1.500       | 0.310 | 0.311 | 0.375 | 0.330             | 0.250 | 0.500 | 1.813 | 1.250 | 0.750 | 0.750 | Steel           | Zinc Plated      |
| PL5X1500T----X0 | 5/16         |       | 1.500       | 0.310 | 0.311 | 0.375 | 0.330             | 0.250 | 0.500 | 1.813 | 1.250 | 0.750 | 0.750 | Stainless Steel | Plain            |
| PL5X2000T----01 | 5/16         |       | 2.000       | 0.310 | 0.311 | 0.375 | 0.330             | 0.250 | 0.500 | 1.813 | 1.250 | 0.750 | 0.750 | Steel           | Zinc Plated      |
| PL5X2000T----X0 | 5/16         |       | 2.000       | 0.310 | 0.311 | 0.375 | 0.330             | 0.250 | 0.500 | 1.813 | 1.250 | 0.750 | 0.750 | Stainless Steel | Plain            |
| PL5X2500T----01 | 5/16         |       | 2.500       | 0.310 | 0.311 | 0.375 | 0.330             | 0.250 | 0.500 | 1.813 | 1.250 | 0.750 | 0.750 | Steel           | Zinc Plated      |
| PL5X2500T----X0 | 5/16         |       | 2.500       | 0.310 | 0.311 | 0.375 | 0.330             | 0.250 | 0.500 | 1.813 | 1.250 | 0.750 | 0.750 | Stainless Steel | Plain            |
| PL6X1000T----01 | 3/8          |       | 1.000       | 0.372 | 0.374 | 0.440 | 0.365             | 0.313 | 0.594 | 2.000 | 1.438 | 0.938 | 0.938 | Steel           | Zinc Plated      |
| PL6X1000T----X0 | 3/8          |       | 1.000       | 0.372 | 0.374 | 0.440 | 0.365             | 0.313 | 0.594 | 2.000 | 1.438 | 0.938 | 0.938 | Stainless Steel | Plain            |
| PL6X1500T----01 | 3/8          |       | 1.500       | 0.372 | 0.374 | 0.440 | 0.365             | 0.313 | 0.594 | 2.000 | 1.438 | 0.938 | 0.938 | Steel           | Zinc Plated      |
| PL6X1500T----X0 | 3/8          |       | 1.500       | 0.372 | 0.374 | 0.440 | 0.365             | 0.313 | 0.594 | 2.000 | 1.438 | 0.938 | 0.938 | Stainless Steel | Plain            |
| PL6X2000T----01 | 3/8          |       | 2.000       | 0.372 | 0.374 | 0.440 | 0.365             | 0.313 | 0.594 | 2.000 | 1.438 | 0.938 | 0.938 | Steel           | Zinc Plated      |
| PL6X2000T----X0 | 3/8          |       | 2.000       | 0.372 | 0.374 | 0.440 | 0.365             | 0.313 | 0.594 | 2.000 | 1.438 | 0.938 | 0.938 | Stainless Steel | Plain            |
| PL6X2500T----01 | 3/8          |       | 2.500       | 0.372 | 0.374 | 0.440 | 0.365             | 0.313 | 0.594 | 2.000 | 1.438 | 0.938 | 0.938 | Steel           | Zinc Plated      |
| PL6X2500T----X0 | 3/8          |       | 2.500       | 0.372 | 0.374 | 0.440 | 0.365             | 0.313 | 0.594 | 2.000 | 1.438 | 0.938 | 0.938 | Stainless Steel | Plain            |
| PL6X3000T----01 | 3/8          |       | 3.000       | 0.372 | 0.374 | 0.440 | 0.365             | 0.313 | 0.594 | 2.000 | 1.438 | 0.938 | 0.938 | Steel           | Zinc Plated      |
| PL6X3000T----X0 | 3/8          |       | 3.000       | 0.372 | 0.374 | 0.440 | 0.365             | 0.313 | 0.594 | 2.000 | 1.438 | 0.938 | 0.938 | Stainless Steel | Plain            |
| PL6X3500T----01 | 3/8          |       | 3.500       | 0.372 | 0.374 | 0.440 | 0.365             | 0.313 | 0.594 | 2.000 | 1.438 | 0.938 | 0.938 | Steel           | Zinc Plated      |
| PL6X3500T----X0 | 3/8          |       | 3.500       | 0.372 | 0.374 | 0.440 | 0.365             | 0.313 | 0.594 | 2.000 | 1.438 | 0.938 | 0.938 | Stainless Steel | Plain            |
| PL8X1500T----01 | 1/2          |       | 1.500       | 0.497 | 0.499 | 0.594 | 0.460             | 0.469 | 0.750 | 2.000 | 1.625 | 1.000 | 1.000 | Steel           | Zinc Plated      |
| PL8X1500T----X0 | 1/2          |       | 1.500       | 0.497 | 0.499 | 0.594 | 0.460             | 0.469 | 0.750 | 2.000 | 1.625 | 1.000 | 1.000 | Stainless Steel | Plain            |
| PL8X2000T----01 | 1/2          |       | 2.000       | 0.497 | 0.499 | 0.594 | 0.460             | 0.469 | 0.750 | 2.000 | 1.625 | 1.000 | 1.000 | Steel           | Zinc Plated      |
| PL8X2000T----X0 | 1/2          |       | 2.000       | 0.497 | 0.499 | 0.594 | 0.460             | 0.469 | 0.750 | 2.000 | 1.625 | 1.000 | 1.000 | Stainless Steel | Plain            |
| PL8X2500T----01 | 1/2          |       | 2.500       | 0.497 | 0.499 | 0.594 | 0.460             | 0.469 | 0.750 | 2.000 | 1.625 | 1.000 | 1.000 | Steel           | Zinc Plated      |
| PL8X2500T----X0 | 1/2          |       | 2.500       | 0.497 | 0.499 | 0.594 | 0.460             | 0.469 | 0.750 | 2.000 | 1.625 | 1.000 | 1.000 | Stainless Steel | Plain            |
| PL8X3000T----01 | 1/2          |       | 3.000       | 0.497 | 0.499 | 0.594 | 0.460             | 0.469 | 0.750 | 2.000 | 1.625 | 1.000 | 1.000 | Steel           | Zinc Plated      |
| PL8X3000T----X0 | 1/2          |       | 3.000       | 0.497 | 0.499 | 0.594 | 0.460             | 0.469 | 0.750 | 2.000 | 1.625 | 1.000 | 1.000 | Stainless Steel | Plain            |
| PL8X3500T----01 | 1/2          |       | 3.500       | 0.497 | 0.499 | 0.594 | 0.460             | 0.469 | 0.750 | 2.000 | 1.625 | 1.000 | 1.000 | Steel           | Zinc Plated      |
| PL8X3500T----X0 | 1/2          |       | 3.500       | 0.497 | 0.499 | 0.594 | 0.460             | 0.469 | 0.750 | 2.000 | 1.625 | 1.000 | 1.000 | Stainless Steel | Plain            |
| PL8X4000T----01 | 1/2          |       | 4.000       | 0.497 | 0.499 | 0.594 | 0.460             | 0.469 | 0.750 | 2.000 | 1.625 | 1.000 | 1.000 | Steel           | Zinc Plated      |
| PL8X4000T----X0 | 1/2          |       | 4.000       | 0.497 | 0.499 | 0.594 | 0.460             | 0.469 | 0.750 | 2.000 | 1.625 | 1.000 | 1.000 | Stainless Steel | Plain            |

Note: Other configurations, materials, and customizations available upon request.

# POSITIVE LOCKING PINS



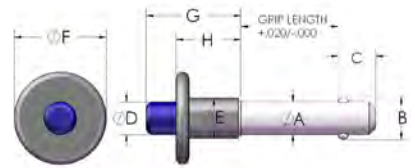
## PL Series Button Handle Positive Locking Pins

### Specifications

- Pin Material: Stainless Steel
- Handle Material: Black Cast Aluminum
- Button Material: Blue Aluminum

### Features

- Secure method of making adjustments on equipment
- Ball detents will not collapse in without pushing of the button
- Ring allows for easy attachment of optional wire lanyard
- Can be attached to a wire rope lanyard for loss prevention



| Item No.        | Pin Diameter |       | Grip Length |       | A     |       | B               | C     | D     | E     | F     | G     | H     |
|-----------------|--------------|-------|-------------|-------|-------|-------|-----------------|-------|-------|-------|-------|-------|-------|
|                 | in           | #10   | in          | Min   | Max   | ±.005 | + .000 / - .040 | in    | in    | in    | in    | in    | in    |
| PL3X0500B----X0 | 3/16         | (#10) | 0.500       | 0.187 | 0.189 | 0.220 | 0.260           | 0.250 | 0.438 | 0.813 | 0.813 | 0.813 | 0.625 |
| PL3X1000B----X0 | 3/16         | (#10) | 1.000       | 0.187 | 0.189 | 0.220 | 0.260           | 0.250 | 0.438 | 0.813 | 0.813 | 0.813 | 0.625 |
| PL3X1500B----X0 | 3/16         | (#10) | 1.500       | 0.187 | 0.189 | 0.220 | 0.260           | 0.250 | 0.438 | 0.813 | 0.813 | 0.813 | 0.625 |
| PL3X2000B----X0 | 3/16         | (#10) | 2.000       | 0.187 | 0.189 | 0.220 | 0.260           | 0.250 | 0.438 | 0.813 | 0.813 | 0.813 | 0.625 |
| PL4X0500B----X0 | 1/4          |       | 0.500       | 0.247 | 0.249 | 0.289 | 0.290           | 0.250 | 0.438 | 0.813 | 0.875 | 0.875 | 0.625 |
| PL4X1000B----X0 | 1/4          |       | 1.000       | 0.247 | 0.249 | 0.289 | 0.290           | 0.250 | 0.438 | 0.813 | 0.875 | 0.875 | 0.625 |
| PL4X1500B----X0 | 1/4          |       | 1.500       | 0.247 | 0.249 | 0.289 | 0.290           | 0.250 | 0.438 | 0.813 | 0.875 | 0.875 | 0.625 |
| PL4X2000B----X0 | 1/4          |       | 2.000       | 0.247 | 0.249 | 0.289 | 0.290           | 0.250 | 0.438 | 0.813 | 0.875 | 0.875 | 0.625 |
| PL5X1000B----X0 | 5/16         |       | 1.000       | 0.310 | 0.311 | 0.375 | 0.330           | 0.250 | 0.438 | 0.875 | 0.906 | 0.906 | 0.625 |
| PL5X1500B----X0 | 5/16         |       | 1.500       | 0.310 | 0.311 | 0.375 | 0.330           | 0.250 | 0.438 | 0.875 | 0.906 | 0.906 | 0.625 |
| PL5X2000B----X0 | 5/16         |       | 2.000       | 0.310 | 0.311 | 0.375 | 0.330           | 0.250 | 0.438 | 0.875 | 0.906 | 0.906 | 0.625 |
| PL5X2500B----X0 | 5/16         |       | 2.500       | 0.310 | 0.311 | 0.375 | 0.330           | 0.250 | 0.438 | 0.875 | 0.906 | 0.906 | 0.625 |
| PL6X1000B----X0 | 3/8          |       | 1.000       | 0.372 | 0.374 | 0.440 | 0.365           | 0.313 | 0.563 | 1.125 | 1.031 | 1.031 | 0.750 |
| PL6X1500B----X0 | 3/8          |       | 1.500       | 0.372 | 0.374 | 0.440 | 0.365           | 0.313 | 0.563 | 1.125 | 1.031 | 1.031 | 0.750 |
| PL6X2000B----X0 | 3/8          |       | 2.000       | 0.372 | 0.374 | 0.440 | 0.365           | 0.313 | 0.563 | 1.125 | 1.031 | 1.031 | 0.750 |
| PL6X2500B----X0 | 3/8          |       | 2.500       | 0.372 | 0.374 | 0.440 | 0.365           | 0.313 | 0.563 | 1.125 | 1.031 | 1.031 | 0.750 |
| PL6X3000B----X0 | 3/8          |       | 3.000       | 0.372 | 0.374 | 0.440 | 0.365           | 0.313 | 0.563 | 1.125 | 1.031 | 1.031 | 0.750 |
| PL6X3500B----X0 | 3/8          |       | 3.500       | 0.372 | 0.374 | 0.440 | 0.365           | 0.313 | 0.563 | 1.125 | 1.031 | 1.031 | 0.750 |
| PL8X1500B----X0 | 1/2          |       | 1.500       | 0.497 | 0.499 | 0.594 | 0.460           | 0.438 | 0.719 | 1.375 | 1.188 | 1.188 | 0.813 |
| PL8X2000B----X0 | 1/2          |       | 2.000       | 0.497 | 0.499 | 0.594 | 0.460           | 0.438 | 0.719 | 1.375 | 1.188 | 1.188 | 0.813 |
| PL8X2500B----X0 | 1/2          |       | 2.500       | 0.497 | 0.499 | 0.594 | 0.460           | 0.438 | 0.719 | 1.375 | 1.188 | 1.188 | 0.813 |
| PL8X3000B----X0 | 1/2          |       | 3.000       | 0.497 | 0.499 | 0.594 | 0.460           | 0.438 | 0.719 | 1.375 | 1.188 | 1.188 | 0.813 |
| PL8X3500B----X0 | 1/2          |       | 3.500       | 0.497 | 0.499 | 0.594 | 0.460           | 0.438 | 0.719 | 1.375 | 1.188 | 1.188 | 0.813 |
| PL8X4000B----X0 | 1/2          |       | 4.000       | 0.497 | 0.499 | 0.594 | 0.460           | 0.438 | 0.719 | 1.375 | 1.188 | 1.188 | 0.813 |

Note: Other configurations, materials, and customizations available upon request.

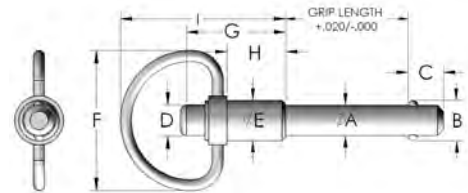
## PL Series Ring Handle Positive Locking Pins

### Specifications

- Pin Material: Stainless Steel
- Spindle Material: Stainless Steel
- Button Material: Stainless Steel

### Features

- Secure method of making adjustments on equipment
- Ball detents will not collapse in without pushing of the button
- Ring allows for easy attachment of optional wire lanyard
- Can be attached to a wire rope lanyard for loss prevention



| Item No.        | Pin Diameter |       | Grip Length |       | A     |       | B               | C     | D     | E     | F     | G     | H     | I  |
|-----------------|--------------|-------|-------------|-------|-------|-------|-----------------|-------|-------|-------|-------|-------|-------|----|
|                 | in           | #10   | in          | Min   | Max   | ±.005 | + .000 / - .040 | in    | in    | in    | in    | in    | in    | in |
| PL3X0500R----X0 | 3/16         | (#10) | 0.500       | 0.187 | 0.189 | 0.220 | 0.260           | 0.250 | 0.438 | 1.125 | 0.813 | 0.453 | 1.344 |    |
| PL3X1000R----X0 | 3/16         | (#10) | 1.000       | 0.187 | 0.189 | 0.220 | 0.260           | 0.250 | 0.438 | 1.125 | 0.813 | 0.453 | 1.344 |    |
| PL3X1500R----X0 | 3/16         | (#10) | 1.500       | 0.187 | 0.189 | 0.220 | 0.260           | 0.250 | 0.438 | 1.125 | 0.813 | 0.453 | 1.344 |    |
| PL3X2000R----X0 | 3/16         | (#10) | 2.000       | 0.187 | 0.189 | 0.220 | 0.260           | 0.250 | 0.438 | 1.125 | 0.813 | 0.453 | 1.344 |    |
| PL4X0500R----X0 | 1/4          |       | 0.500       | 0.247 | 0.249 | 0.289 | 0.290           | 0.250 | 0.438 | 1.125 | 0.813 | 0.453 | 1.344 |    |
| PL4X1000R----X0 | 1/4          |       | 1.000       | 0.247 | 0.249 | 0.289 | 0.290           | 0.250 | 0.438 | 1.125 | 0.813 | 0.453 | 1.344 |    |
| PL4X1500R----X0 | 1/4          |       | 1.500       | 0.247 | 0.249 | 0.289 | 0.290           | 0.250 | 0.438 | 1.125 | 0.813 | 0.453 | 1.344 |    |
| PL4X2000R----X0 | 1/4          |       | 2.000       | 0.247 | 0.249 | 0.289 | 0.290           | 0.250 | 0.438 | 1.125 | 0.813 | 0.453 | 1.344 |    |
| PL5X1000R----X0 | 5/16         |       | 1.000       | 0.310 | 0.311 | 0.375 | 0.330           | 0.250 | 0.438 | 1.125 | 0.844 | 0.453 | 1.344 |    |
| PL5X1500R----X0 | 5/16         |       | 1.500       | 0.310 | 0.311 | 0.375 | 0.330           | 0.250 | 0.438 | 1.125 | 0.844 | 0.453 | 1.344 |    |
| PL5X2000R----X0 | 5/16         |       | 2.000       | 0.310 | 0.311 | 0.375 | 0.330           | 0.250 | 0.438 | 1.125 | 0.844 | 0.453 | 1.344 |    |
| PL5X2500R----X0 | 5/16         |       | 2.500       | 0.310 | 0.311 | 0.375 | 0.330           | 0.250 | 0.438 | 1.125 | 0.844 | 0.453 | 1.344 |    |
| PL6X1000R----X0 | 3/8          |       | 1.000       | 0.372 | 0.374 | 0.440 | 0.365           | 0.313 | 0.563 | 1.125 | 1.000 | 0.594 | 1.500 |    |
| PL6X1500R----X0 | 3/8          |       | 1.500       | 0.372 | 0.374 | 0.440 | 0.365           | 0.313 | 0.563 | 1.125 | 1.000 | 0.594 | 1.500 |    |
| PL6X2000R----X0 | 3/8          |       | 2.000       | 0.372 | 0.374 | 0.440 | 0.365           | 0.313 | 0.563 | 1.125 | 1.000 | 0.594 | 1.500 |    |
| PL6X2500R----X0 | 3/8          |       | 2.500       | 0.372 | 0.374 | 0.440 | 0.365           | 0.313 | 0.563 | 1.125 | 1.000 | 0.594 | 1.500 |    |
| PL6X3000R----X0 | 3/8          |       | 3.000       | 0.372 | 0.374 | 0.440 | 0.365           | 0.313 | 0.563 | 1.125 | 1.000 | 0.594 | 1.500 |    |
| PL6X3500R----X0 | 3/8          |       | 3.500       | 0.372 | 0.374 | 0.440 | 0.365           | 0.313 | 0.563 | 1.125 | 1.000 | 0.594 | 1.500 |    |
| PL8X1500R----X0 | 1/2          |       | 1.500       | 0.497 | 0.499 | 0.594 | 0.460           | 0.438 | 0.688 | 1.375 | 1.250 | 0.625 | 1.875 |    |
| PL8X2000R----X0 | 1/2          |       | 2.000       | 0.497 | 0.499 | 0.594 | 0.460           | 0.438 | 0.688 | 1.375 | 1.250 | 0.625 | 1.875 |    |
| PL8X2500R----X0 | 1/2          |       | 2.500       | 0.497 | 0.499 | 0.594 | 0.460           | 0.438 | 0.688 | 1.375 | 1.250 | 0.625 | 1.875 |    |
| PL8X3000R----X0 | 1/2          |       | 3.000       | 0.497 | 0.499 | 0.594 | 0.460           | 0.438 | 0.688 | 1.375 | 1.250 | 0.625 | 1.875 |    |
| PL8X3500R----X0 | 1/2          |       | 3.500       | 0.497 | 0.499 | 0.594 | 0.460           | 0.438 | 0.688 | 1.375 | 1.250 | 0.625 | 1.875 |    |
| PL8X4000R----X0 | 1/2          |       | 4.000       | 0.497 | 0.499 | 0.594 | 0.460           | 0.438 | 0.688 | 1.375 | 1.250 | 0.625 | 1.875 |    |

Note: Other configurations, materials, and customizations available upon request.



# POSITIVE LOCKING PINS / PIN RECEPTACLES

## PL Series

### L-Handle Positive Locking Pins

#### Specifications

- Pin Material: Stainless Steel
- Handle Material: Black Cast Aluminum
- Button Material: Black Aluminum

#### Features

- Secure method of making adjustments on equipment
- Ball detents will not collapse in without pushing of the button
- Ring allows for easy attachment of optional wire lanyard
- Can be attached to a wire rope lanyard for loss prevention

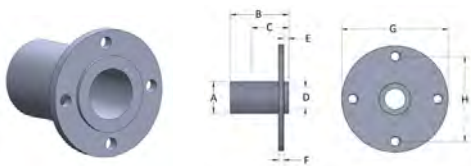


| Item No.       | Pin Diameter<br>in | Grip Length<br>in | A     |       | B<br>±.005" | C<br>+.000" / -.040" | D<br>in | E<br>in | F<br>in | G<br>in | H<br>in |
|----------------|--------------------|-------------------|-------|-------|-------------|----------------------|---------|---------|---------|---------|---------|
|                |                    |                   | Min   | Max   |             |                      |         |         |         |         |         |
| PL3X0500L---X0 | 3/16 (#10)         | 0.500             | 0.187 | 0.189 | 0.220       | 0.260                | 0.250   | 0.500   | 1.750   | 1.250   | 0.750   |
| PL3X1000L---X0 | 3/16 (#10)         | 1.000             | 0.187 | 0.189 | 0.220       | 0.260                | 0.250   | 0.500   | 1.750   | 1.250   | 0.750   |
| PL3X1500L---X0 | 3/16 (#10)         | 1.500             | 0.187 | 0.189 | 0.220       | 0.260                | 0.250   | 0.500   | 1.750   | 1.250   | 0.750   |
| PL3X2000L---X0 | 3/16 (#10)         | 2.000             | 0.187 | 0.189 | 0.220       | 0.260                | 0.250   | 0.500   | 1.750   | 1.250   | 0.750   |
| PL4X0500L---X0 | 1/4                | 0.500             | 0.247 | 0.249 | 0.289       | 0.290                | 0.250   | 0.500   | 1.750   | 1.250   | 0.750   |
| PL4X1000L---X0 | 1/4                | 1.000             | 0.247 | 0.249 | 0.289       | 0.290                | 0.250   | 0.500   | 1.750   | 1.250   | 0.750   |
| PL4X1500L---X0 | 1/4                | 1.500             | 0.247 | 0.249 | 0.289       | 0.290                | 0.250   | 0.500   | 1.750   | 1.250   | 0.750   |
| PL4X2000L---X0 | 1/4                | 2.000             | 0.247 | 0.249 | 0.289       | 0.290                | 0.250   | 0.500   | 1.750   | 1.250   | 0.750   |
| PL5X1000L---X0 | 5/16               | 1.000             | 0.310 | 0.311 | 0.375       | 0.330                | 0.250   | 0.500   | 1.750   | 1.250   | 0.750   |
| PL5X1500L---X0 | 5/16               | 1.500             | 0.310 | 0.311 | 0.375       | 0.330                | 0.250   | 0.500   | 1.750   | 1.250   | 0.750   |
| PL5X2000L---X0 | 5/16               | 2.000             | 0.310 | 0.311 | 0.375       | 0.330                | 0.250   | 0.500   | 1.750   | 1.250   | 0.750   |
| PL5X2500L---X0 | 5/16               | 2.500             | 0.310 | 0.311 | 0.375       | 0.330                | 0.250   | 0.500   | 1.750   | 1.250   | 0.750   |
| PL6X1000L---X0 | 3/8                | 1.000             | 0.372 | 0.374 | 0.440       | 0.365                | 0.313   | 0.594   | 2.000   | 1.438   | 0.938   |
| PL6X1500L---X0 | 3/8                | 1.500             | 0.372 | 0.374 | 0.440       | 0.365                | 0.313   | 0.594   | 2.000   | 1.438   | 0.938   |
| PL6X2000L---X0 | 3/8                | 2.000             | 0.372 | 0.374 | 0.440       | 0.365                | 0.313   | 0.594   | 2.000   | 1.438   | 0.938   |
| PL6X2500L---X0 | 3/8                | 2.500             | 0.372 | 0.374 | 0.440       | 0.365                | 0.313   | 0.594   | 2.000   | 1.438   | 0.938   |
| PL6X3000L---X0 | 3/8                | 3.000             | 0.372 | 0.374 | 0.440       | 0.365                | 0.313   | 0.594   | 2.000   | 1.438   | 0.938   |
| PL6X3500L---X0 | 3/8                | 3.500             | 0.372 | 0.374 | 0.440       | 0.365                | 0.313   | 0.594   | 2.000   | 1.438   | 0.938   |
| PL8X1500L---X0 | 1/2                | 1.500             | 0.497 | 0.499 | 0.594       | 0.460                | 0.469   | 0.750   | 2.250   | 1.625   | 1.000   |
| PL8X2000L---X0 | 1/2                | 2.000             | 0.497 | 0.499 | 0.594       | 0.460                | 0.469   | 0.750   | 2.250   | 1.625   | 1.000   |
| PL8X2500L---X0 | 1/2                | 2.500             | 0.497 | 0.499 | 0.594       | 0.460                | 0.469   | 0.750   | 2.250   | 1.625   | 1.000   |
| PL8X3000L---X0 | 1/2                | 3.000             | 0.497 | 0.499 | 0.594       | 0.460                | 0.469   | 0.750   | 2.250   | 1.625   | 1.000   |
| PL8X3500L---X0 | 1/2                | 3.500             | 0.497 | 0.499 | 0.594       | 0.460                | 0.469   | 0.750   | 2.250   | 1.625   | 1.000   |
| PL8X4000L---X0 | 1/2                | 4.000             | 0.497 | 0.499 | 0.594       | 0.460                | 0.469   | 0.750   | 2.250   | 1.625   | 1.000   |

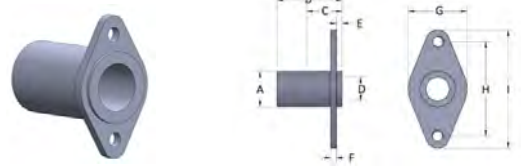
Note: Other configurations, materials, and customizations available upon request.

## PR Series

### Pin Receptacles



Round



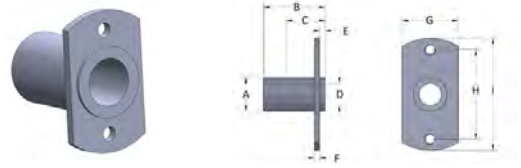
Diamond

#### Specifications

- Material: Stainless Steel

#### Features

- When your ball lock pin doesn't have a surface to lock against, use these receptacles for a permanent mating hole
- Receptacle mounting hole size is 6-32, except 1/2" diameter is 10-32



Oval

### Circle Pin Receptacles

| Item No.       | Diameter | A<br>in | B<br>in | C<br>in | D<br>in | E<br>in | F<br>in | G<br>in | H<br>in |
|----------------|----------|---------|---------|---------|---------|---------|---------|---------|---------|
| PR4X---RND--70 | 1/4      | 0.375   | 0.688   | 0.375   | 0.250   | 0.060   | 0.060   | 1.000   | 1.250   |
| PR5X---RND--70 | 5/16     | 0.500   | 0.750   | 0.500   | 0.313   | 0.060   | 0.060   | 1.000   | 1.250   |
| PR6X---RND--70 | 3/8      | 0.563   | 0.875   | 0.563   | 0.375   | 0.060   | 0.060   | 1.000   | 1.250   |
| PR8X---RND--70 | 1/2      | 0.750   | 1.188   | 0.750   | 0.500   | 0.060   | 0.060   | 1.125   | 1.500   |

### Diamond Pin Receptacles

| Item No.       | Diameter | A<br>in | B<br>in | C<br>in | D<br>in | E<br>in | F<br>in | G<br>in | H<br>in | I<br>in |
|----------------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PR4X---DMD--70 | 1/4      | 0.375   | 0.688   | 0.375   | 0.250   | 0.060   | 0.060   | 0.625   | 1.000   | 1.250   |
| PR5X---DMD--70 | 5/16     | 0.500   | 0.750   | 0.500   | 0.313   | 0.060   | 0.060   | 0.625   | 1.000   | 1.250   |
| PR6X---DMD--70 | 3/8      | 0.563   | 0.875   | 0.563   | 0.375   | 0.060   | 0.060   | 0.625   | 1.000   | 1.250   |
| PR8X---DMD--70 | 1/2      | 0.750   | 1.188   | 0.750   | 0.500   | 0.060   | 0.060   | 0.875   | 1.125   | 1.500   |

### Oval Pin Receptacles

| Item No.       | Diameter | A<br>in | B<br>in | C<br>in | D<br>in | E<br>in | F<br>in | G<br>in | H<br>in | I<br>in |
|----------------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PR4X---OVL--70 | 1/4      | 0.375   | 0.688   | 0.375   | 0.250   | 0.060   | 0.060   | 0.625   | 1.000   | 1.250   |
| PR5X---OVL--70 | 5/16     | 0.500   | 0.750   | 0.500   | 0.313   | 0.060   | 0.060   | 0.625   | 1.000   | 1.250   |
| PR6X---OVL--70 | 3/8      | 0.563   | 0.875   | 0.563   | 0.375   | 0.060   | 0.060   | 0.625   | 1.000   | 1.250   |
| PR8X---OVL--70 | 1/2      | 0.750   | 1.188   | 0.750   | 0.500   | 0.060   | 0.060   | 0.875   | 1.125   | 1.500   |

Note: Other configurations, materials, and customizations available upon request.



**PI Series**  
Retractable Spring Plungers, Weld Mount

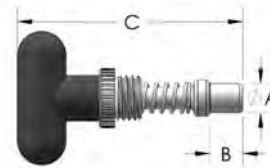


**Specifications**

- Pin Material: C1022 Steel, Case Hard
- Pin Plating: Clear Zinc
- Knob Material: Polypropylene
- Color: Black
- Barrel Material: Steel 1215, C1010-C1021
- Barrel Plating: Plain

**Features**

- Weld on mating barrel included
- Convenient and quick way to adjust height or length on equipment
- Lock-Out feature holds pin in the retracted position to allow user both hands to make adjustments



Option to Lock-Out

| Item No.         | A    | B     | C     | Pin Tip Style     | Barrel Diameter | Barrel Height | Knob Style | Knob Diameter | Lock Out Option |
|------------------|------|-------|-------|-------------------|-----------------|---------------|------------|---------------|-----------------|
|                  | in   | in    | in    |                   | in              | in            |            | in            |                 |
| PI5/16-1.5-B-B3  | 5/16 | 0.610 | 3.720 | Standard Straight | 1.000           | 1.500         | B3         | 1.360         | No              |
| PI5/16-1.5-B-PL5 | 5/16 | 0.610 | 3.590 | Standard Straight | 1.000           | 1.500         | PL5        | 1.640         | No              |
| PI5/16-1.5-B-TR6 | 5/16 | 0.610 | 3.790 | Standard Straight | 1.000           | 1.500         | TR6        | 2.270         | No              |
| PI3/8-1.5-B--B3  | 3/8  | 0.600 | 3.680 | Standard Straight | 1.000           | 1.500         | B3         | 1.360         | No              |
| PI3/8-1.5-B-PL5  | 3/8  | 0.600 | 3.570 | Standard Straight | 1.000           | 1.500         | PL5        | 1.640         | No              |
| PI3/8-1.5-B-TR6  | 3/8  | 0.600 | 3.790 | Standard Straight | 1.000           | 1.500         | TR6        | 2.270         | No              |
| PI3/8-1.5LOB-B3  | 3/8  | 0.610 | 3.700 | Standard Straight | 1.000           | 1.500         | B3         | 1.360         | Yes             |
| PI3/8-1.5LOBPL5  | 3/8  | 0.610 | 3.550 | Standard Straight | 1.000           | 1.500         | PL5        | 1.640         | Yes             |
| PI3/8-1.5LOBTR6  | 3/8  | 0.610 | 3.800 | Standard Straight | 1.000           | 1.500         | TR6        | 2.270         | Yes             |
| PI1/2-1.5-B--B3  | 1/2  | 0.875 | 3.970 | Standard Straight | 1.000           | 1.500         | B3         | 1.360         | No              |
| PI1/2-1.5-B-PL5  | 1/2  | 0.875 | 3.840 | Standard Straight | 1.000           | 1.500         | PL5        | 1.640         | No              |
| PI1/2-1.5-B-TR6  | 1/2  | 0.875 | 4.080 | Standard Straight | 1.000           | 1.500         | TR6        | 2.270         | No              |
| PI1/2S1.5-B--B3  | 1/2  | 0.562 | 3.620 | Short Tip         | 1.000           | 1.500         | B3         | 1.360         | No              |
| PI1/2S1.5-B-PL5  | 1/2  | 0.562 | 3.540 | Short Tip         | 1.000           | 1.500         | PL5        | 1.640         | No              |
| PI1/2S1.5-B-TR6  | 1/2  | 0.562 | 3.730 | Short Tip         | 1.000           | 1.500         | TR6        | 2.270         | No              |
| PI1/2S2.25-B-B3  | 1/2  | 0.550 | 4.410 | Short Tip         | 1.000           | 2.250         | B3         | 1.360         | No              |
| PI1/2S2.25-B-PL5 | 1/2  | 0.550 | 4.270 | Short Tip         | 1.000           | 2.250         | PL5        | 1.640         | No              |
| PI1/2S2.25-B-TR6 | 1/2  | 0.550 | 4.530 | Short Tip         | 1.000           | 2.250         | TR6        | 2.270         | No              |
| PI1/2T1.5-B--B3  | 1/2  | 0.625 | 3.680 | Tapered Tip       | 1.000           | 1.500         | B3         | 1.360         | No              |
| PI1/2T1.5-B-PL5  | 1/2  | 0.625 | 3.620 | Tapered Tip       | 1.000           | 1.500         | PL5        | 1.640         | No              |
| PI1/2T1.5-B-TR6  | 1/2  | 0.625 | 3.850 | Tapered Tip       | 1.000           | 1.500         | TR6        | 2.270         | No              |

Note: Other configurations, materials, and customizations available upon request.

**SP Series**  
Lock-Out Pull Ring Plunger Pins

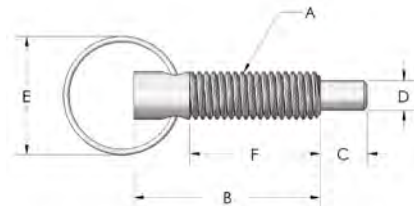


**Specifications**

- Pin Material: Steel
- Plating: Clear Zinc

**Features**

- Hand retractable pins are used as a fast and convenient way to adjust or remove accessories on equipment
- Great for applications with limited space as positioners, loading pins, alignment pins, and indexing devices
- Can add an anti-vibration lock patch onto the threads



| Item No.        | A       | B     | C     | D     | E     | F     | End Force (lbs) |       | Anti-Vibration Lock Patch |
|-----------------|---------|-------|-------|-------|-------|-------|-----------------|-------|---------------------------|
|                 | Threads | in    | in    | in    | in    | in    | Initial         | Final |                           |
| SP4C---R-X--21  | 1/4-20  | 1.140 | 0.250 | 0.155 | 0.620 | 0.800 | 1.00            | 2.50  | No                        |
| SP4C---R-V--21  | 1/4-20  | 1.140 | 0.250 | 0.155 | 0.620 | 0.800 | 1.00            | 2.50  | Yes                       |
| SP6C---R-----21 | 3/8-16  | 1.680 | 0.375 | 0.233 | 0.980 | 1.200 | 2.00            | 4.00  | No                        |
| SP6C---R-V--21  | 3/8-16  | 1.680 | 0.375 | 0.233 | 0.980 | 1.200 | 2.00            | 4.00  | Yes                       |
| SP8C---R-----2R | 1/2-13  | 2.000 | 0.500 | 0.312 | 1.260 | 1.400 | 2.50            | 5.00  | No                        |
| SP8C---R-V--2R  | 1/2-13  | 2.000 | 0.500 | 0.312 | 1.260 | 1.400 | 2.50            | 5.00  | Yes                       |

Note: Other configurations, materials, and customizations available upon request.



# SPRING LOADED PLUNGER PINS

## SP Series

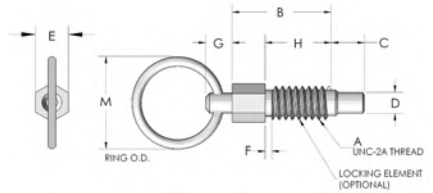
### Non Lock-Out Short Pull Ring Plunger Pins

#### Specifications

- Pin Material: See Table
- Plating: See Table

#### Features

- Hand retractable pins are used as a fast and convenient way to adjust or remove accessories on equipment
- Great for applications with limited space as positioners, loading pins, alignment pins, and indexing devices
- Can add an anti-vibration lock patch onto the threads



| Item No.        | A<br>Threads | B<br>in | C<br>in | D<br>in | E<br>in | F<br>in | G<br>in | H<br>in | M<br>in | End Force (lbs) |       | Pin Material    | Plating Material | Anti-Vibration Lock Patch |
|-----------------|--------------|---------|---------|---------|---------|---------|---------|---------|---------|-----------------|-------|-----------------|------------------|---------------------------|
|                 |              |         |         |         |         |         |         |         |         | Initial         | Final |                 |                  |                           |
| SP4C--SR----21* | 1/4-20       | 0.440   | 0.190   | 0.160   | 0.250   | —       | 0.180   | 0.310   | 0.750   | 0.50            | 2.00  | Steel           | Clear Zinc       | No                        |
| SP4C--SR--V-21* | 1/4-20       | 0.440   | 0.190   | 0.160   | 0.250   | —       | 0.180   | 0.310   | 0.750   | 0.50            | 2.00  | Steel           | Clear Zinc       | Yes                       |
| SP6C--SR----21  | 3/8-16       | 0.630   | 0.280   | 0.250   | 0.380   | 0.130   | 0.190   | 0.440   | 0.750   | 0.75            | 3.00  | Steel           | Clear Zinc       | No                        |
| SP6C--SR----70  | 3/8-16       | 0.630   | 0.280   | 0.250   | 0.380   | 0.130   | 0.190   | 0.440   | 0.750   | 0.75            | 3.00  | Stainless Steel | Plain            | No                        |
| SP6C--SR--V-21  | 3/8-16       | 0.630   | 0.280   | 0.250   | 0.380   | 0.130   | 0.190   | 0.440   | 0.750   | 0.75            | 3.00  | Steel           | Clear Zinc       | Yes                       |
| SP6C--SR--V-70  | 3/8-16       | 0.630   | 0.280   | 0.250   | 0.380   | 0.130   | 0.190   | 0.440   | 0.750   | 0.75            | 3.00  | Stainless Steel | Plain            | Yes                       |
| SP8C--SR----21  | 1/2-13       | 0.810   | 0.380   | 0.310   | 0.500   | 0.130   | 0.250   | 0.560   | 1.000   | 1.00            | 4.00  | Steel           | Clear Zinc       | No                        |
| SP8C--SR----70  | 1/2-13       | 0.810   | 0.380   | 0.310   | 0.500   | 0.130   | 0.250   | 0.560   | 1.000   | 1.00            | 4.00  | Stainless Steel | Plain            | No                        |
| SP8C--SR--V-21  | 1/2-13       | 0.810   | 0.380   | 0.310   | 0.500   | 0.130   | 0.250   | 0.560   | 1.000   | 1.00            | 4.00  | Steel           | Clear Zinc       | Yes                       |
| SP8C--SR--V-70  | 1/2-13       | 0.810   | 0.380   | 0.310   | 0.500   | 0.130   | 0.250   | 0.560   | 1.000   | 1.00            | 4.00  | Stainless Steel | Plain            | Yes                       |
| SP1C--SR----21  | 5/8-11       | 1.000   | 0.440   | 0.380   | 0.620   | 0.130   | 0.310   | 0.690   | 1.000   | 1.25            | 5.00  | Steel           | Clear Zinc       | No                        |
| SP1C--SR--V-21  | 5/8-11       | 1.000   | 0.440   | 0.380   | 0.620   | 0.130   | 0.310   | 0.690   | 1.000   | 1.25            | 5.00  | Steel           | Clear Zinc       | Yes                       |

\*No thread relief for 1/4-20 series.

Note: Other configurations, materials, and customizations available upon request.

## SP Series

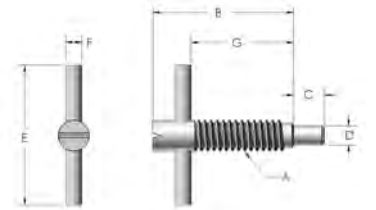
### Lock-Out T-Handle Retractable Plunger Pins

#### Specifications

- Pin Material: Stainless Steel
- Plating: See Table

#### Features

- Hand retractable pins are used as a fast and convenient way to adjust or remove accessories on equipment
- Great for applications with limited space as positioners, loading pins, alignment pins, and indexing devices
- Can add an anti-vibration lock patch onto the threads



| Item No.        | A<br>Threads | B<br>in | C<br>in | D<br>in | E<br>in | F<br>in | G<br>in | End Force (lbs) |       | Anti-Vibration Lock Patch |
|-----------------|--------------|---------|---------|---------|---------|---------|---------|-----------------|-------|---------------------------|
|                 |              |         |         |         |         |         |         | Initial         | Final |                           |
| SP4C--T--L--70* | 1/4-20       | 1.140   | 0.250   | 0.155   | 1.130   | 0.130   | 0.800   | 1.00            | 2.50  | No                        |
| SP4C--T--LV-70* | 1/4-20       | 1.140   | 0.250   | 0.155   | 1.130   | 0.130   | 0.800   | 1.00            | 2.50  | Yes                       |
| SP6C--T--L--70  | 3/8-16       | 1.680   | 0.375   | 0.233   | 1.500   | 0.130   | 1.200   | 2.00            | 4.00  | No                        |
| SP8C--T--L--70  | 1/2-13       | 2.000   | 0.500   | 0.312   | 2.000   | 0.160   | 1.400   | 2.50            | 5.00  | No                        |
| SP8C--T--LV-70  | 1/2-13       | 2.000   | 0.500   | 0.312   | 2.000   | 0.160   | 1.400   | 2.50            | 5.00  | Yes                       |

\*No thread relief for 1/4-20 series.

Note: Other configurations, materials, and customizations available upon request.

## SP Series

### Non Lock-Out Plastic Knob Plunger Pins

#### Specifications

- Pin Material: Steel
- Plating: Clear Zinc

#### Features

- Hand retractable pins are used as a fast and convenient way to adjust or remove accessories on equipment
- Great for applications with limited space as positioners, loading pins, alignment pins, and indexing devices
- Can add an anti-vibration lock patch onto the threads



| Item No.         | A<br>Threads | B<br>in | C<br>in | D<br>in | E<br>in | F<br>in | G<br>in | H<br>in | M<br>in | End Force (lbs) |       | Anti-Vibration Lock Patch |
|------------------|--------------|---------|---------|---------|---------|---------|---------|---------|---------|-----------------|-------|---------------------------|
|                  |              |         |         |         |         |         |         |         |         | Initial         | Final |                           |
| SP4C--SK3----21* | 1/4-20       | 0.440   | 0.190   | 0.160   | 0.750   | —       | 0.170   | 0.310   | 0.460   | 0.50            | 2.00  | No                        |
| SP4C--SK3-V-21*  | 1/4-20       | 0.440   | 0.190   | 0.160   | 0.750   | —       | 0.170   | 0.310   | 0.460   | 0.50            | 2.00  | Yes                       |
| SP6C--SK3----21  | 3/8-16       | 0.630   | 0.280   | 0.250   | 0.750   | 0.130   | 0.170   | 0.440   | 0.460   | 0.75            | 3.00  | No                        |
| SP6C--SK3-V-21   | 3/8-16       | 0.630   | 0.280   | 0.250   | 0.750   | 0.130   | 0.170   | 0.440   | 0.460   | 0.75            | 3.00  | Yes                       |
| SP8C--SK4----21  | 1/2-13       | 0.810   | 0.380   | 0.310   | 1.000   | 0.130   | 0.170   | 0.560   | 0.580   | 1.00            | 4.00  | No                        |
| SP8C--SK4-V-21   | 1/2-13       | 0.810   | 0.380   | 0.310   | 1.000   | 0.130   | 0.170   | 0.560   | 0.580   | 1.00            | 4.00  | Yes                       |

\*No thread relief for 1/4-20 series.

Note: Other configurations, materials, and customizations available upon request.



# SPRING LOADED PLUNGER PINS

## SP Series

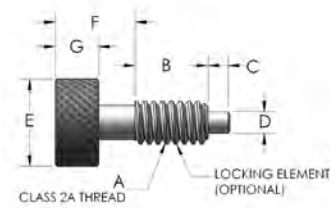
### Metal Knurled Knob Retractable Plunger Pins

#### Specifications

- Pin Material: See Table
- Plating: See Table

#### Features

- Hand retractable pins are used as a fast and convenient way to adjust or remove accessories on equipment
- Great for applications with limited space as positioners, loading pins, alignment pins, and indexing devices
- Can add an anti-vibration lock patch onto the threads



| Item No.        | A       | B     | C     | D     | E     | F     | G     | End Force (lbs) |       | Pin Material    | Plating Material | Lock-Out Feature | Anti-Vibration Lock Patch |
|-----------------|---------|-------|-------|-------|-------|-------|-------|-----------------|-------|-----------------|------------------|------------------|---------------------------|
|                 | Threads | in    | in    | in    | in    | in    | in    | Initial         | Final |                 |                  |                  |                           |
| SP4C--SM--L-70  | 1/4-20  | 0.500 | 0.125 | 0.123 | 0.500 | 0.313 | 0.019 | 1.00            | 4.00  | Stainless Steel | Plain            | No               | No                        |
| SP4C--SM--LL-21 | 1/4-20  | 0.500 | 0.125 | 0.123 | 0.500 | 0.313 | 0.019 | 1.00            | 4.00  | Steel           | Clear Zinc       | Yes              | Yes                       |
| SP4C--SM--LL-70 | 1/4-20  | 0.500 | 0.125 | 0.123 | 0.500 | 0.313 | 0.019 | 1.00            | 4.00  | Stainless Steel | Plain            | Yes              | Yes                       |
| SP5C--SM--LL-21 | 5/16-18 | 0.625 | 0.188 | 0.154 | 0.630 | 0.375 | 0.250 | 1.00            | 6.00  | Steel           | Clear Zinc       | Yes              | Yes                       |
| SP6C--SM--LL-21 | 3/8-16  | 0.750 | 0.218 | 0.185 | 0.750 | 0.500 | 0.310 | 1.00            | 8.00  | Steel           | Clear Zinc       | Yes              | Yes                       |
| SP8C--SM--L--21 | 1/2-13  | 0.875 | 0.250 | 0.248 | 1.000 | 0.625 | 0.380 | 1.00            | 10.00 | Steel           | Clear Zinc       | Yes              | Yes                       |
| SP8C--SM--LL-70 | 1/2-13  | 0.875 | 0.250 | 0.248 | 1.000 | 0.625 | 0.380 | 1.00            | 10.00 | Stainless Steel | Plain            | Yes              | Yes                       |

Note: Other configurations, materials, and customizations available upon request.

## SP Series

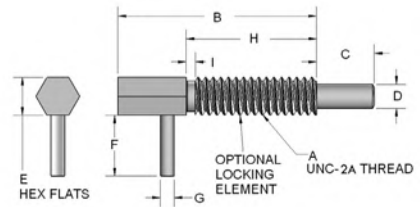
### Lock-Out Lever Style Plunger Pins

#### Specifications

- Pin Material: See Table
- Plating: See Table

#### Features

- Hand retractable pins are used as a fast and convenient way to adjust or remove accessories on equipment
- Great for applications with limited space as positioners, loading pins, alignment pins, and indexing devices
- Can add an anti-vibration lock patch onto the threads



| Item No.       | A       | B     | C     | D     | E     | F     | G     | H     | I     | End Force (lbs) |       | Pin Material    | Plating Material | Anti-Vibration Lock Patch |
|----------------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|-------|-----------------|------------------|---------------------------|
|                | Threads | in    | in    | in    | in    | in    | in    | in    | in    | Initial         | Final |                 |                  |                           |
| SP4C--L--L-70  | 1/4-20  | 1.250 | 0.380 | 0.160 | 0.250 | 0.500 | 0.090 | 0.800 | --    | 0.50            | 2.50  | Stainless Steel | Plain            | No                        |
| SP4C--L--LV-70 | 1/4-20  | 1.250 | 0.380 | 0.160 | 0.250 | 0.500 | 0.090 | 0.800 | --    | 0.50            | 2.50  | Stainless Steel | Plain            | Yes                       |
| SP6C--L--L-21  | 3/8-16  | 2.000 | 0.560 | 0.250 | 0.380 | 0.750 | 0.140 | 1.310 | 0.130 | 0.75            | 3.75  | Steel           | Clear Zinc       | No                        |
| SP6C--L--L-70  | 3/8-16  | 2.000 | 0.560 | 0.250 | 0.380 | 0.750 | 0.140 | 1.310 | 0.130 | 1.00            | 3.75  | Stainless Steel | Plain            | No                        |
| SP6C--L--LV-21 | 3/8-16  | 2.000 | 0.560 | 0.250 | 0.380 | 0.750 | 0.140 | 1.310 | 0.130 | 0.75            | 3.75  | Steel           | Clear Zinc       | Yes                       |
| SP6C--L--LV-70 | 3/8-16  | 2.000 | 0.560 | 0.250 | 0.380 | 0.750 | 0.140 | 1.310 | 0.130 | 1.00            | 3.75  | Stainless Steel | Plain            | Yes                       |
| SP8C--L--L-70  | 1/2-13  | 2.110 | 0.750 | 0.310 | 0.500 | 0.930 | 0.190 | 1.250 | 0.150 | 1.00            | 5.00  | Stainless Steel | Plain            | No                        |
| SP8C--L--LV-70 | 1/2-13  | 2.110 | 0.750 | 0.310 | 0.500 | 0.930 | 0.190 | 1.250 | 0.150 | 1.00            | 5.00  | Stainless Steel | Plain            | Yes                       |

Note: Other configurations, materials, and customizations available upon request.

## SP Series

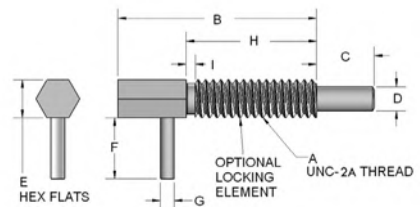
### Lock-Out Short Lever Style Plunger Pins

#### Specifications

- Pin Material: Stainless Steel
- Plating: See Table

#### Features

- Hand retractable pins are used as a fast and convenient way to adjust or remove accessories on equipment
- Great for applications with limited space as positioners, loading pins, alignment pins, and indexing devices
- Can add an anti-vibration lock patch onto the threads



| Item No.        | A       | B     | C     | D     | E     | F     | G     | H     | I     | End Force (lbs) |       | Anti-Vibration Lock Patch |
|-----------------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|-------|---------------------------|
|                 | Threads | in    | in    | in    | in    | in    | in    | in    | in    | Initial         | Final |                           |
| SP4C--SL--L-70  | 1/4-20  | 0.750 | 0.200 | 0.160 | 0.250 | 0.400 | 0.090 | 0.500 | --    | 0.12            | 0.50  | No                        |
| SP4C--SL--LV-70 | 1/4-20  | 0.750 | 0.200 | 0.160 | 0.250 | 0.400 | 0.090 | 0.500 | --    | 0.12            | 0.50  | Yes                       |
| SP6C--SL--L-70  | 3/8-16  | 1.130 | 0.300 | 0.250 | 0.380 | 0.750 | 0.140 | 0.750 | 0.130 | 0.25            | 1.25  | No                        |
| SP6C--SL--LV-70 | 3/8-16  | 1.130 | 0.300 | 0.250 | 0.380 | 0.750 | 0.140 | 0.750 | 0.130 | 0.25            | 1.25  | Yes                       |
| SP8C--SL--L-70  | 1/2-13  | 1.500 | 0.400 | 0.310 | 0.500 | 0.750 | 0.190 | 1.000 | 0.150 | 0.50            | 2.00  | No                        |
| SP8C--SL--LV-70 | 1/2-13  | 1.500 | 0.400 | 0.310 | 0.500 | 0.750 | 0.190 | 1.000 | 0.150 | 0.50            | 2.00  | Yes                       |

Note: Other configurations, materials, and customizations available upon request.



# WIRE ROPE LANYARDS

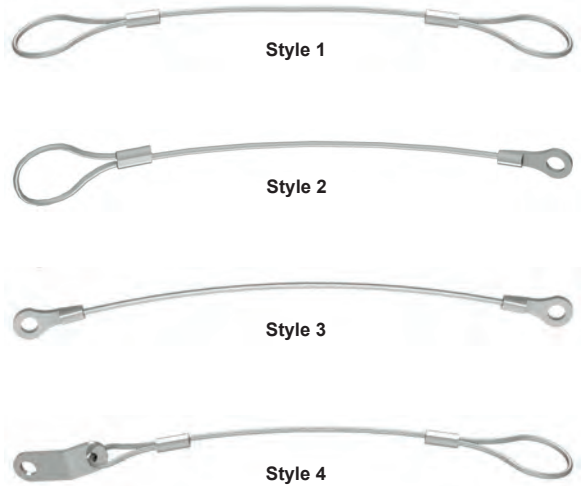
## LN Series Wire Rope Lanyards

### Specifications

- Lanyard Material: 7x7 Aircraft Cable
- Jacket Color: Clear
- Length is Measured center of terminus to center of terminus
- Tab Material: Aluminum
- Crimp: Aluminum
- Stake Eye Material: Steel, Nickel Plating

### Features

- Wire lanyards are ideal for tethering and loss prevention
- 7x7 aircraft cable is chosen for its strength and flexibility
- Not for load bearing applications; load bearing versions are available upon request



| Item No.        | Wire Diameter | Coated Diameter | Length | Terminus 1    | Terminus 2     | Style | Wire Material   | Jacket Material |
|-----------------|---------------|-----------------|--------|---------------|----------------|-------|-----------------|-----------------|
|                 | in            | in              | in     |               |                |       |                 |                 |
| LN3/6406000337N | 3/64          | 1/16            | 6      | 3/4 Loop      | 3/4 Loop       | 1     | Stainless Steel | Nylon           |
| LN3/640600033GP | 3/64          | 1/16            | 6      | 3/4 Loop      | 3/4 Loop       | 1     | Galvanized      | PVC             |
| LN3/64060003B7N | 3/64          | 1/16            | 6      | 3/4 Loop      | #10 Stake Eye  | 2     | Stainless Steel | Nylon           |
| LN3/64060003BGP | 3/64          | 1/16            | 6      | 3/4 Loop      | #10 Stake Eye  | 2     | Galvanized      | PVC             |
| LN3/64060003E7N | 3/64          | 1/16            | 6      | 3/4 Loop      | 1/4" Stake Eye | 2     | Stainless Steel | Nylon           |
| LN3/64060003EGP | 3/64          | 1/16            | 6      | 3/4 Loop      | 1/4" Stake Eye | 2     | Galvanized      | PVC             |
| LN3/64060003Q7N | 3/64          | 1/16            | 6      | 3/4 Loop      | #10 Tab        | 4     | Stainless Steel | Nylon           |
| LN3/64060003QGP | 3/64          | 1/16            | 6      | 3/4 Loop      | #10 Tab        | 4     | Galvanized      | PVC             |
| LN3/6406000BB7N | 3/64          | 1/16            | 6      | #10 Stake Eye | #10 Stake Eye  | 3     | Stainless Steel | Nylon           |
| LN3/6406000BBGP | 3/64          | 1/16            | 6      | #10 Stake Eye | #10 Stake Eye  | 3     | Galvanized      | PVC             |
| LN3/6406000FF7N | 3/64          | 1/16            | 6      | 3/8 Stake Eye | 3/8 Stake Eye  | 3     | Stainless Steel | Nylon           |
| LN3/6406000FFGP | 3/64          | 1/16            | 6      | 3/8 Stake Eye | 3/8 Stake Eye  | 3     | Galvanized      | PVC             |
| LN3/6412000337N | 3/64          | 1/16            | 12     | 3/4 Loop      | 3/4 Loop       | 1     | Stainless Steel | Nylon           |
| LN3/641200033GP | 3/64          | 1/16            | 12     | 3/4 Loop      | 3/4 Loop       | 1     | Galvanized      | PVC             |
| LN3/64120003B7N | 3/64          | 1/16            | 12     | 3/4 Loop      | #10 Stake Eye  | 2     | Stainless Steel | Nylon           |
| LN3/64120003BGP | 3/64          | 1/16            | 12     | 3/4 Loop      | #10 Stake Eye  | 2     | Galvanized      | PVC             |
| LN3/64120003E7N | 3/64          | 1/16            | 12     | 3/4 Loop      | 1/4" Stake Eye | 2     | Stainless Steel | Nylon           |
| LN3/64120003EGP | 3/64          | 1/16            | 12     | 3/4 Loop      | 1/4" Stake Eye | 2     | Galvanized      | PVC             |
| LN3/64120003Q7N | 3/64          | 1/16            | 12     | 3/4 Loop      | #10 Tab        | 4     | Stainless Steel | Nylon           |
| LN3/64120003QGP | 3/64          | 1/16            | 12     | 3/4 Loop      | #10 Tab        | 4     | Galvanized      | PVC             |
| LN3/6412000BB7N | 3/64          | 1/16            | 12     | #10 Stake Eye | #10 Stake Eye  | 3     | Stainless Steel | Nylon           |
| LN3/6412000BBGP | 3/64          | 1/16            | 12     | #10 Stake Eye | #10 Stake Eye  | 3     | Galvanized      | PVC             |
| LN3/6412000FF7N | 3/64          | 1/16            | 12     | 3/8 Stake Eye | 3/8 Stake Eye  | 3     | Stainless Steel | Nylon           |
| LN3/6412000FFGP | 3/64          | 1/16            | 12     | 3/8 Stake Eye | 3/8 Stake Eye  | 3     | Galvanized      | PVC             |

Note: Other configurations are available upon request.

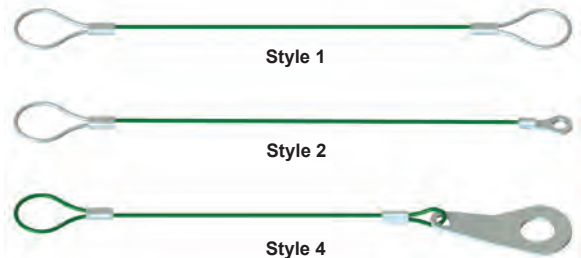
## LN Series Wire Rope Lanyards - Green Jacket

### Specifications

- Lanyard Material: 7x7 Aircraft Cable
- Jacket Color: Green
- Tab Material: Aluminum
- Crimp Material: Aluminum
- Stake Eye Material: Steel, Nickel Plating

### Features

- Wire lanyards are ideal for tethering and loss prevention
- 7x7 aircraft cable is chosen for its strength and flexibility
- Ends are stripped and may contain bare wire
- Not for load bearing applications; load bearing versions are available upon request



| Item No.        | Wire Diameter | Coated Diameter | Length | Terminus 1 | Terminus 2      | Style Number | Wire Material   | Jacket Material |
|-----------------|---------------|-----------------|--------|------------|-----------------|--------------|-----------------|-----------------|
|                 | in            | in              | in     |            |                 |              |                 |                 |
| LN3/640600X337X | 3/64          | 1/16            | 6.000  | 5/16 Loop  | 5/16 Loop       | 1            | Stainless Steel | Green Nylon     |
| LN3/640600X3B7X | 3/64          | 1/16            | 6.000  | 5/16 Loop  | 13/64 Stake Eye | 2            | Stainless Steel | Green Nylon     |
| LN3/640600X3Q7X | 3/64          | 1/16            | 6.000  | 5/16 Loop  | 1/4 Tab         | 4            | Stainless Steel | Green Nylon     |
| LN3/641200X337X | 3/64          | 1/16            | 12.000 | 5/16 Loop  | 5/16 Loop       | 1            | Stainless Steel | Green Nylon     |
| LN3/641200X3B7X | 3/64          | 1/16            | 12.000 | 5/16 Loop  | 13/64 Stake Eye | 2            | Stainless Steel | Green Nylon     |
| LN3/641200X3Q7X | 3/64          | 1/16            | 12.000 | 5/16 Loop  | 1/4 Tab         | 4            | Stainless Steel | Green Nylon     |

Note: Other configurations are available upon request.





**LN Series  
Coiled Lanyards**



Style 1



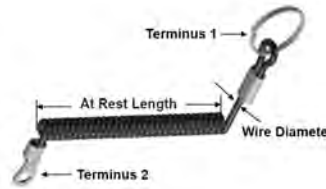
Style 2

**Specifications**

- Lanyard Material: Polyurethane
- Split Ring Material: Steel Nickel Plate
- Crimp Material: Aluminum

**Features**

- Extremely durable and highly elastic. A stretched lanyard will expand to more than 10 times its contracted length
- Perfect for securing pins, tools, etc. in applications requiring large differences in positioning
- Not for load bearing applications; load bearing versions are available upon request



| Item No.        | Wire Diameter | At Rest Length | Terminus 1    | Terminus 2         | Style |
|-----------------|---------------|----------------|---------------|--------------------|-------|
|                 | in            | in             |               |                    |       |
| LN.11X3.25N10SE | 0.11          | 3.250          | #10 Stake Eye | Split Ring .844 ID | 2     |
| LN.11X6.0-N10SE | 0.11          | 6.000          | #10 Stake Eye | Split Ring .844 ID | 2     |
| LN.11X6.0WRINGR | 0.11          | 6.000          | Straight Tail | Split Ring .844 ID | 1     |
| LN.15X5.0WRING  | 0.15          | 5.000          | Straight Tail | Split Ring 1"      | 1     |

**Note: Other configurations are available upon request.**

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# NYLON & ADHESIVE INFORMATION

## UL® File Number & UL® Yellow Cards

Underwriter's Laboratories Inc. (UL®), plastics classification number is used to describe the performance of material. Tests conducted by UL® may include the determination of material flammability (burning characteristics), ignition characteristics from various thermal and electrical sources, electrical tracking, other electrical characteristics, physical and mechanical characteristics, and analytical tests. In addition, the effect of long-term exposure to elevated temperature (air-oven aging), water, ultraviolet light, cold, etc. on property-retention may be evaluated.

For more information and to download the UL® Yellow Card for a product, please visit [www.ul.com](http://www.ul.com) and click on "Certifications."

## UL® Flame Rating

UL94 classifications V-0, V-1, V-2, and HB describe the flame retardant levels for a given resin. V-0 rated resins typically have the highest flame resistance followed by V-1, V-2, and HB.

For more information on UL® Flame Ratings and the Burn Test, please visit [www.ul.com](http://www.ul.com).

## Common Material Abbreviations

ABS = Acrylonitrile Butadiene Styrene  
Acetal/POM = Polyacetal  
CPVC = Chlorinated Polyvinyl Chloride  
EPDM = Ethylene-Propylene-Diene-Monomer  
HDPE = High-Density Polyethylene  
HIPS = High Impact Polystyrene  
LCP = Liquid Crystal Polymer  
LDPE = Low-Density Polyethylene  
Nitrile Rubber = Acrylonitrile Rubber  
Nylon = Polyamide (PA)  
PBT = Polybutylene Terephthalate  
PC = Polycarbonate  
PE = Polyethylene  
PEI = Polyetherimide  
PP = Polypropylene  
PPE/PS = Polyphenylene Ether/Polystyrene Alloy  
PPE/SB = Polyphenylene Ether/Styrene-Butadiene Alloy  
PPS = Polyphenylene Sulfide  
PS = Polystyrene  
PSU = Polysulfone  
PU = Polyurethane  
PVC = Polyvinyl Chloride  
PVDF = Polyvinylidene Fluoride  
SEBS = Styrene-Ethylene Butylene-Styrene Block Copolymer  
SIR = Silicone Molding Compound  
TPE = Thermoplastic Elastomer  
TPR = Thermoplastic Rubber

## Adhesive Tape Usage Guidelines

### Loads & Product Usage Guidelines

Long-term maximum product application loads generally should not exceed 0.25 psi. The surface area of contact is very critical for bond strength, so the amount of tape used should be maximized based on the application. In general, the tensile strength of the adhesive is higher than the peel or shear strength, so the product should be designed to be loaded in tension whenever possible.

### Nylon & Adhesive Shelf Life

If products are kept under the Ideal Storage Conditions, shelf life is 1 year from date of shipment.

### Ideal Storage Conditions

Stored in the original unopened bags at 73°F (23°C) and 50% relative humidity.

### Temperature Considerations

Ideal application temperature for most adhesives is 70° - 100°F (21° - 38°C). Lower application temperatures should be avoided as the adhesive will be too firm and may not 'wet out' sufficiently.

### Application Guide

**Surface Condition:** The bonding surfaces must be clean, uniform, dry and free of condensation. Do not use on fabric, coarse concrete, loose paint, or rough, loose surfaces.

**Surface Preparation:** For maximum performance, clean the mounting surfaces with a cleaning solvent such as a 50/50 mixture of isopropyl alcohol and water. Be sure to follow the solvent manufacturer's directions for use. Some surfaces may require a sealant or primer to achieve the desired bonding. Test the product on your actual application.

**Application Pressure:** Remove the release liner being very careful not to touch the adhesive surface and then quickly and firmly press the product into place. Firm pressure is needed to ensure full contact and to allow the adhesive to fully wet-out on the mating surfaces.

**Dwell Time:** The bond strength is affected by the substrate surface, application temperature and dwell time. At room temperature approximately half of the bond strength will be obtained within the first half hour with the majority of the strength achieved within 24 hours. Therefore, whenever possible wait 24 hours before applying load.

**Acrylic vs. Rubber Based Adhesives:** In general, rubber based adhesives offer higher initial tack whereas acrylic based adhesives maintain higher mechanical strength over time. One should evaluate the performance of the product on the actual end use application. Contact your local Essentra representative for additional physical property and chemical resistance data.

# MATERIAL DATA CHART FOR INJECTION AND DIP MOLDED PRODUCTS

# MATERIAL DATA CHART

|                                   |  | Nylon 6/6                                                           |  |                                    |  |  |                              |  |                    |  |                    |                 |                           |  |                         |  |                    |  |                             |  |                                                        |  |                                                        |  |                |  |      |  |
|-----------------------------------|--|---------------------------------------------------------------------|--|------------------------------------|--|--|------------------------------|--|--------------------|--|--------------------|-----------------|---------------------------|--|-------------------------|--|--------------------|--|-----------------------------|--|--------------------------------------------------------|--|--------------------------------------------------------|--|----------------|--|------|--|
|                                   |  | Polyethylene                                                        |  |                                    |  |  | Thermoplastic Rubber         |  |                    |  |                    | Silicone Rubber |                           |  |                         |  |                    |  |                             |  |                                                        |  |                                                        |  |                |  |      |  |
|                                   |  | Low Density                                                         |  | High Density                       |  |  | Polypropylene                |  | UL94 V2 RMS-01     |  | UL94 V0 RMS-19     |                 | V2 Heat Stabilized RMS-47 |  | V2 UV Stabilized RMS-46 |  | Standard Dip Vinyl |  | High Temperature Vinyl      |  | EPDM                                                   |  |                                                        |  |                |  |      |  |
| Service Temperatures              |  |                                                                     |  |                                    |  |  |                              |  |                    |  |                    |                 |                           |  |                         |  |                    |  |                             |  |                                                        |  |                                                        |  |                |  |      |  |
| Continuous °F/°C                  |  | 150/66                                                              |  | 165/74                             |  |  | 250/121                      |  | 185/85             |  | 230/110            |                 | 239/115                   |  | 185/85                  |  | 275/135            |  | 200/93                      |  | 250/149                                                |  | 300/149                                                |  | 450/232        |  |      |  |
| Intermittent °F/°C                |  | 175/79                                                              |  | 215/102                            |  |  | 257/125                      |  | —                  |  | —                  |                 | —                         |  | —                       |  | 300/148            |  | 350/177                     |  | 425/218                                                |  | 425/218                                                |  | 600/315        |  |      |  |
| <b>Resistance Characteristics</b> |  |                                                                     |  |                                    |  |  |                              |  |                    |  |                    |                 |                           |  |                         |  |                    |  |                             |  |                                                        |  |                                                        |  |                |  |      |  |
| Effect of Sunlight                |  | Crazes rapidly unless black color or ultraviolet inhibitor is used. |  |                                    |  |  | Crazes Rapidly               |  | Discolors Slightly |  | Discolors Slightly |                 | Discolors Slightly        |  | Discolors Slightly      |  | Good Resistance    |  | Crazes                      |  | Good Resistance                                        |  | Good Resistance                                        |  | Very Resistant |  |      |  |
| Effect of Weak Acids              |  | Resistant                                                           |  | Very Resistant                     |  |  | None                         |  | Resistance         |  | Resistance         |                 | Resistance                |  | Resistance              |  | Resistance         |  | Very Resistant              |  | Very Resistant                                         |  | Good Resistance                                        |  | Poor           |  |      |  |
| Effect of Strong Acids            |  | Attacked by oxidizing acids                                         |  | Attacked Slowly by oxidizing acids |  |  | Attacked by oxidizing acids  |  | Attacked           |  | Attacked           |                 | Attacked                  |  | Attacked                |  | Attacked           |  | Attacked by oxidizing acids |  | Resistant                                              |  | Very Resistant                                         |  | Poor           |  |      |  |
| Effect of Weak Alkalies           |  | Resistant                                                           |  | Very Resistant                     |  |  | None                         |  | None               |  | None               |                 | None                      |  | None                    |  | None               |  | Very Resistant              |  | Very Resistant                                         |  | Very Resistant                                         |  | Poor           |  |      |  |
| Effect of Strong Alkalies         |  | Resistant                                                           |  | Very Resistant                     |  |  | Very Resistant               |  | None               |  | None               |                 | None                      |  | None                    |  | None               |  | Very Resistant              |  | Resistant                                              |  | Very Resistant                                         |  | Poor           |  |      |  |
| Effect of Organic Solvents        |  | Resistant Below (140°F/60°C)                                        |  | Resistant Below (176°F/80°C)       |  |  | Resistant Below (176°F/80°C) |  | Resists Most       |  | Resists Most       |                 | Resists Most              |  | Resists Most            |  | Resists Most       |  | Resists Most                |  | Resistant to alcohols, aliphatic hydrocarbons and oils |  | Resistant to alcohols, aliphatic hydrocarbons and oils |  | Resistant      |  | Poor |  |

Chart is a guide for typical applications for products. Due to the number of variables in each process, some products may not work for the application shown above, we recommend sampling to ensure. Material data contained in this chart is for reference only. Essentra Components reserves the right to change this information at any time without notification. Please consult factory for more information.

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## Essentra Plastics LLC, d/b/a Essentra Components (the "Supplier") Essentra U.S. Terms and Conditions of Sale

### 1. GENERAL

- 1.1 These Terms and Conditions shall apply to the sale and supply of Products by the Supplier to the Customer.
- 1.2 The contract governing the sale and supply of Products by the Supplier to the Customer shall in each instance consist of (i) these Terms and Conditions, (ii) the Sales Sheet (if applicable), and (iii) the Confirmation (if applicable), which shall be to the express exclusion of any other terms and conditions (including any Customer terms and conditions) referred to in any negotiations, the Confirmation, or course of dealing between the parties.
- 1.3 The Supplier reserves the right to modify these Terms and Conditions at any time to reflect changes in how the Supplier accepts payment from the Customer, changes in relevant laws and regulatory requirements and any other circumstances which are reasonable in the Supplier's opinion. If the Supplier modifies these Terms and Conditions, the Supplier will post the modification on its website and/or notify the Customer of the modified Terms and Conditions. The Supplier will also update the "last updated" date at the top of these Terms and Conditions. Every time the Customer orders Products from the Supplier, the Terms and Conditions published on the Supplier's website at that time or previously notified by the Supplier to the Customer will apply to the applicable Contract.

### 2. DEFINITIONS AND INTERPRETATION

2.1 In these Terms and Conditions:

- "Confirmation" has the meaning given in clause 3.4.2;
- "Contract" means each individual contract formed pursuant to clause 3.4 and which consists of those documents specified in clause 1.2;
- "Customer" the person purchasing Products pursuant to orders placed in accordance with clause 3;
- "Delivery" means the delivery of the Products in accordance with clause 8.1 or 8.2 (as applicable);
- "Export Controls" means all laws, regulations, codes and controls on the import and export of goods and services in and out of a country or relevant administrative area or applied by reason of the country of origin of the Products or part of them, including the United States' Export Administration Regulations, the International Traffic in Arms Regulations, the United Kingdom's and European Union's military and dual-use lists and any similar list each as amended, supplemented or substituted from time to time;
- "Group" means in relation to a company, that company and any subsidiary and any holding company of that company and any subsidiary of any such holding company in each case from time to time;
- "Intellectual Property Rights" means patents, utility models, rights in invention, copyright and neighbouring and related rights, database rights, moral rights, design rights, trademarks, trade names and get-up, goodwill, know-how, confidential information and other intellectual property rights, whether registered or unregistered and including all applications for the grant of the foregoing and all rights or forms of protection having similar or equivalent effect to any of the foregoing which may subsist anywhere in the world;
- "Materials" has the meaning given in clause 4.1;
- "Permitted Method" means email, telephone, electronic data interchange or any other method of communication between the parties which is permitted by the Supplier from time to time;
- "Products" means the products made available for sale (and, if applicable sold) by the Supplier from time to time and (to the extent applicable) as set out in the Sales Sheet and/or Confirmation;
- "Restricted Party" means a person or entity that is listed on, owned or controlled by, or acting on behalf of, a person listed on a Sanctions List, or otherwise a subject of Sanctions;
- "Sales Sheet" means the Supplier's pro forma document which can be used to detail certain commercial terms of the Contract which may be formed when the Supplier accepts an order placed by the Customer;
- "Sample" means a sample of the Product provided by the Supplier to the Customer;
- "Sanctions Authority" means (a) the Security Council of the United Nations; (b) the Department of State, the Department of the Treasury and the Office of Foreign Assets Control of the United States of America; (c) the Council and the Commission of the European Union; (d) Her Majesty's Treasury of the United Kingdom; and (e) any other relevant governments, departments, authorities, institutions or agencies;
- "Sanctions List" means the Specially Designated Nationals and Blocked Persons list maintained by the United States' Office of Foreign Assets Control, the Consolidated List of Financial Sanctions Targets maintained by Her Majesty's Treasury, or any similar list maintained by or public announcement of a Sanctions designation made by, a Sanctions Authority, each as amended, supplemented or substituted from time to time;
- "Sanctions" means any trade, economic or financial sanctions laws, regulations, embargoes or restrictive measures administered, enacted or enforced by a Sanctions Authority;
- "Specification" means the specification of the relevant Product which may be applicable pursuant to clause 5.3;
- "Supplier" means the Essentra group company named at the beginning of these Terms and Conditions;
- "Terms and Conditions" means these terms and conditions as updated and varied from time to time; and
- "Working Days" means any day other than a Saturday, Sunday or public holiday in the country in which the Supplier is located.
- 2.2 In these Terms and Conditions: (i) a "party" means the Supplier or the Customer (as applicable) and "parties" means both of them, (ii) headings are for convenience only and shall not affect its interpretation, (iii) references to a "person" include any individual, company, corporation, firm, partnership, association, organisation, institution, trust or agency, whether or not having a separate legal personality, (iv) words in the singular shall include the plural and vice versa as the context admits or requires, (v) any reference to any statute or statutory provision shall, unless the context otherwise requires, be construed as a reference to that statute or statutory provision as from time to time amended, consolidated, modified, extended, re-enacted or replaced, (vi) the word "including" shall, unless the context otherwise requires, mean "including without limitation", and (vii) "in writing" includes by email or other written Permitted Method.

### 3. ORDER AND CONFIRMATION

- 3.1 The Supplier shall supply Products ordered by the Customer from time to time in accordance with these Terms and Conditions.
- 3.2 Each order placed by the Customer shall be deemed to be a separate offer to purchase Products under these Terms and Conditions which the Supplier shall be free to accept or decline at its absolute discretion.
- 3.3 Orders may be placed by the Customer in one of three ways:
- 3.3.1 by completing a Sales Sheet which includes specific details of the Products required by the Customer (and which does not anticipate or require any subsequent call-off or other communication) and which is signed by both the Customer and the Supplier;
- 3.3.2 by placing an order from time to time by a Permitted Method, where the order is governed by (and is made under) a previously agreed Sales Sheet; or
- 3.3.3 by placing an order from time to time by a Permitted Method, but where a Sales Sheet has not been completed or agreed.
- 3.4 An order placed in the manner described in:
- 3.4.1 clause 3.3.1 shall be deemed accepted by the Supplier on execution by both parties of the Sales Sheet; and
- 3.4.2 clauses 3.3.2 or 3.3.3 shall be deemed accepted by the Supplier upon the sending by the Supplier of an order acknowledgement and confirmation by a written Permitted Method and which shall confirm the commercial terms of the order (a "Confirmation"), and in each case a separate contract will be formed upon such acceptance, save that there shall be deemed to be no acceptance where the price of the Product has been incorrectly quoted or stated by the Supplier in a Sales Sheet or Confirmation.
- 3.5 The Customer shall act in good faith and with accuracy if it forecasts its requirements for Products. Unless otherwise set out in a Sales Sheet, a product forecast shall be binding on the Customer and shall constitute an order for Products in accordance with clause 3.3.
- 3.6 Each Contract shall consist of these Terms and Conditions and (to the extent applicable) the Sales Sheet and the Confirmation, to the exclusion of any terms and conditions the Customer may seek to impose.
- 3.7 The Supplier reserves the right to decline to accept or to cancel any order for Products or to impose reasonable conditions prior to accepting any order (including the prior receipt of a letter of credit or cleared funds from the Customer) including where the Supplier considers it reasonably necessary for security or fraud prevention purposes or to comply with any applicable laws or regulations in the country of sale, distribution or use.
- 3.8 All orders placed by the Customer via the Supplier's website shall be subject to the terms and conditions specified on that website.
- 3.9 If a price quotation is provided by the Supplier in respect of any Products, the quotation shall remain valid for 30 days from the date it is given (unless otherwise specified by the Supplier) but shall not bind the Supplier until the applicable order is accepted by the Supplier in accordance with clause 3.4.
- 3.10 Once an order has been accepted by the Supplier it cannot be cancelled, varied or suspended by the Customer without the written agreement of the Supplier.
- 3.11 In the event of any conflict between the following, the order of precedent between them shall be as follows: (i) the Confirmation, (ii) the Sales Sheet, and (iii) these Terms and Conditions.

### 4. DESCRIPTIONS, SAMPLES AND LITERATURE

- 4.1 Unless otherwise confirmed by the Supplier in writing, nothing in any materials produced by or on behalf of the Supplier which includes images and/or descriptions of the Products (including website content, CAD files, technical drawings, product measurements and specifications, catalogue content or any other Product-specific imagery and information) ("Materials") is to be considered a representation of the source of origin, manufacturer or production of Products or any part of them.
- 4.2 Subject to clause 11.1 all information contained in the Materials are published for the sole purpose of giving the Customer an approximate idea of the Products described in them and will not be relied on by the Customer or form part of the Contract except as otherwise expressly provided in the

# TERMS & CONDITIONS OF SALE

Sales Sheet and/or the Confirmation.

4.3 Any typographical, clerical or other manifestly obvious error or omission in any quote, price list, Confirmation, label, packaging, invoice or other document or information issued by the Supplier may be corrected by the Supplier, without liability to the Customer, at any time either by correcting any such matter in public by publishing the correction on the Supplier's website or by notifying the Customer in writing and such correction shall be immediately binding upon the Customer.

4.4 Except as otherwise required by law, a Contract shall not be (i) a sale by Sample, even if Samples have been provided to the Customer, unless specified otherwise in the Sales Sheet or otherwise agreed and specified in the Confirmation, or (ii) a sale by description, even if a description has been provided.

## 5. FITNESS FOR PURPOSE AND SPECIFICATIONS

5.1 The Customer will undertake appropriate tests to ensure that the Products are fit for all of the Customer's purposes. Subject to clause 5.2, the Customer expressly acknowledges that, irrespective of any guidance provided to it by the Supplier, in determining whether the Product will be fit for all its purposes, it is not relying on (i) the Supplier's skill and judgement, or (ii) any Materials which are provided or made accessible by the Supplier to the Customer.

5.2 If the Customer wishes to rely on the Supplier's skill and judgement in relation to a Product being fit for a particular purpose then prior to placing an order the Customer must expressly advise the Supplier in writing of the particular purpose and that it wishes to rely on the Supplier's confirmation of fitness for purpose rather than conduct its own testing. The Supplier shall advise the Customer of any additional charges which will apply if such confirmation is given. The Customer shall only be entitled to rely on the Product being fit for a particular purpose if the Customer has provided all the information which the Supplier would need to undertake the requisite testing and the Supplier has expressly confirmed in the Sales Sheet and/or the Confirmation that the Product can fulfil a particular purpose.

5.3 A Specification in relation to a Product shall only take effect and form part of a Contract where specified in the Sales Sheet and/or the Confirmation (and in each case this may be facilitated by way of a cross-reference to a pre-agreed specification document). The parties may agree a process for producing and agreeing a Specification, which shall be set out in the Sales Sheet. A Specification may include (inter alia) details of the Products measurements, tolerances, regulatory compliance, packaging and compliance with quality standards.

## 6. PRICE

6.1 The price of Products shall be the price specified in the Sales Sheet or as otherwise agreed and specified in the Confirmation (as applicable). Prices specified in a Sales Sheet will be subject to review and possibly change from time to time in accordance with the mechanism specified in that Sales Sheet.

6.2 The Supplier will use its reasonable endeavours to ensure that prices are accurately specified in any quote and in the Materials.

6.3 The Supplier reserves the right to invoice sums in addition to the agreed price to reflect any increase in the cost to the Supplier of supplying any Products which is due to: (i) any increase in the cost of labour or materials (including any storage costs) as a consequence of Delivery of the Products not being in accordance with clause 8.1 or 8.2 (as applicable), (ii) any variation requested by the Customer to delivery dates, quantities, the Specification or the scope of the Supplier's instructions, (iii) any delay or additional work or materials caused by any erroneous instructions, neglect or default of the Customer, or (iv) any failure of the Customer to provide the Supplier with adequate and timely information, instructions, or specifications. Subject to the foregoing, prices charged will be those prevailing when an order is accepted.

6.4 Unless set out in the Sales Sheet or Confirmation, any reference to the price for Products is in U.S. Dollars and is exclusive of any VAT or other taxes or duties and of all costs and charges in relation to non-standard packaging, loading, unloading, carriage and insurance or similar costs, which (if any) shall be paid in addition by the Customer at the time it is due to pay for the Products. Where carriage or other costs to be borne by the Customer are paid by the Supplier, the Supplier shall be entitled to immediately render an invoice in respect of such costs.

### 7. Payment

7.1 The Supplier shall at its discretion be entitled to invoice the Customer for payment of the price of any Products or any other amounts in advance. The Supplier reserves the right, where the Customer is required to pay for an order in advance, to suspend Delivery of any Products pending receipt of payment.

7.2 Unless otherwise set out in a Sales Sheet or Confirmation, payment of the Supplier's invoice is due by the Customer (without deduction, discount, abatement or set-off) within 30 days of the date of the invoice, notwithstanding that Delivery may not have taken place or that property in the Products has not passed to the Customer. Payment shall be made in the currency stipulated in the Sales Sheet or Confirmation (as applicable). Time for payment of sums due from the Customer shall be of the essence. No payment will be deemed received until received by the Supplier in cash or cleared funds.

7.3 Payment is to be made by the Customer via the payment method stipulated in the Sales Sheet or Confirmation (as applicable).

7.4 If the Customer is permitted to open a credit facility with the Supplier, it must furnish such information and references as may be requested by the Supplier and the Supplier may make a search with a credit reference agency in relation to the Customer. The Supplier reserves the right in its absolute discretion to grant, refuse or discontinue any credit facilities or reduce or suspend any credit facility at any time.

7.5 If any sums are not paid on or before the due date for payment, interest will accrue on the amount unpaid at the rate of six percent per annum above the base rate of (i) the bank specified in the Sales Sheet, or (ii) if no such bank is specified, the Wall Street Journal (or any successor). Such interest shall accrue on a daily basis from the due date until payment is made in full (both before and after any judgment).

7.6 If the Customer fails to make any payment when due pursuant to a Contract then, without prejudice to any other right or remedy available to the Supplier (including the right to charge interest pursuant to clause 7.5, the Supplier shall be entitled to: (i) deduct outstanding sums from any sums owed by the Supplier to the Customer under the Contract or otherwise, (ii) require the Customer to pay any costs of storage of the Products, (iii) suspend any further deliveries to the Customer under the Contract or any other contract between the parties until paid, (iv) resell any Products not yet delivered to the Customer, and/or (v) retain any sums paid as deposit for the Products.

## 8. DELIVERY

8.1 Where the Customer's order has been placed in the manner described in clauses 3.3.1 or 3.3.2, subject to anything specified to the contrary in the Sales Sheet or otherwise agreed and specified in the Confirmation, the Contract shall be Ex Works (Incoterms 2010) at the Supplier's premises and Delivery of the Products shall be effected accordingly. Additional details regarding the physical Delivery of the Products (including the date of collection by the Customer) may be agreed between the parties and set out in the Sales Sheet and/or Confirmation.

8.2 Where the Customer's order has been placed in the manner described in clause 3.3.3 (but subject to clause 8.3), Products will be sent to the Customer by a carrier service chosen by the Supplier, acting reasonably. Delivery of the Products to the Customer shall be effected by the Supplier delivering the Products to the carrier or by collection by the carrier. Thereafter, transport of such Products shall be subject to the carrier's conditions which shall be notified to the Customer if the Customer requests, and, subject to clause 10.1, the Supplier shall have no liability for the acts or omissions of the relevant carrier, unless otherwise agreed and specified in the Confirmation. The Supplier may deliver Products earlier than any agreed delivery date.

8.3 Where it is agreed and specified in the Confirmation that Products ordered in the manner described in clause 3.3.3 shall be delivered by a method other than that referred to in clause 8.2 then delivery shall be effected: (i) where the Products are to be collected by the Customer from the Supplier's premises, by the Supplier notifying the Customer that the Products are ready for collection, (ii) where the Products are delivered by the Supplier, by the Supplier delivering the Products to the address nominated by the Customer for delivery, or (iii) where the Products are to be transported by a third party, by collection by or delivery to that third party of the Products.

8.4 The remainder of this clause 8 shall apply to all Contracts regardless of the manner in which the order was placed by the Customer.

8.5 Unless otherwise set out in the Sales Sheet or Confirmation, any periods of time or dates quoted for Delivery of the Products are estimates only. The Supplier will use its reasonable endeavours to deliver the Products by the delivery date set out in the Sales Sheet or Confirmation (as applicable). If the Supplier is unable to meet the delivery date because of an event outside the Supplier's control, the Supplier will contact the Customer with a revised delivery date.

8.6 The Supplier may deliver up to 10 percent more or 10 percent less than the quantity of Products specified in the order and the Customer shall accept such variation in quantity and shall pay the agreed price as adjusted to reflect such variation in quantity. Where more than 10 percent or less than 10 percent of the quantity of Products specified in the order are delivered, the Customer and the Supplier shall discuss the excess supply or short supply (as the case may be) and (a) in the case of an excess supply: (i) if the Customer wishes to keep the additional Products, the Customer shall pay the agreed price as adjusted to reflect excess supply, or (ii) if the Customer does not wish to keep the additional Products, the Customer shall promptly return the additional Products in accordance with the Supplier's directions and at the Supplier's cost, or (b) in the case of a short supply: (i) if the Customer does not wish to be delivered additional Products to make up the order, the Customer shall pay the agreed price as adjusted to reflect short supply, or (ii) if the Customer wishes to take delivery of additional Products to make up the order, the Supplier shall (where available and in supply) promptly deliver such additional Products to the Customer. The quantity of any consignment of Products, as recorded by the Supplier, on dispatch from the Supplier's premises, shall be conclusive evidence of the quantity received by the Customer on Delivery, unless the Customer can provide conclusive evidence to the contrary.

8.7 The Supplier shall not be responsible for any losses incurred or suffered by the Customer as a result of a failure to deliver the Products or for short Delivery unless the Customer has informed the Supplier in writing within 12 days from the estimated date of Delivery (in relation to a failure to deliver) or on the actual date of Delivery (in relation to a short Delivery). In any event, where for any reason the Supplier is liable to the Customer for any such losses, the Supplier's liability shall be limited to: (i) the amount by which the price in the cheapest available market of similar goods to replace those not delivered exceeds the agreed price of the Products not delivered, or (ii) if there is no such market, an amount equal to the agreed

price applicable in respect of the Products not delivered.

8.8 Where the Customer fails to take Delivery of the Products or fails to give the Supplier adequate Delivery instructions in advance of the time stated for Delivery (other than by reason of any cause beyond the Customer's reasonable control or by reason of the Supplier's neglect or default) then the Products shall be deemed to have been delivered at the time stated for Delivery and, without prejudice to any other right or remedy available to the Supplier, the Supplier may: (i) store the Products until actual Delivery and charge the Customer for the reasonable costs (including insurance) of storage, if applicable but without any obligation on the Supplier to procure insurance, or (ii) where the Customer has failed to take Delivery of the Products on or before the seventh day following the intended day for Delivery, sell the Products at the best price readily obtainable and (after deducting all reasonable storage and selling expenses) shall reimburse the Customer if the agreed price has already been paid by the Customer or invoice the Customer for any shortfall below the agreed price if payment has not yet been made.

8.9 Where the Products are to be delivered in instalments, each Delivery shall constitute a separate obligation and neither any failure by the Supplier to deliver nor any claim in respect of any one or more instalments by the Customer shall entitle the Customer to treat the Contract as a whole as repudiated.

8.10 If, upon Delivery of the Products, the Customer discovers that it has incorrectly ordered those Products, the Supplier's standard handling charge from time to time will be payable by the Customer if the Supplier agrees (at its sole discretion) to accept return of those Products (at the Customer's risk).

8.11 No returned Products from any source will be accepted by Supplier, without written approval, together with shipping instructions, from Supplier. If permission is granted by Supplier, the returned Goods will be subject to a 25 percent re-stock handling charge plus freight cost. Non-standard Products or fabricated items are not returnable in Supplier's sole and unfettered discretion. Unless otherwise agreed by Supplier, Products returned must be in their original, smallest, unopened packaging, or undamaged and in the same condition as when the Products were delivered to Customer.

## 9. RESTRICTED DELIVERY

9.1 The applicable Sales Sheet may specify that the Supplier does not deliver Products to addresses in certain countries. The Supplier may place an order for Products in those countries, but the order must be for Delivery to an address outside the prohibited countries.

## 10. RISK AND PROPERTY IN THE PRODUCTS

10.1 Products supplied by the Supplier shall be at the Customer's risk when the Products are unloaded from the Supplier's carrier at the Customer's premise or, where the Products are collected by the Customer from the Supplier's premise (or any other location agreed between the parties), immediately upon being made available for collection. The Customer acknowledges that it is responsible for arranging appropriate insurance for the Products from the point at which it assumes risk.

10.2 Title (legal and beneficial) in all Products supplied shall be retained by the Supplier until the Supplier has received in either cash or cleared funds all sums due in respect of the Products.

10.3 Following risk in the Products passing to the Customer pursuant to clause 10.1, until such time as title in the Products passes to the Customer, the Customer must: (i) hold such Products (on a fiduciary basis for and on behalf of the Supplier) as the Supplier's bailee and act in good faith to protect the Supplier's interests in the Products, (ii) store such Products (at no cost to the Supplier) separately from all other goods of the Customer in such a way that such Products remain identifiable as property of the Supplier and shall not mix them with any other goods, (iii) not pledge or allow any lien, charge, or other interest to arise over the Products or their documents of title, (iv) not destroy or deface any identifying marks on such Products or relevant packaging and maintain such Products in satisfactory condition, and (v) keep such Products insured on the Supplier's behalf and in the event of any claim resulting from loss, theft or damage hold the proceeds of such insurance on trust for the Supplier.

10.4 In the event that the Customer fails to pay the price of the Products by the due date, the Supplier shall be entitled at any time to require the Customer to deliver up the Products to the Supplier prior to title in the Products passing to the Customer. The Customer grants the Supplier and its agents the right at any such time to enter any premises where the Products are stored to inspect or, if the Customer has failed to deliver up possession when requested by the Supplier, to repossess the Products.

## 11. QUALITY OF PRODUCTS

11.1 The Supplier warrants that on Delivery all Products will be of satisfactory quality and (if applicable) will conform to the Specification.

11.2 The warranty contained in clause 11.1 shall not apply unless:

11.2.1 in respect of defects that are apparent on inspection of the Products, the Customer notifies the Supplier in writing, setting out in reasonable detail the nature of the breach of warranty within 14 days after Delivery;

11.2.2 in relation to latent defects, the Customer notifies the Supplier in writing setting out in reasonable detail the nature of the breach of warranty within 14 days after the defect became apparent or ought to have become apparent to the Customer, and in any event within 6 months of the date of Delivery;

11.2.3 after receiving such notice of the defect, the Supplier is given reasonable opportunity to inspect the Products and, at the Supplier's request (acting reasonably), the Products are returned to the Supplier's place of business (at the Customer's risk and cost) for the purpose of inspection;

11.2.4 the total price for the Products has been paid by the Customer; and

11.2.5 none of the events listed in clause 11.3 apply.

11.3 The Supplier shall not be liable for any breach of the warranty in clause 11.1 if:

11.3.1 the Customer makes any further use of the Products after giving notice in accordance with clause 11.2;

11.3.2 the defect arises because the Customer failed to follow the Supplier's oral or written instructions as to the storage, commissioning, installation, use and maintenance of the Products or (if there are none) good trade practice regarding the same;

11.3.3 the defect arises as a result of the Supplier following any drawing, design or specific requirement or instructions supplied or approved by the Customer (including any such thing which may constitute (or form part of) the Specification);

11.3.4 the Customer alters or repairs the Products without the written consent of the Supplier;

11.3.5 the Customer makes further use of or resells a Product after the Supplier gives notice of a defect or the Customer fails to comply with the Supplier's reasonable instructions in relation to a Product hold or recall;

11.3.6 the defect arises as a result of reasonable wear and tear, wilful damage, negligence, or abnormal storage or working conditions; or

11.3.7 the Products differ from the Specification as a result of changes made to ensure they comply with applicable statutory or regulatory requirements.

11.4 If the Customer fails to give notice of rejection in accordance with clause 11.2, it shall be deemed to have accepted the Products.

11.5 If the Customer rejects Products under clause 11.2 then the Customer shall be entitled to: (i) require the Supplier to repair or replace the rejected Products, or (ii) require the Supplier to repay the price of the rejected Products in full. Once the Supplier has complied with the Customer's requirement, it shall have no further liability to the Customer in respect of the rejected Products' failure to comply with clause 11.1.

11.6 The terms of the Contract shall apply to any repaired or replacement Products supplied by the Supplier. All Products which have been replaced pursuant to clause 11.5 shall belong to the Supplier.

11.7 To the extent permitted by law and subject to clauses 12.5, the requirement to provide the remedy contained in clause 11.5 shall be the sole extent of the Supplier's liability arising out of or in connection with any breach of clause 11.1 or any other claim relating to the quality the Products.

11.8 The Customer shall comply with all reasonable instructions of the Supplier in relation to any Product hold or Product recall campaign organised in respect of any Products or any other corrective action reasonably taken by or on behalf of Supplier in respect of the Products after Delivery to Customer. Unless required by law, the Customer may not undertake any Product recall or withdrawal without the written permission of the Supplier and only then in strict compliance with the Supplier's instructions as to the process of implementing the withdrawal.

## 12. LIMITATION OF LIABILITY

12.1 For the purposes of this clause 12, a "Claim" means a claim arising out of or in connection with the supply of any Products to the Customer or as a result of breach of a Contract or of any duty of any nature whatsoever by the Supplier or pursuant to any use made by the Customer or resale by the Customer of any Products (or of any product incorporating any of the Products) or as a result of any representation, statement, act or omission including negligence or breach of statutory duty arising under or in connection with a Contract.

12.2 Subject to clause 12.5, the Supplier's aggregate liability (including any liability for the acts or omissions of its employees, agents, sub-contractors or other members of its Group) to the Customer for all Claims shall be limited as follows:

12.2.1 the Supplier's aggregate liability for a Claim in relation to any single item of Product shall be limited to the price payable by the Customer for that item; and

12.2.2 the Supplier's aggregate liability to the Customer for all other Claims brought in any calendar year shall be limited to the total amount paid by the Customer to the Supplier for Products during that calendar year.

12.3 Subject to clause 12.5, the Supplier shall not be liable to the Customer for any (a) indirect losses, (b) economic loss, (c) loss of profits or anticipated profits, (d) loss of anticipated savings, (e) loss of business or of expected future business, (f) damage to reputation or goodwill, or (g) punitive, exemplary, treble, special, indirect or consequential loss, which in each case arises under or in connection with a Contract.

12.4 Notwithstanding anything herein to the contrary and to the fullest extent permitted by law, all implied warranties, including but not limited to, the implied warranties of merchantability, non-infringement, or fitness or suitability for any particular purpose or use, are excluded from a Contract and, subject to clause 12.5, the Supplier will not be liable to the Customer for any loss of any kind whatsoever which arises out of the breach of implied warranties, terms or conditions, or breach of any duty of any kind imposed on the Supplier by operation of law.

12.5 Nothing in these Terms and Conditions shall exclude or limit the Supplier's liability in respect of (i) any death or personal injury caused by its

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gross negligence, (ii) any fraud or fraudulent misrepresentation, or (iii) any other liability to the extent that it may not be so excluded or limited by law. 12.6 If the Customer becomes aware that any third party has made or appears likely to make any claim against the Customer in respect of the Products (including as to defects in them or rights infringed by them) it shall: (i) promptly notify the Supplier of such claim or circumstance, (ii) promptly take such action as the Supplier may reasonably request to avoid, dispute, defend, mitigate, resist, appeal or compromise such claim or circumstance including to allow the Supplier to take full control of any proceedings or negotiations in connection with the claim, and (iii) not settle or compromise, make any admissions, nor agree any matter in the conduct of any dispute, without the prior written approval of the Supplier.

12.7 The Customer acknowledges that the limitations of liability set out in these Terms and Conditions are reasonable and reflect the commercial intentions of the parties in the context of the anticipated earnings of the Supplier under a Contract and the ability of the Customer to protect itself through insurance.

## 13. EVENTS OUTSIDE THE SUPPLIER'S CONTROL

13.1 The Supplier will not be in breach of the terms of a Contract for any delay in performing, or failure to perform, its obligations under the Contract if that failure or delay was due to any cause or circumstance beyond the Supplier's reasonable control, which shall, without limiting the generality of the term, include war or other action of military forces, terrorism, riot, civil commotion, sabotage, vandalism, accident, break down or damage to machinery or equipment, fire, flood, severe adverse weather, acts of God, strike, lock-out or other industrial disputes or shortage of materials at the market rates existing when the Contract is made, legislative or administrative interference (including, for example, Sanctions, embargos and Export Controls) or was due to any failure, neglect or delay on the part of the Customer or its agents or representatives.

13.2 The Supplier reserves the right to defer the date of Delivery or to terminate the Contract or reduce the volume of the Products ordered by the Customer (with an appropriate reduction in the price payable by the Customer) if it is prevented from or delayed in the carrying on of its business due to an event referred to in clause 13.1 occurring, and where the event in question continues for a continuous period in excess of 30 days either party shall be entitled to give notice in writing to the other to terminate the Contract with no liability due to or by either party.

## 14. TERMINATION

14.1 Without affecting any other rights and remedies, the Supplier may immediately terminate a Contract if: (i) the Customer fails to pay any sum due under the Contract by the due date for payment and remains in default not less than 14 days after being notified in writing by the Supplier to make such payment, (ii) the Customer materially breaches any term of the Contract, (iii) the Customer makes any composition or voluntary arrangement with its creditors or any step, application, order, proceeding or appointment is made or taken by or in respect of the Customer (including the making of an application or the giving of any notice) by the Customer or any other person for a distress, execution, winding up, dissolution, or to appoint an administrator of the Customer or (being an individual or firm) becomes bankrupt or (being a company) goes into liquidation (otherwise than for the purposes of a solvent amalgamation or reconstruction), (iv) an encumbrance takes possession, or a receiver (administrative or otherwise) is appointed, of any of the property or assets of the Customer, or the Customer ceases, or threatens to cease, to carry on business, or (v) the Supplier possesses bona fide and justifiable reason to believe that any of the events specified in (iii) or (iv) above is likely to occur and notifies the Customer accordingly.

14.2 Where the Supplier terminates the Contract in accordance with clause 14.1, without prejudice to clauses 10.3 or 10.4 or to any other right or remedy available to the Supplier: (i) the Supplier shall be entitled to terminate any other contract or suspend any further deliveries under any other contract between the parties, (ii) where the Products have been delivered, but not paid for, the Customer's right to possession shall terminate and the Supplier may dispose or use any of the Products as it wishes, and (iii) the price for the Products shall become immediately due and payable notwithstanding any previous agreement or arrangement to the contrary.

14.3 Termination of the Contract, for whatever reason, shall not affect any of its provisions which are expressed or are intended to continue to have effect after it has come to an end.

## 15. INDEMNITY

15.1 Without prejudice to the Supplier's other rights and remedies and to the fullest extent permitted by law, the Customer shall indemnify and keep indemnified the Supplier, its Group and its employees and agents on demand in full against any loss, liability, damage, costs, claims and expenses (including but not limited to attorney's fees, expert's fees and expenses of litigation) incurred or suffered as a result of: (i) any claim brought by any third party in respect of losses, injury or damage caused by any Products which, following Delivery, have been subjected to any use other than the authorised use for the Products (being the use for which the Products are commonly supplied) or modified or repaired by a person other than the Supplier, (ii) any allegation or claim made against the Supplier by a third party in relation to the actual or purported infringement of that third party's Intellectual Property Rights due to the incorporation into a Product design of any requirements, designs, specifications or other materials (including third party components) stipulated or provided by the Customer, (iii) the negligence of Customer, and (iv) the breach by Customer of any of the terms and conditions of this Contract.

## 16. INTELLECTUAL PROPERTY RIGHTS

16.1 Save where otherwise agreed in a Sales Sheet and/or Confirmation, the Supplier and/or the Supplier's licensors shall own all Intellectual Property Rights in the Products, Catalogue and any Materials.

16.2 The Customer is not granted any rights or licence in respect of the Products, other than the right to use or resell the Products in the Customer's ordinary course of business and otherwise in accordance with the terms and conditions of the Contract.

16.3 The Supplier grants to the Customer a limited, non-exclusive, non-transferable licence, without the right to sublicense, to access and view and (unless shown as not permitted) download and print the Materials in each case solely for the Customer's personal purposes.

16.4 The Customer shall not use, copy, adapt, transmit, distribute, modify, publish, reverse engineer, create derivative works based upon, distribute, licence, sell, transfer, publically perform, broadcast, communicate to the public or otherwise exploit the Materials except as expressly permitted in these Terms and Conditions or otherwise without the Supplier's prior written consent.

## 17. EXPORT CONTROLS AND SANCTIONS

17.1 The Customer warrants and represents that neither it, nor any of its Group, nor any directors, officers or employees of any of its Group: (i) is a Restricted Party or is engaging in or has engaged in any transaction or conduct that could result in it becoming a Restricted Party, (ii) has engaged or is engaging, directly or indirectly, in any trade, business or other activities with, for the benefit of, or on behalf of, any Restricted Party, (iii) has violated or is violating applicable laws, statutes, regulations and codes relating to Export Controls or Sanctions.

17.2 The Customer acknowledges that some of the Products, their components and technologies may be subject to Export Controls and Sanctions. The Customer shall: (i) comply with Export Controls and Sanctions applicable to both the Supplier and the Customer, (ii) not export, re-export, transfer or trade, directly or indirectly, with or to any Restricted Party nor any person or entity incorporated or located in any country subject to Sanctions, (iii) obtain at its cost any licence, permit, notification or authorisation required to sell, export, re-export, transfer or import the Products, their components and technologies, and (iv) ensure that the end-use of the Products will not breach any Export Controls or Sanctions, including weapons of mass destruction and military end-use controls.

## 18. GENERAL

18.1 The Customer shall at all times: (i) respond promptly to any request for guidance or instruction which is reasonably required by the Supplier to enable it to perform its obligations under a Contract; (ii) co-operate and liaise with the Supplier as necessary or desirable for the performance of a Contract, and (iii) promptly provide the Supplier with all documents and information in the Customer's possession or control which the Supplier reasonably requires in order to comply with its internal and Group policies and with all applicable laws and regulatory requirements (including all documents and information associated with know your customer checks).

18.2 The Contract contains the entire agreement and understanding of the parties and supersedes all prior agreements, understandings or arrangements (both oral and written) in respect of the Products. The Customer acknowledges that it is entering into the Contract without reliance on any undertaking, warranty, or representation given by or on behalf of the Supplier, other than as expressly contained in the Contract (or any document expressly incorporated into the Contract). This clause 18.1 is subject to clause 12.5(iv).

18.3 The parties acknowledge that in performing their obligations hereunder, each party is acting as an independent contractor. Nothing in this Contract shall be construed to create a partnership, joint venture, franchise or other similar arrangement between the parties. Neither party has the authority to enter into any agreement, or make any warranty or representation on behalf of the other party, except where and to the extent specifically authorized to do so in writing. To the extent that either party utilizes its employees for the performance of its duties pursuant to this Contract, that party shall be solely responsible for the payment of salaries and wages to such employees and matters relating thereto (including the withholding and/or payment of all federal, state and local income and other payroll taxes), workers compensation, disability benefits, and all such other legal requirements of like nature applicable to such employees.

18.4 The Customer shall not transfer, assign, sub-contract or deal in any other similar manner any of its rights or obligations under the Contract or purport to do any of the same.

18.5 Any notice shall be in writing and addressed to the other party at, in the case of the Supplier, the address or email address specified in the Sales Sheet and/or Confirmation (as applicable) and in the case of the Customer at the address or email address specified in the Sales Sheet or (if that is not applicable) at its registered address or an email address it may have used to place an order for Products with the Supplier. Hand delivered notices shall take effect immediately; postal notices, two Working Days after posting by first class post (five Working Days if sent by airmail post); and notice sent by email, at the date and time the email is sent (unless an out-of-office message is received by the sending party, in which case notice will not



have been validly served).

18.6 The invalidity, illegality or unenforceability of any provision of these Terms and Conditions shall not affect the other provisions and the Contract shall be given effect as if the invalid, illegal or unenforceable provision had been deleted.

18.7 Where the Contract is entered into in the manner described in clause 3.3.1, the Sales Sheet may be executed in any number of counterparts and by the parties on separate counterparts, but shall not be effective until each party has executed at least one counterpart. Each counterpart, when executed, shall be an original, but all counterparts shall together constitute one and the same instrument.

18.8 No variation of the Contract shall be effective unless it is made in writing, refers specifically to the Contract and is signed by both of the parties.

18.9 No waiver of any term, provision or condition of the Contract shall be effective, except where it is clearly made in writing and signed by the waiving party. No waiver of any particular breach of the Contract shall be held to be a waiver of any other or subsequent breach.

18.10 No omission or delay on the part of any party in exercising any right, power or privilege under the Contract shall operate as a waiver by it or of any right to exercise it in future or of any other of its rights under the Contract.

18.11 The rights and remedies arising under, or in connection with, the Contract are cumulative and, except where otherwise expressly provided in the Contract do not exclude rights and remedies provided by law or otherwise.

18.12 This Contract shall be construed and enforced in accordance with, and the rights of the parties shall be governed by, the laws of the State of Illinois (not including the choice of law rules thereof). The United Nations Convention on the International Sale of Goods shall not apply to the Contract. To the extent relevant pursuant to clause 8.1 the international rules for the interpretation of trade terms prepared by the International Chamber of Commerce (Incoterms) shall apply (unless agreed otherwise) but where they conflict with the Contract, the Contract shall prevail.

18.13 Subject to clause 18.14, any and all disputes, complaints, controversies, claims and grievances arising under, out of, in connection with, or in any manner related to this Contract or the relationship of parties hereunder shall be settled by binding arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association. The obligation to arbitrate shall extend to any affiliate, subsidiary, officer, employee, shareholder, principal, agent, trustee in bankruptcy or guarantor of a party making or defending any claim hereunder. Any decision and award of the arbitrator shall be final, binding and conclusive upon all of the parties hereto and said decision and award may be entered as a final judgment in any court of competent jurisdiction. Notwithstanding said Rules, any arbitration hearing to take place hereunder shall be conducted in Chicago, Illinois, before one (1) arbitrator who shall be an attorney who has substantial experience in commercial law issues. However, neither party shall institute an arbitration, or any other proceeding to resolve such disputes between the parties before that party has sought to resolve disputes through direct negotiation with the other party. If disputes are not resolved within three (3) weeks after a demand for direct negotiation, the parties shall attempt to resolve disputes through mediation conducted in Chicago, Illinois. If the parties do not agree on a mediator within ten (10) days, either party may request the American Arbitration Association to appoint a mediator who shall be an attorney who has substantial experience in commercial law issues. If the mediator is unable to facilitate a settlement of disputes within forty-five (45) days, the mediator shall issue a written statement to the parties to that effect and the aggrieved party may then seek relief through arbitration as provided above. The fees and expenses of the mediator shall be split and paid equally by each of the parties. In the event of any arbitration between the parties hereto involving this Contract or the respective rights of the parties hereunder, the party who does not prevail in such arbitration shall pay all the prevailing party's reasonable attorneys' and experts' fees, costs and expenses incurred by the prevailing party in resolving said matter. As used herein the term 'prevailing party' shall include, but not be limited to, a party who obtains legal counsel or brings an action against the other by reason of the other's breach or default and obtains substantially the relief sought whether by compromise, settlement, or judgment. Each party hereby consents to a single, consolidated arbitration proceeding of multiple claims, or claims involving two (2) or more parties. Either party may apply to any court of competent jurisdiction for injunctive relief or other interim measures as provided for elsewhere in this Contract, in aid of the arbitration proceedings, or to enforce the arbitration award, but not otherwise. Any such application to a court shall not be deemed incompatible or a waiver of this provision. The arbitrator shall be required to make written findings of fact and conclusions of law to support its award. Except as may be required by law, neither a party nor an arbitrator(s) may disclose the existence, content, or results of any arbitration hereunder without the prior written consent of both parties. By execution of this Agreement, the Customer consents to the jurisdiction of the American Arbitration Association and waives any objection which Customer may have to any proceeding so commenced based upon improper venue or forum non conveniens.

18.14 Nothing in this clause 18 shall limit the right of the Supplier to take proceedings against the Customer in any other court of competent jurisdiction, nor shall the taking of proceedings in any one or more jurisdictions preclude the Supplier from taking proceedings in any other jurisdiction, whether concurrently or not, to the extent permitted by the law of such other jurisdiction.

## Essentra Plastics LLC, d/b/a Essentra Components (the "Supplier") Essentra Canada Terms and Conditions of Sale

### 1. GENERAL

1.1 These Terms and Conditions shall apply to the sale and supply of Products by the Supplier to the Customer.

1.2 The contract governing the sale and supply of Products by the Supplier to the Customer shall in each instance consist of (i) these Terms and Conditions, (ii) the Sales Sheet (if applicable), and (iii) the Confirmation (if applicable), which shall be to the express exclusion of any other terms and conditions (including any Customer terms and conditions) referred to in any negotiations, the Confirmation, or course of dealing between the parties.

1.3 The Supplier reserves the right to modify these Terms and Conditions at any time to reflect changes in how the Supplier accepts payment from the Customer, changes in relevant laws and regulatory requirements and any other circumstances which are reasonable in the Supplier's opinion. If the Supplier modifies these Terms and Conditions, the Supplier will post the modification on its website and/or notify the Customer of the modified Terms and Conditions. The Supplier will also update the "last updated" date at the top of these Terms and Conditions. Every time the Customer orders Products from the Supplier, the Terms and Conditions published on the Supplier's website at that time or previously notified by the Supplier to the Customer will apply to the applicable Contract.

### 2. DEFINITIONS AND INTERPRETATION

2.1 In these Terms and Conditions:

"Confirmation" has the meaning given in clause 3.4.2;

"Contract" means each individual contract formed pursuant to clause 3.4 and which consists of those documents specified in clause 1.2;

"Customer" the person purchasing Products pursuant to orders placed in accordance with clause 3;

"Delivery" means the delivery of the Products in accordance with clause 8.1 or 8.2 (as applicable);

"Export Controls" means all laws, regulations, codes and controls on the import and export of goods and services in and out of a country or relevant administrative area or applied by reason of the country of origin of the Products or part of them, including the Canadian Export and Import Permits Act, United States' Export Administration Regulations, the International Traffic in Arms Regulations, the Canadian Export Control List, the United Kingdom's and European Union's military and dual-use lists and any similar list each as amended, supplemented or substituted from time to time;

"Group" means in relation to a company, that company and any subsidiary and any holding body corporate of that company and any subsidiary of any such holding company in each case from time to time (the term "subsidiary" shall have the meaning ascribed to it in section 1(5) of the Canada Business Corporations Act and a "holding body corporate" shall have the meaning ascribed to it in section 1(4) of the Canada Business Corporations Act)

"Intellectual Property Rights" means all intellectual property rights including but not limited to patents, utility models, rights in invention, copyright and neighbouring and related rights, database rights, moral rights, design rights, trade marks (including service marks), trade names and get-up, goodwill, know-how, confidential information and other intellectual property rights, whether registered or unregistered and including all applications for the grant of the foregoing and all rights or forms of protection having similar or equivalent effect to any of the foregoing which may subsist anywhere in the world;

"Materials" has the meaning given in clause 4.1;

"Permitted Method" means email, telephone, electronic data interchange or any other method of communication between the parties which is permitted by the Supplier from time to time;

"Products" means the products made available for sale (and, if applicable sold) by the Supplier from time to time and (to the extent applicable) as set out in the Sales Sheet and/or Confirmation;

"Restricted Party" means a person or entity that is listed on, owned or controlled by, or acting on behalf of, a person listed on a Sanctions List, or otherwise a subject of Sanctions;

"Sales Sheet" means the Supplier's pro forma document which can be used to detail certain commercial terms of the Contract which may be formed when the Supplier accepts an order placed by the Customer;

"Sample" means a sample of the Product provided by the Supplier to the Customer;

"Sanctions Authority" means (a) the Security Council of the United Nations; (b) the Department of State, the Department of the Treasury and the Office of Foreign Assets Control of the United States of America; (c) the Council and the Commission of the European Union; (d) Her Majesty's Treasury of the United Kingdom; and (e) The Royal Canadian Mounted Police and the Canada Border Services Agency (f) any other relevant governments, departments, authorities, institutions or agencies;

"Sanctions List" means Consolidated United Nations Security Council Sanctions List, the list maintained under Canada's Special Economic Measures Act, the Specially Designated Nationals and Blocked Persons list maintained by the United States' Office of Foreign Assets Control, the Consolidated List of Financial Sanctions Targets maintained by Her Majesty's Treasury, or any similar list maintained by or public announcement of a Sanctions designation made by, a Sanctions Authority, each as amended, supplemented or substituted from time to time;

"Sanctions" means any trade, economic or financial sanctions laws, regulations, embargoes or restrictive measures administered, enacted or enforced

# TERMS & CONDITIONS OF SALE

by a Sanctions Authority;

"Specification" means the specification of the relevant Product which may be applicable pursuant to clause 5.3;

"Supplier" means the Essentra group company named at the beginning of these Terms and Conditions;

"Terms and Conditions" means these terms and conditions as updated and varied from time to time; and

"Business Days" means any day other than a Saturday, Sunday, public or statutory holiday in the country in which the Supplier is located.

2.2 In these Terms and Conditions: (i) a "party" means the Supplier or the Customer (as applicable) and "parties" means both of them, (ii) headings are for convenience only and shall not affect its interpretation, (iii) references to a "person" include any individual, company, corporation, firm, partnership, association, organisation, institution, trust or agency, whether or not having a separate legal personality, (iv) words in the singular shall include the plural and vice versa as the context admits or requires, (v) any reference to any statute or statutory provision shall, unless the context otherwise requires, be construed as a reference to that statute or statutory provision as from time to time amended, consolidated, modified, extended, re-enacted or replaced, (vi) the word "including" shall, unless the context otherwise requires, mean "including without limitation", and (vii) "in writing" includes by email or other written Permitted Method.

## 3. ORDER AND CONFIRMATION

3.1 The Supplier shall supply Products ordered by the Customer from time to time in accordance with these Terms and Conditions.

3.2 Each order placed by the Customer shall be deemed to be a separate offer to purchase Products under these Terms and Conditions which the Supplier shall be free to accept or decline at its absolute discretion.

3.3 Orders may be placed by the Customer in one of three ways:

3.3.1 by completing a Sales Sheet which includes specific details of the Products required by the Customer (and which does not anticipate or require any subsequent call-off or other communication) and which is signed by both the Customer and the Supplier;

3.3.2 by placing an order from time to time by a Permitted Method, where the order is governed by (and is made under) a previously agreed Sales Sheet; or

3.3.3 by placing an order from time to time by a Permitted Method, but where a Sales Sheet has not been completed or agreed.

3.4 An order placed in the manner described in:

3.4.1 clause 3.3.1 shall be deemed accepted by the Supplier on execution by both parties of the Sales Sheet; and

3.4.2 clauses 3.3.2 or 3.3.3 shall be deemed accepted by the Supplier upon the sending by the Supplier of an order acknowledgement and confirmation by a written Permitted Method and which shall confirm the commercial terms of the order (a "Confirmation"),

and in each case a separate contract will be formed upon such acceptance, save that there shall be deemed to be no acceptance where the price of the Product has been incorrectly quoted or stated by the Supplier in a Sales Sheet or Confirmation.

3.5 The Customer shall act in good faith and with accuracy if it forecasts its requirements for Products. Unless otherwise set out in a Sales Sheet, a product forecast shall be binding on the Customer and shall constitute an order for Products in accordance with clause 3.3.

3.6 Each Contract shall consist of these Terms and Conditions and (to the extent applicable) the Sales Sheet and the Confirmation, to the exclusion of any terms and conditions the Customer may seek to impose.

3.7 The Supplier reserves the right to decline to accept or to cancel any order for Products or to impose reasonable conditions prior to accepting any order (including the prior receipt of a letter of credit or cleared funds from the Customer) including where the Supplier considers it reasonably necessary for security or fraud prevention purposes or to comply with any applicable laws or regulations in the country of sale, distribution or use.

3.8 All orders placed by the Customer via the Supplier's website shall be subject to the terms and conditions specified on that website.

3.9 If a price quotation is provided by the Supplier in respect of any Products, the quotation shall remain valid for 30 days from the date it is given (unless otherwise specified by the Supplier) but shall not bind the Supplier until the applicable order is accepted by the Supplier in accordance with clause 3.4.

3.10 Once an order has been accepted by the Supplier it cannot be cancelled, varied or suspended by the Customer without the written agreement of the Supplier.

3.11 In the event of any conflict between the following, the order of precedent between them shall be as follows: (i) the Confirmation, (ii) the Sales Sheet, and (iii) these Terms and Conditions.

## 4. DESCRIPTIONS, SAMPLES AND LITERATURE

4.1 Unless otherwise confirmed by the Supplier in writing, nothing in any materials produced by or on behalf of the Supplier which includes images and/or descriptions of the Products (including website content, CAD files, technical drawings, product measurements and specifications, catalogue content or any other Product-specific imagery and information) ("Materials") is to be considered a representation of the source of origin, manufacturer or production of Products or any part of them.

4.2 Subject to clause 11.1 all information contained in the Materials are published for the sole purpose of giving the Customer an approximate idea of the Products described in them and will not be relied on by the Customer or form part of the Contract except as otherwise expressly provided in the Sales Sheet and/or the Confirmation.

4.3 Any typographical, clerical or other manifestly obvious error or omission in any quote, price list, Confirmation, label, packaging, invoice or other document or information issued by the Supplier may be corrected by the Supplier, without liability to the Customer, at any time either by correcting any such matter in public by publishing the correction on the Supplier's website or by notifying the Customer in writing and such correction shall be immediately binding upon the Customer.

4.4 Except as otherwise required by law, a Contract shall not be (i) a sale by Sample, even if Samples have been provided to the Customer, unless specified otherwise in the Sales Sheet or otherwise agreed and specified in the Confirmation, or (ii) a sale by description, even if a description has been provided.

## 5. FITNESS FOR PURPOSE AND SPECIFICATIONS

5.1 The Customer will undertake appropriate tests to ensure that the Products are fit for all of the Customer's purposes. Subject to clause 5.2, the Customer expressly acknowledges that, irrespective of any guidance provided to it by the Supplier, in determining whether the Product will be fit for all its purposes, it is not relying on (i) the Supplier's skill and judgement, or (ii) any Materials which are provided or made accessible by the Supplier to the Customer.

5.2 If the Customer wishes to rely on the Supplier's skill and judgement in relation to a Product being fit for a particular purpose then prior to placing an order the Customer must expressly advise the Supplier in writing of the particular purpose and that it wishes to rely on the Supplier's confirmation of fitness for purpose rather than conduct its own testing. The Supplier shall advise the Customer of any additional charges which will apply if such confirmation is given. The Customer shall only be entitled to rely on the Product being fit for a particular purpose if the Customer has provided all the information which the Supplier would need to undertake the requisite testing and the Supplier has expressly confirmed in the Sales Sheet and/or the Confirmation that the Product can fulfil a particular purpose.

5.3 A Specification in relation to a Product shall only take effect and form part of a Contract where specified in the Sales Sheet and/or the Confirmation (and in each case this may be facilitated by way of a cross-reference to a pre-agreed specification document). The parties may agree a process for producing and agreeing a Specification, which shall be set out in the Sales Sheet. A Specification may include (inter alia) details of the Products measurements, tolerances, regulatory compliance, packaging and compliance with quality standards.

## 6. PRICE

6.1 The price of Products shall be the price specified in the Sales Sheet or as otherwise agreed and specified in the Confirmation (as applicable). Prices specified in a Sales Sheet will be subject to review and possibly change from time to time in accordance with the mechanism specified in that Sales Sheet.

6.2 The Supplier will use its reasonable endeavours to ensure that prices are accurately specified in any quote and in the Materials.

6.3 The Supplier reserves the right to invoice sums in addition to the agreed price to reflect any increase in the cost to the Supplier of supplying any Products which is due to: (i) any increase in the cost of labour or materials (including any storage costs) as a consequence of Delivery of the Products not being in accordance with clause 8.1 or 8.2 (as applicable), (ii) any variation requested by the Customer to delivery dates, quantities, the Specification or the scope of the Supplier's instructions, (iii) any delay or additional work or materials caused by any erroneous instructions, neglect or default of the Customer, or (iv) any failure of the Customer to provide the Supplier with adequate and timely information, instructions, or specifications. Subject to the foregoing, prices charged will be those prevailing when an order is accepted.

6.4 Unless set out in the Sales Sheet or Confirmation, any reference to the price for Products is in Canadian Dollars and is exclusive of any HST, PST, GST, QST or other taxes or duties and of all costs and charges in relation to non-standard packaging, loading, unloading, carriage and insurance or similar costs, which (if any) shall be paid in addition by the Customer at the time it is due to pay for the Products. Where carriage or other costs to be borne by the Customer are paid by the Supplier, the Supplier shall be entitled to immediately render an invoice in respect of such costs.

## 7. PAYMENT

7.1 The Supplier shall at its discretion be entitled to invoice the Customer for payment of the price of any Products or any other amounts in advance. The Supplier reserves the right, where the Customer is required to pay for an order in advance, to suspend Delivery of any Products pending receipt of payment.

7.2 Unless otherwise set out in a Sales Sheet or Confirmation, payment of the Supplier's invoice is due by the Customer (without deduction, discount, abatement or set-off) within 30 days of the date of the invoice, notwithstanding that Delivery may not have taken place or that property in the Products has not passed to the Customer. Payment shall be made in the currency stipulated in the Sales Sheet or Confirmation (as applicable). Time for

payment of sums due from the Customer shall be of the essence. No payment will be deemed received until received by the Supplier in cash or cleared funds.

7.3 Payment is to be made by the Customer via the payment method stipulated in the Sales Sheet or Confirmation (as applicable).

7.4 If the Customer is permitted to open a credit facility with the Supplier, it must furnish such information and references as may be requested by the Supplier and the Supplier may make a search with a credit reference agency in relation to the Customer. The Supplier reserves the right in its absolute discretion to grant, refuse or discontinue any credit facilities or reduce or suspend any credit facility at any time.

7.5 If any sums are not paid on or before the due date for payment, interest will accrue on the amount unpaid at the rate of six percent per annum above (i) the base rate of the bank specified in the Sales Sheet, or (ii) if no such bank is specified, the annual rate of interest amended from time to time by the Royal Bank of Canada as a reference rate then in effect for determining interest rates on Canadian dollar commercial loans in Canada. Such interest shall accrue on a daily basis from the due date until payment is made in full (both before and after any judgment).

7.6 If the Customer fails to make any payment when due pursuant to a Contract then, without prejudice to any other right or remedy available to the Supplier (including the right to charge interest pursuant to clause 7.5), the Supplier shall be entitled to: (i) deduct outstanding sums from any sums owed by the Supplier to the Customer under the Contract or otherwise, (ii) require the Customer to pay any costs of storage of the Products, (iii) suspend any further deliveries to the Customer under the Contract or any other contract between the parties until paid, (iv) resell any Products not yet delivered to the Customer, and/or (v) retain any sums paid as deposit for the Products.

## 8. DELIVERY

8.1 Where the Customer's order has been placed in the manner described in clauses 3.3.1 or 3.3.2, subject to anything specified to the contrary in the Sales Sheet or otherwise agreed and specified in the Confirmation, the Contract shall be Ex Works (Incoterms 2010) at the Supplier's premises and Delivery of the Products shall be effected accordingly. Additional details regarding the physical Delivery of the Products (including the date of collection by the Customer) may be agreed between the parties and set out in the Sales Sheet and/or Confirmation.

8.2 Where the Customer's order has been placed in the manner described in clause 3.3.3 (but subject to clause 8.3), Products will be sent to the Customer by a carrier service chosen by the Supplier, acting reasonably. Delivery of the Products to the Customer shall be effected by the Supplier delivering the Products to the carrier or by collection by the carrier. Thereafter, transport of such Products shall be subject to the carrier's conditions which shall be notified to the Customer if the Customer requests, and, subject to clause 10.1, the Supplier shall have no liability for the acts or omissions of the relevant carrier, unless otherwise agreed and specified in the Confirmation. The Supplier may deliver Products earlier than any agreed delivery date.

8.3 Where it is agreed and specified in the Confirmation that Products ordered in the manner described in clause 3.3.3 shall be delivered by a method other than that referred to in clause 8.2 then delivery shall be effected: (i) where the Products are to be collected by the Customer from the Supplier's premises, by the Supplier notifying the Customer that the Products are ready for collection, (ii) where the Products are delivered by the Supplier, by the Supplier delivering the Products to the address nominated by the Customer for delivery, or (iii) where the Products are to be transported by a third party, by collection by or delivery to that third party of the Products.

8.4 The remainder of this clause 8 shall apply to all Contracts regardless of the manner in which the order was placed by the Customer.

8.5 Unless otherwise set out in the Sales Sheet or Confirmation, any periods of time or dates quoted for Delivery of the Products are estimates only. The Supplier will use its reasonable endeavours to deliver the Products by the delivery date set out in the Sales Sheet or Confirmation (as applicable). If the Supplier is unable to meet the delivery date because of an event outside the Supplier's control, the Supplier will contact the Customer with a revised delivery date.

8.6 The Supplier may deliver up to 10 percent more or 10 percent less than the quantity of Products specified in the order and the Customer shall accept such variation in quantity and shall pay the agreed price as adjusted to reflect such variation in quantity. Where more than 10 percent or less than 10 percent of the quantity of Products specified in the order are delivered, the Customer and the Supplier shall discuss the excess supply or short supply (as the case may be) and (a) in the case of an excess supply: (i) if the Customer wishes to keep the additional Products, the Customer shall pay the agreed price as adjusted to reflect excess supply, or (ii) if the Customer does not wish to keep the additional Products, the Customer shall promptly return the additional Products in accordance with the Supplier's directions and at the Supplier's cost, or (b) in the case of a short supply: (i) if the Customer does not wish to be delivered additional Products to make up the order, the Customer shall pay the agreed price as adjusted to reflect short supply, or (ii) if the Customer wishes to take delivery of additional Products to make up the order, the Supplier shall (where available and in supply) promptly deliver such additional Products to the Customer. The quantity of any consignment of Products, as recorded by the Supplier, on dispatch from the Supplier's premises, shall be conclusive evidence of the quantity received by the Customer on Delivery, unless the Customer can provide conclusive evidence to the contrary.

8.7 The Supplier shall not be responsible for any losses incurred or suffered by the Customer as a result of a failure to deliver the Products or for short Delivery unless the Customer has informed the Supplier in writing within 12 days from the estimated date of Delivery (in relation to a failure to deliver) or on the actual date of Delivery (in relation to a short Delivery). In any event, where for any reason the Supplier is liable to the Customer for any such losses, the Supplier's liability shall be limited to: (i) the amount by which the price in the cheapest available market of similar goods to replace those not delivered exceeds the agreed price of the Products not delivered, or (ii) if there is no such market, an amount equal to the agreed price applicable in respect of the Products not delivered.

8.8 Where the Customer fails to take Delivery of the Products or fails to give the Supplier adequate Delivery instructions in advance of the time stated for Delivery (other than by reason of any cause beyond the Customer's reasonable control or by reason of the Supplier's neglect or default) then the Products shall be deemed to have been delivered at the time stated for Delivery and, without prejudice to any other right or remedy available to the Supplier, the Supplier may: (i) store the Products until actual Delivery and charge the Customer for the reasonable costs (including insurance) of storage, if applicable but without any obligation on the Supplier to procure insurance, or (ii) where the Customer has failed to take Delivery of the Products on or before the seventh day following the intended day for Delivery, sell the Products at the best price readily obtainable and (after deducting all reasonable storage and selling expenses) shall reimburse the Customer if the agreed price has already been paid by the Customer or invoice the Customer for any shortfall below the agreed price if payment has not yet been made.

8.9 Where the Products are to be delivered in instalments, each Delivery shall constitute a separate obligation and neither any failure by the Supplier to deliver nor any claim in respect of any one or more instalments by the Customer shall entitle the Customer to treat the Contract as a whole as repudiated.

8.10 No returned Products from any source will be accepted by Supplier, without written approval, together with shipping instructions, from Supplier. If permission is granted by Supplier, the returned Goods will be subject to a 25 percent re-stock handling charge plus freight cost. Non-standard Products or fabricated items are not returnable in Supplier's sole and unfettered discretion. Unless otherwise agreed by Supplier, Products returned must be in their original, smallest, unopened packaging, or undamaged and in the same condition as when the Products were delivered to Customer.

## 9. RESTRICTED DELIVERY

9.1 The applicable Sales Sheet may specify that the Supplier does not deliver Products to addresses in certain countries. The Supplier may place an order for Products in those countries, but the order must be for Delivery to an address outside the prohibited countries.

## 10. RISK AND PROPERTY IN THE PRODUCTS

10.1 Products supplied by the Supplier shall be at the Customer's risk when the Products are unloaded from the Supplier's carrier at the Customer's premise or, where the Products are collected by the Customer, or a third party on behalf of the Customer, from the Supplier's premise (or any other location agreed between the parties), immediately upon being made available for collection. The Customer acknowledges that it is responsible for arranging appropriate insurance for the Products from the point at which it assumes risk.

10.2 Title (legal and beneficial) in all Products supplied shall be retained by the Supplier until the Supplier has received in either cash or cleared funds all sums due in respect of the Products.

10.3 Following risk in the Products passing to the Customer pursuant to clause 10.1, until such time as title in the Products passes to the Customer, the Customer must: (i) hold such Products (on a fiduciary basis for and on behalf of the Supplier) as the Supplier's bailee and act in good faith to protect the Supplier's interests in the Products, (ii) store such Products (at no cost to the Supplier) separately from all other goods of the Customer in such a way that such Products remain identifiable as property of the Supplier and shall not mix them with any other goods, (iii) not pledge or allow any lien, charge, or other interest to arise over the Products or their documents of title, (iv) not destroy or deface any identifying marks on such Products or relevant packaging and maintain such Products in satisfactory condition, and (v) keep such Products insured on the Supplier's behalf and in the event of any claim resulting from loss, theft or damage hold the proceeds of such insurance on trust for the Supplier.

10.4 In the event that the Customer fails to pay the price of the Products by the due date, the Supplier shall be entitled at any time to require the Customer to deliver up the Products to the Supplier prior to title in the Products passing to the Customer. The Customer grants the Supplier and its agents the right at any such time to enter any premises where the Products are stored to inspect or, if the Customer has failed to deliver up possession when requested by the Supplier, to repossess the Products.

## 11. QUALITY OF PRODUCTS

11.1 The Supplier warrants that on Delivery all Products will be of satisfactory quality and (if applicable) will conform to the Specification.

11.2 The warranty contained in clause 11.1 shall not apply unless:

11.2.1 in respect of defects that are apparent on inspection of the Products, the Customer notifies the Supplier in writing, setting out in reasonable detail the nature of the breach of warranty within 14 days after Delivery;

11.2.2 in relation to latent defects, the Customer notifies the Supplier in writing setting out in reasonable detail the nature of the breach of warranty

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within 14 days after the defect became apparent or ought to have become apparent to the Customer, and in any event within 6 months of the date of Delivery;

11.2.3 after receiving such notice of the defect, the Supplier is given reasonable opportunity to inspect the Products and, at the Supplier's request (acting reasonably), the Products are returned to the Supplier's place of business (at the Customer's risk and cost) for the purpose of inspection;

11.2.4 the total price for the Products has been paid by the Customer; and

11.2.5 none of the events listed in clause 11.3 apply.

11.3 The Supplier shall not be liable for any breach of the warranty in clause 11.1 if:

11.3.1 the Customer makes any further use of the Products after giving notice in accordance with clause 11.2;

11.3.2 the defect arises because the Customer failed to follow the Supplier's oral or written instructions as to the storage, commissioning, installation, use and maintenance of the Products or (if there are none) good trade practice regarding the same;

11.3.3 the defect arises as a result of the Supplier following any drawing, design or specific requirement or instructions supplied or approved by the Customer (including any such thing which may constitute (or form part of) the Specification);

11.3.4 the Customer alters or repairs the Products without the written consent of the Supplier;

11.3.5 the Customer makes further use of or resells a Product after the Supplier gives notice of a defect or the Customer fails to comply with the Supplier's reasonable instructions in relation to a Product hold or recall;

11.3.6 the defect arises as a result of reasonable wear and tear, wilful damage, negligence, or abnormal storage or working conditions; or

11.3.7 the Products differ from the Specification as a result of changes made to ensure they comply with applicable statutory or regulatory requirements.

11.4 If the Customer fails to give notice of rejection in accordance with clause 11.2, it shall be deemed to have accepted the Products.

11.5 If the Customer rejects Products under clause 11.2 then the Customer shall be entitled to: (i) require the Supplier to repair or replace the rejected Products, or (ii) require the Supplier to repay the price of the rejected Products in full. Once the Supplier has complied with the Customer's requirement, it shall have no further liability to the Customer in respect of the rejected Products' failure to comply with clause 11.1.

11.6 The terms of the Contract shall apply to any repaired or replacement Products supplied by the Supplier. All Products which have been replaced pursuant to clause 11.5 shall belong to the Supplier.

11.7 To the extent permitted by law and subject to clauses 12.5, the requirement to provide the remedy contained in clause 11.5 shall be the sole extent of the Supplier's liability arising out of or in connection with any breach of clause 11.1 or any other claim relating to the quality of the Products.

11.8 The Customer shall comply with all reasonable instructions of the Supplier in relation to any Product hold or Product recall campaign organised in respect of any Products or any other corrective action reasonably taken by or on behalf of Supplier in respect of the Products after Delivery to Customer. Unless required by law, the Customer may not undertake any Product recall or withdrawal without the written permission of the Supplier and only then in strict compliance with the Supplier's instructions as to the process of implementing the withdrawal.

## 12. LIMITATION OF LIABILITY

12.1 For the purposes of this clause 12, a "Claim" means a claim arising out of or in connection with the supply of any Products to the Customer or as a result of breach of a Contract or of any duty of any nature whatsoever by the Supplier or pursuant to any use made by the Customer or resale by the Customer of any Products (or of any product incorporating any of the Products) or as a result of any representation, statement, act or omission including negligence or breach of statutory duty arising under or in connection with a Contract.

12.2 Subject to clause 12.5, the Supplier's aggregate liability (including any liability for the acts or omissions of its employees, agents, sub-contractors or other members of its Group) to the Customer for all Claims shall be limited as follows:

12.2.1 the Supplier's aggregate liability for a Claim in relation to any single item of Product shall be limited to the price payable by the Customer for that item; and

12.2.2 the Supplier's aggregate liability to the Customer for all other Claims brought in any calendar year shall be limited to the total amount paid by the Customer to the Supplier for Products during that calendar year.

12.3 Subject to clause 12.5, the Supplier shall not be liable to the Customer for any (a) indirect losses, (b) economic loss, (c) loss of profits or anticipated profits, (d) loss of anticipated savings, (e) loss of business or of expected future business, (f) damage to reputation or goodwill, or (g) punitive, exemplary, incidental, special, indirect or consequential loss, which in each case arises under or in connection with a Contract.

12.4 Notwithstanding anything herein to the contrary and to the fullest extent permitted by law, all implied warranties including but not limited to, the implied warranties of merchantability, non-infringement, or fitness or suitability for any particular purpose or use, are excluded from a Contract and, subject to clause 12.5, the Supplier will not be liable to the Customer for any loss of any kind whatsoever which arises out of the breach of implied warranties, terms or conditions, or breach of any duty of any kind imposed on the Supplier by operation of law.

12.5 Nothing in these Terms and Conditions shall exclude or limit the Supplier's liability in respect of (i) any death or personal injury caused by its gross negligence, (ii) any fraud or fraudulent misrepresentation, or (iii) any other liability to the extent that it may not be so excluded or limited by law.

12.6 If the Customer becomes aware that any third party has made or appears likely to make any claim against the Customer in respect of the Products (including as to defects in them or rights infringed by them) it shall: (i) promptly notify the Supplier of such claim or circumstance, (ii) promptly take such action as the Supplier may reasonably request to avoid, dispute, defend, mitigate, resist, appeal or compromise such claim or circumstance including to allow the Supplier to take full control of any proceedings or negotiations in connection with the claim, and (iii) not settle or compromise, make any admissions, nor agree any matter in the conduct of any dispute, without the prior written approval of the Supplier.

12.7 The Customer acknowledges that the limitations of liability set out in these Terms and Conditions are reasonable and reflect the commercial intentions of the parties in the context of the anticipated earnings of the Supplier under a Contract and the ability of the Customer to protect itself through insurance.

## 13. EVENTS OUTSIDE THE SUPPLIER'S CONTROL

13.1 The Supplier will not be in breach of the terms of a Contract for any delay in performing, or failure to perform, its obligations under the Contract if that failure or delay was due to any cause or circumstance beyond the Supplier's reasonable control, which shall, without limiting the generality of the term, include war or other action of military forces, terrorism, riot, civil commotion, sabotage, vandalism, accident, break down or damage to machinery or equipment, fire, flood, acts of God, strike, lock-out or other industrial disputes or shortage of materials at the market rates existing when the Contract is made, legislative or administrative interference (including, for example, Sanctions, embargos and Export Controls) or was due to any failure, neglect or delay on the part of the Customer or its agents or representatives.

13.2 The Supplier reserves the right to defer the date of Delivery or to terminate the Contract or reduce the volume of the Products ordered by the Customer (with an appropriate reduction in the price payable by the Customer) if it is prevented from or delayed in the carrying on of its business due to an event referred to in clause 13.1 occurring, and where the event in question continues for a continuous period in excess of 30 days either party shall be entitled to give notice in writing to the other to terminate the Contract with no liability due to or by either party.

## 14. TERMINATION

14.1 Without affecting any other rights and remedies, the Supplier may immediately terminate a Contract if: (i) the Customer fails to pay any sum due under the Contract by the due date for payment and remains in default not less than 14 days after being notified in writing by the Supplier to make such payment, (ii) the Customer materially breaches any term of the Contract, (iii) the Customer makes any composition or voluntary arrangement with its creditors or any step, application, order, proceeding or appointment is made or taken by or in respect of the Customer (including the making of an "application" or the giving of any notice) by the Customer or any other person for a distress, execution, winding up, dissolution, or to appoint an administrator of the Customer or (being an individual or firm) becomes bankrupt or (being a company) goes into liquidation (otherwise than for the purposes of a solvent amalgamation or reconstruction), (iv) an encumbrance takes possession, or a receiver (administrative or otherwise) is appointed, of any of the property or assets of the Customer, or the Customer ceases, or threatens to cease, to carry on business, or (v) the Supplier possesses bona fide and justifiable reason to believe that any of the events specified in (iii) or (iv) above is likely to occur and notifies the Customer accordingly.

14.2 Where the Supplier terminates the Contract in accordance with clause 14.1, without prejudice to clauses 10.3 or 10.4 or to any other right or remedy available to the Supplier: (i) the Supplier shall be entitled to terminate any other contract or suspend any further deliveries under any other contract between the parties, (ii) where the Products have been delivered, but not paid for, the Customer's right to possession shall terminate and the Supplier may recover the Products and dispose or use any of the Products as it wishes, and (iii) the price for the Products shall become immediately due and payable notwithstanding any previous agreement or arrangement to the contrary.

14.3 Termination of the Contract, for whatever reason, shall not affect any of its provisions which are expressed or are intended to continue to have effect after it has come to an end.

## 15. INDEMNITY

15.1 Without prejudice to the Supplier's other rights and remedies and to the fullest extent permitted by law, the Customer shall indemnify and keep indemnified the Supplier, its Group and its employees and agents on demand in full against any loss, liability, damage, costs, claims and expenses (including but not limited to legal fees, expert's fees and expenses of litigation) incurred or suffered as a result of: (i) any claim brought by any third party in respect of losses, injury or damage caused by any Products which, following Delivery, have been subjected to any use other than the authorised use for the Products (being the use for which the Products are commonly supplied) or modified or repaired by a person other than the Supplier, (ii) any allegation or claim made against the Supplier by a third party in relation to the actual or purported infringement of that third party's Intellectual Property Rights due to the incorporation into a Product design of any requirements, designs, specifications or other materials (including third party

components) stipulated or provided by the Customer, (iii) the negligence of the Customer, and (iv) the breach by the Customer of any of the terms and conditions of this Contract.

## 16. INTELLECTUAL PROPERTY RIGHTS

16.1 Save where otherwise agreed in a Sales Sheet and/or Confirmation, the Supplier and/or the Supplier's licensors shall own all Intellectual Property Rights in the Products, Catalogue and any Materials.

16.2 The Customer is not granted any rights or licence in respect of the Products, other than the right to use or resell the Products in the Customer's ordinary course of business and otherwise in accordance with the terms and conditions of the Contract.

16.3 The Supplier grants to the Customer a limited, non-exclusive, non-transferable licence, without the right to sublicense, to access and view and (unless shown as not permitted) download and print the Materials in each case solely for the Customer's personal purposes.

16.4 The Customer shall not use, copy, adapt, transmit, distribute, modify, publish, reverse engineer, create derivative works based upon, distribute, licence, sell, transfer, publically perform, broadcast, communicate to the public or otherwise exploit the Materials except as expressly permitted in these Terms and Conditions or otherwise without the Supplier's prior written consent.

## 17. EXPORT CONTROLS AND SANCTIONS

17.1 The Customer warrants and represents that neither it, nor any of its Group, nor any directors, officers or employees of any of its Group: (i) is a Restricted Party or is engaging in or has engaged in any transaction or conduct that could result in it becoming a Restricted Party, (ii) has engaged or is engaging, directly or indirectly, in any trade, business or other activities with, for the benefit of, or on behalf of, any Restricted Party, (iii) has violated or is violating applicable laws, statutes, regulations and codes relating to Export Controls or Sanctions.

17.2 The Customer acknowledges that some of the Products, their components and technologies may be subject to Export Controls and Sanctions. The Customer shall: (i) comply with Export Controls and Sanctions applicable to both the Supplier and the Customer, (ii) not export, re-export, transfer or trade, directly or indirectly, with or to any Restricted Party nor any person or entity incorporated or located in any country subject to Sanctions, (iii) obtain at its cost any licence, permit, notification or authorisation required to sell, export, re-export, transfer or import the Products, their components and technologies, and (iv) ensure that the end-use of the Products will not breach any Export Controls or Sanctions, including weapons of mass destruction and military end-use controls.

## 18. GENERAL

18.1 The Customer shall at all times: (i) respond promptly to any request for guidance or instruction which is reasonably required by the Supplier to enable it to perform its obligations under a Contract; (ii) co-operate and liaise with the Supplier as necessary or desirable for the performance of a Contract, and (iii) promptly provide the Supplier with all documents and information in the Customer's possession or control which the Supplier reasonably requires in order to comply with its internal and Group policies and with all applicable laws and regulatory requirements (including all documents and information associated with know your customer checks).

18.2 The Contract contains the entire agreement and understanding of the parties and supersedes all prior agreements, understandings or arrangements (both oral and written) in respect of the Products. The Customer acknowledges that it is entering into the Contract without reliance on any undertaking, warranty, or representation given by or on behalf of the Supplier, other than as expressly contained in the Contract (or any document expressly incorporated into the Contract).

18.3 The parties acknowledge that in performing their obligations hereunder, each party is acting as an independent contractor. Nothing in this Contract shall be construed to create an employment, partnership, joint venture, franchise or other similar arrangement between the parties. Neither party has the authority to enter into any agreement, or make any warranty or representation on behalf of the other party, except where and to the extent specifically authorized to do so in writing. To the extent that either party utilizes its employees for the performance of its duties pursuant to this Contract, that party shall be solely responsible for the payment of salaries and wages to such employees and matters relating thereto (including the withholding and/or payment of all federal, state and local income and other payroll taxes), workers compensation, disability benefits, and all such other legal requirements of like nature applicable to such employees.

18.4 The Customer shall not transfer, assign, sub-contract or deal in any other similar manner any of its rights or obligations under the Contract or purport to do any of the same.

18.5 Any notice shall be in writing and addressed to the other party at, in the case of the Supplier, the address or email address specified in the Sales Sheet and/or Confirmation (as applicable) and in the case of the Customer at the address or email address specified in the Sales Sheet or (if that is not applicable) at its registered address or an email address it may have used to place an order for Products with the Supplier. Hand delivered notices shall take effect immediately; postal notices, two Business Days after posting by first class post (five Business Days if sent by airmail post); and notice sent by email, at the date and time the email is sent (unless an out-of-office message is received by the sending party, in which case notice will not have been validly served).

18.6 The invalidity, illegality or unenforceability of any provision of these Terms and Conditions shall not affect the other provisions and the Contract shall be given effect as if the invalid, illegal or unenforceable provision had been deleted.

18.7 Where the Contract is entered into in the manner described in clause 3.3.1, the Sales Sheet may be executed in any number of counterparts and by the parties on separate counterparts, but shall not be effective until each party has executed at least one counterpart. Each counterpart, when executed, shall be an original, but all counterparts shall together constitute one and the same instrument.

18.8 No variation of the Contract shall be effective unless it is made in writing, refers specifically to the Contract and is signed by both of the parties.

18.9 No waiver of any term, provision or condition of the Contract shall be effective, except where it is clearly made in writing and signed by the waiving party. No waiver of any particular breach of the Contract shall be held to be a waiver of any other or subsequent breach.

18.10 No omission or delay on the part of any party in exercising any right, power or privilege under the Contract shall operate as a waiver by it or of any right to exercise it in future or of any other of its rights under the Contract.

18.11 The rights and remedies arising under, or in connection with, the Contract are cumulative and, except where otherwise expressly provided in the Contract do not exclude rights and remedies provided by law or otherwise.

18.12 This Contract shall be construed and enforced in accordance with, and the rights of the parties shall be governed by, the laws of the Province of Ontario and the federal laws of Canada applicable therein (not including the choice of law rules thereof). The United Nations Convention on the International Sale of Goods shall not apply to the Contract. To the extent relevant pursuant to clause 8.1 the international rules for the interpretation of trade terms prepared by the International Chamber of Commerce (Incoterms) shall apply (unless agreed otherwise) but where they conflict with the Contract, the Contract shall prevail.

18.13 Subject to clause 18.14, any and all disputes, complaints, controversies, claims and grievances arising under, out of, in connection with, or in any manner related to this Contract or the relationship of parties hereunder shall be resolved by arbitration. Such arbitration shall be conducted by a single arbitrator. The arbitrator shall be appointed by agreement between the parties or, in default of such agreement, such arbitrator shall be appointed by a Judge of the Superior Court of Justice sitting in the City of Toronto, upon the application of any of the parties and such judge shall be entitled to act as such arbitrator, if he or she so desires. Unless otherwise agreed to by the parties, the arbitration shall be held in the City of Toronto. The procedure to be followed is shall be agreed to by the parties or, in default of such agreement, determined by the arbitrator. The arbitration shall proceed in accordance with the provisions of the Arbitration Act, 1991 (Ontario). The arbitrator shall have the power to proceed with the arbitration and to deliver his or her award notwithstanding the default by any party in respect of any procedural order made by the arbitrator. The obligation to arbitrate shall extend to any affiliate, subsidiary, officer, employee, shareholder, principal, agent, trustee in bankruptcy or guarantor of a party making or defending any claim hereunder. Any decision and award of the arbitrator shall be final, binding and conclusive upon all of the parties hereto and said decision and award may be entered as a final judgment in any court of competent jurisdiction. Notwithstanding the foregoing, neither party shall institute an arbitration, or any other proceeding to resolve such disputes between the parties before that party has sought to resolve disputes through direct negotiation with the other party. If disputes are not resolved within three (3) weeks after a demand for direct negotiation, the parties shall attempt to resolve disputes through mediation conducted in the City of Toronto. If the parties do not agree on a mediator within ten (10) days, either party may request the ADR Institute of Ontario to appoint a mediator who shall be a barrister and solicitor who has substantial experience in commercial law issues. If the mediator is unable to facilitate a settlement of disputes within forty-five (45) days, the mediator shall issue a written statement to the parties to that effect and the aggrieved party may then seek relief through arbitration as provided above. The fees and expenses of the mediator shall be split and paid equally by each of the parties. In the event of any arbitration between the parties hereto involving this Contract or the respective rights of the parties hereunder, the party who does not prevail in such arbitration shall pay all the prevailing party's reasonable legal' and experts' fees, costs and expenses incurred by the prevailing party in resolving said matter. As used herein the term 'prevailing party' shall include, but not be limited to, a party who obtains legal counsel or brings an action against the other by reason of the other's breach or default and obtains substantially the relief sought whether by compromise, settlement, or judgment. Each party hereby consents to a single, consolidated arbitration proceeding of multiple claims, or claims involving two (2) or more parties. Either party may apply to any court of competent jurisdiction for injunctive relief or other interim measures as provided for elsewhere in this Contract, in aid of the arbitration proceedings, or to enforce the arbitration award, but not otherwise. Any such application to a court shall not be deemed incompatible or a waiver of this provision. The arbitrator shall be required to make written findings of fact and conclusions of law to support its award. Except as may be required by law, neither a party nor an arbitrator(s) may disclose the existence, content, or results of any arbitration hereunder without the prior written consent of both parties.

18.14 Nothing in this clause 18 shall limit the right of the Supplier to take proceedings against the Customer in any other court of competent jurisdiction, nor shall the taking of proceedings in any one or more jurisdiction preclude the Supplier from taking proceedings in any other jurisdiction, whether concurrently or not, to the extent permitted by the law of such other jurisdiction.



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