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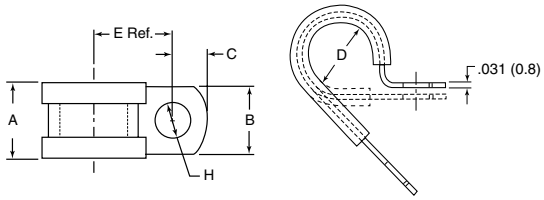
CABLE CLAMPS

SPN / SPNW
Steel Clamp with Rubber Cushion

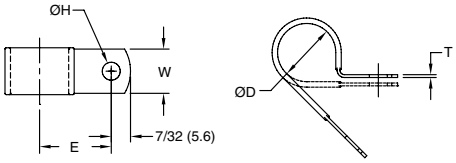
Specifications:
- Material: Cold Rolled Steel, Zinc Electroplated, Elastomer Cushion
- Color: Steel with Black Cushion

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



Item No.	D Holding Ø		B		A		H Hole Ø		E Ref.		C		Pack Qty.	Bulk Pack Qty.
	In	mm	In	mm	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

NE
Aluminum Clamp with Vinyl Coating

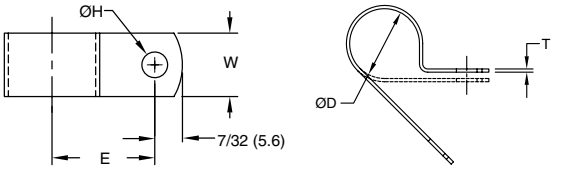


Specifications:
- Material: Aluminum Alloy 5052 H-32, TPV Coating
- Color: Aluminum with Black Coating

Features:
- Vinyl coating allows a more permanent solution for protecting cables against vibration
- Screw mount area is bare to ensure firm tightening

Item No.	Holding Ø D		Ø H Hole		E Ref.		T		W		Pack Qty.	Bulk Pack Qty.
	In	mm	In	mm	In	mm	IN	mm	In	mm		
NE3	3/16	4.8	.204	5.2	.50	12.7	1/32	0.8	3/8	9.5	1	1000
NE4	1/4	6.4	.204	5.2	.53	13.5	1/32	0.8	3/8	9.5	1	1000
NE5	5/16	7.9	.204	5.2	.56	14.2	1/32	0.8	3/8	9.5	1	1000
NE6	3/8	9.5	.204	5.2	.59	15.0	1/32	0.8	3/8	9.5	1	1000
NE7	7/16	11.1	.204	5.2	.62	15.7	1/32	0.8	3/8	9.5	1	1000
NE8	1/2	12.7	.204	5.2	.65	16.5	1/32	0.8	3/8	9.5	1	1000
NE9	9/16	14.3	.204	5.2	.75	19.1	1/32	0.8	3/8	9.5	1	1000
NE10	5/8	15.9	.204	5.2	.78	19.8	1/32	0.8	3/8	9.5	1	1000
NE11	11/16	17.5	.204	5.2	.81	20.6	1/16	1.6	1/2	12.7	1	500
NE12	3/4	19.1	.204	5.2	.84	21.3	1/16	1.6	1/2	12.7	1	500
NE14	7/8	22.2	.204	5.2	.90	22.9	1/16	1.6	1/2	12.7	1	500
NE16	1	25.4	.204	5.2	.96	24.4	1/16	1.6	1/2	12.7	1	500
NE18	1-1/8	28.6	.204	5.2	1.05	26.7	1/16	1.6	1/2	12.7	1	500
NE20	1-1/4	31.8	.204	5.2	1.11	28.2	1/16	1.6	1/2	12.7	1	500

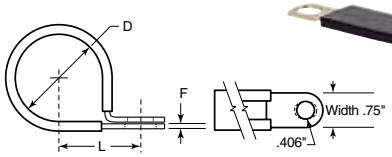
AL
Aluminum Clamp



Specifications:
- Material: Aluminum Alloy 5052 H-32
- Color: Aluminum

Item No.	Holding Ø D		Ø H Hole		E Ref.		T		W		Pack Qty.	Bulk Pack Qty.
	In	mm	In	mm	In	mm	In	mm	In	mm		
AL2A	1/8	3.2	.204	5.2	.46	11.7	1/32	0.8	3/8	9.5	1	1000
AL3A	3/16	4.8	.204	5.2	.50	12.7	1/32	0.8	3/8	9.5	1	1000
AL4A	1/4	6.4	.204	5.2	.53	13.5	1/32	0.8	3/8	9.5	1	1000
AL5A	5/16	7.9	.204	5.2	.56	14.2	1/32	0.8	3/8	9.5	1	1000
AL6A	3/8	9.5	.204	5.2	.59	15.0	1/32	0.8	3/8	9.5	1	1000
AL7A	7/16	11.1	.204	5.2	.62	15.7	1/32	0.8	3/8	9.5	1	1000
AL8A	1/2	12.7	.204	5.2	.65	16.5	1/32	0.8	3/8	9.5	1	1000
AL9A	9/16	14.3	.204	5.2	.75	19.1	1/32	0.8	3/8	9.5	1	1000
AL10A	5/8	15.9	.204	5.2	.78	19.8	1/32	0.8	3/8	9.5	1	1000
AL11	11/16	17.5	.204	5.2	.81	20.6	1/32	0.8	1/2	12.7	1	500
AL12	3/4	19.1	.204	5.2	.84	21.3	1/32	0.8	1/2	12.7	1	500
AL14	7/8	22.2	.204	5.2	.90	22.9	1/32	0.8	1/2	12.7	1	500
AL16	1	25.4	.204	5.2	.96	24.4	1/16	1.6	1/2	12.7	1	500
AL18	1-1/8	28.6	.204	5.2	1.05	26.7	1/16	1.6	1/2	12.7	1	500
AL20	1-1/4	31.8	.204	5.2	1.11	28.2	1/16	1.6	1/2	12.7	1	500

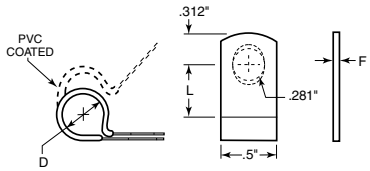
Loop Clamps SPW Series Steel



- Light to medium duty steel clamp
- EPDM cushion for electrical insulation and vibration absorption
- Steel clamps are zinc electroplated for corrosion resistance
- Temperature range -50 degrees Fahrenheit to +275 degrees Fahrenheit

Item No.	Size	D	L	F	Pack Qty.
ZS-454	¼	.250	.656	.031	1
ZS-456	⅜	.375	.718	.031	1
ZS-458	½	.500	.781	.031	1
ZS-460	⅝	.625	.843	.031	1
ZS-462	¾	.750	.906	.031	1
ZS-464	1	1.000	1.031	.031	1
ZS-466	1⅛	1.125	1.093	.050	1
ZS-468	1¼	1.250	1.000	.032	1
ZS-470	1½	1.500	1.218	.032	1
ZS-472	2	2	1.468	.040	1

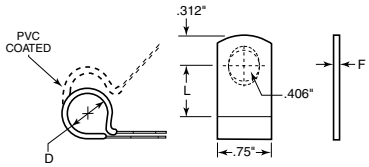
Loop Clamps SVN Series Steel



- Medium duty steel clamp that can be slipped over a tube or wire and closed with a bolt at assembly. Holes provide easy alignment. Its pre-developed shape allows for proper closing and excellent fit of the clamp.
- Galvanized steel
- PVC coated, black color
- Temperature range -25 degrees Fahrenheit to +160 degrees Fahrenheit

Item No.	Size	D	L	F	Pack Qty.
ZS-474	3/16	.187	.500	.032	1
ZS-476	¼	.250	.531	.032	1
ZS-478	5/16	.312	.562	.032	1
ZS-480	⅜	.375	.593	.032	1
ZS-482	½	.500	.656	.048	1
ZS-484	9/16	.562	.687	.048	1
ZS-486	⅝	.625	.718	.048	1
ZS-488	¾	.750	.781	.048	1
ZS-490	⅞	.875	.843	.048	1
ZS-492	1	1.000	.906	.048	1
ZS-494	1⅛	1.125	.968	.048	1

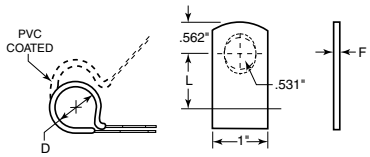
Loop Clamps SVW Series Steel



- Medium duty steel clamp that can be slipped over a tube or wire and closed with a bolt at assembly. Holes provide easy alignment. Its pre-developed shape allows for proper closing and excellent fit of the clamp
- Galvanized steel
- PVC coated, black color
- Temperature range -25 degrees Fahrenheit to +160 degrees Fahrenheit

Item No.	Size	D	L	F	Pack Qty.
ZS-496	¼	.250	.656	.032	1
ZS-498	⅜	.375	.718	.032	1
ZS-500	½	.500	.781	.048	1
ZS-502	9/16	.562	.812	.048	1
ZS-504	⅝	.625	.843	.048	1
ZS-506	¾	.750	.906	.048	1
ZS-508	13/16	.812	.937	.048	1
ZS-510	⅞	.875	.968	.048	1
ZS-512	15/16	.937	1.000	.048	1
ZS-514	1	1.000	1.031	.048	1
ZS-516	1 1/16	1.050	1.062	.048	1
ZS-518	1⅛	1.125	1.092	.048	1

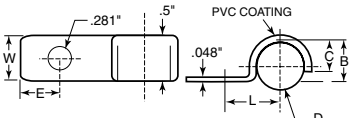
Loop Clamps LVZ Series Steel



- Heavy duty steel clamp
- Galvanized steel
- PVC coated, black color
- Temperature range -25 degrees Fahrenheit to +160 degrees Fahrenheit

Item No.	Size	D	L	F	Pack Qty.
ZS-520	1⅛	1.130	1.218	.048	1
ZS-522	1 3/16	1.190	1.250	.048	1
ZS-524	1¼	1.250	1.281	.048	1
ZS-526	1 5/16	1.310	1.312	.048	1
ZS-528	1½	1.500	1.406	.048	1
ZS-530	1 9/16	1.560	1.437	.048	1
ZS-532	1¾	1.750	1.531	.048	1
ZS-534	1 13/16	1.810	1.562	.048	1
ZS-536	2	2.000	1.687	.048	1
ZS-538	2 1/16	2.060	1.718	.048	1
ZS-540	2¼	2.250	1.812	.048	1
ZS-542	2½	2.500	1.937	.048	1
ZS-544	2⅝	2.630	2.000	.048	1
ZS-546	2¾	2.750	2.062	.048	1
ZS-548	2⅞	2.880	2.125	.048	1
ZS-550	3 9/16	3.560	2.437	.048	1

Loop Clamps HVN Series Steel

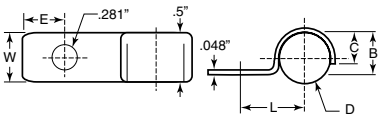


Item No.	Size	D	L	E	B	C	W	Pack Qty.
ZS-552	¼	.250	.500	.250	.250	.188	½	1
ZS-554	5/16	.312	.531	.312	.312	.218	⅝	1
ZS-556	⅜	.375	.562	.312	.375	.281	⅝	1
ZS-558	½	.500	.687	.312	.500	.343	⅝	1
ZS-560	9/16	.562	.750	.312	.562	.437	⅝	1
ZS-562	⅝	.625	.812	.312	.625	.406	⅝	1
ZS-564	¾	.750	.875	.312	.750	.468	⅝	1

- Black vinyl plastic coated (PVC)
- Galvanized steel for corrosion resistance
- Temperature range -25 degrees Fahrenheit to +160 degrees Fahrenheit

HOSE & PIPE CLAMPS

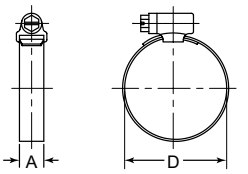
Loop Clamps
HSN Series



- Stainless steel ½" wide
- Type 301 or 304

Item No.	Size	D	L	E	B	C	W	Pack Qty.
ZS-566	¼	.250	.500	.250	.250	.188	½	1
ZS-568	5/16	.312	.531	.312	.312	.218	⅝	1
ZS-570	⅜	.375	.562	.312	.375	.281	⅝	1
ZS-572	½	.500	.687	.312	.500	.343	⅝	1
ZS-574	9/16	.562	.750	.312	.562	.437	⅝	1
ZS-576	⅝	.625	.812	.312	.625	.406	⅝	1
ZS-578	¾	.750	.875	.312	.750	.468	⅝	1

MHC Series
Mini Worm Gear Hose Clamps



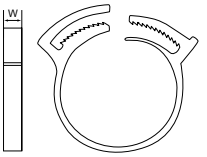
Specifications:
- Band and Housing: Stainless steel
- Screw: 1/4 inch hex-head. Plated carbon steel

Features:
- To 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	Diameter Range D Min (In)	Diameter Range D Max (In)	A (In)	Pack Qty.	Bulk Pack Qty.
MHC04A	4	0.250	0.625	0.312	1	100
MHC05A	5	0.250	0.687	0.312	1	100
MHC06A	6	0.312	0.875	0.312	1	100
MHC08A	8	0.375	1.000	0.312	1	100
MHC10A	10	0.375	1.062	0.312	1	100
MHC12A	12	0.500	1.250	0.312	1	50
MHC16A	16	0.500	1.500	0.312	1	50
MHC20A	20	0.750	1.750	0.312	1	50

Item No.	SAE Size	Diameter Range D Min (In)	Diameter Range D Max (In)	A (In)	Pack Qty.	Bulk Pack Qty.
MHC24A	24	1.000	2.000	0.312	1	50
MHC28A	28	1.250	2.250	0.312	1	20
MHC30A	30	1.375	2.375	0.312	1	25
MHC32A	32	1.500	2.500	0.312	1	25
MHC36A	36	1.750	2.750	0.312	1	25
MHC44A	44	2.250	3.250	0.312	1	20
MHC48A	48	2.500	3.500	0.312	1	20

THC & SHC Series
Quick Assemble Hose Clamps



Specifications:
- Material: THC Series - UL94V-2 Nylon 6/6
  SHC Series - UL94 HB Nylon 6/6
- Color: THC Series: Black
  SHC Series: White

Features:
- Quick and easy assembly or removal
- Adjustable locking range to fit various diameters
- Excellent for securing the ends of textile covers to the hose assembly

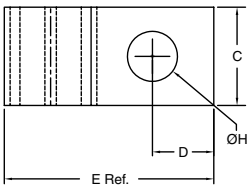
Item No.	Bundle Range In	Bundle Range mm	W In	W mm	Pack Qty.	Bulk Pack Qty.
THC1A	0.260 - 0.315	6.6 - 8.0	0.197	5.0	1	100
THC2A	0.315 - 0.362	8.0 - 9.2	0.197	5.0	1	100
SHC-23	0.359 - 0.390	9.1 - 9.9	0.220	5.6	1	100
THC3A	0.362 - 0.413	9.2 - 10.5	0.197	5.0	1	100
SHC-26	0.390 - 0.468	9.9 - 11.9	0.220	5.6	1	100
THC4A	0.413 - 0.472	10.5 - 12.0	0.236	6.0	1	100
SHC-30	0.468 - 0.531	11.9 - 13.5	0.220	5.6	1	100
THC6A	0.504 - 0.591	12.8 - 15.0	0.276	7.0	1	100
SHC-32	0.531 - 0.593	13.5 - 15.1	0.220	5.6	1	100
THC7A	0.591 - 0.677	15.0 - 17.2	0.276	7.0	1	100
SHC-38	0.593 - 0.674	15.1 - 16.7	0.220	5.6	1	100
THC8A	0.670 - 0.728	17.0 - 18.5	0.276	7.0	1	100
SHC-44	0.687 - 0.812	17.5 - 20.6	0.220	5.6	1	100
THC9A	0.717 - 0.807	18.2 - 20.5	0.276	7.0	1	100
SHC-50	0.750 - 0.875	19.1 - 22.2	0.220	5.6	1	100
THC10A	0.807 - 0.906	20.5 - 23.0	0.276	7.0	1	100
THC11A	0.866 - 0.984	22.0 - 25.0	0.276	7.0	1	100
SHC-56	0.875 - 1.000	22.2 - 25.4	0.220	5.6	1	100
SHC-62	0.953 - 1.093	24.2 - 27.8	0.310	7.9	1	100
THC12A	0.984 - 1.102	25.0 - 28.0	0.276	7.0	1	100

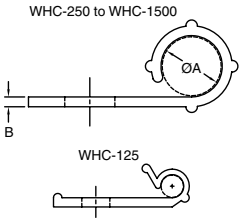
Item No.	Bundle Range In	Bundle Range mm	W In	W mm	Pack Qty.	Bulk Pack Qty.
THC13A	1.063 - 1.181	27.0 - 30.0	0.295	7.5	1	100
SHC-68	1.093 - 1.187	26.2 - 30.2	0.310	7.9	1	100
THC14A	1.161 - 1.280	29.5 - 32.5	0.295	7.5	1	100
THC15A	1.280 - 1.398	32.5 - 35.5	0.315	8.00	1	100
SHC-80	1.250 - 1.437	31.8 - 36.5	0.310	7.9	1	100
THC16A	1.378 - 1.516	35.0 - 38.5	0.315	8.0	1	50
SHC-92	1.406 - 1.625	35.7 - 41.3	0.360	9.1	1	100
THC17A	1.496 - 1.634	38.0 - 41.5	0.315	8.0	1	50
THC18A	1.614 - 1.752	41.0 - 44.5	0.315	8.0	1	50
THC19A	1.732 - 1.870	44.0 - 47.5	0.315	8.0	1	50
THC20A	1.850 - 1.988	47.0 - 50.5	0.315	8.0	1	50
THC21A	1.969 - 2.106	50.0 - 53.5	0.315	8.0	1	50
THC22A	2.087 - 2.244	53.0 - 57.0	0.315	8.0	1	50
SHC-134	2.125 - 2.375	54.0 - 60.3	0.400	10.2	1	100
THC23A	2.224 - 2.382	56.5 - 60.5	0.315	8.0	1	50
THC24A	2.362 - 2.559	60.0 - 65.0	0.315	8.0	1	50
THC25A	2.598 - 2.756	66.0 - 70.0	0.315	8.0	1	50
THC26A	2.756 - 2.953	70.0 - 75.0	0.315	8.0	1	50
THC27A	2.992 - 3.150	76.0 - 80.0	0.315	8.0	1	50
THC28A	3.150 - 3.346	80.0 - 85.0	0.315	8.0		50

WHC
Wire Harness Clamp

Richco

Expanded Line





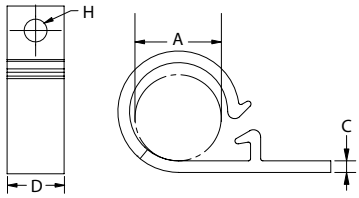
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: See Table

Features:
- Cables can be removed for wiring changes or replacements

Item No. Natural	Item No. Black	Approval	A Holding Ø In	A Holding Ø mm	H Hole Ø In	H Hole Ø mm	C In	C mm	B In	B mm	D In	D mm	E Ref. In	E Ref. mm	Bulk Pack Qty.
WHC-125-01	WHC-125-01BK		0.125	3.2	0.156	4	0.330	8.4	0.050	1.3	0.230	5.8	0.750	19.1	1000
WHC-250-01	WHC-250-01BK		0.250	6.4	0.204	5.2	0.400	10.2	0.040	1	0.250	6.4	0.830	21.1	1000
WHC-375-01	WHC-375-01BK		0.375	9.5	0.204	5.2	0.400	10.2	0.050	1.3	0.190	4.8	0.830	21.1	1000
WHC-500-01	WHC-500-01BK		0.500	12.7	0.204	5.2	0.400	10.2	0.070	1.8	0.250	6.4	1.156	29.4	1000
WHC-625-01	WHC-625-01BK		0.625	15.9	0.204	5.2	0.500	12.7	0.080	2	0.190	4.8	1.125	28.6	1000
WHC-750-01	WHC-750-01BK		0.750	19.1	0.204	5.2	0.500	12.7	0.090	2.2	0.190	4.8	1.281	32.5	1000
WHC-1000-01	WHC-1000-01BK		1.000	25.4	0.204	5.2	0.500	12.7	0.090	2.2	0.190	4.8	1.531	38.9	500
WHC-1500-01	WHC-1500-01BK		1.500	38.1	0.204	5.2	0.500	12.7	0.100	2.5	0.190	4.8	2.125	53.9	500

EXWHC
Wire Harness Clamp

Richco



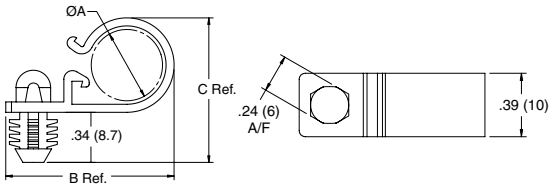
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:
- Cables are easily inserted into clamp and locked in place
- Cables can be removed for wiring change or replacements

Item No.	A Holding Ø In	A Holding Ø mm	H Mounting Hole Ø In	H Mounting Hole Ø mm	C In	C mm	D Ref. In	D Ref. mm	Bulk Pack Qty.
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

BHLWHC
Blind Hole Mounted Clamp

Richco



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

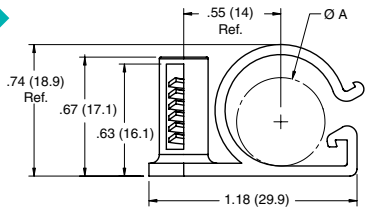
Features:
- Easily pushed into mounting hole using a standard 6mm hexagonal socket pressed onto mounting head
- Releasable & reusable for easy wire bundling

Item No.	A Max Bundle Ø In	A Max Bundle Ø mm	Mounting Hole Ø In	Mounting Hole Ø mm	B In	B mm	C In	C mm	Panel Thickness In	Panel Thickness mm	Bulk Pack Qty.
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

SMWHC
Stud Mount Wire Harness Clip

Richco

New



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

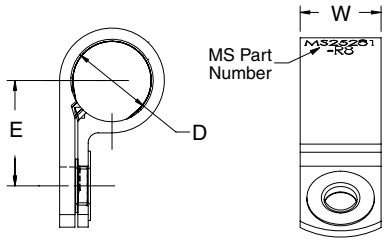
Item No.	A Holding Ø In	A Holding Ø mm	Mounting Method	Bulk Pack Qty.
SMWHC-500-01	0.5	12.7	Push onto a #8, #10, M4 or M5 Screw or Stud	500

CABLE CLAMPS

NM - MS25281
Heavy Duty Support Clamp

Richco

Expanded Line



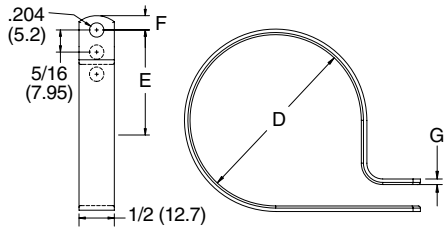
Specifications:
- Material: UL94 V-2 Heat Stabilized Nylon, conforms to MIL-M-20693/ASTM D-4066 Eyelet: Aluminum, anodized in accordance with MIL-A-8625
- Color: Natural

Features:
- Complies with MS-25281
- Strong & 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	Bundle Ø D		Recommended Mounting Screw	W		E		Pack Qty.	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	1	500
NM-4-R4	MS25281-R4	1/4	6.4	#10 or M5	0.503	12.8	0.510	13.0	1	500
NM-5-R5	MS25281-R5	5/16	7.9	#10 or M5	0.503	12.8	0.546	13.9	1	500
NM-6-R6	MS25281-R6	3/8	9.5	#10 or M5	0.503	12.8	0.578	14.7	1	500
NM-7-R7	MS25281-R7	7/16	11.1	#10 or M5	0.503	12.8	0.608	15.4	1	500
NM-8-R8	MS25281-R8	1/2	12.7	#10 or M5	0.503	12.8	0.639	16.2	1	500
NM-9-R9	MS25281-R9	9/16	14.3	#10 or M5	0.503	12.8	0.661	16.8	1	500
NM-10-R10	MS25281-R10	5/8	15.9	#10 or M5	0.553	14.1	0.706	17.9	1	500
NM-11-R11	MS25281-R11	11/16	17.5	#10 or M5	0.553	14.1	0.785	19.9	1	500
NM-12-R12	MS25281-R12	3/4	19.1	#10 or M5	0.553	14.1	0.816	20.7	1	500
NM-13-R13	MS25281-R13	13/16	20.6	#10 or M5	0.553	14.1	0.827	21.0	1	500
NM-14-R14	MS25281-R14	7/8	22.2	#10 or M5	0.553	14.1	0.878	22.3	1	500
NM-16-R16	MS25281-R16	1	25.4	#10 or M5	0.553	14.1	0.941	23.9	1	500
NM-18-R18	MS25281-R18	1-1/8	28.6	#10 or M5	0.553	14.1	0.983	25.0	1	500
NM-20-R20	MS25281-R20	1-1/4	31.8	#10 or M5	0.553	14.1	1.006	27.1	1	100
NM-22-R22	MS25281-R22	1-3/8	34.9	#10 or M5	0.553	14.1	1.110	28.2	1	100
NM-24-R24	MS25281-R24	1-1/2	38.1	#10 or M5	0.553	14.1	1.170	29.7	1	100
NM-26-R26	MS25281-R26	1-5/8	41.3	#10 or M5	0.553	14.1	1.250	31.8	1	100
NM-28-R28	MS25281-R28	1-3/4	44.5	#10 or M5	0.553	14.1	1.300	33.0	1	100
NM-3-F3	MS25281-F3	3/16	4.8	#10 or M5	0.500	12.7	0.498	12.6	1	500
NM-4-F4	MS25281-F4	1/4	6.4	#10 or M5	0.500	12.7	0.529	13.4	1	500
NM-5-F5	MS25281-F5	5/16	7.9	#10 or M5	0.500	12.7	0.560	14.2	1	500
NM-6-F6	MS25281-F6	3/8	9.5	#10 or M5	0.500	12.7	0.592	15.0	1	500
NM-7-F7	MS25281-F7	7/16	11.1	#10 or M5	0.500	12.7	0.623	15.8	1	500
NM-8-F8	MS25281-F8	1/2	12.7	#10 or M5	0.500	12.7	0.654	16.6	1	500
NM-10-F10	MS25281-F10	5/8	15.9	#10 or M5	0.600	15.2	0.783	19.9	1	500
NM-13-F13	MS25281-F13	13/16	20.6	#10 or M5	0.600	15.2	0.877	22.3	1	500

NB-3
Adjustable Cable Clamp

Richco

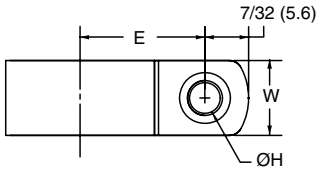


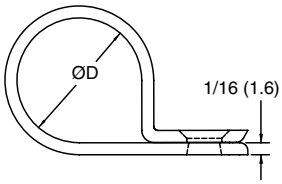
Specifications:
- Material: See Table
- Color: See Table

Features:
- Adjustable design allows you to bundle multiple diameters of wires & cables while securing in place
- Clamp down and screw clamp to chassis to secure

Item No.			Bundle Ø D													
UL94 V-2 Nylon 6/6		UL94 V-0 Nylon 6/6	Inside Hole		Center Hole		Outside Hole		E Ref.		F		G		Bulk Pack Qty.
Natural	Black	Natural	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	
N-20B	**N-20B-BK**	**N-20B-19**	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**	**N-24B-19**	1-1/4	31.8	1-3/8	34.9	1-15/32	37.3	1.031	26.2	0.219	5.6	0.063	1.6	500
N-32B	**N-32B-BK**	**N-32B-19**	1-3/4	44.5	1-7/8	47.6	2	50.8	1.453	36.9	0.203	5.2	0.065	1.7	500

N / NB
Cable Clamp



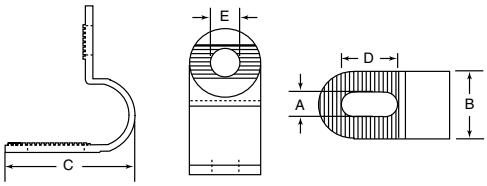


Specifications:
- Material: Nylon 6/6
- Color: Refer to chart

Features:
- Designed to secure wires and cables in place
- Clamp down and screw clamp to chassis to secure

Item No.			D Holding Ø		W		H Hole Ø		E Ref.		Bulk Pack Qty.
Natural UL94 V-2	Black UL94 V-2	Natural UL94 V-0	In	mm	In	mm	In	mm	In	mm	
N-1	**N-1-BK**	**N-1-19**	0.063	1.6	0.375	9.5	0.125	3.2	0.270	6.9	1000
N-2	**N-2-BK**	**N-2-19**	0.125	3.2	0.375	9.5	0.172	4.4	0.328	8.3	1000
CCL001A	—	—	0.125	3.2	0.377	9.6	0.188	4.8	0.374	9.5	100
N-2B	**N-2B-BK**	**N-2B-19**	0.125	3.2	0.500	12.7	0.204	5.2	0.328	8.3	1000
N-3	**N-3-BK**	**N-3-19**	0.188	4.7	0.375	9.5	0.172	4.4	0.391	9.9	1000
CCL002A	—	—	0.188	4.7	0.377	9.6	0.188	4.7	0.413	10.5	100
N-3B	**N-3B-BK**	**N-3B-19**	0.188	4.7	0.500	12.7	0.204	5.2	0.391	9.9	1000
N-4	**N-4-BK**	**N-4-19**	0.250	6.4	0.375	9.5	0.172	4.4	0.422	10.7	1000
CCL003A	—	—	0.250	6.4	0.393	10.0	0.181	4.6	0.394	10.0	100
N-4B	**N-4B-BK**	**N-4B-19**	0.250	6.4	0.500	12.7	0.204	5.2	0.422	10.7	1000
N-5	**N-5-BK**	**N-5-19**	0.313	7.9	0.375	9.5	0.172	4.4	0.453	11.5	1000
CCL004A	—	—	0.313	7.9	0.393	10.0	0.181	4.6	0.472	12.0	100
N-5B	**N-5B-BK**	**N-5B-19**	0.313	7.9	0.500	12.7	0.204	5.2	0.453	11.5	1000
N-6	**N-6-BK**	**N-6-19**	0.375	9.5	0.375	9.5	0.172	4.4	0.484	12.3	1000
CCL005A	—	—	0.375	9.5	0.472	12.0	0.181	4.6	0.492	12.5	100
N-6B	**N-8B-BK**	**N-8B-19**	0.375	9.5	0.500	12.7	0.204	5.2	0.484	12.3	1000
N-7	**N-7-BK**	**N-7-19**	0.438	11.1	0.375	9.5	0.172	4.4	0.531	13.5	1000
N-7B	**N-7B-BK**	**N-7B-19**	0.438	11.1	0.500	12.7	0.204	5.2	0.531	13.5	1000
N-8	**N-8-BK**	**N-8-19**	0.500	12.7	0.375	9.5	0.172	4.4	0.563	14.3	1000
CCL006A	—	—	0.500	12.7	0.472	12.0	0.196	5.0	0.598	15.2	100
N-8B	**N-8B-BK**	**N-8B-19**	0.500	12.7	0.500	12.7	0.204	5.2	0.563	14.3	1000
N-9B	**N-9B-BK**	**N-9B-19**	0.563	14.3	0.500	12.7	0.204	5.2	0.594	15.0	1000
CCL007A	—	—	0.625	15.9	0.472	12.0	0.181	4.6	0.717	18.8	100
N-10B	**N-10B-BK**	**N-10B-19**	0.625	15.9	0.500	12.7	0.204	5.2	0.625	15.9	1000
N-11B	**N-11B-BK**	**N-11B-19**	0.688	17.5	0.500	12.7	0.204	5.2	0.656	16.7	1000
CCL008A	—	—	0.750	19.1	0.463	11.8	0.181	4.6	0.717	18.8	100
N-12B	**N-12B-BK**	**N-12B-19**	0.750	19.1	0.500	12.7	0.204	5.2	0.766	19.4	1000
N-14B	**N-14B-BK**	**N-14B-19**	0.875	22.2	0.500	12.7	0.204	5.2	0.813	20.6	500
CCL009A	—	—	1.000	25.4	0.472	12.0	0.181	4.6	0.866	22.0	100
N-16B	**N-16B-BK**	**N-16B-19**	1.000	25.4	0.500	12.7	0.204	5.2	0.906	23.0	500
CCL010A	—	—	1.062	27.0	0.472	12.0	0.181	4.6	0.945	24.0	100
N-18B	**N-18B-BK**	**N-18B-19**	1.125	28.6	0.500	12.7	0.204	5.2	0.969	24.6	500
CCL011A	—	—	1.250	31.8	0.472	12.0	0.181	4.6	1.031	26.2	100
CCL012A	—	—	1.446	36.7	0.472	12.0	0.181	4.6	1.181	30.0	100

CCLA
Adjustable "P" Clamps

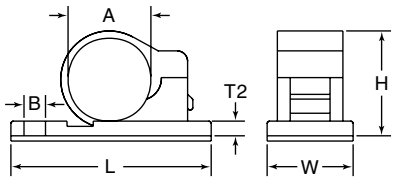


Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:
- Adjustable sized "P" Style clip designed to secure wires and cables in place
- Rounded interior edges protect bundles or tubes at insulation
- To apply, clamp down and screw clamp to chassis to secure

Item No.	A		B		C		D		E		Max Bundle Range		Bulk Pack Qty.
	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	
CCLA010A	0.197	5.0	0.512	13.0	0.925	23.5	0.409	10.4	0.217	5.5	0.189 - 0.252	4.8 - 6.4	100
CCLA020A	0.197	5.0	0.512	13.0	1.201	30.5	0.634	16.1	0.217	5.5	0.252 - 0.374	6.7 - 9.5	100
CCLA030A	0.197	5.0	0.512	13.0	1.575	40.0	0.815	20.7	0.217	5.5	0.374 - 0.563	9.5 - 14.3	100

CCA
Self Adhesive Cable Clamps



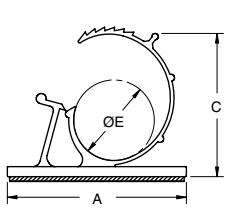
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Black

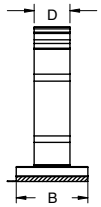
Features:
- Fixed diameter clamp range
- Can be mounted with adhesive tape backing or via screw mounting hole

Item No.	A Ø		B Ø		T2		L		W		H		Bulk Pack Qty.
	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	
CCA001A	0.236	6.00	0.173	4.40	0.079	2.00	1.016	25.80	0.528	13.40	0.358	9.10	100
CCA002A	0.354	9.00	0.173	4.40	0.118	3.00	1.157	29.40	0.528	13.40	0.551	14.00	100
CCA003A	0.472	12.00	0.173	4.40	0.118	3.00	1.398	35.50	0.646	16.40	0.650	16.50	100
CCA004A	0.551	14.00	0.173	4.40	0.118	3.00	1.437	36.50	0.646	16.40	0.728	18.50	100
CCA005A	0.630	16.00	0.173	4.40	0.118	3.00	1.516	38.50	0.646	16.40	0.807	20.50	100
CCA006A	0.709	18.00	0.173	4.40	0.118	3.00	1.654	42.00	0.646	16.40	0.886	22.50	100

CABLE CLAMPS

AKKL / CCAA
Adhesive Mount Adjustable Clamp



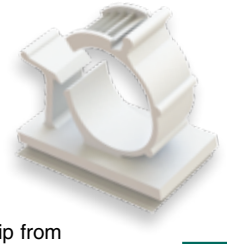


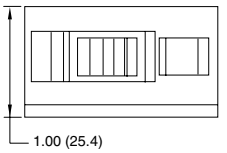
Specifications:
- Material: Nylon 6/6
- Color: See Table

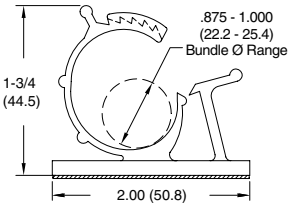
Features:
- Locks securely and easily. Reopens for routing changes
- Ratcheting clip holds bundle securely in place
- Good for high vibration applications. Once closed the clip will not open until tab is released

Item No.				E Bundle Ø Range Ref.		A		B		C Ref.		D		Bulk Pack Qty.
UL94 V-2	UL94 V-0	Approval	Color	In	mm	In	mm	In	mm	In	mm	In	mm	
AKKL-2140A-RT	**AKKL-2140A-19**		Natural	0.215 - 0.258	5.5 - 6.5	0.850	21.6	0.650	16.5	0.708	18	0.390	10	100
AKKL-3140A-RT	**AKKL-3140A-19**		Natural	0.312 - 0.406	7.9 - 10.3	1.000	25.4	0.750	19.1	0.866	22	0.400	10.2	100
CCAA001A	—	—	Black	0.312 - 0.406	7.9 - 10.3	1.000	25.4	0.750	19.1	0.874	22.4	0.400	10.2	100
CCAA002A	—	—	Black	0.394 - 0.492	10.1 - 12.5	1.250	31.8	0.750	19.1	1.095	27.8	0.400	10.2	100
AKKL-4756A-RT	**AKKL-4756A-19**		Natural	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
CCAA003A	—	—	Black	0.496 - 0.606	12.6 - 15.4	1.500	38.1	0.750	19.1	1.250	31.8	0.500	12.7	100
AKKL-5775A-RT	**AKKL-5775A-19**		Natural	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
CCAA004A	—	—	Black	0.650 - 0.791	15.5 - 20.1	2.000	50.8	1.000	25.4	1.750	44.5	0.500	12.7	100
AKKL-8710A-RT	**AKKL-8710A-19**		Natural	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
CCAA005A	—	—	Black	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**	—	Natural	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
Side Lock Adhesive Mount Adjustable Clamp







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

PAKKL
Snap In Adjustable Clip

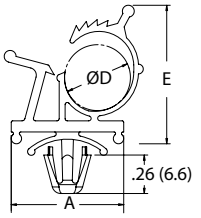


Figure 1

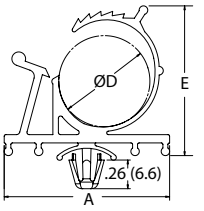


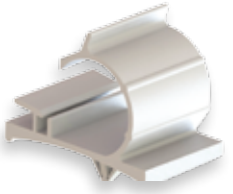
Figure 2

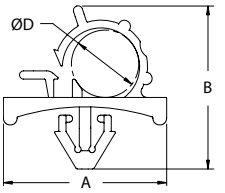
Specifications:
- Material: Nylon 6/6
- Color: Natural

Features:
- Gathers and routes cables and wires
- Adjusts to diameter needed to bundle
- Push mount design allows for fast installation

Item No.			A		Holding Ø D		E Ref.		Mounting Hole Ø		Panel Thickness		Depth		Bulk Pack Qty.
UL94 V-2	UL94 V-O	Figure	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	
PAKKL-3140-01	**PAKKL-3140-19**	1	0.750	19.1	0.310 - 0.400	7.9 - 10.2	0.940	23.8	0.250	6.4	0.030 - 0.060	0.8 - 1.5	0.350	8.9	100
PAKKL-4756-01	**PAKKL-4756-19**	1	1.240	31.5	0.469 - 0.563	11.9 - 14.3	1.170	29.8	0.250	6.4	0.030 - 0.060	0.8 - 1.5	0.620	15.7	100
PAKKL-5775-01	**PAKKL-5775-19**	2	1.500	38.1	0.578 - 0.750	14.7 - 19.1	1.360	34.5	0.250	6.4	0.030 - 0.060	0.8 - 1.5	0.750	19.1	100

PKKL
Plug In Locking Clamp



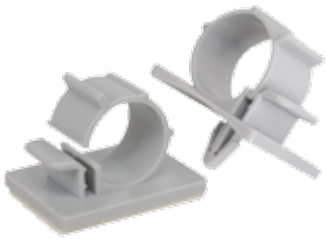


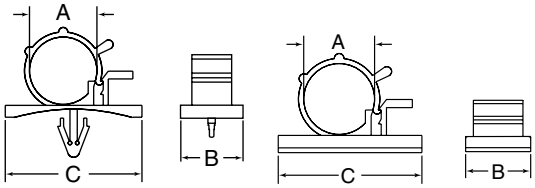
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:
- Part can be opened and closed multiple times for adding or removing wires
- Large contoured base assures stable mounting

Item No.	A		B		Holding Ø D		Mounting Hole Ø		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	0.670	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	0.750	19.1	200
PKKL-4	1.190	30.3	1.260	32.0	0.532	13.5	0.256	6.5	0.031 - 0.062	0.8 - 1.6	10.760	19.4	100

CCP / CCA
Push Mount & Adhesive Clamp

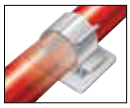




CCP Push Mount CCA Adhesive

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

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



Item No.		A Bundle Ø Range		B		C		Mounting Hole Ø		Panel Thickness		Bulk Pack Qty.
Push Mount	Adhesive	In	mm	In	mm	In	mm	In	mm	In	mm	
CCP001A	**CCA007A**	0.230 - 0.280	6.0 - 7.0	0.787	20.00	0.984	25.00	0.187	4.80	0.070 - 0.110	1.8 - 2.8	100
CCP002A	**CCA008A**	0.280 - 0.310	7.0 - 8.0	0.787	20.00	0.984	25.00	0.187	4.80	0.070 - 0.110	1.8 - 2.8	100
CCP003A	**CCA009A**	0.350 - 0.390	9.0 - 10.0	0.984	25.00	1.181	30.00	0.187	4.80	0.070 - 0.110	1.8 - 2.8	100
CCP004A	**CCA010A**	0.470 - 0.550	12.0 - 14.0	0.984	25.00	1.181	30.00	0.187	4.80	0.070 - 0.110	1.8 - 2.8	100
CCP005A	**CCA011A**	0.620 - 0.710	16.0 - 18.0	0.984	25.00	1.181	30.00	0.187	4.80	0.070 - 0.110	1.8 - 2.8	100

WAC
Webbed Adjustable Clip

Richco

New

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

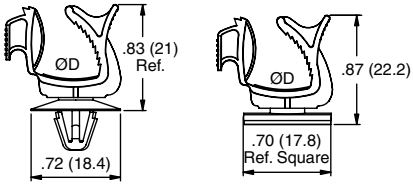
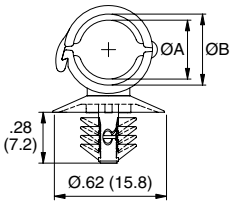


Figure 1 Figure 2

Item No.	D Bundle Ø		Mounting Hole Ø		Panel Thickness		Figure	Bulk Pack Qty.
	In	mm	In	mm	In	mm		
WAC1-01	.12 - .34	3.0 - 8.5	.157-.189	4.0 - 4.8	.019-.063	0.5 - 1.6	1	1000
WAC2-01	.12 - .34	3.0 - 8.5	.236-.267	6.0 - 6.8	.019-.098	0.5 - 2.5	1	1000
WAC3-01A4-RT	.12 - .34	3.0 - 8.5	Adhesive	Adhesive	Adhesive	Adhesive	2	1000

HLCC
Hinged Locking Clamp

Richco



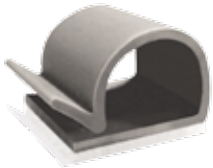
Specifications:
- Material: Heat Stabilized UL94 V-2 Nylon 6/6
- Color: Black

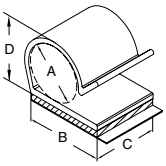
Features:
- Securely holds corrugated/convoluted tubing or other bundles
- An internal rib spanning the diameter of the clamp provides a tight grip
- Releasable latch convenient for maintenance
- Fir-tree mount accommodates a large range of panel thicknesses

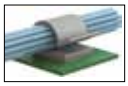
Item No.	Recommended Corrugated Tube Size				Mounting Hole Ø		Panel Thickness		A Ref.		B Ref.		Bulk Pack Qty.
	I.D.		O.D.										
	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	
HLCC-1BK	.20	5.0	.28	7.1	.26 - .28	6.5 - 7.0	.03 - .12	.0.8 - 3.0	.23	5.8	.28	7.2	1000
HLCC-2BK	.27	6.9	.39	9.9	.26 - .28	6.5 - 7.0	.03 - .12	.0.8 - 3.0	.33	8.3	.39	10.0	1000

KKR
Adhesive Mount Clamp

Richco





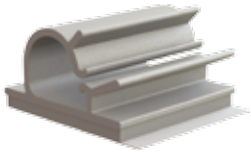


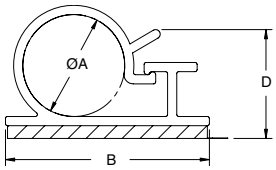
Specifications:
- Material: UL94 V-0 PVC
- Color: Grey

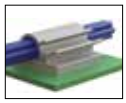
Item No.	A Bundle Ø		B		C		Max Capacity D		
	In	mm	In	mm	In	mm	In	mm	Bulk Pack Qty.
KKR-5A1-RT	0.521	13.2	0.750	19.1	0.750	19.1	0.680	17.3	500

CABLE CLAMPS

KKL
Adhesive Mount Locking Clamp







Specifications:
- Material: UL94 V-0 PVC
- Color: Grey

Features:
- Gathers, routes, and locks cables & wires
- Can be opened and closed multiple times for addition or removal of cables

Item No.	Holding Capacity A		B		Depth		D		Bulk Pack Qty.
	In	mm	In	mm	In	mm	In	mm	
KKL-4-RT	0.250	6.4	0.750	19.1	0.750	19.1	0.375	9.5	500
KKL-8-RT	0.500	12.7	1.000	25.4	1.000	25.4	0.844	21.4	100
KKL-12-RT	0.750	19.1	1.000	25.4	1.000	25.4	1.000	25.4	100

KKD / KKDL
Adhesive Mount Clamp

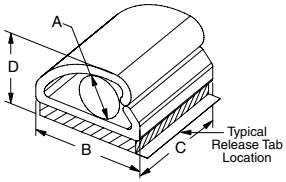


Figure 1

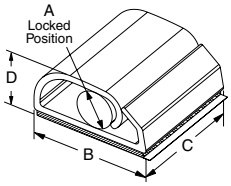


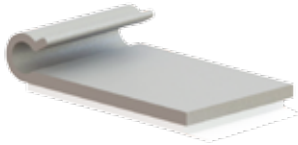
Figure 2

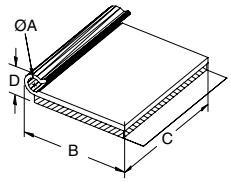
Specifications:
- Material: UL94 V-0 PVC
- Color: Grey

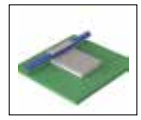
Features:
- To hold wires, cords or cables in place

Item No.	Figure	Holding Capacity A		B		C		D at Max Capacity Ref.		Bulk Pack Qty.
		In	mm	In	mm	In	mm	In	mm	
KKDL-4-RT	2	0.125	3.2	0.500	12.7	0.500	12.7	0.280	7.1	500
KKDL-8-RT	2	0.219	5.6	0.750	19.1	0.750	19.1	0.430	10.9	100
KKD-4-RT	1	0.250	6.4	0.500	12.7	0.500	12.7	0.400	10.2	500
KKD-8-RT	1	0.500	12.7	0.750	19.1	0.750	19.1	0.730	18.5	100
KKD-12-RT	1	0.750	19.1	1.125	28.6	1.000	25.4	1.020	25.9	100
KKD-16-RT	1	1.000	25.4	1.500	38.1	1.250	31.8	1.300	33.0	100

KKJ
Adhesive Mount Clamp



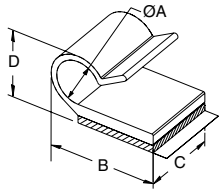


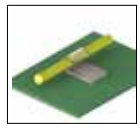


Specifications:
- Material: UL94 V-0 PVC
- Color: Grey

Item No.	A Bundle Ø		B		C		D at Max Capacity Ref.		Bulk Pack Qty
	In	mm	In	mm	In	mm	In	mm	
KKJ-2-RT	1/8	3.2	27/32	21.4	1	25.4	1/4	6.4	1000
KKJ-3-RT	3/16	4.8	7/8	22.2	1-1/4	31.8	5/16	7.9	1000
KKJ-4-RT	1/4	6.4	29/32	23.0	1-1/2	38.1	13/32	10.3	1000
KKJ-5-RT	5/16	7.9	1-7/32	31.0	1-3/4	44.5	7/16	11.1	1000
KKJ-6-RT	**3/8**	**9.5**	**1-9/32**	**32.5**	**2**	**50.8**	**17/32**	**13.5**	**1000**

MKKJ
Mini Adhesive Mount Clamp



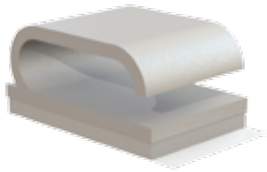


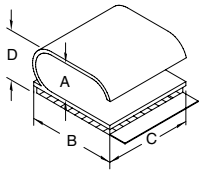
Specifications:
- Material: UL94 V-0 PVC
- Color: Clear

Features:
- Clear color hides clamp

Item No.	Holding Capacity A		B		C		D		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

KKF
Adhesive Mount Clamp



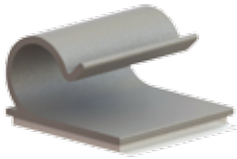


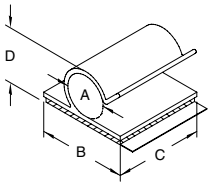
Specifications:
- Material: UL94 V-0 PVC
- Color: Grey

Features:
- Can hold 3 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	0.562 x 0.230	14.3 x 5.2	0.750	19.1	0.750	19.1	0.359	9.1	100

KKC
Adhesive Mount Clamp





Specifications:
- Material: UL94 V-0 PVC
- Color: Grey

Features:
- For clamping cable or tubing securely

Item No.	Holding Capacity A		B		C		D		Bulk Pack Qty.
	In	mm	In	mm	In	mm	In	mm	
KKC-2-RT	0.125	3.2	0.750	19.1	0.750	19.1	0.310	7.9	500
KKC-3-RT	0.187	4.8	0.750	19.1	0.750	19.1	0.330	8.4	500
KKC-4-RT	0.250	6.4	0.750	19.1	0.750	19.1	0.420	10.7	500
KKC-5-RT	0.312	7.9	0.750	19.1	0.750	19.1	0.480	12.2	500
KKC-6-RT	0.375	9.5	0.750	19.1	0.750	19.1	0.600	15.2	500
KKC-8-RT	0.500	12.7	1.000	25.4	1.000	25.4	0.690	17.5	100
KKC-12-RT	0.750	19.1	1.000	25.4	1.000	25.4	0.940	23.9	100

UC / HUC
Adhesive Mount U Clamp

Expanded Line

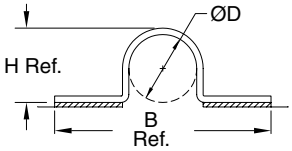


Figure 1

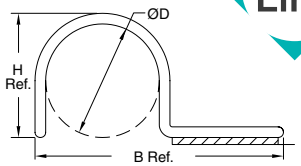
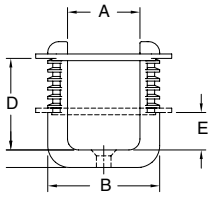


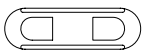
Figure 2

Specifications:
- Material: UL94 V-0 PVC
- Color: Black

Item No.	Figure	D Holding Capacity		B Ref.		H Ref.		Depth		Bulk Pack Qty.
		In	mm	In	mm	In	mm	In	mm	
UC-2-RT	1	0.125	3.2	1.219	30.9	0.172	4.4	0.625	15.9	1000
HUC-2-RT	2	0.125	3.2	0.718	18.3	0.172	4.4	0.625	15.9	1000
UC-4-RT	1	0.250	6.4	1.344	34.1	0.297	7.5	0.625	15.9	1000
HUC-4-RT	2	0.250	6.4	1.343	34.1	0.297	7.5	0.625	15.9	1000
UC-6-RT	1	0.375	9.5	1.469	37.3	0.422	10.7	0.625	15.9	1000
UC-8-RT	1	0.500	12.7	1.594	40.4	0.547	13.9	0.625	15.9	1000

D
Two-Piece Locking Clamp





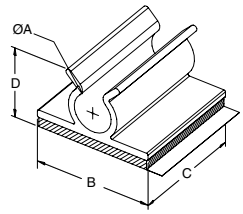
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

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	1.250	31.8	0.500	12.7	100
D-1.5	1.457	37.0	2.175	55.3	1.650	41.9	0.660	16.8	100

CABLE CLIPS & CLAMPS

KKU
Adhesive Mount Clamp



Specifications:
- Material: UL94 V-0 PVC
- Color: Grey

Features:
- To hold wires, cords, or cables in place

Item No.	Holding Capacity A		B		C		D Ref.		Bulk Pack Qty.
	In	mm	In	mm	In	mm	In	mm	
KKU-2-RT	0.125	3.2	0.750	19.1	0.750	19.1	0.281	7.1	500
KKU-4-RT	0.250	6.4	0.750	19.1	0.750	19.1	0.468	11.9	500
KKU-6-RT	0.375	9.5	0.750	19.1	0.750	19.1	0.593	15.1	500
KKU-8-RT	0.500	12.7	1.000	25.4	1.000	25.4	0.687	17.5	100
KKU-9-RT	0.562	14.3	1.000	25.4	1.000	25.4	0.750	19.1	100
KKU-12-RT	0.750	19.1	1.000	25.4	1.000	25.4	0.906	23.0	100

HURC / DHURC / HURCBH / HURCS / DHURCS
U Clamp

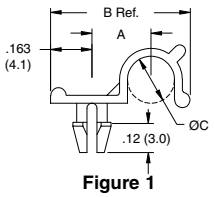


Figure 1

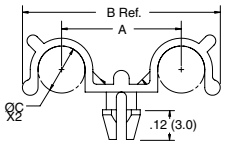


Figure 2

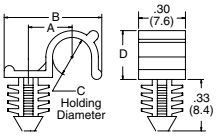


Figure 3

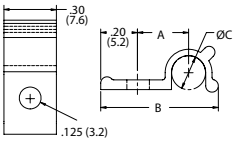


Figure 4

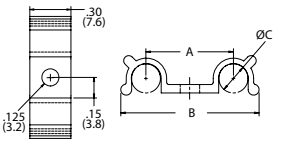


Figure 5

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

Features:
- For clamping cable or tubing securely

Item No.	Figure	Holding Ø C In	Holding Ø C mm	Mounting Hole Ø In	Mounting Hole Ø mm	Approval	A In	A mm	B Ref. In	B Ref. mm	Panel Thickness In	Panel Thickness mm	Bulk Pack Qty.
HURC-2-01	1	0.125	3.2	0.125	3.2	UL	0.200	5.1	0.490	12.4	0.062	1.6	1000
HURC-3-01	1	0.187	4.8	0.125	3.2	UL	0.240	6.1	0.560	14.2	0.062	1.6	1000
HURC-4-01	1	0.250	6.4	0.125	3.2	UL	0.270	6.9	0.620	15.7	0.062	1.6	1000
HURC1-2-01	1	0.125	3.2	0.125	3.2	UL	0.200	5.1	0.490	12.4	0.093	2.4	1000
HURC1-3-01	1	0.187	4.8	0.125	3.2	UL	0.240	6.1	0.560	14.2	0.093	2.4	1000
HURC1-4-01	1	0.250	6.4	0.125	3.2	UL	0.270	6.9	0.620	15.7	0.093	2.4	1000
DHURC-2-01	2	0.125	3.2	0.125	3.2	UL	0.410	10.4	0.660	16.8	0.062	1.6	1000
DHURC-3-01	2	0.187	4.8	0.125	3.2	UL	0.480	12.2	0.790	20.1	0.062	1.6	1000
DHURC-4-01	2	0.250	6.4	0.125	3.2	UL	0.550	14.0	0.940	23.9	0.062	1.6	1000
HURCS-2-01	4	0.125	3.2	0.125	3.2	—	0.250	6.2	0.590	15.0	—	—	1000
HURCS-3-01	4	0.187	4.8	0.125	3.2	—	0.280	7.1	0.650	15.6	—	—	1000
HURCS-4-01	4	0.250	6.4	0.125	3.2	—	0.320	8.1	0.720	18.3	—	—	1000
DHURCS-2-01	5	0.125	3.2	0.125	3.2	—	0.490	12.4	0.750	19.0	—	—	1000
DHURCS-3-01	5	0.187	4.8	0.125	3.2	—	0.560	14.2	0.890	22.6	—	—	1000
DHURCS-4-01	5	0.250	6.4	0.125	3.2	—	0.640	16.2	1.020	25.9	—	—	1000
HURCBH-2-01	3	0.125	3.2	0.250	6.4	—	0.490	12.4	0.170	4.3	0.250	6.4	1000
HURCBH-3-01	3	0.187	4.8	0.250	6.4	—	0.560	14.2	0.240	6.1	0.250	6.4	1000
HURCBH-4-01	3	0.250	6.4	0.250	6.4	—	0.620	15.7	0.300	7.6	0.250	6.4	1000

SRC
Split Routing Clamp

Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural
- Mounting Hole .250 (6.4)

Features:
- Gathers and routes cables and wires
- Push mount design allows for fast installation

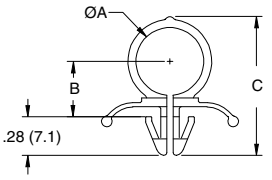


Figure 1

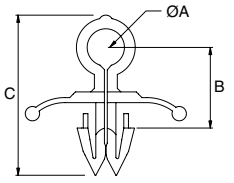


Figure 2

Item No.	Approval	Figure	A In	A mm	B In	B mm	C Ref. In	C Ref. mm	Panel Thickness In	Panel Thickness mm	Bulk Pack Qty.
SRC-1-01		2	0.197	5.0	0.443	11.2	0.878	22.3	0.079 - 0.118	2.0 - 3.0	1000
SRC-4-01	UL	1	0.250	6.4	0.260	6.6	0.750	19.1	0.050 - 0.060	1.3 - 1.5	1000
SRC-7-01	UL	1	0.437	11.1	0.390	9.8	0.970	24.7	0.050 - 0.060	1.3 - 1.5	1000
SRC-8-01	UL	1	0.500	12.7	0.430	10.8	1.040	26.5	0.050 - 0.060	1.3 - 1.5	1000
SRC-10-01	UL	1	0.625	15.9	0.500	12.7	1.180	29.9	0.050 - 0.060	1.3 - 1.5	1000

SRCC
Strain Relief Clamp

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

Features:
- Grips cable providing slight strain relief
- Securely installed with two screws

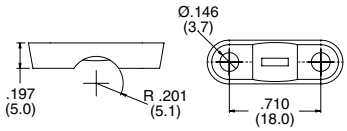


Figure 1

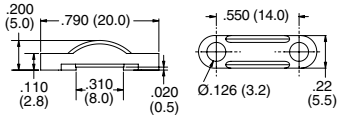
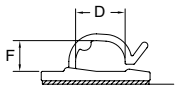


Figure 2

Item No.	Figure	Color	Max Cable Dia.	Mounting Screws	Bulk Pack Qty.
SRCC-1	1	Grey	0.177	M3 or #6	1000
SRCC-2	2	Black	0.310	M3 or #4	1000

WCK / MWCK
Adhesive Mount Clips



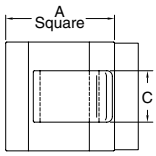
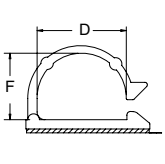


Figure 1



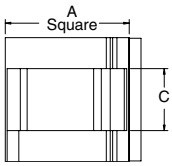


Figure 2

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

Features:
- To hold wires, cords, or cables in place

Item No.	Figure	Approval	A In	A mm	C In	C mm	D In	D mm	F In	F mm	Bulk Pack Qty.
WCK-180-01A-RT	1	UL	0.630	16.0	0.310	7.9	0.340	8.6	0.160	7.0	1000
WCK-280-01A4-RT	1	—	0.750	19.0	0.390	10.0	0.260	6.5	0.220	8.8	1000
WCK-460-01A-RT	1	UL	0.990	25.1	0.470	11.9	0.450	11.4	0.280	11.7	1000
MWCK-460-01A4-RT	2	—	0.750	19.0	0.470	11.9	0.450	11.4	0.280	11.6	1000
WCK-720-01A-RT	2	—	1.000	25.4	0.470	11.9	0.720	18.3	0.540	17.9	1000

WCA
Adhesive Mount Clips

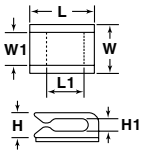


Figure 1

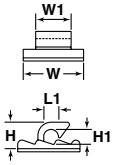


Figure 2

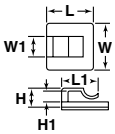


Figure 3

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

Features:
- Self-adhesive wire clip is designed to support lightweight wire bundles when properly applied on any clean, smooth, grease-free surface

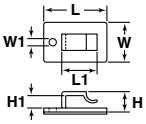


Figure 4

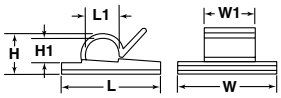


Figure 5

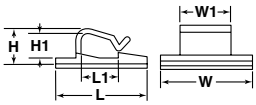


Figure 6

Item No.	Figure	L In	L mm	L1 In	L1 mm	W In	W mm	W1 In	W1 mm	H In	H mm	H1 In	H1 mm	Bulk Pack Qty.
WCA001A	1	0.510	13.00	0.354	9.00	0.370	9.50	0.260	6.50	0.200	5.20	0.110	2.80	100
WCA002A	2	0.630	16.00	0.190	4.80	0.610	15.50	0.354	9.00	0.270	6.80	0.190	4.80	100
WCA003A	3	0.630	16.00	0.490	12.50	0.630	16.00	0.354	9.00	0.340	8.70	0.150	3.70	100
WCA004A	4	1.060	27.00	0.580	14.80	0.670	17.00	0.120	3.10	0.340	8.70	0.220	5.50	100
WCA005A	5	0.750	19.00	0.230	5.90	0.750	19.00	0.394	10.00	0.280	7.20	0.190	4.90	100
WCA006A	1	0.630	16.00	0.470	11.90	0.620	15.80	0.354	9.00	0.354	9.00	0.230	5.80	100
WCA007A	6	1.060	26.80	0.470	11.90	1.040	26.50	0.480	12.30	0.460	11.70	0.330	8.30	100

RWS / RWSB
Round Clamp

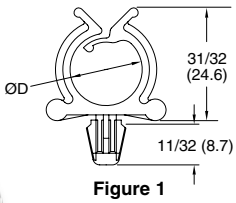


Figure 1

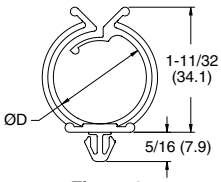
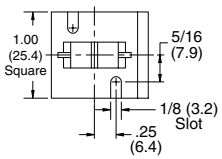


Figure 2



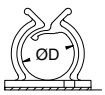


Figure 3

Specifications:
- Material: Nylon 6/6
- Color: Natural

Features:
- Gathers and routes cables & wires
- Push mount design allows for fast installation
- Adhesive base makes installation quick & easy

Item No. UL94 V-2	Item No. UL94 V-0	Mounting Method	Approval	Figure	Mounting Hole in	Mounting Hole mm	Panel Thickness in	Panel Thickness mm	Holding Ø D in	Holding Ø D mm	Depth In	Depth mm	Color	Bulk Pack Qty.
RWS-10-01	RWS-10-19	Snap-In	UL	1	Ø.250	6.4	.030 - .060	0.8 - 1.5	0.625	15.9	0.297	17.5	Natural	1000
RWS-10-01BK	—	Snap-In	UL	1	Ø.250	6.4	.030 - .060	0.8 - 1.5	0.625	15.9	0.297	17.5	Black	1000
RWS-16-01	RWS-16-19	Snap-In	UL	2	.250 Square	6.4	.058 - .064	1.5 - 1.6	1.000	25.4	0.297	17.5	Natural	1000
RWS-16-01BK	—	Snap-In	UL	2	.250 Square	6.4	.058 - .064	1.5 - 1.6	1.000	25.4	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

CABLE CLIPS & CLAMPS

CH / RSC
Snap In Cable Hanger

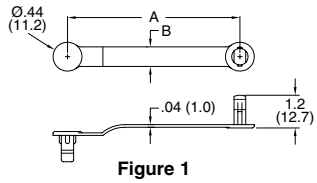


Figure 1

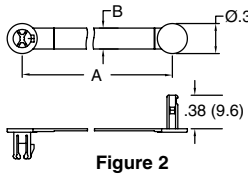


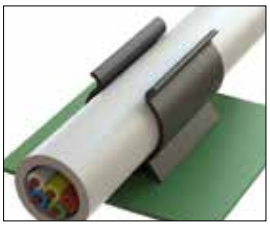
Figure 2

Specifications:
- Material: See table
- Color: See table

Features:
- Gathers and routes cables & wires
- Push mount design allows for fast installation

Item No. Natural	Item No. Black	Figure	A Ref In	A Ref mm	B In	B mm	Max Holding Ø In	Max Holding Ø mm	Material	Bulk Pack Qty.
CH-1-01	CH-1-01BK	1	1.750	44.5	0.297	7.5	0.375	9.5	UL94 V-2 Nylon 6/6	1000
CH-2-01	CH-2-01BK	1	2.625	66.7	0.297	7.5	0.625	15.9	UL94 V-2 Nylon 6/6	1000
CH-3-01	CH-3-01BK	1	3.750	95.3	0.297	7.5	1.000	25.4	UL94 V-2 Nylon 6/6	1000
CH-1-10	CH-1-10BK	1	1.750	44.5	0.297	7.5	0.375	9.5	UL94 HB Polypropylene	1000
CH-2-10	CH-2-10BK	1	2.625	66.7	0.297	7.5	0.625	15.9	UL94 HB Polypropylene	1000
CH-3-10	CH-3-10BK	1	3.750	95.3	0.297	7.5	1.000	25.4	UL94 HB Polypropylene	1000
—	RSC-3-01	2	1.100	28.0	0.160	4.0	0.218	5.6	UL94 V-2 Nylon 6/6	1000
—	RSC-4-01	2	1.300	33.0	0.240	6.0	0.250	6.4	UL94 V-2 Nylon 6/6	1000
—	RSC-6-01	2	1.690	43.0	0.240	6.0	0.375	9.5	UL94 V-2 Nylon 6/6	1000
—	RSC-9-01	2	2.480	63.0	0.240	6.0	0.625	15.9	UL94 V-2 Nylon 6/6	1000

V
Screw Mount Component Clip



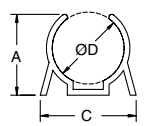


Figure 1

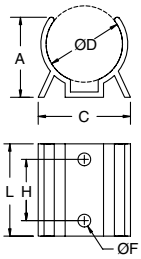


Figure 2

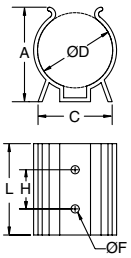


Figure 3

Specifications:
- Material: UL94 V-0 PVC Color: Black

Features:
- Legs prevent shifting and tipping
- Mounts securely with screws or rivets
- Holds parts firmly

Item No.	D Holding Ø In	D Holding Ø mm	F Hole Ø Ref. In	F Hole Ø Ref. mm	A Ref. In	A Ref. mm	C Ref. In	C Ref. mm	H Ref. In	H Ref. mm	L In	L mm	Figure	Bulk Pack Qty.
V-1000	0.25	6.4	.094	2.4	0.30	7.5	0.50	12.7	Single Hole In Center		0.50	12.7	1	1000
V-1001	0.31	7.9	.094	2.4	0.36	9.1	0.50	12.7	Single Hole In Center		0.50	12.7	1	1000
V-1002	0.38	9.5	.094	2.4	0.41	10.3	0.50	12.7	Single Hole In Center		0.50	12.7	1	1000
V-1003	0.44	11.1	.094	2.4	0.45	11.5	0.52	13.1	Single Hole In Center		0.50	12.7	1	1000
V-1004	0.50	12.7	.094	2.4	0.50	12.7	0.66	16.7	Single Hole In Center		0.50	12.7	1	1000
V-1005	0.56	14.3	.094	2.4	0.61	15.5	0.72	18.3	Single Hole In Center		0.50	12.7	1	1000
V-1006	0.63	15.9	.094	2.4	0.63	15.9	0.83	21.0	Single Hole In Center		0.50	12.7	1	1000
V-1007	0.69	17.6	.156	4.0	0.63	15.9	0.84	21.0	Single Hole In Center		0.50	12.7	1	1000
V-1008	0.75	19.7	.156	4.0	0.78	19.8	0.89	22.6	Single Hole In Center		0.50	12.7	1	100
V-1009	0.88	22.2	.156	4.0	0.91	23.0	1.08	27.4	Single Hole In Center		0.50	12.7	1	100
V-1010	1.00	25.4	.156	4.0	0.98	25.0	1.13	28.6	.75	19.1	1.13	28.5	2	100
V-1011	1.38	34.9	.156	4.0	1.34	34.1	1.25	31.8	.75	19.1	1.13	28.5	2	100
V-1024	1.50	38.1	.156	4.0	1.81	46.0	1.42	36.1	.75	19.1	1.75	44.5	3	100
V-1028	1.75	44.5	.156	4.0	1.92	48.8	1.50	38.1	.75	19.1	1.75	44.5	3	100
V-1030	2.25 - 2.75	57.1 - 69.9	.156	4.0	2.44	61.9	2.61	66.3	.75	19.1	1.50	38.1	3	100

VM
Screw Mount Component Clip

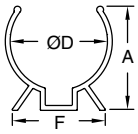


Figure 1

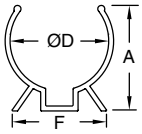


Figure 2

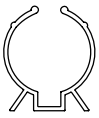
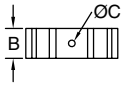
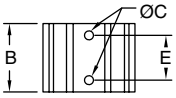


Figure 3

Figure 4



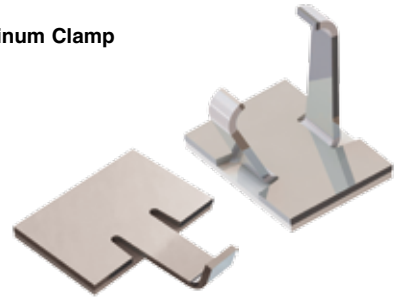


Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Black

Features:
- Smooth edges protect components from wear and abrasion
- Legs prevent shifting and tipping
- Mounts securely with screws or rivets

Item No.	D Holding Ø In	D Holding Ø mm	C Hole Ø In	C Hole Ø mm	A Ref. In	A Ref. mm	B In	B mm	E In	E mm	F Ref. In	F Ref. mm	Figure	Bulk Pack Qty.
VM-1002	3/8	9.5	0.11	2.8	0.44	11.2	0.50	12.7	Single Hole in Center		0.54	13.7	1	100
VM-1004	1/2	12.7	0.11	2.8	0.52	13.2	0.50	12.7	Single Hole in Center		0.75	19.1	1	100
VM-1007	11/16	17.5	0.15	3.8	0.78	19.8	0.50	12.7	Single Hole in Center		0.82	20.8	1	100
VM-1008	3/4	19.1	0.15	3.8	0.97	24.6	0.50	12.7	Single Hole in Center		0.98	24.9	1	100
VM-1010	1	25.4	0.15	3.8	1.03	26.1	1.12	28.4	.750	19.1	1.25	31.8	2	100
VM-1011	1-3/8	34.9	0.15	3.8	1.51	38.4	1.16	29.5	.750	19.1	1.37	34.8	2	100
VM-1024	1-1/2	38.1	0.15	3.8	1.67	42.4	1.70	43.2	.750	19.1	1.50	38.1	3	100
VM-1030	2-1/4	57.2	0.15	3.8	2.50	63.5	1.52	38.6	.750	19.1	3.00	76.2	4	100

ASK / RAK
Adhesive Mount Aluminum Clamp



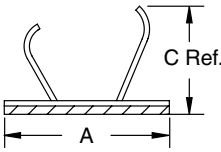


Figure 1

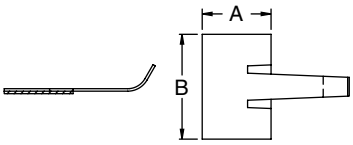


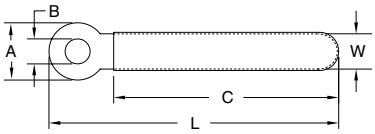
Figure 2

Specifications:
- Material: Aluminum, Bright Finish

Features:
- Aluminum arms are flexed around bundle
- Lightweight and durable
- Adhesive mount for quick installation

Item No.	Figure	A In	A mm	B Base Depth In	B Base Depth mm	Max Bundle Ø In	Max Bundle Ø mm	Bulk Pack Qty.
ASK-3	1	0.440	11.3	0.660	16.8	0.234	6.0	250
ASK-6	1	0.620	15.7	0.740	18.8	0.375	9.5	250
RAK-1	2	0.440	11.3	0.670	17.1	0.234	6.0	250
RAK-2	2	0.640	16.3	0.760	19.3	0.375	9.5	250

VCC
Vinyl Coated Adjustable Steel Clamp

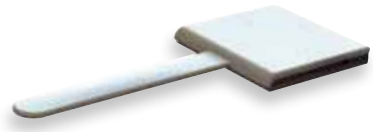


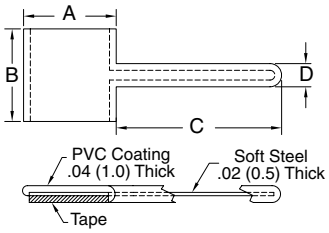
Specifications:
- Material: PVC Coated Soft Steel
- Color: Body - Steel Coating - Black

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.	Bundle Ø In	Bundle Ø mm	C Ref. In	C Ref. mm	L Ref. In	L Ref. mm	W Ref. In	W Ref. mm	A In	A mm	B Ø In	B Ø mm	Pack Qty.	Bulk Pack Qty.
VCC-83028	0.220	5.7	0.710	18.0	1.100	28.0	0.120	3.0	0.315	8.0	0.118	3.0	1	1000
VCC-83535	0.310	7.9	0.980	25.0	1.340	35.0	0.200	5.0	0.315	8.0	0.138	3.5	1	1000
VCC-83540	0.370	9.5	1.180	30.0	1.570	40.0	0.120	3.0	0.315	8.0	0.138	3.5	1	1000
VCC-63048	0.500	12.7	1.570	40.0	1.890	48.0	0.080	2.0	0.236	6.0	0.118	3.0	1	1000
VCC-84554	0.520	13.3	1.650	42.0	2.130	54.0	0.190	4.8	0.315	8.0	0.177	4.5	1	1000
VCC-63254	0.570	14.6	1.810	46.0	2.130	54.0	0.140	3.6	0.236	6.0	0.126	3.2	1	1000
VCC-83664	0.660	16.9	2.090	53.0	2.520	64.0	0.200	5.0	0.315	8.0	0.161	4.1	1	1000
VCC-84576	0.810	20.7	2.560	65.0	2.990	76.0	0.180	4.5	0.315	8.0	0.177	4.5	1	1000
VCC-84584	0.900	22.9	2.830	72.0	3.310	84.0	0.180	4.5	0.315	8.0	0.177	4.5	1	1000
VCC-845126	1.400	35.6	4.410	112.0	4.960	126.0	0.240	6.0	0.315	8.0	0.177	4.5	1	100

PCC
Adhesive Mount Vinyl Coated Adjustable Steel Clamp



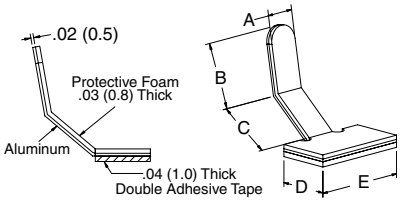


Specifications:
- Material: Soft Steel with PVC Coating
- Color: White

Features:
- Protects and insulates wires or components
- 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. In	A Ref. mm	B In	B mm	C Ref. In	C Ref. mm	D Ref. In	D Ref. mm	Bulk Pack Qty.
PCC-5	0.310	8.0	0.310	8.0	0.590	15.0	0.080	2.1	1000
PCC-9	0.550	14.0	0.550	14.0	0.980	25.0	0.140	3.5	500
PCC-12	0.750	19.0	0.750	19.0	1.580	40.0	0.160	4.0	500

PFC
Adhesive Mount Foam Coated Adjustable Steel Clamp



Specifications:
- Material: Foam Coated Aluminum
- Color: Grey Coated

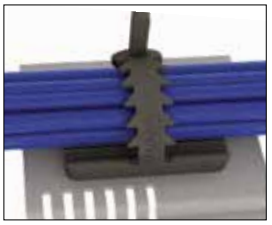
Features:
- Made of aluminum with a protective foam coating on the inside of the clamp that protects cables and fibers
- Flexible arm holds flat, round or oddly shaped components
- Arm may be opened or closed repeatedly and reshaped for varying holding diameters

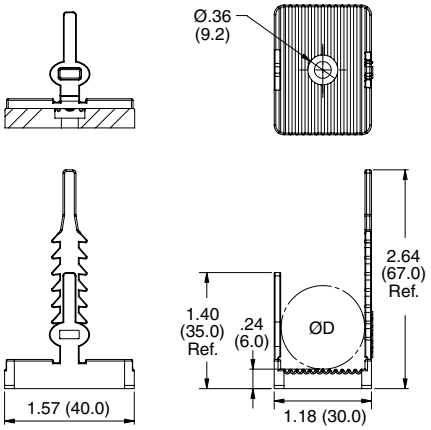
Item No.	A Ref. In	A Ref. mm	B Ref. In	B Ref. mm	C Ref. In	C Ref. mm	D In	D mm	E In	E mm	Bulk Pack Qty.
PFC-25M	0.189	4.8	0.494	12.6	0.437	11.1	0.380	9.7	0.750	19.1	1000
PFC-50M	0.205	5.2	0.573	14.6	0.55	14.1	0.550	14.1	0.980	25.0	1000

UMB
Universal Rubber Clamp

Richco

New





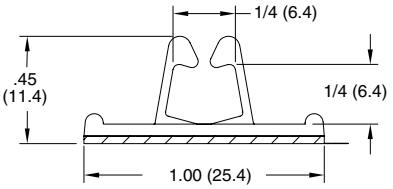
Specifications:
- Material: Neoprene Rubber, 50 Shore A
- Color: Black

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 Bundle Ø In	D Approx. Max Cable Bundle Ø mm	Pack Qty.	Bulk Pack Qty.
UMB-1	#10 or M5 Screw	.79	20.0	1	200
UMB-1A-RT	Adhesive	.79	20.0	1	200

WCB
Cord Clip on Adhesive Base

Richco



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

Features:
- Routes and fastens cords & cables
- Adhesive mount design for quick & easy installation

Item No.	Approval	Depth In	Depth mm	Bulk Pack Qty.
WCB-250-01A-RT		0.500	12.7	1000

SCCA / SCCB
Standoff Cable Clip

Richco

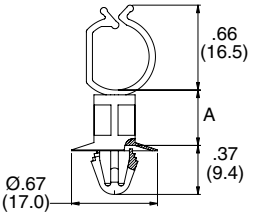


Figure 1

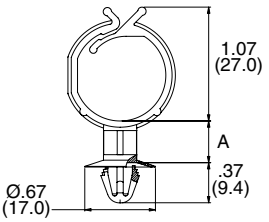


Figure 2

Specifications:
- Material: Nylon 6/6
- Color: Natural
- Mounting Hole: .256 - .276 (6.5 - 7.0)
- Panel Thickness: .024 - 0.079 (0.6 - 2.0)

Features:
- Gathers and routes wires
- Standoff design provides spacing between the wires and chassis

Item No. UL94 V-2	Item No. UL94 V-0	Figure	A In	A mm	Max Bundle Ø In	Max Bundle Ø mm	Bulk Pack Qty.
SCCA-1-01	SCCA-1-19	1	0.160	4.0	0.870	22.0	1000
SCCA-2-01	SCCA-2-19	1	0.240	6.0	0.870	22.0	1000
SCCA-3-01	SCCA-3-19	1	0.320	8.0	0.870	22.0	1000
SCCA-4-01	SCCA-4-19	1	0.390	10.0	0.870	22.0	1000
SCCA-5-01	SCCA-5-19	1	0.470	12.0	0.870	22.0	1000
SCCB-1-01	SCCB-1-19	2	0.160	4.0	0.430	11.0	1000
SCCB-2-01	SCCB-2-19	2	0.240	6.0	0.430	11.0	1000
SCCB-3-01	SCCB-3-19	2	0.320	8.0	0.430	11.0	1000
SCCB-4-01	SCCB-4-19	2	0.390	10.0	0.430	11.0	1000
SCCB-5-01	SCCB-5-19	2	0.470	12.0	0.430	11.0	1000
SCCB-6-01	SCCB-6-19	2	1.180	30.0	0.430	11.0	1000

SLCS / SLCSE
Standoff Locking Clip

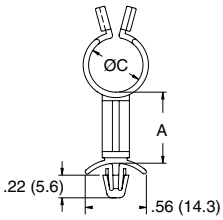


Figure 1

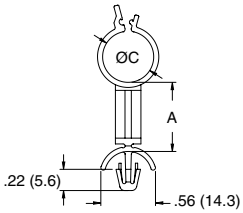


Figure 2

Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural
- Mounting Hole: .187 (4.8)
- SLCS/SLCSE Panel Thickness: .031 - .078 (0.8 - 2.0)
- SLCSE2 Panel Thickness: .078 - .160 (2.0 - 4.0)

Features:
- Gathers and routes wires
- Easy locking design makes it easy to open & close with very little effort
- Standoff design provides spacing between the wires and the chassis

Item No.	Approval	Figure	A In	A mm	C Max Bundle Ø In	C Max Bundle Ø mm	Bulk Pack Qty.
SLCS-250-3-01	UL	1	0.187	4.8	0.187	4.8	1000
SLCS-250-4-01	UL	1	0.250	6.4	0.187	4.8	1000
SLCS-250-6-01	UL	1	0.375	9.5	0.187	4.8	1000
SLCS-250-8-01	UL	1	0.500	12.7	0.187	4.8	1000
SLCS-250-16-01	UL	1	1.000	25.4	0.187	4.8	1000
SLCS-370-3-01	UL	1	0.187	4.8	0.312	7.9	1000
SLCS-370-4-01	UL	1	0.250	6.4	0.312	7.9	1000
SLCS-370-6-01	UL	1	0.375	9.5	0.312	7.9	1000
SLCS-370-8-01	UL	1	0.500	12.7	0.312	7.9	1000
SLCS-370-16-01	UL	1	1.000	25.4	0.312	7.9	1000
SLCS-500-3-01	UL	1	0.187	4.8	0.437	11.1	1000
SLCS-500-4-01	UL	1	0.250	6.4	0.437	11.1	1000
SLCS-500-6-01	UL	1	0.375	9.5	0.437	11.1	1000
SLCS-500-8-01	UL	1	0.500	12.7	0.437	11.1	1000

Item No.	Approval	Figure	A In	A mm	C Max Bundle Ø In	C Max Bundle Ø mm	Bulk Pack Qty.
SLCS-500-16-01	UL	1	1.000	25.4	0.437	11.1	1000
SLCS-750-3-01	UL	1	0.187	4.8	0.687	17.5	1000
SLCS-750-4-01	UL	1	0.250	6.4	0.687	17.5	1000
SLCS-750-6-01	UL	1	0.375	9.5	0.687	17.5	1000
SLCS-750-8-01	UL	1	0.500	12.7	0.687	17.5	1000
SLCS-750-16-01	UL	1	1.000	25.4	0.687	17.5	1000
SLCSE-250-3-01	UL	2	0.187	4.8	0.220	5.6	1000
SLCSE-370-3-01	UL	2	0.187	4.8	0.350	8.9	1000
SLCSE-500-3-01	UL	2	0.187	4.8	0.470	12.0	1000
SLCSE-750-3-01	UL	2	0.187	4.8	0.730	18.4	1000
SLCSE2-250-3-01	UL	2	0.187	4.8	0.220	5.6	1000
SLCSE2-370-3-01	UL	2	0.187	4.8	0.350	8.9	1000
SLCSE2-500-3-01	UL	2	0.187	4.8	0.470	12.0	1000
SLCSE2-750-3-01	UL	2	0.187	4.8	0.730	18.4	1000

SHK / SHKE / SHKBS
Standoff Cable Clip

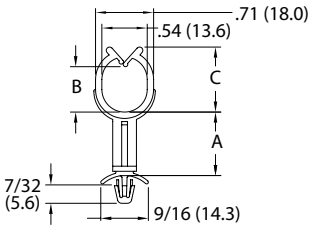


Figure 1

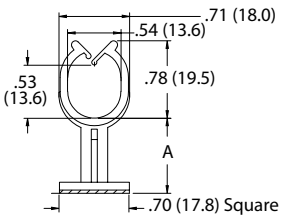


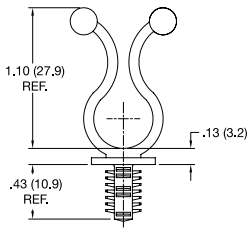
Figure 2

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 In	A mm	B Ref. In	B Ref. mm	C Ref. In	C Ref. mm	Mounting Hole Ø In	Mounting Hole Ø mm	Panel Thickness In	Panel Thickness mm	Bulk Pack Qty.
SHK-6-01	UL	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	UL	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	See Figure 2					Not Applicable			1000
SHKBS-8-01A-RT		2	0.500	12.7	See Figure 2					Not Applicable			1000

STL-8
Standoff Twist Lock



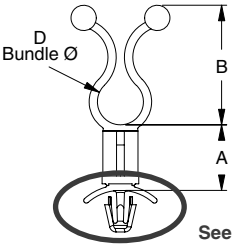
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:
- Lifts wires off board to isolate from other board components
- Cable and wire bundles load and unload with a fingertip twist

Item No.	Bundle Ø In	Bundle Ø mm	Hole Ø In	Hole Ø mm	Min Board Thickness In	Min Board Thickness mm	Bulk Pack Qty.
STL-8-450-2-01	0.400 - 0.500	10.2 - 12.7	0.250	6.4	0.250	7.2	1000

TWIST TIES

STL
Standoff Twist Lock



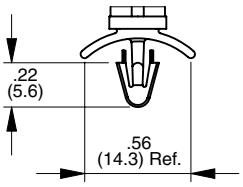
Hole Ø: .187 (4.75)
Panel Thickness:
.031-.078 (0.8-2)

See Individual Styles for Mounting Details

STL Basic Style

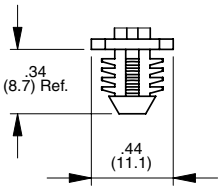
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

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



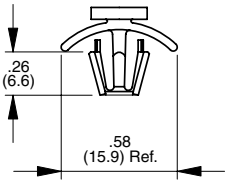
Hole Ø: .156 (4)
Panel Thickness:
.031-.078 (0.8-2)

STL-1



Hole Ø: .312 (7.9)
Panel Thickness:
.250 (7.9) Minimum

STL-3

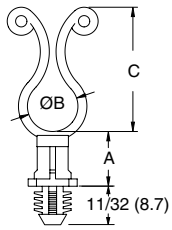


Hole Ø: .236 (6)
Panel Thickness:
.031-.078 (0.8-2)

STL-6

Item No.				Approval	D Bundle Ø		A Spacer Length		B Ref.		Bulk Pack Qty.
					In	mm	In	mm	In	mm	
STL-250-3-01	STL-1-250-3-01	STL-3-250-3-01	STL-6-250-3-01		.200 - .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	STL-6-250-8-01		.200 - .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	STL-6-350-3-01		.300 - .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	STL-6-350-8-01		.300 - .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	STL-6-450-3-01		.400 - .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	STL-6-450-8-01		.400 - .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	STL-6-600-3-01		.500 - .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	STL-6-600-8-01		.500 - .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	STL-6-750-3-01		.700 - .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	STL-6-750-8-01		.700 - .800	17.8 - 20.3	0.500	12.7	1.450	36.8	1000

BHKL
Fir-Tree Curly Lock

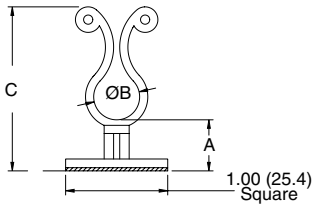


Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural
- To press fit in a .312 (7.9) Ø hole in a .250 (6.4) minimum panel thickness

Features:
- Ends twist into place with very little effort
- Releasable and reusable for easy wire bundling
- Rounded edges prevent abrasion

Item No.	Approval	A		Bundle Ø B		C Ref.		Bulk Pack Qty.
		In	mm	In	mm	In	mm	
BHKL-350-4-01		0.250	6.4	0.300 - 0.400	7.6 - 10.2	1.000	25.4	1000
BHKL-350-10-01		0.625	15.9	0.300 - 0.400	7.6 - 10.2	1.000	25.4	1000
BHKL-450-4-01		0.250	6.4	0.400 - 0.500	10.2 - 12.7	1.125	28.6	1000
BHKL-450-6-01		0.375	9.5	0.400 - 0.500	10.2 - 12.7	1.125	28.6	1000
BHKL-750-4-01		0.250	6.4	0.700 - 0.800	17.8 - 20.3	1.500	38.1	1000
BHKL-750-6-01		0.375	9.5	0.700 - 0.800	17.8 - 20.3	1.500	38.1	1000

KLBS
Adhesive Mount Standoff Curly Lock

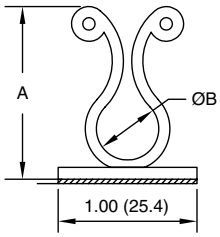


Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:
- Ends twist into place with very little effort
- Releasable and reusable for easy wire bundling
- Rounded edges prevent abrasion

Item No.	Approval	A		Bundle Ø B		C Ref.		Bulk Pack Qty.
		In	mm	In	mm	In	mm	
KLBS-350-401A		0.250	6.4	0.300 - 0.400	7.6 - 10.2	1.281	32.5	1000
KLBS-3508-01A		0.500	12.7	0.300 - 0.400	7.6 - 10.2	1.531	38.9	1000
KLBS-35012-01A		0.750	19.1	0.300 - 0.400	7.6 - 10.2	1.781	45.2	1000
KLBS-35016-01A		1.000	25.4	0.300 - 0.400	7.6 - 10.2	2.031	51.6	1000

KLB
Adhesive Mount Curly Lock

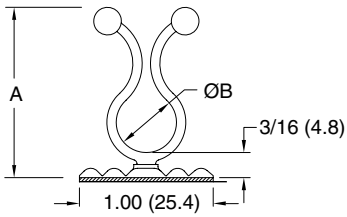


Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

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	B Holding Ø In	B Holding Ø mm	A Ref. In	A Ref. mm	Base Depth In	Base Depth mm	Bulk Pack Qty.
KLB-350A-RT		.300 - .400	7.6 - 10.2	1.070	27.2	0.510	13.0	1000
KLB-450A-RT		.400 - .500	10.2 - 12.7	1.230	31.2	0.510	13.0	1000
KLB-750A-RT		.700 - .800	17.8 - 20.3	1.580	40.1	0.510	13.0	1000

TLFB
Twist Lock on Flexible Adhesive Base

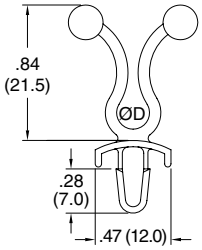


Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:
- Flexible adhesive base can be mounted onto contoured surfaces
- Cables are locked into place with a fingertip twist

Item No.	Bundle Ø B In	Bundle Ø B mm	A Ref. In	A Ref. mm	Base Depth In	Base Depth mm	Bulk Pack Qty.
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 Lock



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	Mounting Hole Ø In	Mounting Hole Ø mm	Bundle Ø D In	Bundle Ø D mm	Panel Thickness In	Panel Thickness mm	Bulk Pack Qty.
TLJ-200-01		0.187	4.8	0.500-0.600	12.7-15.2	0.031 - 0.078	0.8 - 2.0	1000

SKL / SKLO
Side Entry and 45° Curly Lock

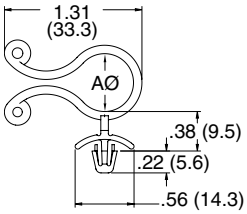


Figure 1

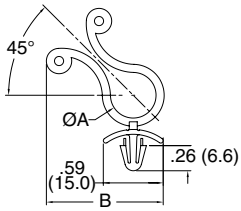


Figure 2

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 & reusable for easy wire bundling
- Eases installation in hard to reach places

Item No.	Approval	Figure	Bundle Ø A In	Bundle Ø A mm	B Ref. In	B Ref. mm	Bulk Pack Qty.
SKLO-550-01		1	0.500 - 0.600	12.7 - 15.2	See Figure 1		1000
SKL45-250		2	0.150 - 0.250	3.8 - 6.35	0.980	24.9	1000
SKL45-350		2	0.300 - 0.400	7.6 - 10.0	1.070	27.2	1000
SKL45-450		2	0.400 - 0.470	10.0 - 12.0	1.120	28.4	1000

TWIST TIES

KLH / TLH / TLHE
Screw Mount Hinged Twist Lock

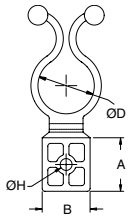


Figure 1

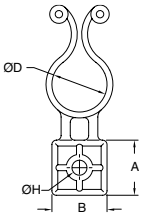


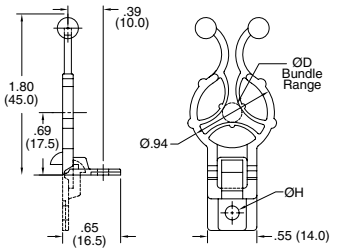
Figure 2

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	Holding Ø D In	Holding Ø D mm	H In	H mm	Recommended Screw Size	A In	A mm	B In	B mm	Figure	Bulk Pack Qty.
TLH-800-01	UL	0.750 - 0.850	19.0 - 21.6	0.160	4.1	#6 or M3	0.750	19.0	0.670	17.0	1	1000
TLH-500-01	—	0.450 - 0.550	11.4 - 14.0	0.170	4.2	#8 or M4	0.560	14.2	0.550	14.0	1	1000
TLHE-1-750-01	—	0.700 - 0.800	17.8 - 20.3	0.204	5.2	#10 or M5	0.750	19.0	0.670	17.0	1	1000
KLH-750-01	UL	0.700 - 0.800	17.8 - 20.3	0.204	5.2	#10 or M5	0.750	19.0	0.750	19.0	2	1000

WTLH
Webbed Hinged Twist Lock

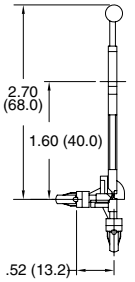


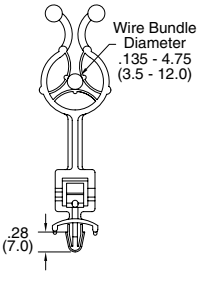
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

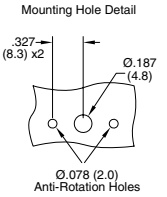
Features:
- Once clamp is hinged, it locks into position
- Webbed design provides a positive lock

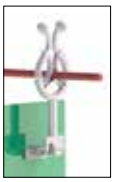
Item No.	Hole Ø H In	Hole Ø H mm	Bundle Ø D In	Bundle Ø D mm	Recommended Screw Size	Bulk Pack Qty.
WTLH90-300-4-01	0.130	3.3	0.140 - 0.480	3.6 - 12.2	#4 or M3	500
WTLH90-300-6-01	0.150	3.8	0.140 - 0.480	3.6 - 12.2	#6 or M3.5	500
WTLH90300-M4-01	0.170	4.3	0.140 - 0.480	3.6 - 12.2	#8 or M4	500

TLHS
Webbed Hinged Twist Lock









Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural
- Panel Thickness: .078 (2.0)

Features:
- Hinged design eases installation for hard to reach places
- Tensioning device surrounding wire bundles allows for a positive lock
- Once the base is installed in the panel, the spacer is hinged where it locks into place, routing at a 90° angle

Item No.	Approval	Bulk Pack Qty.
TLHS90-300-01	UL	500

PLASTIC FASTENERS

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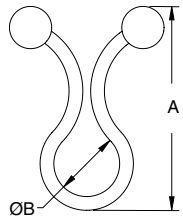
TL / TT
Twist Lock

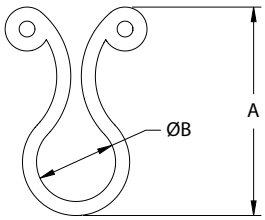


Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

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	Bundle Ø B In	Bundle Ø B mm	A Ref. In	A Ref. mm	Bulk Pack Qty.
TT001A	—	0.150 - .190	3.8 - 4.8	0.850	21.6	100
TL-250	UL	0.200 - 0.300	5.1 - 7.6	0.900	22.9	1000
TL-350	UL	0.300 - 0.400	7.6 - 10.2	1.030	26.1	1000
TL-450	UL	0.400 - 0.500	10.2 - 12.7	1.200	30.5	1000
TL-600	UL	0.550 - 0.650	14.0 - 16.5	1.330	33.7	1000
TL-750	UL	0.700 - 0.800	17.8 - 20.3	1.550	39.4	1000
TL-950	UL	Max 1.000	25.4	1.700	43.4	1000
TL-1125	UL	Max 1.187	30.2	2.190	55.6	1000
TL-1375	UL	Max 1.437	36.5	2.680	68.1	1000
TL-1500	UL	Max 1.562	39.7	2.930	74.4	1000
TL-1750	UL	Max 1.812	46.0	3.450	87.6	1000

KL
Curly Lock

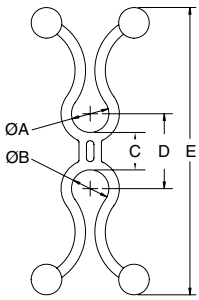


Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:
- Ends twist into place with very little effort
- Releasable and reusable for easy wire bundling
- Rounded edges prevent abrasion

Item No.	Approval	Bundle Ø B In	Bundle Ø B mm	A Ref. In	A Ref. mm	Bulk Pack Qty.
KL-125	UL	0.125 - 0.150	3.2 - 3.8	0.480	12.2	1000
KL-200	UL	0.160 - 0.240	4.1 - 6.1	0.820	20.7	1000
KL-250	UL	0.200 - 0.300	5.1 - 7.6	0.910	23.0	1000
KL-350	UL	0.300 - 0.400	7.6 - 10.2	1.030	26.2	1000
KL-450	UL	0.400 - 0.500	10.2 - 12.7	1.200	30.5	1000
KL-600	UL	0.550 - 0.650	14.0 -16.5	1.250	31.8	1000
KL-750	UL	0.700 - .0800	17.8 - 20.3	1.520	38.6	1000
KL-950	UL	0.900 - 1.000	22.9 - 25.4	1.750	44.5	1000

DTL
Dual Twist Lock



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.	A and B Bundle Ø In	A and B Bundle Ø mm	C In	C mm	D Ref. In	D Ref. mm	E Ref. In	E Ref. mm	Bulk Pack Qty.
DTL2525-4-01	.200-.300	5.1-7.6	0.250	6.4	0.500	12.7	1.920	48.8	500
DTL2525-12-01	.200-.300	5.1-7.6	0.750	19.1	1.000	25.4	2.420	61.5	500
DTL2525-20-01	.200-.300	5.1-7.6	1.250	31.8	1.500	38.1	2.920	74.2	500
DTL3535-4-01	.300-.400	7.6-10.2	0.250	6.4	0.600	15.2	2.180	55.4	500
DTL3535-12-01	.300-.400	7.6-10.2	0.750	19.1	1.100	27.9	2.680	68.1	500
DTL3535-20-01	.300-.400	7.6-10.2	1.250	31.8	1.600	40.6	3.180	80.8	500
DTL4545-4-01	.400-.500	10.2-12.7	0.250	6.4	0.600	15.2	2.180	55.4	500
DTL4545-12-01	.400-.500	10.2-12.7	0.750	19.1	1.100	27.9	2.680	68.1	500
DTL4545-20-01	.400-.500	10.2-12.7	1.250	31.8	1.600	40.6	3.180	80.8	500
DTL5555-4-01	.500-.600	12.7-15.2	0.250	6.4	0.600	15.2	2.180	55.4	500
DTL5555-12-01	.500-.600	12.7-15.2	0.750	19.1	1.100	27.9	2.680	68.1	500
DTL5555-20-01	.500-.600	12.7-15.2	1.250	31.8	1.600	40.6	3.180	80.8	500
DTL6565-4-01	.600-.700	15.2-17.8	0.250	6.4	0.600	15.2	2.180	55.4	500
DTL6565-12-01	.600-.700	15.2-17.8	0.750	19.1	1.100	27.9	2.680	68.1	500
DTL6565-20-01	.600-.700	15.2-17.8	1.250	31.8	1.600	40.6	3.180	80.8	500
DTL7575-4-01	.700-.800	17.8-20.3	0.250	6.4	1.000	25.4	3.100	78.7	500
DTL7575-12-01	.700-.800	17.8-20.3	0.750	19.1	1.500	38.1	3.600	91.4	500
DTL7575-20-01	.700-.800	17.8-20.3	1.250	31.8	2.000	50.8	4.100	104.1	500

CABLE CLIPS & CLAMPS

HCS
Hinged Cable Saddle

New

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

Features:
- Separate locking top holds and provides excellent strain relief to mounted cables
- Teeth on cable saddle holds locking top securely in place
- Push the saddle ends together to release locking top and cables
- Snap lock with cup provides stability and protects mounting hole

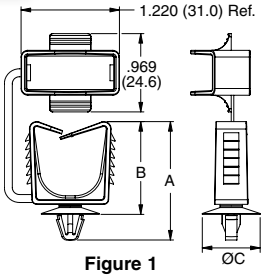


Figure 1

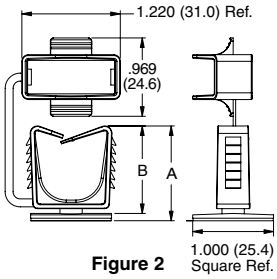


Figure 2

Item No.	Figure	A Ref. In	A Ref. mm	B Max In	B Max mm	C In	C mm	Mounting Method In	Mounting Method mm	Panel Thickness In	Panel Thickness mm	Cable Bundle Ø In	Cable Bundle Ø mm	Bulk Pack Qty.
HCS1-01	1	0.338	34.0	1.141	29.0	0.629	16	0.157 - 0.189 Hole	4.0 - 4.8 Hole	0.016 - 0.063	0.4 - 1.6	0.118 - 0.629	3.0 - 16.0	250
HCS2-01	1	1.4448	36.8	1.129	28.7	0.716	18.2	0.236 - 0.267 Hole	6.0 - 6.8 Hole	0.024 - 0.098	0.6 - 2.5	0.118 - 0.629	3.0 - 16.0	250
HCS3-01A4-RT	2	1.160	29.5	1.082	27.5	—	—	Adhesive		—	—	0.118 - 0.629	3.0 - 16.0	1000

WCC
Webbed Centering Clip

New

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

Features:
- Cables are inserted into center of clamp. Clamp wraps around cables and locks them securely in place
- Finger grip eases installation
- Cupped base adds stability to the mounting and covers the hole completely

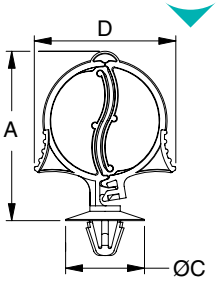


Figure 1

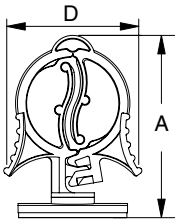
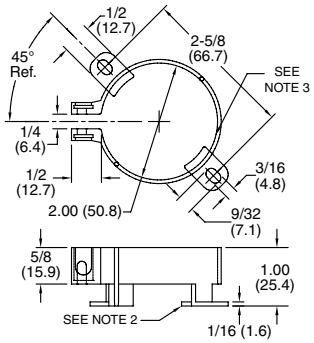


Figure 2

Item No.	Bundle Ø In	Bundle Ø mm	Ø Mounting Hole In	Ø Mounting Hole mm	Panel Thickness In	Panel Thickness mm	A Ref. In	A Ref. mm	D Ref. In	D Ref. mm	CØ Ref. In	CØ Ref. mm	Figure	Bulk Pack Qty.
WCC1-1-01	.118 - .311	3.0 - 7.9	.157 - .189	4.0 - 4.8	.019-.063	0.5 - 1.6	1.100	28.0	0.910	23.0	0.630	16.0	1	500
WCC1-2-01	.118 - .374	3.0 - 9.5	.157 - .189	4.0 - 4.8	.019-.063	0.5 - 1.6	1.220	31.0	1.060	27.0	0.630	16.0	1	500
WCC1-3-01	.118 - .500	3.0 - 12.7	.157 - .189	4.0 - 4.8	.019-.063	0.5 - 1.6	1.460	37.0	1.300	33.0	0.630	16.0	1	500
WCC2-1-01	.118 - .311	3.0 - 7.9	.236 - .267	6.0 - 6.8	.019-.098	0.5 - 1.6	1.100	28.0	0.910	23.0	0.720	18.4	1	500
WCC2-2-01	.118 - .374	3.0 - 9.5	.236 - .267	6.0 - 6.8	.019-.098	0.5 - 1.6	1.220	31.0	1.060	27.0	0.720	18.4	1	500
WCC2-3-01	.118 - .500	3.0 - 12.7	.236 - .267	6.0 - 6.8	.019-.098	0.5 - 1.6	1.460	37.0	1.300	33.0	0.720	18.4	1	500
WCC3-1-01A4-RT	.118 - .311	3.0 - 7.9	Adhesive	Adhesive	Adhesive	Adhesive	1.100	28.0	0.910	23.0	Adhesive	Adhesive	2	1000
WCC3-2-01A4-RT	.118 - .374	3.0 - 9.5	Adhesive	Adhesive	Adhesive	Adhesive	1.220	31.0	1.060	27.0	Adhesive	Adhesive	2	1000
WCC3-3-01A4-RT	.118 - .500	3.0 - 12.7	Adhesive	Adhesive	Adhesive	Adhesive	1.460	37.0	1.300	33.0	Adhesive	Adhesive	2	1000

SCH / SCHS
Standoff Capacitor Holder

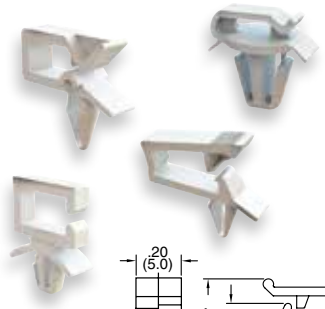


Specifications:
- Material: UL94 HB Glass Filled Nylon 6/6
- Color: Black

Notes:
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 (Note 1)	100
SCH-2	w/o spacer, w/o hardware	100
SCHS-2-H	w/spacer, w/ clamping hardware	100
SCH-2-H	w/o spacer, w/ clamping hardware	100

WS-SE
Wire Saddle - Side Entry



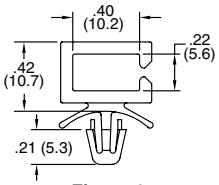


Figure 1

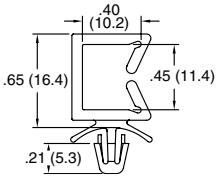


Figure 2

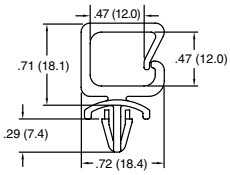


Figure 3

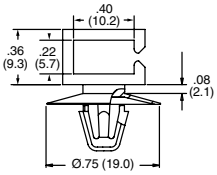


Figure 4

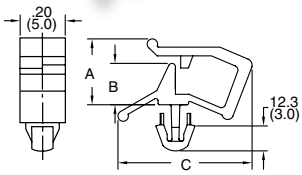


Figure 5

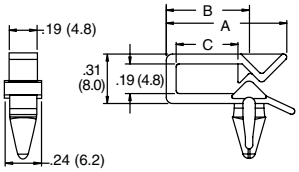


Figure 6

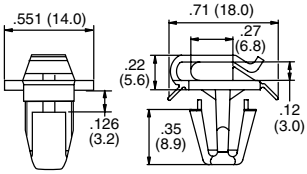


Figure 7

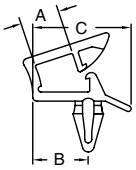


Figure 8

Specifications:
- Material: Nylon 6/6
- Color: Natural

Features:
- Gathers and routes single or groups of wires and cables
- Side entry provides low height where clearance is a problem

Item No. UL94 V-2	Item No. UL94 V-0	Approval	Figure	A Ref. In	A Ref. mm	B In	B mm	C Ref. In	C Ref. mm	Mounting Hole Ø In	Mounting Hole Ø mm	Panel Thickness In	Panel Thickness mm	Bulk Pack Qty.
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	—	UL	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	—	UL	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	—	UL	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	—	UL	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	—	UL	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	—	UL	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	—	UL	8	0.400	10.2	0.530	13.5	0.820	20.8	0.187	4.8	0.020 - 0.063	0.5 - 1.6	1000

WS / WWS / WSBH
Wire Saddle

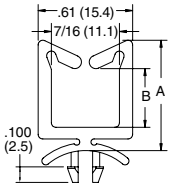


Figure 1

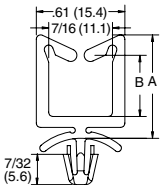


Figure 2

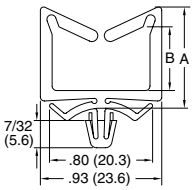


Figure 3

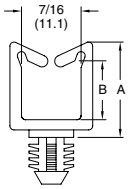


Figure 4

Specifications:
- Material: Nylon 6/6
- Color: Natural
- Depth: 0.220 (5.6)

Features:
- Gathers & routes cables or wires
- WS-9 parts have a quarter turn design
- WSBH parts are designed to mount in blind holes

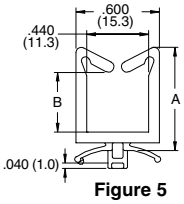
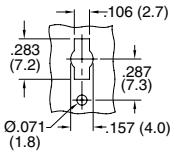


Figure 5

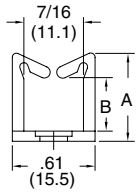


Mounting Hole Detail

Item No. UL94V-2	Item No. UL94 V-0	Approval	Figure	A Ref. In	A Ref. mm	B Ref. In	B Ref. mm	Mounting Hole Ø In	Mounting Hole Ø mm	Panel Thickness In	Panel Thickness mm	Bulk Pack Qty.
WS-9-1-01	—	—	5	0.510	13.0	0.190	4.8	See Mounting Hole Detail		0.031 - 0.063	0.8 - 1.6	1000
WS-1-01	WS-1-19	UL	1	0.520	13.2	0.190	4.8	0.187	4.8	0.062	1.6	1000
WS-A-1-01	WS-A-1-19	UL	2	0.520	13.2	0.190	4.8	0.187	4.8	0.062	1.6	1000
WSBH-1-01	—	UL	4	0.520	13.2	0.190	4.8	.312	7.9	0.250	6.4	1000
WS-9-2-01	—	—	5	0.700	17.8	0.390	10.0	See Mounting Hole Detail		0.031 - 0.063	0.8 - 1.6	1000
WS-2-01	WS-2-19	UL	1	0.710	18.0	0.380	9.7	0.187	4.8	0.062	1.6	1000
WS-A-2-01	WS-A-2-19	UL	2	0.710	18.0	0.380	9.7	0.187	4.8	0.062	1.6	1000
WS-A-2-1-01	WS-A-2-1-19	UL	2	0.710	18.0	0.380	9.7	0.187	4.8	0.062	1.6	1000
WS-A-2-2-01	WS-A-2-2-19	UL	2	0.710	18.0	0.380	9.7	0.187	4.8	0.125	3.2	1000
WSBH-2-01	—	UL	4	0.710	18.0	0.380	9.7	0.312	7.9	0.250	6.4	1000
WWS-A-2-01	WWS-A-2-19	UL	3	0.770	19.6	0.500	12.7	0.187	4.8	0.047	1.19	1000
WS-9-3-01	—	—	5	1.060	26.9	0.750	19.1	See Mounting Hole Detail		0.031 - 0.063	0.8 - 1.6	1000
WS-3-01	WS-3-19	UL	1	1.070	27.2	0.740	18.8	0.187	4.8	0.062	1.6	1000
WS-A-3-01	WS-A-3-19	UL	2	1.070	27.2	0.740	18.8	0.187	4.8	0.062	1.6	1000
WS-A-2-3-01	WS-A-2-3-19	UL	2	1.070	27.2	0.740	18.8	0.187	4.8	0.125	3.2	1000
WSBH-3-01	—	UL	4	1.070	27.2	0.740	18.8	0.312	7.9	0.250	6.4	1000
WWS-A-3-01	WWS-A-3-19	UL	3	1.120	28.5	0.850	21.6	0.187	4.8	0.047	1.19	1000
WS-9-4-01	—	—	5	1.370	34.8	1.070	27.2	See Mounting Hole Detail		0.031 - 0.063	0.8 - 1.6	1000
WS-4-01	WS-4-19	UL	1	1.380	35.0	1.050	26.7	0.187	4.8	0.062	1.6	1000
WS-A-4-01	WS-A-4-19	UL	2	1.380	35.0	1.050	26.7	0.187	4.8	0.062	1.6	1000
WS-A-2-4-01	WS-A-2-4-19	UL	2	1.380	35.0	1.050	26.7	0.187	4.8	0.125	3.2	1000
WSBH-4-01	—	UL	4	1.380	35.0	1.050	26.7	0.312	7.9	0.250	6.4	1000

WIRE SADDLES

WS-SR / LWS-SR
Wire Saddle - Snap Rivet Mount



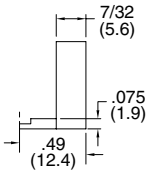
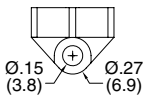


Figure 1



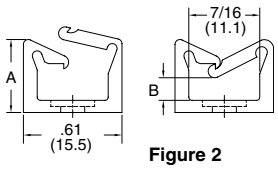


Figure 2

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

Item No.	Figure	A In	A mm	B In	B mm	Mounting Hole Ø In	Mounting Hole Ø mm	Bulk Pack Qty.
WS-SR-1-01	1	0.450	11.4	0.170	4.3	0.142 - 0.146	3.6 - 3.7	1000
LWS-SR-1-01	2	0.450	11.4	0.140	3.6	0.142 - 0.146	3.6 - 3.7	1000
WS-SR-2-01	1	0.640	16.3	0.360	9.1	0.142 - 0.146	3.6 - 3.7	1000
LWS-SR-2-01	2	0.640	16.3	0.340	8.6	0.142 - 0.146	3.6 - 3.7	1000
WS-SR-3-01	1	1.000	25.4	0.730	18.5	0.142 - 0.146	3.6 - 3.7	1000
LWS-SR-3-01	2	1.000	25.4	0.720	18.3	0.142 - 0.146	3.6 - 3.7	1000
WS-SR-4-01	1	1.310	33.3	1.040	26.4	0.142 - 0.146	3.6 - 3.7	1000
LWS-SR-4-01	2	1.310	33.3	1.000	25.4	0.142 - 0.146	3.6 - 3.7	1000

Use Essentra Rivet Number	Chassis Thickness Range In	Chassis Thickness Range mm
SR-3535	.010 - .046	0.3 - 1.2
SR-3545	.046 - .081	1.2 - 2.1
SR-3550	.069 - .105	1.8 - 2.7
SR-3555	.081 - .120	2.1 - 3.7
SR-3560	.109 - .144	2.8 - 3.7
SR-3570	.140 - .180	3.6 - 4.6
SR-3580	.180 - .219	4.6 - 5.6

LWS / WSLT
Locking Wire/Cable Saddle

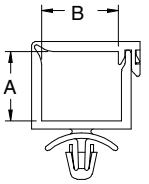


Figure 1

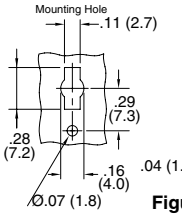


Figure 2

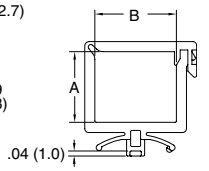


Figure 3

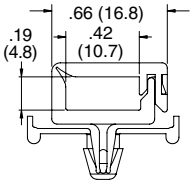
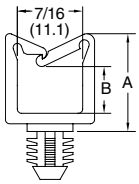


Figure 4



Specifications:
- Material: Nylon 6/6
- Color: Natural

Features:
- Cables are locked in place yet easily removable
- WSLT-9 & LWS-9 include a quarter-turn base
- WSLTRA has a releasable arrow-head for easy removal

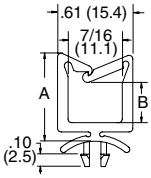


Figure 5

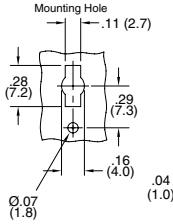


Figure 6

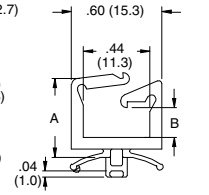


Figure 7

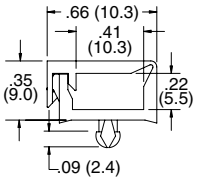
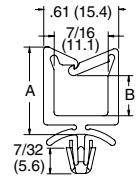
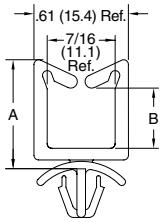


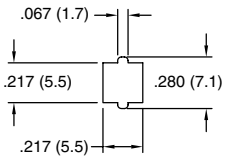
Figure 8



Item No. UL94 V-2	Item No. UL94 V-0	Approval	Figure	A In	A 00	B In	B mm	Mounting Hole Ø In	Mounting Hole Ø mm	Panel Thickness In	Panel Thickness mm	Bulk Pack Qty.
WSLT-3.5-2-1-01	WSLT-3.5-2-1-19	UL	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	UL	1	0.140	3.4	0.530	13.5	0.187	4.8	0.031 - 0.078	0.8 - 1.98	1000
WSLT-9-02-1-01	—	—	2	0.140	3.6	0.530	13.5	See Mounting Hole Detail		0.031 - 0.063	0.8 - 1.6	1000
WSLT-01A-01	WSLT-01A-19	UL	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
WSLT-01-2-01	WSLT-01-2-19	UL	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	UL	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-9-1-01	—	—	6	0.510	13.0	0.150	3.8	See Mounting Hole Detail		0.031 - 0.063	0.8 - 1.6	1000
LWS-1-01	LWS-1-19	UL	4	0.520	13.2	0.140	3.6	0.187	4.8	0.062	1.6	1000
LWSBH-1-01	—	UL	5	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	UL	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	UL	8	0.520	13.2	0.140	3.6	0.187	4.8	0.125	3.2	1000
WSLT-03-2-01	WSLT-03-2-19	UL	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	UL	4	0.710	18.0	0.330	8.4	0.187	4.8	0.062	1.6	1000
LWSBH-2-01	—	UL	5	0.710	18.0	0.330	8.4	0.312	7.9	0.250	6.4	1000
LWS-9-2-01	—	—	6	0.710	18.0	0.390	9.8	See Mounting Hole Detail		0.031 - 0.063	0.8 - 1.6	1000
LWS-A-2-01	LWS-A-2-19	UL	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	UL	8	0.710	18.0	0.330	8.4	0.187	4.8	0.125	3.2	1000
WSLT-03-3-01	WSLT-03-3-19	UL	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	See Figure 3				0.187	4.8	0.062	1.6	1000
LWS-3-01	LWS-3-19	UL	4	1.070	27.2	0.690	17.5	0.187	4.8	0.062	1.6	1000
LWSBH-3-01	—	UL	5	1.070	27.2	0.690	17.5	0.312	7.9	0.250	6.4	1000
LWS-9-3-01	—	—	6	1.070	27.2	0.750	19.0	See Mounting Hole Detail		0.031 - 0.063	0.8 - 1.6	1000
LWS-A-3-01	LWS-A-3-19	UL	8	1.070	27.2	0.690	17.5	0.187	4.8	0.062	1.6	1000
LWS-A-2-3-01	LWS-A-2-3-19	UL	8	1.070	27.2	0.690	17.5	0.187	4.8	0.125	3.2	1000
LWS-4-01	LWS-4-19	UL	4	1.380	35.0	1.000	25.4	0.187	4.8	0.062	1.6	1000
LWSBH-4-01	—	UL	5	1.380	35.0	1.000	25.4	0.312	7.9	0.250	6.4	1000
LWS-9-4-01	—	—	6	1.380	35.1	1.060	26.8	See Mounting Hole Detail		0.031 - 0.063	0.8 - 1.6	1000
WSLT-T-01A-19	—	—	7	See Figure 7				0.118	3.0	0.065	1.7	1000
LWS-A-4-01	LWS-A-4-19	UL	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	UL	8	1.380	35.0	1.000	25.4	0.187	4.8	0.125	3.2	1000

WS-SH
Wire Saddle, Square Hole Mount





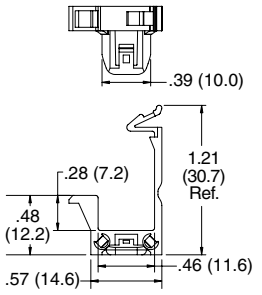
Mounting Hole

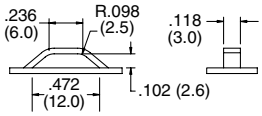
Specifications:
- Material: Nylon 6/6
- Color: Natural

Features:
- Mounts into a square hole to prevent rotation

Item No.			Panel Thickness		A Ref.		B Ref.		Depth		Bulk Pack Qty.
UL94 V-2	UL94 V-0	Approval	In	mm	In	mm	In	mm	In	mm	
WS-SH-1-01	WS-SH-1-19		.031 - .078	0.8 - 2.0	0.510	13.0	0.190	4.8	0.219	5.6	1000
WS-SH-2-01	WS-SH-2-19		.031 - .078	0.8 - 2.0	0.700	17.8	0.390	10.0	0.219	5.6	1000
WS-SH-3-01	WS-SH-3-19		.031 - .078	0.8 - 2.0	1.060	26.9	0.750	19.1	0.219	5.6	1000
WS-SH-4-01	WS-SH-4-19		.031 - .078	0.8 - 2.0	1.370	34.8	1.070	27.2	0.219	5.6	1000

SMWSLT
Side Mount Wire Saddle





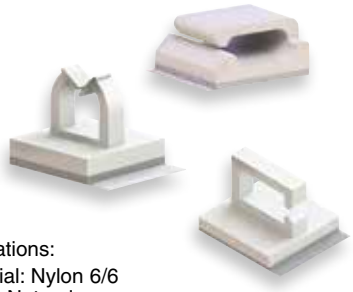
Mounting Dimensions

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

Item No.	Bulk Pack Qty.
SMWSLT-1-19	1000

MWSEB / WSB / MWSB / WS-SE-B
Wire Saddle on Adhesive Base



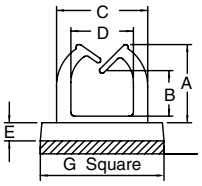


Figure 1

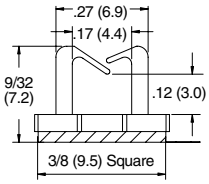


Figure 2

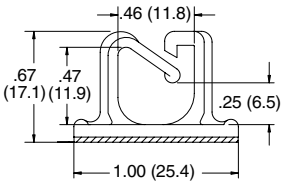


Figure 3

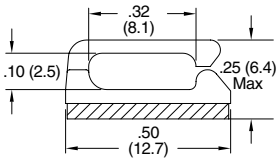


Figure 4

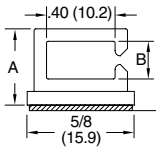


Figure 5

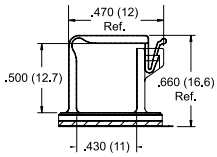


Figure 6

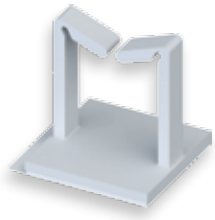
Specifications:
- Material: Nylon 6/6
- Color: Natural

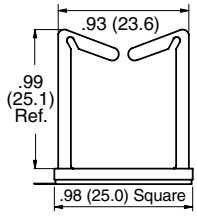
Features:
- Self adhesive wire saddle is designed to support lightweight wire bundles
- Small profile design is ideal for routing fiber

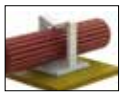
Item No.				A Ref.		B Ref.		C Ref.		D Ref.		E Ref.		G Ref.		Depth		Bulk Pack Qty.
UL94 V-2	UL94 V-0	Approval	Figure	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	
MWSEB-1-01A-RT	MWSEB-1-19A-RT		1	0.160	4.0	0.050	1.3	0.280	7.0	0.190	4.8	0.060	1.6	0.370	9.5	See Fig. 1		1000
MWSEB-2-01A-RT	MWSEB-2-19A-RT		1	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		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		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		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		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
MWSB-1-01A-RT	MWSB-1-19A-RT		2							See Figure 2						See Fig. 2		1000
WSB-2-01A-RT	—		3							See Figure 3						0.480	12.1	1000
MWSSEB-1-01A-RT	MWSSEB-1-19A-RT		4							See Figure 4						0.375	9.5	1000
MWSSEBE-1-01A	MWSSEBE-1-19A		4							See Figure 4						0.500	12.7	1000
WS-SE-B-1-01A	—		5	0.450	11.4	0.220	5.6			See Figure 5						0.375	9.5	1000
WS-SE-B-2-01A	—		5	0.675	17.1	0.450	11.4			See Figure 5						0.375	9.5	1000
WSLTB-03A-19A	—		6							See Figure 6						0.750	19.0	1000

WIRE SADDLES

WWSB
Wire Saddle on Adhesive Base





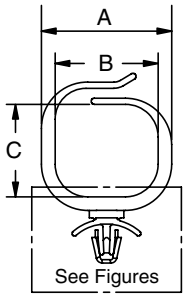


Specifications:
- Material: UL94 HB Nylon 6/6
- Color: Natural

Features:
- No through-hole required
- Large capacity

Item No.	Bulk Pack Qty.
WWSB-3-148A-RT	500

OFNS
Optical Fiber Wire Saddle



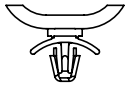


Figure 1
Ø.187

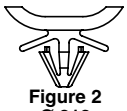


Figure 2
Ø.312

Figure 3
.307 Square

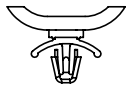


Figure 4
Ø.250

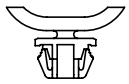
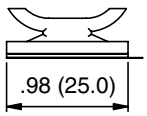


Figure 5
.374 Square



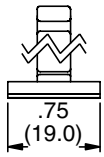


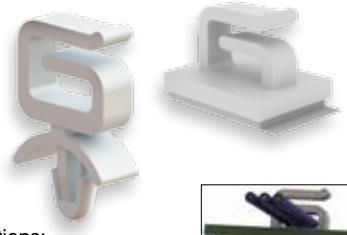
Figure 6

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.		Mounting Hole Ø		Panel Thickness		Depth		Bulk Pack Qty
UL94 V-2	UL94 V-0	Figure	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	
OFNS-13-187-01	OFNS-13-187-19	1	1.060	26.8	0.830	21.2	0.750	19.0	0.187	4.8	.031-.079	0.8-2.0	0.270	6.9	1000
OFNS-13-312-01	OFNS-13-312-19	2	1.060	26.8	0.830	21.2	0.750	19.0	0.312	7.9	.031-.063	0.8-1.6	0.270	6.9	1000
OFNS-13-250-01	OFNS-13-250-19	4	1.060	26.8	0.830	21.2	0.750	19.0	0.250	6.4	.031-.079	0.8-2.0	0.270	6.9	1000
OFNS13-S9.5M-01	OFNS13-S9.5M-19	5	1.060	26.8	0.830	21.2	0.750	19.0	.374 Square	9.5 Square	.031-.079	0.8-2.0	0.270	6.9	1000
OFNSB-13-01A-RT	OFNSB-13-19A-RT	6	1.060	26.8	0.830	21.2	0.750	19.0	Adhesive	Adhesive	Adhesive	Adhesive	0.270	6.9	500
OFNS-16-187-01	OFNS-16-187-19	1	1.350	34.3	1.130	28.7	0.990	25.1	0.187	4.8	.031-.079	0.8-2.0	0.270	6.9	1000
OFNS-16-312-01	OFNS-16-312-19	2	1.350	34.3	1.130	28.7	0.990	25.1	0.312	7.9	.031-.063	0.8-1.6	0.270	6.9	1000
OFNS-16-S307-01	OFNS-16-S307-19	3	1.350	34.3	1.130	28.7	0.990	25.1	.307 Square	7.8 Square	.031-.079	0.8-2.0	0.270	6.9	1000
OFNS16-S9.5M-01	OFNS16-S9.5M-19	4	1.350	34.3	1.130	28.7	0.990	25.1	.374 Square	9.5 Square	.031-.079	0.8-2.0	0.270	6.9	1000
OFNSB-16-01A-RT	OFNSB-16-19A-RT	6	1.350	34.3	1.130	28.7	0.990	25.1	Adhesive	Adhesive	Adhesive	Adhesive	0.270	6.9	500
OFNS28-S9.5M-01	OFNS28-S9.5M-19	5	1.350	34.3	1.130	28.7	0.990	25.1	.374 Square	9.5 Square	.031-.079	0.8-2.0	0.270	6.9	500

MOFNSA / MOFNSP / MOFNSB
Mini Optical Fiber Wire Saddle



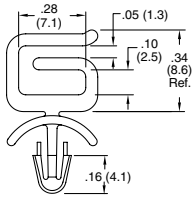


Figure 1

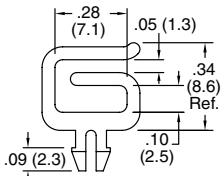
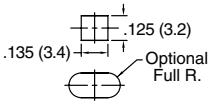


Figure 2



Mounting Hole

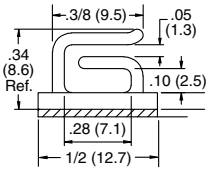


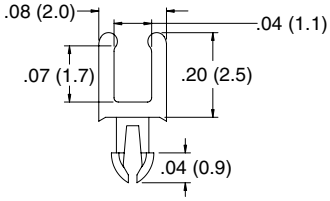
Figure 3

Specifications:
- Material: Nylon 6/6
- Color: Natural

Features:
- Design eliminates stress to fiber upon entry
- Smooth, rounded corners

Item No.			Mounting Hole Ø		Panel Thickness		Depth		Bulk Pack Qty
IUL94 V-2	UL94 V-0	Figure	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

PWS
Pico Wire Saddle

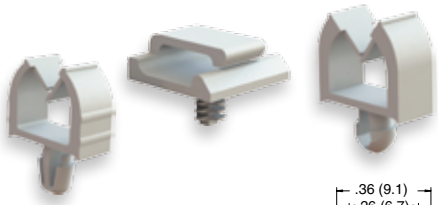


Specifications:
- Material: UL94 V-0 Heat Stabilized, Nylon 6/6
- Color: Natural

Features:
- Gathers and routes fiber optic wires
- Routes up to two 900 micron fibers

Item No.	Mounting Hole Ø		Panel Thickness		Depth		Bulk Pack Qty.
	In	mm	In	mm	In	mm	
PWS-1-104	0.040	1.0	0.040	1.0	0.049	1.3	1000

MWS
Micro Wire Saddle



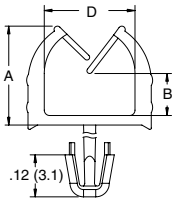


Figure 1

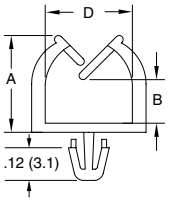


Figure 2

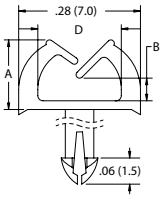


Figure 3

Specifications:
- Material: Nylon 6/6
- Color: Natural

Features:
- Gathers and routes wires
- Small profile is ideal for routing fiber

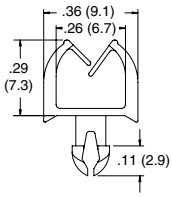


Figure 4

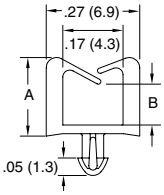


Figure 5

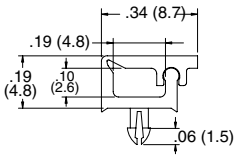


Figure 6

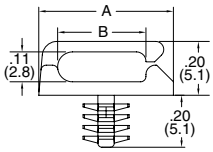
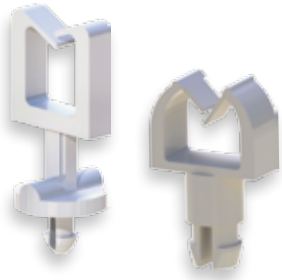


Figure 7

Item No. UL94 V-2	Item No. UL94 V-0	Approval	Figure	A Ref. In	A Ref. mm	B Ref. In	B Ref. mm	D In	D mm	Mounting Hole Ø In	Mounting Hole Ø mm	Panel Thickness In	Panel Thickness mm	Bulk Pack Qty.
MWSET1-1-01	MWSET1-1-19	UL	3	0.160	4.0	0.040	0.9	0.190	4.8	0.067	1.7	0.063	1.6	1000
MWSET1-1-1-01	MWSET1-1-1-19	UL	3	0.160	4.0	0.040	0.9	0.190	4.8	0.067	1.7	0.093	2.4	1000
MWS-1-01	MWS-1-19	UL	5	0.230	5.8	0.120	3.0	See Figure 5		0.070	1.8	0.062	1.6	1000
MWS1-1-01	MWS1-1-19	—	5	0.230	5.8	0.120	3.0	See Figure 5		0.070	1.8	0.093	2.4	1000
MWSET1-2-01	MWSET1-2-19	UL	3	0.240	6.0	0.110	2.9	0.190	4.8	0.067	1.7	0.063	1.6	1000
MWSET1-2-1-01	MWSET1-2-1-19	UL	3	0.240	6.0	0.110	2.9	0.190	4.8	0.067	1.7	0.093	2.4	1000
MWSEA1-1-01	MWSEA1-1-19	UL	1	0.290	7.3	0.120	3.0	0.260	6.6	0.118	3.0	0.063	1.6	1000
MWSEA2-1-01	MWSEA2-1-19	UL	1	0.290	7.3	0.120	3.0	0.260	6.6	0.138	3.5	0.063	1.6	1000
MWSEA1-1-1-01	MWSEA1-1-1-19	UL	1	0.290	7.3	0.120	3.0	0.260	6.6	0.118	3.0	0.093	2.4	1000
MWSEA2-1-1-01	MWSEA2-1-1-19	UL	1	0.290	7.3	0.120	3.0	0.260	6.6	0.138	3.5	0.093	2.4	1000
MWSEA1-2-01	MWSEA1-2-19	UL	1	0.360	9.1	0.160	3.9	0.320	8.1	0.118	3.0	0.063	1.6	1000
MWSEA2-2-01	MWSEA2-2-19	UL	1	0.360	9.1	0.160	3.9	0.320	8.1	0.138	3.5	0.063	1.6	1000
MWSEA1-1-2-01	MWSEA1-1-2-19	UL	1	0.360	9.1	0.160	3.9	0.320	8.1	0.118	3.0	0.093	2.4	1000
MWSEA2-1-2-01	MWSEA2-1-2-19	UL	1	0.360	9.1	0.160	3.9	0.320	8.1	0.138	3.5	0.093	2.4	1000
MWSEA3-2-01	MWSEA3-2-19	UL	2	0.360	9.1	0.160	3.9	0.320	8.1	0.138	3.5	0.063	1.6	1000
MWSEA1-3-01	MWSEA1-3-19	UL	1	0.440	11.2	0.240	6.0	0.360	9.1	0.118	3.0	0.063	1.6	1000
MWSEA2-3-01	MWSEA2-3-19	UL	1	0.440	11.2	0.240	6.0	0.360	9.1	0.138	3.5	0.063	1.6	1000
MWSEA1-1-3-01	MWSEA1-1-3-19	UL	1	0.440	11.2	0.240	6.0	0.360	9.1	0.118	3.0	0.093	2.4	1000
MWSEA2-1-3-01	MWSEA2-1-3-19	UL	1	0.440	11.2	0.240	6.0	0.360	9.1	0.138	3.5	0.093	2.4	1000
—	MWS-2-19	—	5	0.440	11.2	0.330	8.5	See Figure 5		0.070	1.8	0.063	1.6	1000
—	MWS-3-19	—	5	0.440	11.2	0.330	8.5	See Figure 5		0.070	1.8	0.087	2.2	1000
MWSEA1-4-01	MWSEA1-4-19	UL	1	0.510	13.0	0.300	7.7	0.360	9.1	0.118	3.0	0.063	1.6	1000
MWSEA2-4-01	MWSEA2-4-19	UL	1	0.510	13.0	0.300	7.7	0.360	9.1	0.138	3.5	0.063	1.6	1000
MWSEA1-1-4-01	MWSEA1-1-4-19	UL	1	0.510	13.0	0.300	7.7	0.360	9.1	0.118	3.0	0.093	2.4	1000
MWSEA2-1-4-01	MWSEA2-1-4-19	UL	1	0.510	13.0	0.300	7.7	0.360	9.1	0.138	3.5	0.093	2.4	1000
MWSET2-1-01	MWSET2-1-19	UL	4			See Figure 4				0.118	3.0	0.039 - 0.047	1.0 - 1.2	1000
MWSET2-2-01	MWSET2-2-19	UL	4			See Figure 4				0.118	3.0	0.047 - 0.063	1.2 - 1.6	1000
MWSLT-1-01	MWSLT-1-19	—	6			See Figure 6				0.067	1.7	0.063	1.6	1000
MWSLT1-1-01	MWSLT1-1-19	—	6			See Figure 6				0.067	1.7	0.093	2.4	1000
MBHWSSE-1-01	—	—	7	0.500	12.7	0.330	0.8	See Figure 7		0.156	4.0	0.040 - 0.160	1.0 - 4.1	1000
MBHWSSE-1-1-01	—	—	7	0.670	17.0	0.490	12.5	See Figure 7		0.156	4.0	0.040 - 0.160	1.0 - 4.1	1000

MWSELF / SMWS
Standoff Micro Wire Saddle



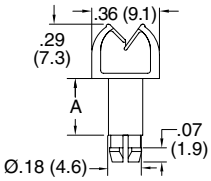


Figure 1

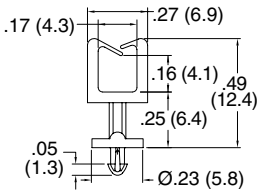


Figure 2

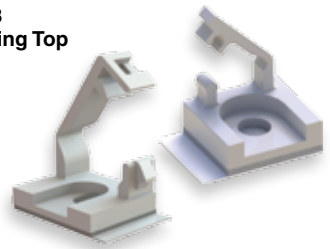
Specifications:
- Material: Nylon 6/6
- Color: Natural

Features:
- Gathers and routes wires
- Standoff design provides spacing between the wires and the chassis

Item No. UL94 V-2	Item No. UL94 V-O	Figure	A In	A mm	Mounting Hole Ø In	Mounting Hole Ø mm	Panel Thickness In	Panel Thickness mm	Bulk Pack Qty.
MWSELF-1-4.1-01	MWSELF-1-4.1-19	1	0.160	4.1	0.150	3.8	0.063	1.6	1000
MWSELF-1-7.7-01	MWSELF-1-7.7-19	1	0.300	7.7	0.150	3.8	0.063	1.6	1000
MWSELF-2-4.1-01	MWSELF-2-4.1-19	1	0.160	4.1	0.150	3.8	0.079	2.0	1000
MWSELF-2-7.7-01	MWSELF-2-7.7-19	1	0.300	7.7	0.150	3.8	0.079	2.0	1000
SMWS-1-01	SMWS-1-19	2	See Figure 2		0.070	1.8	0.062	1.6	1000
SMWS1-1-01	SMWS1-1-19	2	See Figure 2		0.070	1.8	0.093	2.4	1000

WIRE SADDLES & FLAT CABLE CLAMPS

WSLTB / MWSLTB
Wire Saddle Locking Top



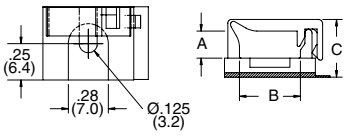


Figure 1

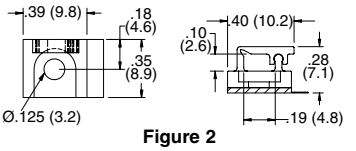


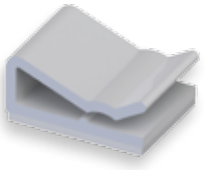
Figure 2

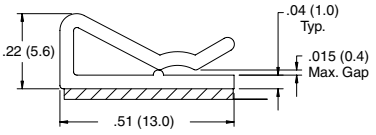
Specifications:
- Material: UL94 V-0 Nylon 6/6
- Color: Natural

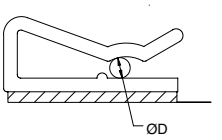
Features:
- Gathers, routes and locks cables and wires

Item No.	Mounting Method	Figure	A In	A mm	B In	B mm	C Ref. In	C Ref. mm	Bulk Pack Qty.
WSLTB-01A-19A	Adhesive	1	0.190	4.8	0.420	10.7	0.410	10.4	1000
WSLTB-01A-19	#4 or M3 Screw or SR-30XX Rivet	1	0.190	4.8	0.420	10.7	0.380	9.6	1000
WSLTB-02A-19A	Adhesive	1	0.390	10.0	0.640	16.3	0.610	15.5	1000
WSLTB-02A-19	#4 or M3 Screw or SR-30XX Rivet	1	0.390	10.0	0.640	16.3	0.580	14.7	1000
MWSLTB-1-19A-RT	Adhesive	2			See Figure 2				1000
MWSLTB-1-19	#4 or M3 Screw or SR-30XX Rivet	2			See Figure 2				1000

SWC
Single Wire Clip





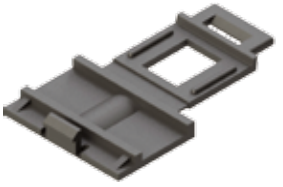


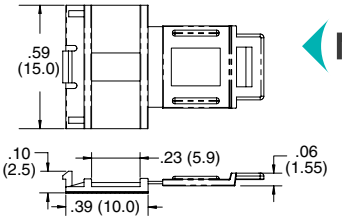
Specifications:
- Material: UL94 V-1 PPE/PS
- Color: White

Features:
- To insert or remove cable, simply lift the tip of the clamp

Item No.	D Holding Ø In	D Holding Ø mm	Base In	Base mm	Bulk Pack Qty.
SWC-0	.030-.060	0.8-1.5	0.510 x 0.380	13.0 x 9.5	1000

MCC
Adhesive Mount Micro Cable Clamp





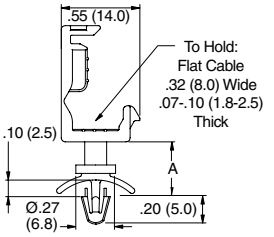
New

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 In	Max Cable Thickness mm	Max Cable Width In	Max Cable Width mm	Bulk Pack Qty.
MCC-1-01A-BK	0.040	1	0.230	5.8	1000

FCWSS
Flat Cable Wire Saddle

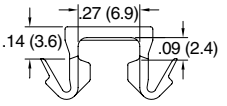


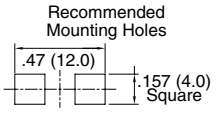
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Black

Features:
- Designed to hold down standard Serial ATA cable
- Flexible tension wing allows a range of cable thicknesses
- Grips cable firmly

Item No.	A In	A	Panel Hole Ø In	Panel Hole Ø mm	Panel Thickness In	Panel Thickness mm	Bulk Pack Qty.
FCWSS-1-01BK	0.189	4.8	0.158	4.000	0.032 - 0.064	0.8 - 1.6	1000
FCWSS-2-01BK	0.394	10.0	0.158	4.000	0.032 - 0.064	0.8 - 1.6	1000

FCCE
Flat Cable Clamp



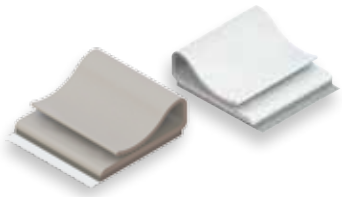


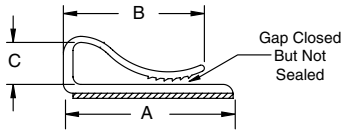
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:
- Holds down ribbon cable
- Extremely low profile

Item No.	Max. Cable Width In	Max. Cable Width mm	Mounting Hole In	Mounting Hole mm	Panel Thickness In	Panel Thickness mm	Depth In	Depth mm	Bulk Pack Qty.
FCCE-9-01	0.250	6.4	0.250	6.4	.039 - .047	1.0 - 1.2	0.280	7.0	1000

CFCC
Side Load Flat Cable Clamp

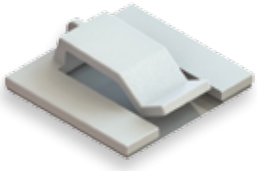


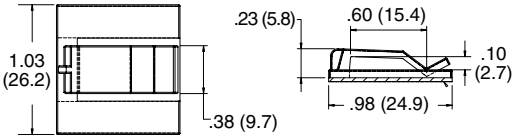


Features:
- Designed for routing flat ribbon cable
- Serrated grip prevents slippage
- Low profile

Item No.	A In	A mm	B Ref. In	B Ref. mm	C In	C mm	Depth In	Depth mm	Material	Color	Bulk Pack Qty.
CFCC-3-05A-RT	0.563	14.3	0.490	12.5	0.180	4.6	1.000	25.4	UL94 V-1 PPE/PS	White	1000
CFCC-4-05A-RT	0.563	14.3	0.420	10.7	0.250	6.4	1.000	25.4	UL94 V-1 PPE/PS	White	1000
CFCC-8-05A-RT	1.062	27.0	0.880	22.4	0.250	6.4	1.000	25.4	UL94 V-1 PPE/PS	White	1000
CFCC-8-04A-RT	1.062	27.0	0.880	22.4	0.250	6.4	1.000	25.4	UL94 V-0 PVC	Grey	1000

CFCCS
Split Flat Cable Clamp 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
Split Flat Cable Clamp

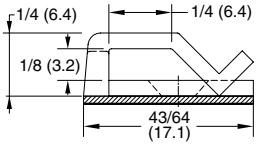


Figure 1

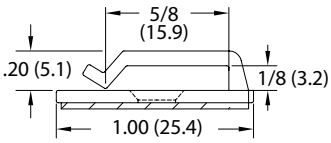


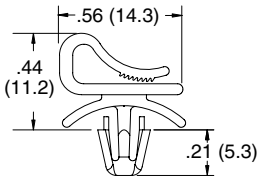
Figure 2

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

Item No.	Base In	Base mm	Mounting Method	Figure	Bulk Pack Qty.
SFCC-4-01	0.672 x 0.500	17.1 x 12.7	#4 or M2.5 Flat Head Screw	1	1000
SFCC-4-01A-RT	0.672 x 0.500	17.1 x 12.7	Adhesive	1	1000
SFCC-8-01	1.000 x 1.000	25.4 x 25.4	#6 or M3 Flat Head Screw	2	1000
SFCC-8-01A-RT	1.000 x 1.000	25.4 x 25.4	Adhesive	2	1000

CFCCA
Flat Cable Clamp

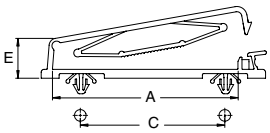


Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:
- Designed for routing flat ribbon cable
- Serrated grip prevents slippage
- Low profile

Item No.	Mounting Hole In	Mounting Hole mm	Panel Thickness In	Panel Thickness mm	Base In	Base mm	Bulk Pack Qty.
CFCCA-1-01	0.187	4.8	0.310 - 0.078	0.8 - 2.0	0.560 x 0.630	14.3 x 15.9	1000

TFCCA
Flat Cable Clamp with Tension



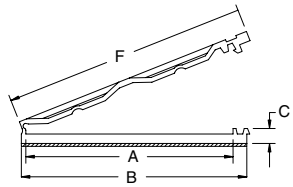
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:
- Provides tension to flat ribbon cable to ensure stability
- Convenient releasable latch

Item No.	Max # of Conductors	A In	A mm	C In	C mm	E In	E mm	Mounting Holes Ø In	Mounting Holes Ø mm	Panel Thickness In	Panel Thickness mm	Depth In	Depth mm	Bulk Pack Qty.
TFCCA-15-01	10	0.570	14.5	0.591	15.0	0.560	14.1	0.156	4.0	0.040 - 0.079	1.0 - 2.0	0.360	9.1	100
TFCCA-25-01	20	0.970	24.7	0.787	20.0	0.500	12.7	0.156	4.0	0.040 - 0.079	1.0 - 2.0	0.520	13.2	100
TFCCA-40-01	40	2.130	54.1	1.575	40.0	0.640	16.3	0.156	4.0	0.040 - 0.079	1.0 - 2.0	0.390	10.0	100
TFCCA-50-01	50	2.510	63.8	1.957	49.7	0.540	13.7	0.156	4.0	0.040 - 0.079	1.0 - 2.0	0.400	10.2	100

FLAT CABLE CLAMPS

TFCM
Flat Cable Clamp with Tension on Adhesive Base

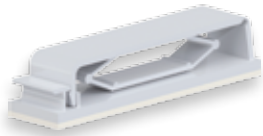


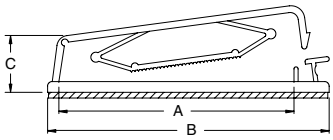
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

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	0.870	22.0	1.060	27.0	0.120	3.0	1.260	32.0	0.390	10.0	15 PIN	200
TFCM-25	1.150	29.3	1.440	36.5	0.120	3.0	1.570	40.0	0.390	10.0	20 PIN	200
TFCM-25M	2.200	55.8	2.410	61.2	0.160	4.0	2.590	66.0	0.590	15.0	40 PIN	100

TFCC
Flat Cable Clamp with Tension on Adhesive Base



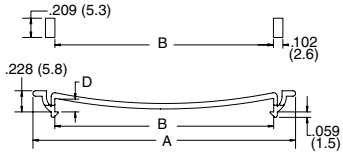


Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

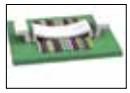
Features:
- Provides tension to flat ribbon cable to ensure stability
- Adhesive base for quick mounting

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	1.260	32.0	1.770	45.0	0.620	15.8	0.730	18.6	100
TFCC-40-01	40	2.130	54.0	2.640	67.0	0.620	15.8	0.620	15.8	100
TFCC-50-01	50	2.570	65.2	3.090	78.4	0.620	15.8	0.740	18.8	100

FCCS
Flat Cable Clamp



Mounting Holes



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	1.060	27.0	0.590	15.0	0.130	3.4	0.280	7.0	500
FCCS-2	1.650	42.0	1.180	30.0	0.150	3.7	0.280	7.0	500
FCCS-3	1.850	47.0	1.380	35.0	0.150	3.7	0.280	7.0	500
FCCS-4	2.240	57.0	1.770	45.0	0.150	3.7	0.280	7.0	500
FCCS-5	2.830	72.0	2.360	60.0	0.150	3.7	0.280	7.0	500

RDAFCC
Flat Cable Clamp

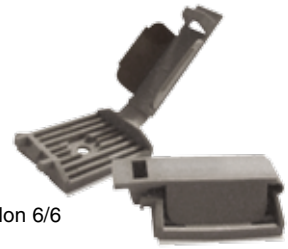


Figure 1

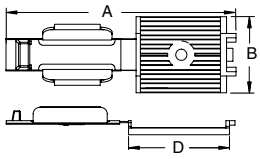
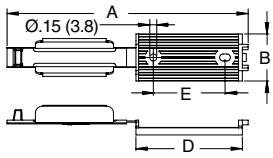


Figure 2

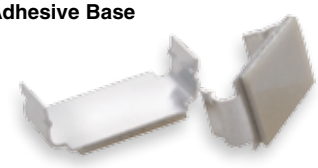


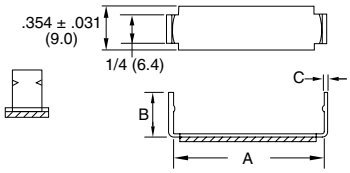
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Grey

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	0.954	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
Aluminum Flat Cable Clamp on Adhesive Base



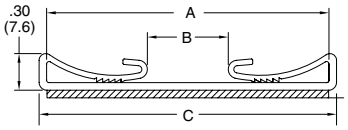


Specifications:
- Material: Aluminum
- Color: Bright Finish

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	0.020	0.500	0.350	9.0	250
AFCC-12	0.750	19.1	0.250	6.4	0.020	0.500	0.350	9.0	250
AFCC-16	1.000	25.4	0.312	7.9	0.020	0.500	0.350	9.0	250
AFCC-20	1.250	31.8	0.375	9.5	0.020	0.500	0.350	9.0	250
AFCC-21	1.312	33.3	0.385	9.8	0.020	0.500	0.350	9.0	250
AFCC-24	1.500	38.1	0.437	11.1	0.020	0.500	0.350	9.0	250
AFCC-28	1.750	44.5	0.500	12.7	0.030	0.800	0.350	9.0	250
AFCC-32	2.000	50.8	0.562	14.3	0.030	0.800	0.350	9.0	250

DFCC
Dual Flat Cable Clamp on Adhesive Base

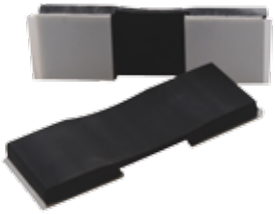


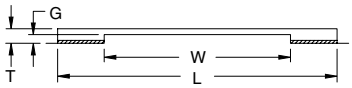
Specifications:
- Material: UL94 V-0 PVC
- Color: Black

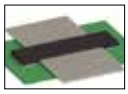
Features:
- Flat ribbon cable is secured by serrated grips on both sides
- Low profile for limited space applications

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
Flat Cable Clamp on Adhesive Base





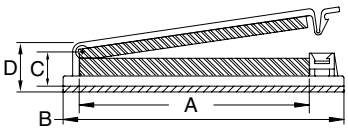


Specifications:
- Material: UL94 V-0 PVC
- Color: Black

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	1.500	38.1	0.500	12.7	0.156	4.0	0.093	2.4	0.500	12.7	100
FCC-8-3-RT	2.000	50.8	1.000	25.4	0.156	4.0	0.093	2.4	0.500	12.7	100
FCC-16-3-RT	3.000	76.2	2.000	50.6	0.156	4.0	0.093	2.4	0.500	12.7	100

FCWSF
Cable Clamp with Silicone Foam Center



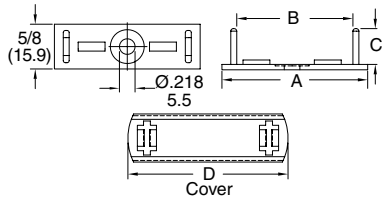
Specifications:
- Material: UL94 V-0 Nylon 6/6 and Silicone Foam
- Color: Natural

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.
											Latch Side		Base Side			
	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm		
FCWSF-29-19	1.240	31.5	1.780	45.1	0.300	7.7	0.440	11.1	0.750	19.1	0.130	3.3	0.130	3.3	1	100
FCWSF-30-19	1.240	31.5	1.790	45.5	0.350	9.0	0.520	13.1	0.750	19.1	0.130	3.3	0190	4.8	1	100
FCWSF-40-19	1.550	39.3	2.090	53.0	0.370	9.3	0.530	13.4	0.750	19.1	0.130	3.3	0.190	4.8	1	100
FCWSF-50-19	2.490	63.2	3.040	77.2	0.360	9.1	0.520	13.2	0.750	19.1	0.130	3.3	0.190	4.8	1	100

CABLE CLAMPS & CLIPS

FCRC
Flat Cable Routing Clamp

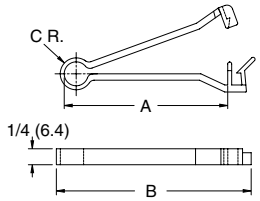


Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

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.
Without Adhesive	With Adhesive	In	mm	In	mm	In	mm		In	mm	
FCRC-13B-4	FCRC-13B-4A-RT	2.040	51.7	1.620	41.2	0.500	12.7	FCRC-13C	2.240	56.8	100
FCRC-19B-4	FCRC-19B-4A-RT	2.720	69.1	2.310	58.7	0.500	12.7	FCRC-19C	2.920	74.2	100
FCRC-21B-4	FCRC-21B-4A-RT	2.980	75.7	2.550	64.8	0.500	12.7	FCRC-21C	3.170	80.5	100
FCRC-26B-4	FCRC-26B-4A-RT	3.660	93.0	3.240	82.3	0.500	12.7	FCRC-26C	3.860	98.0	100
FCRC-13B-6	FCRC-13B-6A-RT	2.040	51.7	1.620	41.2	0.750	19.1	FCRC-13C	2.240	56.8	100
FCRC-19B-6	FCRC-19B-6A-RT	2.720	69.1	2.310	58.7	0.750	19.1	FCRC-19C	2.920	74.2	100
FCRC-21B-6	FCRC-21B-6A-RT	2.980	75.7	2.550	64.8	0.750	19.1	FCRC-21C	3.170	80.5	100
FCRC-26B-6	FCRC-26B-6A-RT	3.660	93.0	3.240	82.3	0.750	19.1	FCRC-26C	3.860	98.0	100

FCLC / FCLCS
Flat Cable Loop Clip

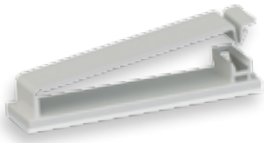


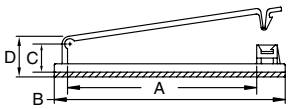
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

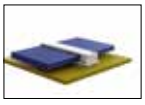
Features:
- Allows for quick positive clamping of flat cable without the need for securing the clip to a board

Item No.	A Max Cable Width		B Ref.		C Ref.		Bulk Pack Qty.
	In	mm	In	mm	In	mm	
FCLCS	1.500	38.1	2.000	50.8	0.230	5.8	500
FCLC	2.500	63.5	3.000	76.2	0.250	6.4	500

FCW
Cable Clamp 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	0.740	18.9	1.240	31.5	1.780	45.1	0.300	7.7	0.440	11.1	100
FCW-30-01	FCW-30-19	30	0.750	19.1	1.240	31.5	1.790	45.5	0.350	9.0	0.520	13.1	100
FCW-40-01	FCW-40-19	40	0.750	19.1	1.550	39.3	2.090	53.0	0.370	9.3	0.530	13.4	100
FCW-50-01	FCW-50-19	50	0.750	19.1	2.490	63.2	3.040	77.2	0.360	9.1	0.520	13.2	100
FCW-50H-01	FCW-50H-19	50	0.740	18.9	2.540	64.6	3.080	78.2	0.590	15.1	0.750	19.0	100

FCCA / FCCB
Arrowhead Mounted Cable Clamp

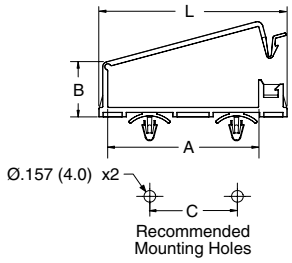


Figure 1

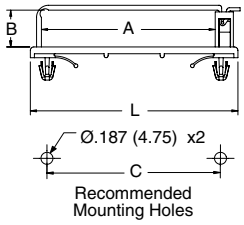


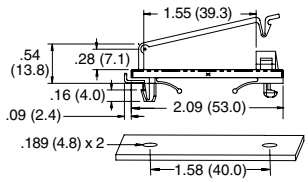
Figure 2

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

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	2.560	65.0	2.100	52.0	0.750	19.1	1.180	30.0	0.030 - 0.079	0.8 - 2.0	0.390	10.0	100
FCCA-40A-01	1	2.640	67.0	5.100	53.4	0.640	16.4	1.580	40.0	0.030 - 0.079	0.8 - 2.0	0.390	10.0	100
FCCB-1	2	3.030	77.0	2.540	64.5	0.280	7.2	2.540	64.5	0.031 - 0.078	0.8 - 2.0	0.790	20.0	100
FCCB-2	2	3.030	77.0	2.540	64.5	0.540	13.7	2.540	64.5	0.031 - 0.078	0.8 - 2.0	0.790	20.0	100

FCSE
Slide Entry Cable Clamp



Mounting Holes

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

Features:
- Removable from the top side of the board
- Fits in standard .189 (4.8) holes

Item No.	Depth In	Depth mm	Panel Thickness In	Panel Thickness mm	Bulk Pack Qty.
FCSE-1	0.750	19.0	0.073	1.4	100

HFCC
Hinged Cable Clamp

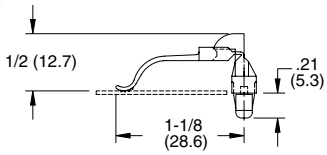


Figure 1

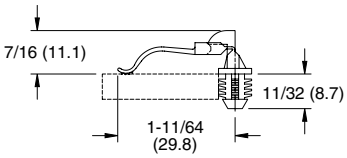


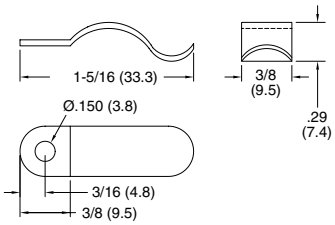
Figure 2

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

Item No.	Mounting Holes In	Mounting Holes mm	Panel Thickness In	Panel Thickness mm	Figure	Bulk Pack Qty.
HFCC-A-8-01	0.187	4.8	.047 - .078	1.2 - 2.0	1	1000
HFCC-BH-8-01	0.312	7.9	.250 min.	6.4 min.	2	1000

TC
Spring Clip

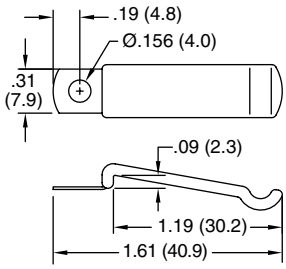


Specifications:
- Material: See Chart
- Color: See Chart

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

Part Number	Holding Ø Max. In	Holding Ø Max. mm	Mounting Method	Material	Color	Bulk Pack Qty.
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

STCV
Vinyl Coated Steel Spring Clip



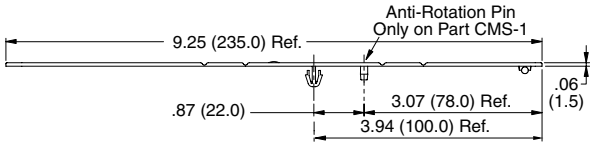
Specifications:
- Material: Stainless Steel SAE30301 Coating: Plastisol Vinyl
- Color: Black

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.
STCV-1	#6 (M3)	1	1000

CABLE STRAPS

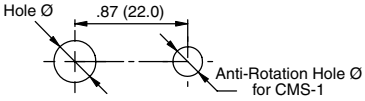
CMS
Cable Management Strap



Specifications:
- Material: UL94 V-0 Nylon 6/6
- Color: See table

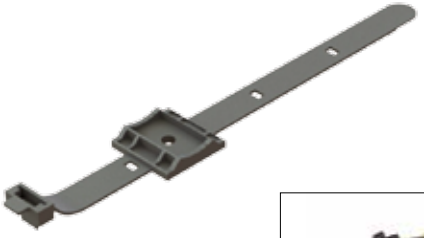
Features:
- Part is provided flat. It is folded up to bundle cables
- Strap is adjustable
- Optional anti-rotation pin prevents the strap from turning in the hole

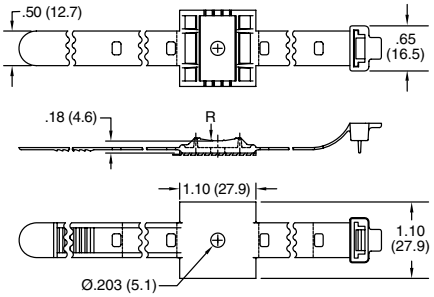
Recommended Mounting Holes For CMS-1



Item No.		Mounting Hole Ø		Anti-Rotation Hole Ø		Panel Thickness		Max Bundle (W x H)		Depth		Bulk Pack Qty.
Natural	Black	In	mm	In	mm	In	mm	In	mm	In	mm	
CMS-1	**CMS-1BK**	0.236 - 0.256	6.0 - 6.5	0.138	3.5	0.118	3	2.76 x 1.12	70 x 30	0.550	14	250
CMS-2	**CMS-2BK**	0.236 - 0.256	6.0 - 6.5	—	—	0.118	3	2.76 x 1.12	70 x 30	0.550	14	250

UMS
Universal Mounting Strap





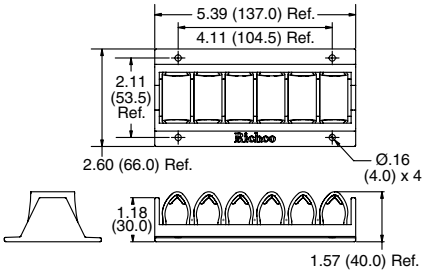
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Black

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		Max Bundle Ø		R Radius		Bulk Pack Qty.
Adhesive Mount	Screw Mount	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
Universal Cable Grip

New



Specifications:
- Base Material: HDPE
  Insert Material: TPE
- Color: Black
- Mount to panel using #6 or M3.5 screws

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

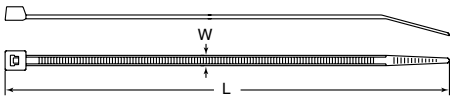
Item No.	Max Cable Bundle Ø Ref (7 Positions)		Max Cable Bundle Ø Ref (5 Center Positions Only)		Pack Qty.	Bulk Pack Qty.
	In	mm	In	mm		
UCG-6BK	0.08	2.0	0.630	16.0	1	125

Expanded Line

CT / WITA
Nylon Locking Cable Tie

Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: See Table
- Service Temperature: -40°F to 185°F (-40°C to 85°C)



Features:

- Complies with MS-3367 & MIL-S-23190E
- UL 181B-C for Ul non-metallic air ducts and connectors on CT080A, CT080B, CT082A & CT082B: recommended for use with R-6 & R-8 flex ducts

Item No.			L Ref.		W Ref.		Max Bundle Ø		Tensile Strength			Bulk Pack Qty.
Natural	Black	Approval	In	mm	In	mm	In	mm	Lbs	N	Classification	
CT001A	CT001B	UL	3.000	75.0	0.095	2.4	0.710	18.0	18	80	Miniature	100
CT002A	CT002B	UL	3.750	96.0	0.098	2.4	0.910	23.0	18	80	Miniature	100
WITA-18SF-M	-	UL	3.850	97.8	0.100	2.5	0.870	22.0	18	80	Miniature	1000
CT003A	CT003B	UL	4.000	100.0	0.098	2.4	0.980	25.0	18	80	Miniature	100
WITA-18R-M	-	UL	4.720	120.0	0.100	2.5	1.060	26.9	18	80	Miniature	1000
CT004A	CT004B	UL	4.750	120.0	0.098	2.5	1.180	30.0	18	80	Miniature	100
CT005A	CT005B	UL	5.500	142.0	0.098	2.5	1.380	35.0	18	80	Miniature	100
WITA-18L-M	—	UL	5.900	150.0	0.100	2.5	1.460	37.1	18	80	Miniature	1000
CT006A	CT006B	UL	6.500	165.0	0.098	2.5	1.730	44.0	18	80	Miniature	100
WITA-18V-M	—	UL	7.870	200.0	0.100	2.5	2.130	54.1	18	80	Miniature	1000
CT007A	CT007B	UL	8.000	203.0	0.098	2.5	2.170	55.0	18	80	Miniature	100
WITA-18X-M	—	UL	15.750	400.0	0.100	2.5	4.560	116.0	18	80	Miniature	1000
CT008A	CT008B	UL	4.750	120.0	0.126	3.2	1.180	40.0	40	178	Intermediate	100
CT009A	CT009B	UL	5.500	142.0	0.126	3.2	1.380	40.0	40	178	Intermediate	100
WITA-40R-C	—	UL	5.910	150.0	0.140	3.6	1.480	37.6	40	178	Intermediate	100
WITA-40R-M	—	UL	5.910	150.0	0.140	3.6	1.480	37.6	40	178	Intermediate	1000
CT010A	CT010B	UL	6.000	150.0	0.142	3.6	1.540	39.0	40	178	Intermediate	100
CT020A	CT020B	UL	7.000	180.0	0.141	3.6	1.930	49.0	40	178	Intermediate	100
WITA-40L-M	—	UL	7.870	200.0	0.140	3.6	2.050	52.0	40	178	Intermediate	1000
CT011A	CT011B	UL	8.000	203.0	0.126	3.2	2.170	40.0	40	178	Intermediate	100
CT012A	CT012C	UL	8.000	203.0	0.142	3.6	2.170	55.0	40	178	Intermediate	100
WITA-40XL-M	—	UL	8.070	205.0	0.140	3.6	2.100	53.3	40	178	Intermediate	1000
CT013A	CT013B	UL	10.000	250.0	0.142	3.6	2.910	74.0	40	178	Intermediate	100
CT014A	CT014B	UL	10.500	265.0	0.142	3.6	3.070	78.0	40	178	Intermediate	100
CT015A	CT015B	UL	11.500	292.0	0.142	3.6	3.350	85.0	40	178	Intermediate	100
WITA-40VL-M	—	UL	11.810	300.0	0.140	3.6	3.270	83.0	40	178	Intermediate	1000
CT016A	CT016B	UL	13.000	330.0	0.142	3.6	3.780	96.0	40	178	Intermediate	100
CT017A	CT017B	UL	14.500	368.0	0.142	3.6	4.020	102.0	40	178	Intermediate	100
CT018A	CT018B	UL	4.750	120.0	0.189	4.8	1.180	30.0	50	222	Standard	100
WITA-50S-M	—	UL	6.300	160.0	0.180	4.6	1.520	38.7	50	222	Standard	1000
CT019A	CT019B	UL	6.500	160.0	0.189	4.8	1.650	42.0	50	222	Standard	100
CT021A	CT021B	UL	7.500	190.0	0.189	4.8	2.050	52.0	50	222	Standard	100
WITA-50R-M	—	UL	7.900	200.7	0.180	4.6	1.950	49.5	50	222	Standard	1000
CT022A	CT022B	UL	8.000	203.0	0.181	4.6	2.170	55.0	50	222	Standard	100
CT023A	CT023B	UL	10.000	250.0	0.189	4.8	2.910	74.0	50	222	Standard	100
CT024A	CT024B	UL	11.000	280.0	0.189	4.8	3.190	81.0	50	222	Standard	100
WITA-50RL-M	—	UL	11.020	280.0	0.190	4.8	3.030	77.0	50	222	Standard	1000
CT025A	CT025B	UL	11.875	300.0	0.189	4.8	3.350	85.0	50	222	Standard	100
CT026A	CT026B	UL	12.250	310.0	0.189	4.8	3.500	89.0	50	222	Standard	100
CT027A	CT027B	UL	14.500	368.0	0.189	4.8	4.020	102.0	50	222	Standard	100
CT028A	CT028B	UL	15.250	385.0	0.189	4.8	4.570	116.0	50	222	Standard	100
WITA-50L-M	—	UL	15.750	400.0	0.180	4.6	4.450	113.0	50	222	Standard	1000
CT029A	CT029B	UL	17.000	432.0	0.189	4.8	4.920	125.0	50	222	Standard	100
CT030A	CT030B	UL	17.750	450.0	0.189	4.8	5.120	130.0	50	222	Standard	100
CT031A	CT031B	UL	19.687	500.0	0.189	4.8	5.910	150.0	50	222	Standard	100
CT033A	CT033B	—	21.687	550.0	0.189	4.8	6.540	166.0	50	222	Standard	100
WITA-50XL-C	—	UL	25.000	635.0	.0.190	4.8	7.480	190.0	50	222	Standard	100
CT063A	CT063B	—	36.000	914.0	0.189	4.8	10.630	270.0	50	222	Standard	100
CT064A	CT064B	—	4.750	120.0	0.299	7.6	1.180	30.0	120	534	Heavy Duty	100
CT065A	CT065B	—	6.000	150.0	0.299	7.6	1.540	39.0	120	534	Heavy Duty	100
CT066A	CT066B	UL	8.000	203.0	0.299	7.6	2.170	55.0	120	534	Heavy Duty	100
WITA-120S-D	—	UL	8.600	218.0	0.300	7.6	2.010	51.0	120	534	Heavy Duty	500
CT067A	CT067B	UL	9.437	240.0	0.299	7.6	2.600	66.0	120	534	Heavy Duty	100
CT068A	CT068B	UL	11.000	280.0	0.299	7.6	3.070	78.0	120	534	Heavy Duty	100
CT069A	CT069B	UL	11.750	300.0	0.299	7.6	3.460	88.0	120	534	Heavy Duty	100
CT070A	CT070B	UL	13.500	340.0	0.299	7.6	3.900	99.0	120	534	Heavy Duty	100
CT071A	CT071B	—	15.000	380.0	0.252	6.4	4.330	110.0	100	445	Heavy Duty	100
CT072A	CT072B	UL	15.000	380.0	0.299	7.6	4.330	110.0	120	534	Heavy Duty	100
WITA-120R-D	—	UL	15.750	400.0	0.310	7.8	4.450	113.0	120	534	Heavy Duty	500
CT073A	CT073B	UL	17.750	450.0	0.315	8.0	5.240	133.0	120	534	Heavy Duty	100
WITA-120L-D	—	UL	21.650	550.0	0.310	7.8	6.380	162.0	120	534	Heavy Duty	500
CT074A	CT074B	UL	21.687	550.0	0.315	8.0	6.540	166.0	175	778	Heavy Duty	100
WITA-175R-L	—	UL	24.000	610.0	0.350	9.0	7.020	178.0	175	778	Heavy Duty	50
CT075A	CT075B	UL	24.000	610.0	0.354	9.0	7.280	185.0	175	778	Heavy Duty	100
CT076A	CT076B	UL	27.000	685.0	0.354	9.0	8.270	210.0	175	778	Heavy Duty	100
CT077A	CT077B	UL	28.000	710.0	0.354	9.0	8.660	220.0	175	778	Heavy Duty	100
CT078A	CT078B	UL	30.000	762.0	0.354	9.0	9.290	236.0	175	778	Heavy Duty	100
CT079A	CT079B	UL	32.000	812.0	0.354	9.0	9.690	246.0	175	778	Heavy Duty	100
CT080A	CT080B	UL	36.000	914.0	0.354	9.0	10.630	270.0	175	778	Heavy Duty	100
WITA-175L-Q	—	UL	36.000	914.0	0.350	9.0	10.910	277.0	175	778	Heavy Duty	25
CT081A	CT081B	UL	46.000	1168.0	0.354	9.0	14.170	360.0	175	778	Heavy Duty	100
CT082A	CT082B	UL	48.000	1219.0	0.354	9.0	15.000	380.0	175	778	Heavy Duty	100
CT084A	CT084B	UL	59.000	1500.0	0.354	9.0	18.270	464.0	175	778	Heavy Duty	100

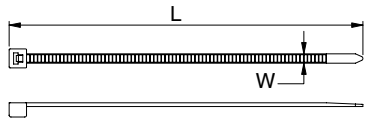
CABLE TIES

CTWR / WITA
Weather Resistant Locking Cable Tie

Expanded Line

Specifications:

- Material: UL94 V-2 UV Stabilized Nylon 6/6
- Color: Black
- Service Temperature: –40°F to 185°F (–40°C to 85°C)

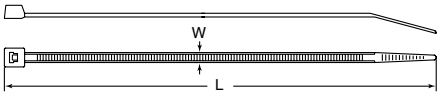


Features:

- Designed for outdoor applications

Item No.	Approval	L Ref. In	L Ref. mm	W Ref. In	W Ref. mm	Max Bundle Ø In	Max Bundle Ø mm	Tensile Strength Lbs	Tensile Strength N	Classification	Bulk Pack Qty.
CTWR001A	UL	3.000	75.0	0.095	2.4	0.710	18.0	18	80	Miniature	100
CTWR002A	UL	3.750	96.0	0.098	2.4	0.910	23.0	18	80	Miniature	100
WITA-18SF-UVB-M	—	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	—	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
CTWR005A	UL	5.500	142.0	0.098	2.5	1.380	35.0	18	80	Miniature	100
WITA-18L-UVB-M	—	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	—	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	—	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-C	—	5.910	150.0	0.140	3.6	1.480	37.6	40	178	Intermediate	100
WITA-40L-UVB-M	—	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	—	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	—	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	—	6.300	160.0	0.180	4.6	1.520	38.7	50	222	Standard	1000
WITA-50R-UVB-M	—	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	—	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	—	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	—	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
CTWR064A	—	4.750	120.0	0.299	7.6	1.180	30.0	120	534	Heavy Duty	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	—	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	—	15.750	400.0	0.310	7.8	4.450	113.0	120	534	Heavy Duty	500
WITA-120L-UVB-D	—	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	—	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
CTWR078A	UL	30.000	762.0	0.354	9.0	9.290	236.0	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	—	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

CTHD
Extra Heavy Duty Cable Tie

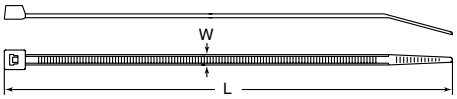


Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: See Table
- Service Temperature: –40°F to 185°F (–40°C to 85°C)

Features:
- High tensile strength for demanding applications

Item No.				L		W		Max Bundle Ø		Tensile Strength			Bulk Pack Qty.
Natural		Black		In	mm	In	mm	In	mm	Lbs	N	Classification	
CTHD001A	UL	CTHD001B	—	9	230.0	0.500	12.7	2.480	63.0	250	1113	Extra Heavy Duty	100
CTHD002A	UL	CTHD002B	—	11	280.0	0.500	12.7	3.150	80.0	250	1113	Extra Heavy Duty	100
CTHD003A	UL	CTHD003B	—	15	380.0	0.500	12.7	4.330	110.0	250	1113	Extra Heavy Duty	100
CTHD004A	—	CTHD004B	—	18-7/8	480.0	0.500	12.7	5.510	140.0	250	1113	Extra Heavy Duty	100
CTHD005A	UL	CTHD005B	UL	21-11/16	550.0	0.500	12.7	6.540	166.0	250	1113	Extra Heavy Duty	100
CTHD006A	—	CTHD006B	—	22-7/8	580.0	0.500	12.7	6.890	175.0	250	1113	Extra Heavy Duty	100
CTHD007A	—	CTHD007B	—	28-3/4	730.0	0.500	12.7	8.860	225.0	250	1113	Extra Heavy Duty	100
CTHD008A	—	CTHD008B	—	34-11/16	880.0	0.500	12.7	10.510	267.0	250	1113	Extra Heavy Duty	100
CTHD009A	—	CTHD009B	—	40-1/2	1030.0	0.500	12.7	12.480	317.0	250	1113	Extra Heavy Duty	100

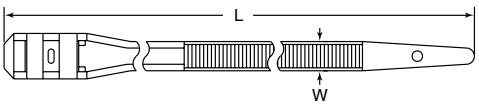
CT
Colored Locking Cable Tie



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

Item No.						L Ref.		W Ref.		Max Bundle Ø		Tensile Strength			Bulk Pack Qty.
Green	Red	Yellow	Blue	Silver	Approval	In	mm	In	mm	In	mm	Lbs	N	Classification	
CT003G	CT003K	CT003Y	CT003L	CT003S	UL	4	100	0.098	2.5	0.980	25	18	80	Miniature	100
CT007G	CT007K	CT007Y	CT007L	CT007S	UL	8	203	0.098	2.5	2.170	55	18	80	Miniature	100
CT010G	CT010K	CT010Y	CT010L	CT010S	UL	6	150	0.142	3.6	1.540	39	40	178	Intermediate	100
CT013G	CT013K	CT013Y	CT013L	CT013S	UL	10	250	0.142	3.6	2.910	74	40	178	Intermediate	100
CT022G	CT022K	CT022Y	CT022L	CT022S	UL	8	203	0.181	4.6	2.170	55	50	222	Standard	100
CT025G	CT025K	CT025Y	CT025L	CT025S	UL	11-7/8	300	0.189	4.8	3.350	85	50	222	Standard	100
CT027G	CT027K	CT027Y	CT027L	CT027S	UL	14-1/2	368	0.189	4.8	4.020	102	50	222	Standard	100
CT072G	CT072K	CT072Y	CT072L	CT072S	UL	15	380	0.299	7.6	4.330	110	120	534	Heavy Duty	100

CTDL
Double Locking Cable Tie

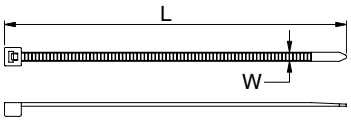


Specifications:
- Material: UL 94 V-2 Nylon 6/6
- Color: Black

Features:
- Bundle conforms to a more rounded shape
- Tail enters head parallel to itself, thus avoiding the teardrop effect of standard cable ties

Item No.	L Ref.		W Ref.		Max Bundle Ø		Tensile Strength		Bulk Pack Qty.
	In	mm	In	mm	In	mm	Lbs	N	
CTDL001A	5-3/16	132.0	0.354	9.0	1.180	30.0	77	343	100
CTDL002A	7-1/16	180.0	0.354	9.0	1.770	45.0	77	343	100
CTDL003A	9-1/4	235.0	0.354	9.0	2.170	55.0	120	534	100
CTDL004A	10-1/2	265.0	0.354	9.0	3.070	78.0	120	534	100
CTDL005A	11-7/8	300.0	0.354	9.0	3.460	88.0	120	534	100
CTDL006A	14-3/16	360.0	0.354	9.0	3.940	100.0	120	534	100
CTDL007A	20	510.0	0.354	9.0	5.910	150.0	120	534	100
CTDL008A	24	610.0	0.354	9.0	7.090	180.0	120	534	100
CTDL009A	30	760.0	0.354	9.0	9.060	230.0	120	534	100

WITA-V0
UL94 V-0 Locking Cable Tie

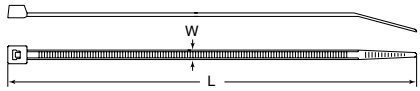


Specifications:
- Material: UL94 V-0 Nylon 6/6
- Color: Natural

Item No.	L Ref.		W Ref.		Max Bundle Ø		Tensile Strength		Bulk Pack Qty.
	In	mm	In	mm	In	mm	Lbs	N	
WITA-18R-V0-M	4.720	120.0	0.100	2.5	1.060	26.9	18	80	1000
WITA-50R-V0-M	7.900	200.7	0.180	4.6	1.950	49.5	50	222	1000

CABLE TIES & INSTALLATION TOOLS

CTHS / WITA-HS
Heat Stabilized Cable Tie



Specifications:
- Material: UL94 V-2 Heat Stabilized Nylon 6/6
- Color: Black
- Service Temperature: –40°F to 221°F (–40°C to 105°C)

Features:
- Suitable for higher temperature applications

Item No.	Approval	L Ref. In	L Ref. mm	W Ref. In	W Ref. mm	Max Bundle Ø In	Max Bundle Ø mm	Tensile Strength Lbs	Tensile Strength N	Classification	Bulk Pack Qty.
CT003F	UL	4.000	100.0	0.098	2.5	0.980	25.0	18	80	Miniature	100
WITA-18R-HS-M	—	4.720	120.0	0.100	2.5	1.060	26.9	18	80	Miniature	1000
CT005C	UL	5.500	142.0	0.098	2.5	1.380	35.0	18	80	Miniature	100
CT007C	UL	8.000	203.0	0.098	2.5	2.170	55.0	18	80	Miniature	100
WITA-40R-HS-M	—	5.910	150.0	0.140	3.6	1.480	37.6	40	178	Intermediate	1000
CT012D	UL	8.000	203.0	0.142	3.6	2.170	55.0	40	178	Intermediate	100
CT015C	UL	11.500	292.0	0.142	3.6	3.350	85.0	40	178	Intermediate	100
CT018C	UL	4.7500	120.0	0.189	4.8	1.180	30.0	50	222	Standard	100
CT019C	UL	6.500	160.0	0.189	4.8	1.650	42.0	50	222	Standard	100
CT021C	UL	7.500	190.0	0.189	4.8	2.050	52.0	50	222	Standard	100
WITA-50R-HS-M	—	7.900	200.7	0.180	4.6	1.950	49.5	50	222	Standard	1000
CT022C	UL	8.000	203.0	0.181	4.6	2.170	55.0	50	222	Standard	100
CT024C	UL	11.000	280.0	0.189	4.8	3.190	81.0	50	222	Standard	100
WITA-50RL-HS-M	—	11.020	280.0	0.190	4.8	3.030	77.0	50	222	Standard	1000
CT025C	UL	11.875	300.0	0.189	4.8	3.350	85.0	50	222	Standard	100
CT027F	UL	14.500	368.0	0.189	4.8	4.020	102.0	50	222	Standard	100
CT029F	UL	17.000	432.0	0.189	4.8	4.920	125.0	50	222	Standard	100
CT033C	—	21.687	550.0	0.189	4.8	6.540	166.0	50	222	Standard	100
CT067C	UL	9.437	240.0	0.299	7.6	2.600	66.0	120	534	Heavy Duty	100
CT072C	UL	15.000	380.0	0.299	7.6	4.330	110.0	120	534	Heavy Duty	100
CT075C	UL	24.000	610.0	0.354	9.0	7.280	185.0	175	778	Heavy Duty	100

CTG
Cable Tie Installation Tools

Figure 1

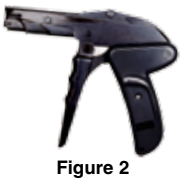


Figure 2

Figure 3

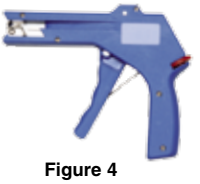


Figure 4

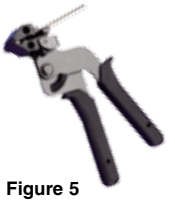


Figure 5

Figure 6

Item No.	Figure	Used with Cable Ties	Features:	Pack Qty.
WIT-1	1	For 18 thru 50 lbs	Lightweight for job site installations and repairs	1
WIT-2A	2	For 18 thru 50 lbs	Heavy duty construction - cuts tie flush when adjustable preset bundling tension is reached	1
CTG004A	3	For 50 thru 175 lbs	Heavy duty construction	1
WIT-3A	4	For 18 thru 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
Standard Releasable Cable Tie

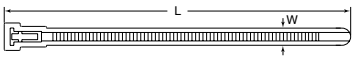


Figure 1

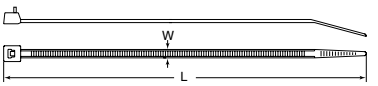


Figure 2

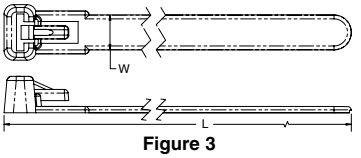


Figure 3

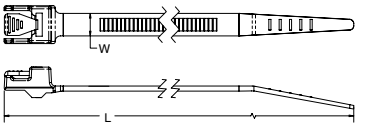


Figure 4

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

Features:
- Ties remain locked until intentionally released using press tab
- Great for temporary bundling purposes or future changes
- RoHS compliant

Item No. Natural	Item No. Black	Item No. Black UV Stabilized Nylon 6/6	Approval	Figure	L Ref. In	L Ref. mm	W Ref. In	W Ref. mm	Max Bundle Ø In	Max Bundle Ø mm	Tensile Strength Lbs	Tensile Strength N	Bulk Pack Qty.
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
CTR006A	—	—	—	2	4.000	100.0	0.142	3.6	1.000	25.0	40	178	100
WIT-RT-0550-M	—	WITRT-0550-UV-M	UL	4	5.500	139.7	0.210	5.3	1.250	31.8	40	178	1000
WIT-RT-0800-M	—	WITRT-0800-UV-M	UL	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
—	CTR001A	—	UL	1	5.000	125.0	0.299	7.6	1.180	30.0	50	222	100
WIT-50SR-M	—	WIT-50SR-UVB-M	UL	2	6.000	152.4	0.190	4.8	1.500	38.1	50	222	1000
—	CTR002A	—	UL	1	6.000	150.0	0.299	7.6	1.380	35.0	50	222	100
WIT-50RR-M	—	WIT-50RR-UVB-M	UL	2	8.000	203.2	0.190	4.8	2.000	50.8	50	222	1000
—	CTR003A	—	UL	1	8.000	200.0	0.299	7.6	2.000	50.0	50	222	100
CTR009A	—	—	—	2	10.000	250.0	0.189	4.8	2.910	74.0	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
WIT-50LR-M	—	WIT-50LR-UVB-M	—	2	11.656	295.9	0.190	4.8	3.000	76.2	50	222	1000
—	CTR005A	—	UL	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
WIT-RT-1525-Q	—	—	UL	4	15.250	387.4	0.520	13.2	4.000	101.6	250	1113	25
WIT-RT-2150-Q	—	—	UL	4	21.500	546.1	0.520	13.2	6.000	152.4	250	1113	25
WIT-RT-2775-Q	—	—	UL	4	27.750	704.9	0.520	13.2	8.000	203.2	250	1113	25

MT
UL Approved Stainless Steel Cable Tie

Specifications:
- Material: See Table
- Temperature Range: –328°F to 1000°F (–200°C to 538°C)

Features:
- Use 316 SS for corrosive environments
- Use Type 304 SS for general purpose indoor/outdoor applications
- Radiation, vibration and flame resistant

Item No.			Length		Width		Max Bundle Ø		Tensile Strength		Pack Qty.	Bulk Pack Qty.
304 Stainless Steel	316 Stainless Steel	Approval	In	mm	In	mm	In	mm	Lbs	N		
MT-1	MT-16		5.000	127.0	0.180	4.6	1.000	25.4	100	445	1	100
MT-2	MT-17		7.910	201.0	0.180	4.6	2.000	51.0	100	445	1	100
MT-3	MT-18		10.200	259.0	0.180	4.6	2.750	70.0	100	445	1	100
MT-4	MT-19		14.250	362.0	0.180	4.6	4.000	102.0	100	445	1	100
MT-5	MT-20		20.510	521.0	0.180	4.6	6.000	152.0	100	445	1	100
MT-6	MT-21		26.730	679.0	0.180	4.6	8.000	203.0	100	445	1	100
MT-7	MT-22		32.990	838.0	0.180	4.6	10.000	254.0	100	445	1	100
MT-8	MT-23		39.290	998.0	0.180	4.6	12.000	304.0	100	445	1	50
MT-9	MT-24		49.210	1250.0	0.180	4.6	15.000	380.0	100	445	1	50
MT-10	MT-25		7.910	201.0	0.310	7.9	2.000	51.0	250	1113	1	100
MT-11	MT-26		14.250	362.0	0.310	7.9	4.000	102.0	250	1113	1	100
MT-12	MT-27		20.510	521.0	0.310	7.9	6.000	152.0	250	1113	1	100
MT-13	MT-28		26.730	679.0	0.310	7.9	8.000	203.0	250	1113	1	100
MT-14	MT-29		32.990	838.0	0.310	7.9	10.000	254.0	250	1113	1	50
MT-15	MT-30		39.290	998.0	0.310	7.9	12.000	304.0	250	1113	1	50

CTSS
Stainless Steel Locking Tie

Use with Installation Tools CTG010A or MTG-1 on page 32.

See page 55 for Stainless Steel Cable Tie Holders.

Specifications:
- Material: See Table
- Temperature Range: –112°F to 1000°F (–80°C to 538°C)

Features:
- Self locking, can be installed by hand
- Excellent resistance to chemicals
- 304 Stainless Steel is an economical choice for light duty applications
- 316 Stainless Steel has superior corrosion resistance for rugged conditions

Item No.		Length		Width		Tensile Strength		Pack Qty.	Bulk Pack Qty.
304 Stainless Steel	316 Stainless Steel	In	mm	In	mm	Lbs	N		
CTSS0152A	CTSS0152B	6.000	152	0.181	4.6	96	427	1	100
CTSS0201A	CTSS0201B	7.910	201	0.181	4.6	96	427	1	100
CTSS0360A	CTSS0360B	14.170	360	0.181	4.6	96	427	1	100
CTSS0520A	CTSS0520B	20.500	520	0.181	4.6	96	427	1	100
CTSS0679A	CTSS0679B	26.730	679	0.181	4.6	96	427	1	100
CTSS2201A	CTSS2201B	7.910	201	0.311	7.9	242	1076	1	100
CTSS2362A	CTSS2362B	14.250	362	0.311	7.9	242	1076	1	100
CTSS2520A	CTSS2520B	20.500	520	0.311	7.9	242	1076	1	100
CTSS2679A	CTSS2679B	26.750	679	0.311	7.9	242	1076	1	100
CTSS2840A	CTSS2840B	33.000	838	0.311	7.9	242	1076	1	100

CTCS
PVC Coated Stainless Steel Cable Tie

Specifications:
- Material 316 Grade Stainless Steel with Black PVC coating
- Temperature Range: -112°F to 302°F (-80°C - 150°C)

Features:
- Coated version offers edge protection and prevents corrosion between metals

Item No.	Length		Width		Max Bundle Ø		Tensile Strength		Pack Qty.	Bulk Pack Qty.
	In	mm	In	mm	In	mm	Lbs	N		
CTCS0150B	5.91	150.0	0.181	4.6	1.18	30.0	112.5	500	1	100
CTCS0200B	7.87	200.0	0.181	4.6	1.97	50.0	112.5	500	1	100
CTCS0360B	14.17	360.0	0.181	4.6	3.94	100.0	112.5	500	1	100
CTCS0520B	20.47	520.0	0.181	4.6	6.14	156.0	112.5	500	1	100
CTCS0680B	26.77	680.0	0.181	4.6	8.15	207.0	112.5	500	1	100
CTCS1200B	7.87	200.0	0.311	7.9	1.97	50.0	250.8	1115	1	100
CTCS1360B	14.17	360.0	0.311	7.9	3.94	100.0	250.8	1115	1	100
CTCS1520B	20.47	520.0	0.311	7.9	6.14	156.0	250.8	1115	1	100
CTCS1680B	26.77	680.0	0.311	7.9	8.15	207.0	250.8	1115	1	100
CTCS1840B	33.07	840.0	0.311	7.9	9.84	250.0	250.8	1115	1	100

CTLS / CTLC
Stainless Steel Ladder Tie

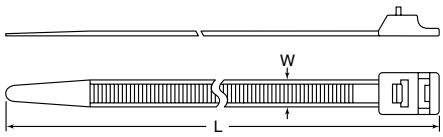
Specifications:
- Material: 316 Grade Stainless Steel available with Black PVC coating
- Uncoated Temperature Range: -112°F to 1000°F (-80°C - 538°C)
- Coated Temperature Range: Operating Temperature: -40°F (-40°C) to 250°F (120°C) {Intermittent up to 300°F (150°C)}

Features:
- Self locking design is easy to install
- Coated version offers protection between different metals
- Tensile strength up to 454 lbs

Item No.		Length		Width		Max Bundle Ø		Tensile Strength		Pack Qty.	Bulk Pack Qty.
Uncoated	Coated	In	mm	In	mm	In	mm	Lbs	N		
CTLS0150B	CTLC0150B	5.910	150.0	0.280	7.0	1.890	48.0	225	1000	1	100
CTLS0225B	CTLC0225B	8.860	225.0	0.280	7.0	2.800	71.0	225	1000	1	100
CTLS0300B	CTLC0300B	11.810	300.0	0.280	7.0	3.820	97.0	225	1000	1	100
CTLS0450B	CTLC0450B	17.720	450.0	0.280	7.0	5.710	145.0	225	1000	1	100
CTLS0610B	CTLC0610B	24.020	610.0	0.280	7.0	7.600	193.0	225	1000	1	100
CTLS1150B	CTLC1150B	5.910	150.0	0.470	12.0	1.890	48.0	454	2019	1	100
CTLS1225B	CTLC1225B	8.860	225.0	0.470	12.0	2.800	71.0	454	2019	1	100
CTLS1300B	CTLC1300B	11.810	300.0	0.470	12.0	3.820	97.0	454	2019	1	100
CTLS1450B	CTLC1450B	17.720	450.0	0.470	12.0	5.710	145.0	454	2019	1	100
CTLS1610B	CTLC1610B	24.020	610.0	0.470	12.0	7.600	193.0	454	2019	1	100

SPECIALTY CABLE TIES

CTRL
Lashing Cable Tie



Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural or UV Stabilized Black

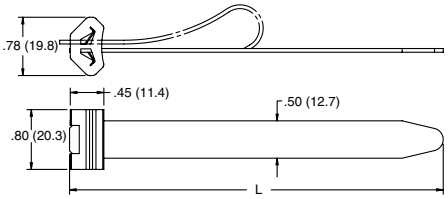
Features:
- Feature an integral retaining loop that eliminates the need to cut the end of the tie
- Simply insert the tie end thru the retaining loop to hold the tie end flush

Item No.		L		W		Max Bundle Ø		Tensile Strength		Bulk Pack Qty.
Natural	Black	In	mm	In	mm	In	mm	Lbs	N	
CTRL001A	CTRL001B	9-7/16	240	0.504	12.80	2.362	60	250	1112	100
CTRL002A	CTRL002B	11-13/16	300	0.504	12.80	3.134	80	250	1112	100
CTRL003A	CTRL003B	16-11/32	415	0.504	12.80	4.567	116	250	1112	100
CTRL004A	CTRL004B	19-10/32	490	0.504	12.80	5.512	140	250	1112	100
CTRL005A	CTRL005B	23-7/32	590	0.504	12.80	6.732	171	250	1112	100

HDSB
Heavy Duty Strap and Buckle

Richco

New

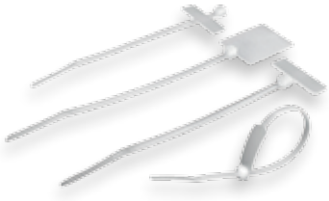


Specifications:
- Head Material: High Impact UV Stabilized Acetal
- Strap Material: See Table
- Color: Black

Features:
- For heavy duty applications; max tensile strength of 350 lbs.
- Steel teeth on buck grip the strap permanently
- Buckle is preassembled on one end of the strap
- Nylon strap material is high strength, lightweight, and relatively inexpensive
- Acetal strap material has excellent weatherability, superior dimension stability, and low-temperature toughness
- Installation tool available. Use Item No. WIT-HD-6

Item No.		Min Loop Tensile Strength Lbs.	L		Max Bundle Ø		Pack Qty.	Bulk Pack Qty.
Strap: UL94 V-2 Nylon 6/6	Strap: High Impact UV Stabilized Acetal		In	mm	In	mm		
HDSB1-350-R	HDSB2-350-R	350	15.000	381.0	4.000	101.6	1	50
HDSB1-350-L	HDSB2-350-L	350	33.000	838.2	9.700	246.4	1	25
HDSB1-350-XL	HDSB2-350-XL	350	50.000	1270.0	15.100	383.5	1	25

CTM / WITA-F Series
Identification Marker Tie



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

Features:
- Identification label on tie that can be imprinted or written on with markers

Figure 1

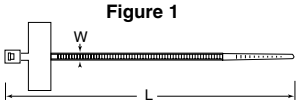


Figure 2

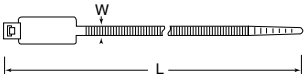


Figure 3

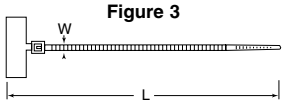
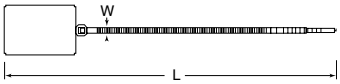


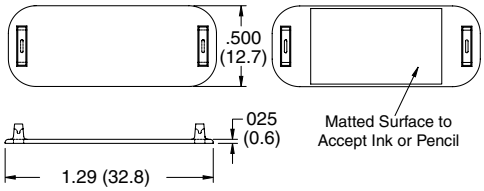
Figure 4



Item No.	Approval	Figure	L Ref.		W Ref.		Max Bundle Ø		Tensile Strength		Marker Pad		Bulk Pack Qty.
			In	mm	In	mm	In	mm	Lbs	N	In	mm	
CTM100A	UL	1	4.000	100.0	0.098	2.5	1.000	25.0	18	80	1.00 x 0.32	25.0 x 8.0	100
WITA-F2-18R-M	—	3	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
CTM200A	UL	3	4.375	110.0	0.098	2.5	1.000	25.0	18	80	1.00 x 0.32	25.0 x 8.0	100
CTM400A	UL	4	5.125	130.0	0.098	2.5	1.000	25.0	18	80	1.10 x 0.78	28.0 x 20.0	100
CTM150A	UL	1	7.875	200.0	0.098	2.5	2.000	50.0	18	80	1.18 x 0.60	30.0 x 15.0	100
CTM300A	UL	2	7.875	200.0	0.181	4.6	2.000	50.0	50	222	1.10 x 0.51	28.0 x 13.0	100
CTM350A	UL	2	10.625	270.0	0.181	4.6	3.000	75.0	50	222	1.10 x 0.51	28.0 x 13.0	100

WIT-MK-1
Marker Tag for Cable Ties

Richco



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)
- Matted surface to accept ink, pencil or marker

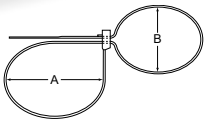
Item No.	Cable Ties Accepted	Bulk Pack Qty.
WIT-MK-1	18 Lbs to 50 Lbs	1000

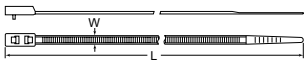
DOUBLE HEADED & BEADED CABLE TIES

CTDH / WITA-DH
Double Headed Cable Tie

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

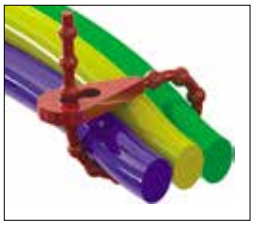
Features:
- Double head design keeps two wire bundles separate





Item No. Natural	Item No. Black UV Stabilized	L In	L mm	W In	W mm	A Max In	A Max mm	A Min In	A Min mm	B Max In	B Max mm	B Min In	B Min mm	Tensile Strength Lbs	Tensile Strength N	Bulk Pack Qty.
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
Beaded Cable Tie

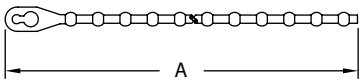


Expanded Line

Richco

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

Features:
- Easy to install and release
- Beaded design keeps wires from shifting or slipping
- PP material is very flexible



Item No. Red UL94 HB Polypropylene	Item No. Yellow UL94 HB Polypropylene	Item No. Blue UL94 HB Polypropylene	Item No. Black UL94 HB Polypropylene	Item No. Natural UL94 V-2 Nylon 6/6	A Ref. Length In	A Ref. Length mm	Max Bundle Ø Requires 3 Bead Engagement In	Max Bundle Ø Requires 3 Bead Engagement mm	Bulk Pack Qty.
BT-2-10-RD	BT-2-10-YL	BT-2-10-BL	BT-2-10-BK	BT-2-01-NT	2.500	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	4.000	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	5.000	127	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	6.000	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	8.750	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	10.750	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	12.750	323.9	3.625	92.1	1000

CTKT / LBT
Ball & Locking Beaded Cable Tie

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

Features:
- Easy to install & release
- Beaded design keeps wires from shifting or slipping
- RoHS compliant
- LBT-18-01 has a permanent locking feature

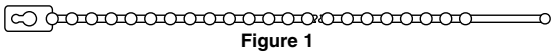


Figure 1

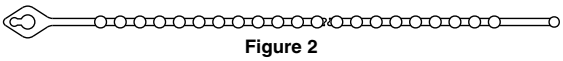


Figure 2

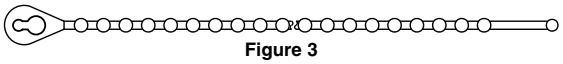


Figure 3

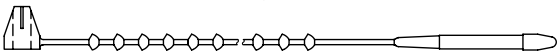
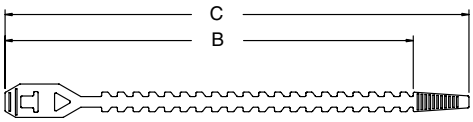


Figure 4

Item No.	Approval	Figure	Length In	Length mm	Width In	Width mm	Max Bundle Ø In	Max Bundle Ø mm	Tensile Strength Lbs	Tensile Strength N	Bulk Pack Qty.
CTKT001A	—	1	4.000	101.6	0.086	2.2	1.000	25.4	18	80	1000
CTKT002A	—	1	4.750	120.6	0.094	2.4	1.180	30.0	18	80	1000
LBT-18-01	UL	4	5.900	150.0	0.080	2.0	1.410	35.6	18	80	1000
CTKT003A	—	3	6.000	152.4	0.114	2.9	1.500	38.1	30	135	1000
CTKT004A	—	3	7.000	178	0.114	2.9	1.930	49.0	40	178	1000
CTKT005A	—	2	9.000	228.6	0.150	3.8	2.500	63.5	40	178	1000
CTKT006A	—	3	11.000	280	0.118	3	3.000	76.2	50	222	1000

HT
Hanking Cable Tie

Richco



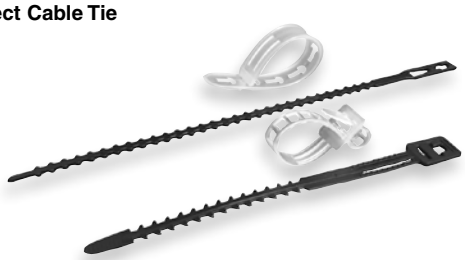
Specifications:
- Material: Polyethylene
- Color: Natural

Features:
- Good for wrapping electrical cords for shipping and packaging
- Extremely flexible

Item No.	B Ref. In	B Ref. mm	C Ref. In	C Ref. mm	Max Bundle Ø In	Max Bundle Ø mm	Width of Strap In	Width of Strap mm	Bulk Pack Qty.
HT-3.9	3.190	81.0	3.900	99.0	0.910	23.0	0.250	6.4	1000
HT-4.9	4.210	107.0	4.920	125.0	1.100	28.0	0.250	6.4	1000
HT-5.9	5.200	132.0	5.910	150.0	1.420	36.0	0.250	6.4	1000

SCREW MOUNT & SPECIALTY CABLE TIES

CWCT
Wire Collect Cable Tie



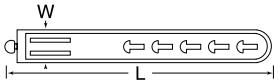


Figure 1

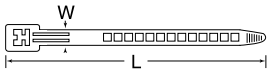


Figure 2

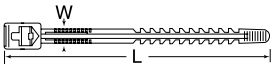


Figure 3

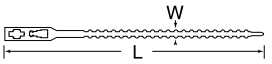


Figure 4

Specifications:
- Material: Polyethylene
- Color: See Table

Features:
- Low cost ties for shipping and packaging
- Easy to remove

Item No. Natural	Item No. Black	Figure	L In	L mm	W In	W mm	Max Bundle Ø In	Max Bundle Ø mm	Tensile Strength Lbs	Tensile Strength N	Bulk Pack Qty.
CWCT010A	**CWCT010B**	1	5-1/8	130.0	0.591	15.0	1.380	35.0	30	133	100
CWCT020A	**CWCT020B**	2	5-1/2	140.0	0.354	9.0	1.500	38.0	18	80	100
CWCT030A	**CWCT030B**	3	6-1/4	160.0	0.354	9.0	1.770	45.0	18	80	100
CWCT040A	**CWCT040B**	4	9-1/16	234.0	0.217	5.5	2.000	50.0	18	80	100

CTMT
Screw Mount Cable Tie

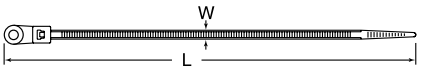


Figure 1

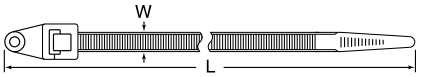


Figure 2

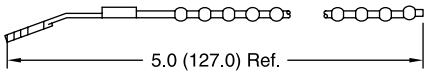
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

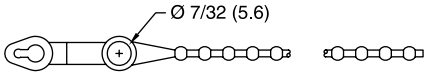
Features:
- Mountable with single screw or bolt

Item No.		Figure	L In	L mm	W In	W mm	Max Bundle Ø In	Max Bundle Ø mm	Tensile Strength Lbs	Tensile Strength N	Screw Size	Bulk Pack Qty.
CTMT001A	UL	1	4	100	0.098	2.5	0.980	25	18	80	#4	100
CTMT002A	UL	1	6	155	0.146	3.7	1.580	40	40	178	#8	100
CTMT003A	UL	1	8	205	0.165	4.2	2.360	60	50	222	#8	100
CTMT004A	—	1	11-7/8	300	0.189	4.8	3.350	85	50	222	#8	100
CTMT005A	UL	1	14-1/2	370	0.189	4.8	4.020	102	50	222	#8	100
CTMT006A	—	2	15-3/4	398	0.311	7.9	4.800	122	120	534	1/4	100
CTMT007A	—	2	11-7/8	300	0.307	7.8	3.150	80	120	534	1/4	100

ST
Screw Mount Beaded Cable Tie

Richco





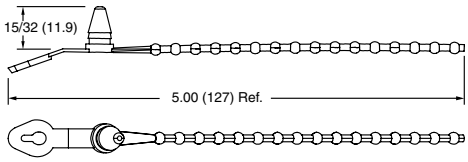
Specifications:
- Material: See table
- Color: Natural
- Easily and securely mounted with a #12 (M5) screw

Features:
- Tie is easily releasable
- PP material is very flexible

Item No.	Material	Material UL Rating	Bundle Ø Range In	Bundle Ø Range mm	Mounting Method	Bulk Pack Qty.
ST-205	UL94 HB Polypropylene	UL94 HB	.250-1.250	6.4-31.8	#12 Screw	1000
ST-305	UL94 V-2 Nylon 6/6	UL94 V-2	.250-1.250	6.4-31.8	#12 Screw	1000

PT
Push In Beaded Cable Tie

Richco



Specifications:
- Material: See table
- Color: See table

Features:
- Easily snaps into mounting hole
- Tie is easily releasable
- PP material is very flexible

Item No. UL94 HB PP	Item No. UL94 V-2 Nylon 6/6	Color	Bundle Ø Range In	Bundle Ø Range mm	Mounting Hole Ø In	Mounting Hole Ø mm	Panel Thickness In	Panel Thickness mm	Bulk Pack Qty.
PT-203	PT-303	Black	1/4 - 1-1/4	6.4 - 31.8	0.250	6.4	1/32 - 1/8	0.8 - 3.2	1000
PT-205	PT-305	Natural	1/4 - 1-1/4	6.4 - 31.8	0.250	6.4	1/32 - 1/8	0.8 - 3.2	1000

CTPM / WIT-A / WITBH
Push Mount Cable Tie

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 8 are removable from the top of the board

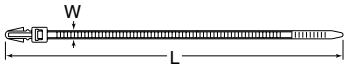


Figure 1

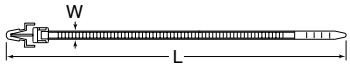


Figure 2

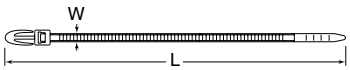


Figure 3

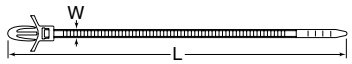


Figure 4

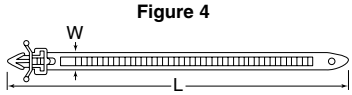


Figure 5

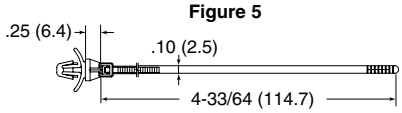


Figure 6

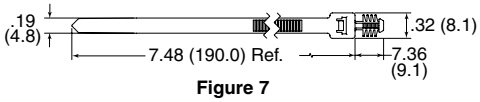


Figure 7

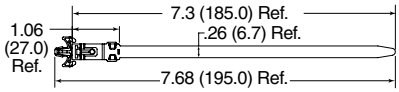


Figure 8

Item No.	Approval	Figure	L Ref.		W Ref.		Max Bundle Ø		Tensile Strength		Mounting Hole Ø		Panel Thickness		Bulk Pack Qty.
			In	mm	In	mm	In	mm	Lbs	N	In	mm	In	mm	
CTPM001A	UL	1	6.125	155.0	0.138	3.5	1.570	40.0	40	178	0.187	4.7	0.118	2.9	100
CTPM003A	—	1	5.125	130.0	0.189	4.8	1.180	30.0	50	222	0.187	4.7	0.118	2.9	100
WIT-50RLA-1	—	1	5.320	135.0	0.190	4.8	1.000	25.4	50	222	0.250	6.4	0.125	3.18	1000
WIT-50RLA-2	—	1	6.690	170.0	0.190	4.8	1.500	38.1	50	222	0.250	6.4	0.125	3.18	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	3.18	1000
CTPM004A	—	1	8.000	203.0	0.189	4.8	2.000	50.8	50	222	0.187	4.7	0.118	2.9	100
CTPM002A	—	1	8.000	203.0	0.189	4.8	2.000	50.8	50	222	0.250	6.4	0.118	2.9	100
WIT-50RLA-M	UL	1	8.870	225.4	0.190	4.8	2.000	50.8	50	222	0.187	4.7	0.093	2.36	1000
WIT-30RAR1-2	—	2	5.125	130	0.14	3.6	1.000	25.4	30	135	0.189	4.8	0.079 - 0.094	2.0 - 2.4	100
CTPM005A	—	2	5.125	130.0	0.138	3.5	1.180	30.0	40	178	0.187	4.7	0.094	2.3	100
CTPM006A	—	2	8.000	200.0	0.138	3.5	2.000	50.8	40	178	0.187	4.7	0.094	2.3	100
WIT-30LAR1-2	—	2	6.125	155.5	0.14	3.6	1.25	31.8	30	135	0.189	4.8	0.079 - 0.094	2.0 - 2.4	100
CTPM007A	—	3	5.125	130.0	0.189	4.8	1.180	30.0	50	222	0.250	6.4	0.098	2.4	100
CTPM008A	—	3	8.000	200.0	0.189	4.8	2.000	50.8	50	222	0.250	6.4	0.130	3.3	100
CTPM009A	—	4	4.750	112.0	0.098	2.5	1.000	25.4	18	80	0.187	4.7	0.120	3	100
CTPM010A	—	4	6.125	155.0	0.138	3.5	1.420	36.0	40	178	0.187	4.7	0.118	2.9	100
CTPM011A	UL	4	5.125	130.0	0.189	4.8	1.180	30.0	50	222	0.234	5.9	0.110	2.8	100
CTPM012A	UL	4	8.000	200.0	0.189	4.8	2.000	50.8	50	222	0.234	5.9	0.110	2.8	100
WIT-18RA-01	—	5	4.290	109.0	0.100	2.5	0.830	21.0	18	80	0.190	4.8	0.060	1.6	1000
CTPM101A	—	5	6.000	152.0	0.315	8.0	1.460	37.0	90	400	0.218	5.5	0.078	1.9	100
WIT-50SA-01	—	5	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	—	5	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
WIT-50SRA-01	—	5	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	—	5	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	—	5	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	—	5	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
WIT-18R1A-4-01	UL	6	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	UL	6	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	UL	6	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	—	7		See Figure 7			1.750	44.5	50	228	0.25	6.4	0.250	6.4	100
WITBH-50R-HS	—	7		See Figure 7			1.750	44.5	50	228	0.25	6.4	0.250	6.4	100
WIT-40LAR	—	8		See Figure 8			1.970	50	40	178	0.187	4.8	0.020 - 0.091	0.5 - 2.3	100

WIT-30RRA / TOAH
Releasable Arrowhead Cable Tie

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

Features:
- Combines cable tie, mount & 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

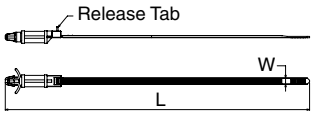


Figure 1

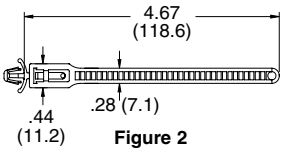
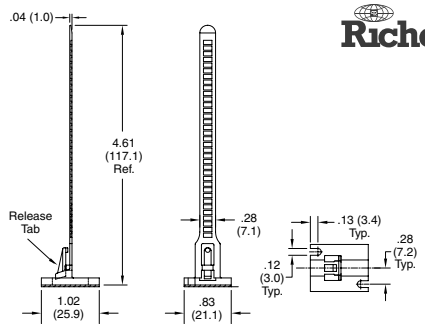


Figure 2

Item No.	Approval	Figure	L Ref.		W Ref.		Max Bundle Ø		Tensile Strength		Mounting Hole Ø		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	UL	1	6.300	160.3	0.140	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	UL	1	6.600	166.7	0.140	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	UL	1	6.800	173.0	0.140	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	UL	1	7.100	179.4	0.140	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-30RRAA-4-M	—	1	6.400	161.6	0.140	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-30RRAA-8-M	—	1	6.600	168.0	0.140	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-30RRAA-12-M	—	1	6.900	174.3	0.140	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-30RRAA-16-M	—	1	7.100	180.7	0.140	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

CABLE TIES & STRAPS

TOBS
Adhesive/Screw Mount Tie

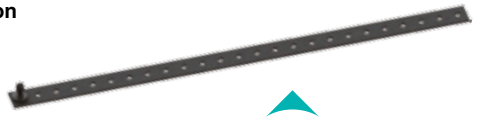


Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Black

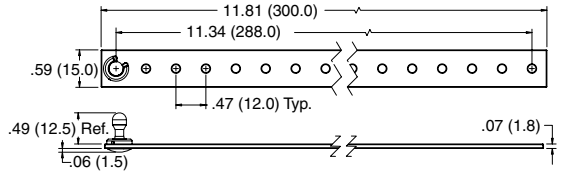
Features:
- Mounts with two #4 (M3) screws or adhesive
- Cable tie is releasable

Item No.	Slots for Screw Size In	Slots for Screw Size mm	Max Bundle Ø In	Max Bundle Ø mm	Bulk Pack Qty.
TOBS-18-01A-RT	#4	M3	1.125	28.5	1000

ES
Rubber Strap with Locking Button



New

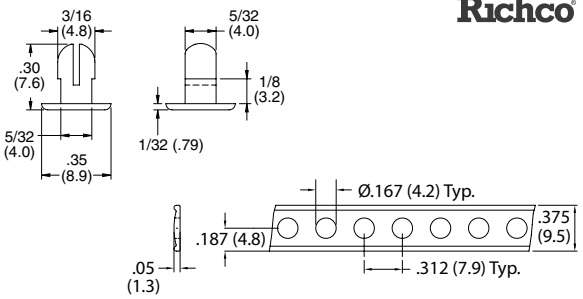


Specifications:
- Material: Strap; Silicone Rubber, 50 Shore A
  Latch Pin; UL94 HB Nylon 6/6
- Color: Black

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.	Max Bundle Ø In	Max Bundle Ø mm	Max Perimeter In	Max Perimeter mm	Pack Qty.	Bulk Pack Qty.
ES-1	4.330	110.0	13.600	345.0	1	100

RNS / LB
Nylon Strap with Locking Button



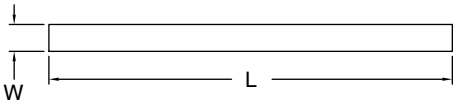
Specifications:
- Material: Nylon 6/6
- Color: Black

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	Material UL Rating	Bulk Pack Qty.
RNS-167	Strap	Nylon 6/6	UL94 HB	100 ft.
LB-5	Locking Button	Nylon 6/6	UL94 V-2	100

RKS
Hook and Loop Strap

New



Specifications:
- Material: Hook: Low Density Polyethylene
  Loop: Nylon Knit
- Color: See table

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. Black	Item No. White	L Length In	L Length mm	W Width In	W Width mm	Bulk Pack Qty.
RKS-8-6-BK-C	—	6.0	152.4	1/2	12.7	100
RKS-8-6-BK	RKS-8-6-W	6.0	152.4	1/2	12.7	10
RKS-8-8-BK-C	—	8.0	203.2	1/2	12.7	100
RKS-8-8-BK	RKW-8-8-W	8.0	203.2	1/2	12.7	10
RKS-8-12-BK-C	—	12.0	304.8	1/2	12.7	100
RKS-8-12-BK	RKS-8-12-W	12.0	304.8	1/2	12.7	10
RKS-12-6-BK-C	—	6.0	152.4	3/4	19.1	100
RKS-12-6-BK	RKS-12-6-W	6.0	152.4	3/4	19.1	10
RKS-12-8-BK-C	—	8.0	203.2	3/4	19.1	100
RKS-12-8-BK	RKS-8-12-W	8.0	203.2	3/4	19.1	10
RKS-12-12-BK-C	—	12.0	304.8	3/4	19.1	100
RKS-12-12-BK	RKS-12-12-W	12.0	304.8	3/4	19.1	10
RKS-16-8-BK-C	—	8.0	203.2	1.0	25.4	100
RKS-16-8-BK	RKS-16-8-W	8.0	203.2	1.0	25.4	10
RKS-16-12-BK-C	—	12.0	304.8	1.0	25.4	100
RKS-16-12-BK	RKS-16-12-W	12.0	304.8	1.0	25.4	10

RKWB / RKWFA
Hook & Loop Clamp

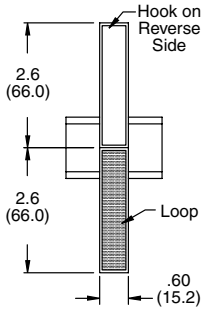


Figure 1

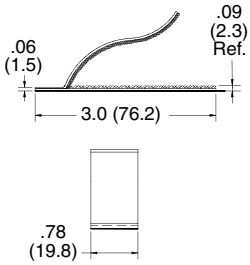


Figure 2

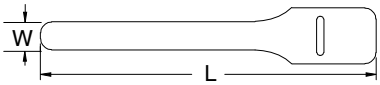
Specifications:
- Material: Hook and Loop
- Color: Black

Features:
- Hook and Loop design
- RKWB accommodates multiple bundle diameters; up to 1-1/2"
- RKWFA accommodates multiple bundle diameters; up to .75"

Item No.	Figure	Max Bundle Ø		Base		Pack Qty.	Bulk Pack Qty.
		In	mm	In	mm		
RKWB-1	1	1.5	38.1	2.000 x 1.000	50.8 x 25.4	1	100
RKWFA-1	2	0.75	19.1	3.000 x 0.780	52.3 x 19.8	1	100

CTHL / RKW
Hook & Loop Cable Tie

Expanded Line



Specifications:
- Material: Loop - Nylon Knit
  Hook - Low Density Polyethylene
- Color: See Table

Features:
- Easy assembly & removal
- Can be fastened & released several times
- Features: VELCRO® brand hook & loop material

See page 55 for Hook & Loop Cable Tie Holders.

Item No.				Screw Mount	L		W		Max Bundle Ø		Bulk Pack Qty.
Black	Blue	Green	Grey		In	mm	In	mm	In	mm	
CTHL001A	—	—	—	No	5.000	127.0	0.472	12.0	1.181	30.0	20
CTHL002A	—	—	—	No	5.313	135.0	0.472	12.0	1.299	33.0	20
RKW-6-6-BK	RKW-6-6-BL	RKW-6-6-GN	RKW-6-6-GY	No	6.000	152.4	0.380	9.5	1.400	35.6	10
RKW-8-6-BK	RKW-8-6-BL	RKW-8-6-GN	RKW-8-6-GY	No	6.000	152.4	0.500	12.7	1.400	35.6	10
CTHL003A	—	—	—	No	7.063	415.0	0.472	12.0	1.575	40.0	20
RKW-8-8-BK	RKW-8-8-BL	RKW-8-8-GN	RKW-8-8-GY	Yes	8.000	203.2	0.500	12.7	1.920	48.7	10
CTHL004A	—	—	—	No	8.250	210.0	0.630	16.0	1.969	50.0	20
RKW-8-9-BK	RKW-8-9-BL	RKW-8-9-GN	RKW-8-9-GY	Yes	9.000	228.6	0.500	12.7	2.140	54.4	10
RKW-8-11-BK	RKW-8-11-BL	RKW-8-11-GN	RKW-8-11-GY	No	11.000	279.4	0.500	12.7	2.618	66.5	10
RKW-8-12-BK	RKW-8-12-BL	RKW-8-12-GN	RKW-8-12-GY	Yes	12.000	304.8	0.500	12.7	2.856	72.5	10
CTHL005A	—	—	—	No	12.813	310.0	0.630	16.0	3.346	85.0	20
RKW-8-13-BK	RKW-8-13-BL	RKW-8-13-GN	RKW-8-13-GY	Yes	13.000	330.2	0.500	12.7	3.396	86.3	10
RKW-12-9-BK	RKW-12-9-BL	RKW-12-9-GN	RKW-12-9-GY	Yes	9.000	228.6	0.750	19.1	2.140	54.4	10
RKW-12-13-BK	RKW-12-13-BL	RKW-12-13-GN	RKW-12-13-GY	Yes	13.000	330.2	0.750	19.1	3.396	86.3	10
RKW-12-15-BK	RKW-12-15-BL	RKW-12-15-GN	RKW-12-15-GY	No	15.000	381.0	0.750	19.1	3.918	99.5	10
RKW-12-18-BK	RKW-12-18-BL	RKW-12-18-GN	RKW-12-18-GY	No	18.000	457.2	0.750	19.1	4.716	119.8	10
RKW-12-24-BK	RKW-12-24-BL	RKW-12-24-GN	RKW-12-24-GY	No	24.000	609.6	0.750	19.1	6.288	159.7	10

Item No.				Screw Mount	L		W		Max Bundle Ø		Bulk Pack Qty.
Orange	Red	White	Yellow		In	mm	In	mm	In	mm	
—	—	—	—	No	5.000	127.0	0.472	12.0	1.181	30.0	20
—	—	—	—	No	5.313	135.0	0.472	12.0	1.299	33.0	20
RKW-6-6-OR	RKW-6-6-RD	RKW-6-6-W	RKW-6-6-YL	No	6.000	152.4	0.380	9.5	1.400	35.6	10
RKW-8-6-OR	RKW-8-6-RD	RKW-8-6-W	RKW-8-6-YL	No	6.000	152.4	0.500	12.7	1.400	35.6	10
—	—	—	—	No	7.063	415.0	0.472	12.0	1.575	40.0	20
RKW-8-8-OR	RKW-8-8-RD	RKW-8-8-W	RKW-8-8-YL	Yes	8.000	203.2	0.500	12.7	1.920	48.7	10
—	—	—	—	No	8.250	210.0	0.630	16.0	1.969	50.0	20
RKW-8-9-OR	RKW-8-9-RD	RKW-8-9-W	RKW-8-9-YL	Yes	9.000	228.6	0.500	12.7	2.140	54.4	10
RKW-8-11-OR	RKW-8-11-RD	RKW-8-11-W	RKW-8-11-YL	No	11.000	279.4	0.500	12.7	2.618	66.5	10
RKW-8-12-OR	RKW-8-12-RD	RKW-8-12-W	RKW-8-12-YL	Yes	12.000	304.8	0.500	12.7	2.856	72.5	10
—	—	—	—	No	12.813	310.0	0.630	16.0	3.346	85.0	20
RKW-8-13-OR	RKW-8-13-RD	RKW-8-13-W	RKW-8-13-YL	Yes	13.000	330.2	0.500	12.7	3.396	86.3	10
RKW-12-9-OR	RKW-12-9-RD	RKW-12-9-W	RKW-12-9-YL	Yes	9.000	228.6	0.750	19.1	2.140	54.4	10
RKW-12-13-OR	RKW-12-13-RD	RKW-12-13-W	RKW-12-13-YL	Yes	13.000	330.2	0.750	19.1	3.396	86.3	10
RKW-12-15-OR	RKW-12-15-RD	RKW-12-15-W	RKW-12-15-YL	No	15.000	381.0	0.750	19.1	3.918	99.5	10
RKW-12-18-OR	RKW-12-18-RD	RKW-12-18-W	RKW-12-18-YL	No	18.000	457.2	0.750	19.1	4.716	119.8	10
RKW-12-24-OR	RKW-12-24-RD	RKW-12-24-W	RKW-12-24-YL	No	24.000	609.6	0.750	19.1	6.288	159.7	10

Item No.	Screw Mount	L		W		Max Bundle Ø		Bulk Pack Qty.
Black		In	mm	In	mm	In	mm	
RKW-6-6-BK-C	No	6.000	152.4	0.380	9.5	1.400	35.56	100
RKW-8-6-BK-C	No	6.000	152.4	0.500	12.7	1.400	35.56	100
RKW-8-8-BK-C	Yes	8.000	203.2	0.500	12.7	1.920	48.70	100
RKW-8-9-BK-C	Yes	9.000	228.6	0.500	12.7	2.140	54.40	100
RKW-8-11-BK-C	No	11.000	279.4	0.500	12.7	2.618	66.50	100
RKW-8-12-BK-C	Yes	12.000	304.8	0.500	12.7	2.856	72.54	100
RKW-8-13-BK-C	Yes	13.000	330.2	0.500	12.7	3.396	86.25	100
RKW-12-9-BK-C	Yes	9.000	228.6	0.750	19.1	2.140	54.40	100
RKW-12-13-BK-C	Yes	13.000	330.2	0.750	19.1	3.396	86.25	100
RKW-12-15-BK-C	No	15.000	381.0	0.750	19.1	3.918	99.52	100
RKW-12-18-BK-C	No	18.000	457.2	0.750	19.1	4.716	119.78	100
RKW-12-24-BK-C	No	24.000	609.6	0.750	19.1	6.288	159.71	100

HOOK & LOOP CABLE TIES & CINCH STRAPS

RKWPR
Plenum Rated Hook and Loop Cable Tie

New

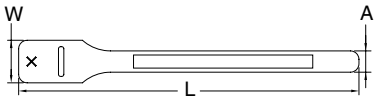
Specifications:
- Material / Color
  Hook: Black UL94 V-2 Polypropylene
  Loop: Maroon UL94 V-2 Nylon

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
- Features: 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	6.000	152.4	1.000	25.4	0.500	12.7	10
RKWPR-8-6	No	6.000	152.4	.750	19.1	0.380	9.5	10
RKWPR-8-8	Yes	8.000	203.2	1.000	25.4	0.500	12.7	10
RKWPR-8-9	Yes	9.000	228.6	1.000	25.4	0.500	12.7	10
RKWPR-8-11	No	11.000	279.4	1.000	25.4	0.500	12.7	10
RKWPR-8-12	Yes	12.000	304.8	1.000	25.4	0.500	12.7	10
RKWPR-8-13	Yes	13.000	330.2	1.000	25.4	0.500	12.7	10
RKWPR-12-9	Yes	9.000	228.6	1.500	38.1	0.750	19.1	10
RKWPR-12-13	Yes	13.000	330.2	1.500	38.1	0.750	19.1	10

RKWID
Hook and Loop Marker Tie

New



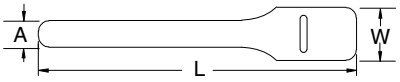
Specifications:
- Material: Hook: LDPE
  Loop: Nylon Knit
- Color: Black

Features:
- This product features VELCRO® brand hook and loop material
- Writing surface on tie can be used to identify bundle with a felt tip pen or marker

Item No.	Screw Mount	L Length		W		A		Bulk Pack Qty.
		In	mm	In	mm	In	mm	
RKWID-8-8-BK	Yes	8.000	203.2	1.000	25.4	0.500	12.7	10

RKWE
Economy Hook and Loop Cable Tie

New



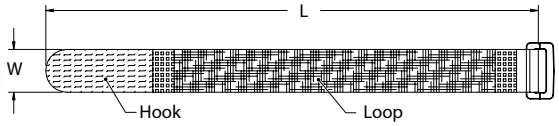
Specifications:
- Material: Hook: LDPE
  Loop: Nylon Knit
- Color: See Table

Features:
- Featuring VELCRO® brand hook and loop material
- Similar in function and purpose to the RKW, these economy ties are made from a lower-profile, economical material

Item No.		L		W		A		Bulk Pack Qty.
Black	White	In	mm	In	mm	In	mm	
RKWE-6-6-BK	RKWE-6-6-W	6.000	152.4	0.750	19.1	0.380	9.5	10
RKWE-8-6-BK	RKWE-8-6-W	6.000	152.4	1.000	25.4	0.500	12.7	10
RKWE-8-8-BK	RKWE-8-8-W	8.000	203.2	1.000	25.4	0.500	12.7	10
RKWE-8-11-BK	RKWE-8-11-W	11.000	279.4	1.000	25.4	0.500	12.7	10
RKWE-8-12-BK	RKWE-8-12-W	12.000	304.8	1.000	25.4	0.500	12.7	10
RKWE-12-15-BK	RKWE-12-15-W	12.000	304.8	1.500	38.1	0.750	19.1	10

RKWDM
Hook and Loop Cinch Strap with Metal Buckle

New



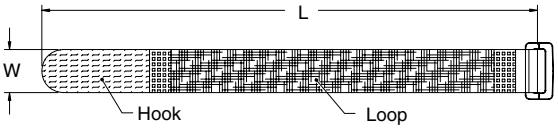
Specifications:
- Material: Nylon Woven Hook and Loop
  Buckle: Metal
- Color: See Table

Features:
- Metal buckle for heavy duty industrial applications

Item No.		L Length		W		Approximate Bundle Ø with Hook Fully Engaged		Bulk Pack Qty.
Black	Orange	In	mm	In	mm	In	mm	
RKWDM-16-15-BK	RKWDM-16-15-OR	15.000	381.0	1.000	25.4	3.750	95.0	10
RKWDM-16-20-BK	RKWDM-16-20-OR	20.000	508.0	1.000	25.4	5.500	140.0	10
RKWDM-16-22-BK	RKWDM-16-22-OR	22.000	559.0	1.000	25.4	5.938	151.0	10
RKWDM-16-24-BK	RKWDM-16-24-OR	24.000	610.0	1.000	25.4	6.625	168.0	10
RKWDM-32-15-BK	RKWDM-32-15-OR	15.000	381.0	2.000	51.0	3.750	95.0	10
RKWDM-32-20-BK	RKWDM-32-20-OR	20.000	508.0	2.000	51.0	5.500	140.0	10
RKWDM-32-22-BK	RKWDM-32-22-OR	22.000	559.0	2.000	51.0	6.000	152.0	10
RKWDM-32-24-BK	RKWDM-32-24-OR	24.000	610.0	2.000	51.0	6.625	168	10

RKWD
Hook & Loop Cinch Strap

New

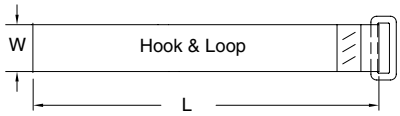


Specifications:
- Material: Nylon Woven Hook and Loop
  Buckle: Nylon
- Color: See Table

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 Length		W		Approximate Bundle Ø with Hook Fully Engaged		Bulk Pack Qty.
Black	Orange	In	mm	In	mm	In	mm	
RKWD-12-12-BK	—	12.000	305	0.750	19.1	2.875	73	10
RKWD-12-18-BK	—	18.000	457	0.750	19.1	4.750	121	10
RKWD-16-9-BK	RKWD-16-9-OR	9.000	229	1.000	25.4	1.875	48	10
RKWD-16-12-BK	RKWD-16-12-OR	12.000	305	1.000	25.4	2.875	73	10
RKWD-16-15-BK	RKWD-16-15-OR	15.000	381	1.000	25.4	3.750	95	10
RKWD-16-20-BK	RKWD-16-20-OR	20.000	508	1.000	25.4	5.500	140	10
RKWD-16-24-BK	RKWD-16-24-OR	24.000	609	1.000	25.4	6.625	168	10

RKWDA
Extra Long / Cut to Length Cinch Strap



New

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		Bundle Ø with Hook Fully Engaged		Bulk Pack Qty.
	In	mm	In	mm	In	mm	
RKWDA-16-20BK	20.000	508.0	1.000	25.4	5.500	140.0	10
RKWDA-16-24BK	24.000	609.0	1.000	25.4	6.325	168.0	10
RKWDA-16-36-BK	36.000	914.0	1.000	25.4	10.500	267.0	10
RKWDA-16-48-BK	48.000	1219.0	1.000	25.4	14.375	365.0	10
RKWDA-32-20-BK	20.000	508.0	2.000	50.8	5.500	140.0	10
RKWDA-32-24-BK	24.000	610.0	2.000	50.8	6.628	169.0	10
RKWDA-32-36-BK	36.000	914.0	2.000	50.8	10.500	267.0	10
RKWDA-32-48-BK	48.000	1219.0	2.000	50.8	14.375	365.0	10

RKWDG / RKWDE
Hook & Loop Cinch Strap with Grommet

New

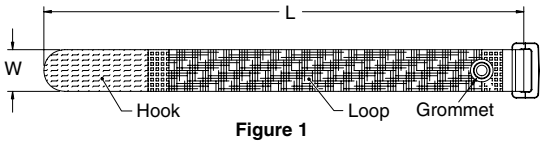


Figure 1

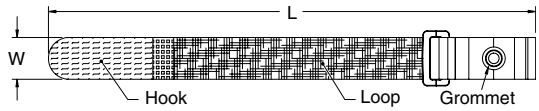


Figure 2

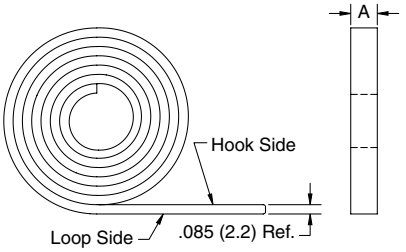
Specifications:
- Material: Nylon Woven Hook and Loop
  Buckle: Nylon
  Grommet: Brass
- Color: See Table

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

Item No.		Figure	L Length		W		Approximate Bundle Ø with Hook Fully Engaged		Grommet Ø Ref.		Bulk Pack Qty.
Black	Orange		In	mm	In	mm	In	mm	In	mm	
RKWDG-16-9-BK	RKWDG-16-9-OR	1	9.000	229	1.000	25.4	1.875	48	0.250	6.4	10
RKWDE-16-9-BK	RKWDE-16-9-OR	2	9.000	229	1.000	25.4	1.875	48	0.250	6.4	10
RKWDG-12-12-BK	—	1	12.000	305	0.750	19.1	2.875	73	0.250	6.4	10
RKWDE-12-12-BK	—	2	10.500	267	0.750	19.1	2.375	60	0.250	6.4	10
RKWDG-16-12-BK	RKWDG-16-12-OR	1	12.000	305	1.000	25.4	2.875	73	0.250	6.4	10
RKWDE-16-12-BK	RKWDE-16-12-OR	2	12.000	305	1.000	25.4	2.875	73	0.250	6.4	10
RKWDG-16-15-BK	RKWDG-16-15-OR	1	15.000	381	1.000	25.4	3.750	95	0.250	6.4	10
RKWDE-16-15-BK	RKWDE-16-15-OR	2	15.000	381	1.000	25.4	3.750	95	0.250	6.4	10
RKWDG-12-18-BK	—	1	18.000	457	0.750	19.1	4.750	121	0.250	6.4	10
RKWDE-12-18-BK	—	2	16.500	419	0.750	19.1	4.250	108	0.250	6.4	10
RKWDG-16-20-BK	RKWDG-16-20-OR	1	20.000	508	1.000	25.4	5.500	140	0.250	6.4	10
RKWDE-16-20-BK	RKWDE-16-20-OR	2	20.000	508	1.000	25.4	5.500	140	0.250	6.4	10
RKWDG-16-24-BK	RKWDG-16-24-OR	1	24.000	609	1.000	25.4	6.625	168	0.250	6.4	10
RKWDE-16-24-BK	RKWDE-16-24-OR	2	24.000	609	1.000	25.4	6.625	168	0.250	6.4	10

HOOK & LOOP ROLLS

RKWR
Hook & Loop Roll

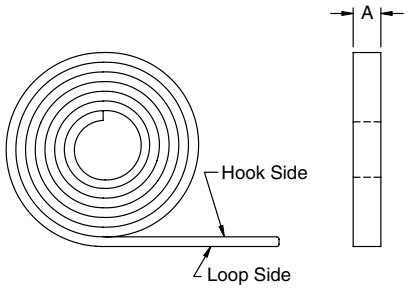


Specifications:
- Material: Hook: LDPE
  Loop: Nylon Knit, RMS-251
- Color: See Table

Features:
- This product features VELCRO® brand hook & loop material
- User can cut to desired length
- Available in 2 lengths; 5 yards and 25 yards

Item No.								A		Roll Length
Black	Blue	Green	Grey	Orange	Red	White	Yellow	In	mm	
RKWR-3-BK	RKWR-3-BL	RKWR-3-GN	RKWR-3-GY	RKWR-3-OR	RKWR-3-RD	RKWR-3-W	RKWR-3-YL	0.500	12.7	5 Yards
RKWR-1-BK	RKWR-1-BL	RKWR-1-GN	RKWR-1-GY	RKWR-1-OR	RKWR-1-RD	RKWR-1-W	RKWR-1-YL	0.750	19.1	5 Yards
RKWR-2-BK	RKWR-2-BL	RKWR-2-GN	RKWR-2-GY	RKWR-2-OR	RKWR-2-RD	RKWR-2-W	RKWR-2-YL	1.000	25.4	5 Yards
RKWR-3L-BK	RKWR-3L-BL	RKWR-3L-GN	RKWR-3L-GY	RKWR-3L-OR	RKWR-3L-RD	RKWR-3L-W	RKWR-3L-YL	0.500	12.7	25 Yards
RKWR-1L-BK	RKWR-1L-BL	RKWR-1L-GN	RKWR-1L-GY	RKWR-1L-OR	RKWR-1L-RD	RKWR-1L-W	RKWR-1L-YL	0.750	19.1	25 Yards
RKWR-2L-BK	RKWR-2L-BL	RKWR-2L-GN	RKWR-2L-GY	RKWR-2L-OR	RKWR-2L-RD	RKWR-2L-W	RKWR-2L-YL	1.000	25.4	25 Yards

RKWRE
Economy Hook & Loop Roll

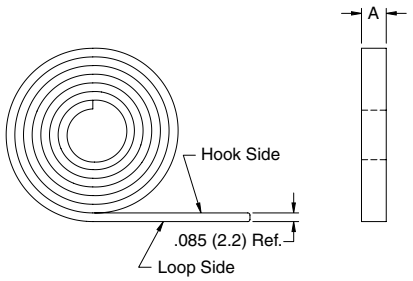


Specifications:
- Material: Hook: LDPE
  Loop: Nylon Knit
- Color: Black

Features:
- This product features VELCRO® brand hook & 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
	In	mm	
RKWRE-3L-BK	0.500	12.7	25 Yards
RKWRE-1L-BK	0.750	19.1	25 Yards

RKWRPR
Plenum Rated Hook & Loop Roll

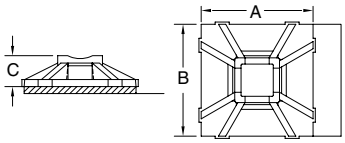


Specifications:
- Material: Hook: UL94 V-2 Black Polypropylene
  Loop: UL94 V-2 Maroon Nylon
- Color: Maroon

Features:
- This product features VELCRO® brand hook & 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
	In	mm	
RKWRPR-3	0.500	12.7	5 Yards
RKWRPR-1	0.750	19.1	5 Yards
RKWRPR-2	1.000	25.4	5 Yards
RKWRPR-3L	0.500	12.7	25 Yards
RKWRPR-1L	0.750	19.1	25 Yards
RKWRPR-2L	1.000	25.4	25 Yards

MFTH
Mini Cable Tie Mount with Adhesive Base

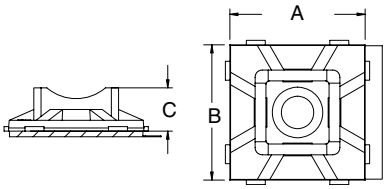


Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

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

Item No. 1000 / Bag	Item No. 100 / Bag	Used with Cable Ties	Approval	Adhesive	A In	A mm	B In	B mm	C In	C mm
MFTH-2-01A-RT-M	MFTH-2-01A-RT-C	18 lbs		Acrylic	0.500	12.7	0.500	12.7	0.140	3.5
MFTH-2-01A1-M	MFTH-2-01A1-C	18 lbs		Rubber	0.500	12.7	0.500	12.7	0.140	3.5

FTH-5 / FTH-7
Four Way Cable Tie Mount



Specifications:
- Material: UL94 V-2 Nylon 6/6 (Black is UV stabilized)
- Color: See Chart

Features:
- 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

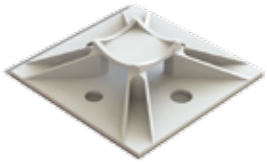
3/4" x 3/4"

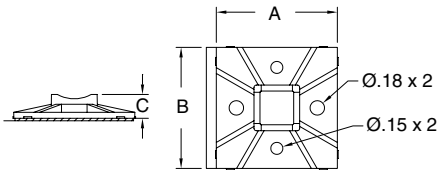
Item No. Natural 1000 / Bag	Item No. Natural 100 / Bag	Item No. Black 1000 / Bag	Item No. Black 100 / Bag	Approval	Used with Cable Ties	Adhesive	Recommended Mounting Screw	A In	A mm	B In	B mm	C In	C mm
FTH-5A-RT-M	FTH-5A-RT-C	FTH-5A-RT-UVB-M	FTH-5A-RT-UVB-C		18 & 40 lbs	Acrylic	#6 and M3.5 Flat Head	0.750	19.1	0.750	19.1	0.240	6.1
FTH-5A1-RT-M	FTH-5A1-RT-C	—	—		18 & 40 lbs	Rubber	#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		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 1000 / Bag	Item No. Natural 100 / Bag	Item No. Black 1000/Bag	Item No. Black 100/Bag	Used with Cable Ties	Approval	Adhesive	Recommended Mounting Screw	A In	A mm	B In	B mm	C In	C mm
FTH-7A-RT-M	FTH-7A-RT-C	FTH-7A-RT-UVB-M	FTH-7A-RT-UVB-C	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	—	—	50 lbs		Rubber	#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	50 lbs		Screw Mount	#8 and M4 Flat Head	1.000	25.4	1.000	25.4	0.280	7.1

FTH-8 / FTH-10
Four Way Cable Tie Mount





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"

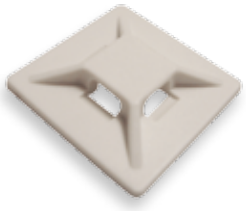
Item No. 1000 / Bag	Item No. 100 / Bag	Used with Cable Ties	Approval	Adhesive	Recommended Mounting Screw	A In	A mm	B In	B mm	C In	C mm
FTH-8A-RT-M	FTH-8A-RT-C	50 & 120 lbs		Acrylic	2 x #6, #8 or M4	1.500	38.1	1.500	38.1	0.300	7.6

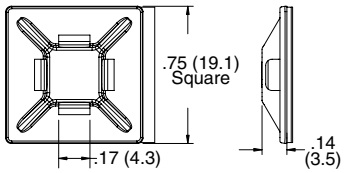
2" x 2"

Item No. 1000 / Bag	Item No. 100 / Bag	Used with Cable Ties	Approval	Adhesive	Recommended Mounting Screw	A In	A mm	B In	B mm	C In	C 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	0.300	7.6

CABLE TIE MOUNTS

FTH-40
Low Profile Cable Tie Mount with Adhesive





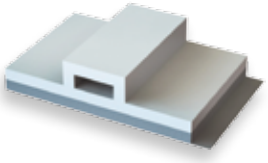
Specifications:
- Material: UL94 HB ABS
- Color: White

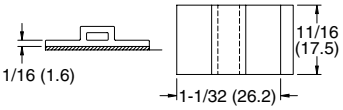
Features:
- Cable ties can be inserted from all four sides
- Acrylic adhesive is a general purpose adhesive and gains strength with dwell time
- Rubber adhesive develops its strength extremely fast
- Low profile for tight spaces

3/4" x 3/4"

Part Number	Used with Cable Ties	Adhesive	Bulk Pack Qty.
FTH-40	18 & 40 lbs	None	1000
FTH-40A-RT	18 & 40 lbs	Acrylic	1000
FTH-40A1-RT	18 & 40 lbs	Rubber	1000

FTH-2
Cable Tie Mount on Adhesive Base



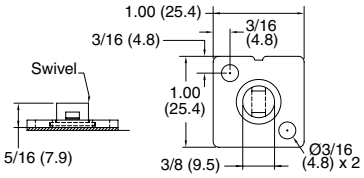


Specifications:
- Material: UL94 V-1 PPE/PS
- Color: White

Features:
- Easily applied

Part Number	Used with Cable Ties	Approval	Bulk Pack Qty.
FTH-2A-RT-C	18 & 50 lbs		100
FTH-2A-RT-M	18 & 50 lbs		1000

FTH-4
Cable Tie Mount with Swivel

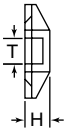


Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:
- Unique swivel head allows 360° rotation of the mounted bundle

Part Number	Used with Cable Ties	Approval	Recommended Mounting Screw	Bulk Pack Qty.
FTH-4A-RT-M	18 & 40 lbs		#8 or M4	1000

TMA
Cable Tie Mount



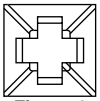


Figure 1

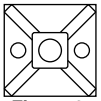


Figure 2

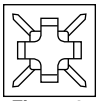


Figure 3

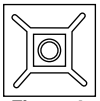


Figure 4

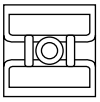


Figure 5

Figure 6

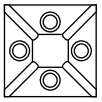


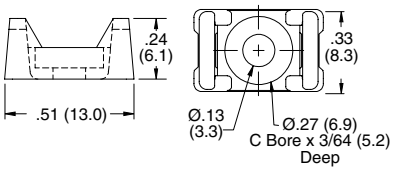
Figure 7

Specifications:
- Material: UL 94 V-2 Nylon 6/6
- Color: Natural

Features:
- Supplies lightweight support to wire bundles with adhesive backing
- Screw mount option available on most versions for added support of heavy bundles (use#4/#5 for 0.126 hole and #10 for 0.197 hole)
- Apply to clean, smooth, grease-free surface

Item No.	Figure	Length		Width		Height		Mounting Hole Ø		Mounting Directions	Slot Width T		Use With Cable Tie Classification	Bulk Pack Qty.
		In	mm	In	mm	In	mm	In	mm		In	mm		
TMA001A	1	0.500	12.50	0.492	12.50	0.126	3.20	—	—	4 Way	0.126	3.20	Miniature	100
TMA002A	2	0.750	19.00	0.748	19.00	0.154	3.90	0.126	3.20	4 Way	0.177	4.50	Miniature, Intermediate	100
TMA003A	3	0.827	21.00	0.827	21.00	0.138	3.50	—	—	4 Way	0.185	4.70	Miniature, Intermediate	100
TMA004A	4	1.102	28.00	1.102	28.00	0.157	4.00	0.197	5.00	4 Way	0.197	5.00	Miniature, Intermediate, Standard	100
TMA005A	5	1.102	28.00	1.102	28.00	0.157	4.00	0.197	5.00	2 Way	0.197	5.00	Miniature, Intermediate, Standard	100
TMA006A	6	0.709	18.00	0.709	18.00	0.177	4.50	0.197	5.00	4 Way	0.177	4.50	Miniature, Intermediate	100
TMA008A	4	0.990	25.80	1.016	25.80	0.240	6.10	—	—	4 Way	0.315	8.00	Standard, 120 lbs. Heavy Duty	100
TMA010A	6	1.009	26.30	1.035	26.30	0.232	5.90	0.197	5.00	4 Way	0.220	5.60	Intermediate, Standard	100
TMA011A	7	1.458	38.00	1.496	38.00	0.295	7.50	0.197	5.00	4 Way	0.394	10.00	Standard, Heavy Duty	100

FTH-28RS
Rivet / Screw Mount Cable Tie Mount



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

Features:
- Mounts with a screw or snap rivet (see rivet chart)
- Cradle design provides stability for the bundle

Mounting Rivets for FTH-28RS		
Panel Thickness In	Panel Thickness mm	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 with Cable Ties	Recommended Mounting Screw	Pack Qty.
FTH-28RS-01	18 & 40 lbs	#4, M3 Screw, SR-30XX (See Table)	1000

FTH-13 / FTH-14
Rivet / Screw Mount Cable Tie Mount

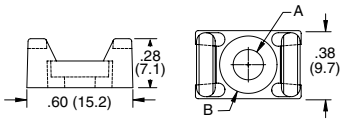


Figure 1

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

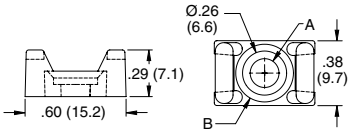


Figure 2

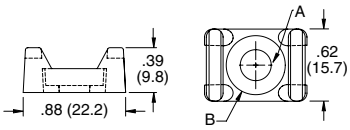


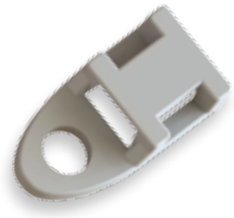
Figure 3

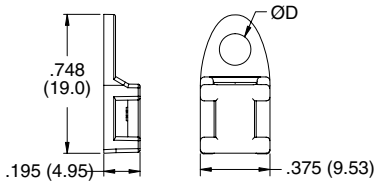
Item No. 1000 / Bag	Item No. 100 / Bag	Approval	Figure	Used with Cable Ties	A In	A mm	B In	B mm	Mounting Method	Pack Qty.
FTH-13R-01-M	**FTH-13R-01-C**	UL	1	18 - 50 lbs	0.170	4.3	0.320	8.1	#8 or M4 screw or rivet	1000
FTH-13S-01-M	**FTH-13S-01-C**	UL	2	18 - 50 lbs	0.170	4.3	0.320	8.1	#6 or M3/#8 or M4 screw	1000
FTH-14R-01-M	**FTH-14R-01-C**	UL	3	18 - 120 lbs	0.210	5.2	0.380	9.5	#10 or M5 screw or rivet	1000
FTH-14S-01-M	**FTH-14S-01-C**	UL	3	18 - 120 lbs	0.260	6.6	0.490	12.5	1/4 or M6 screw	1000

Mounting Rivets for Figure 1		
Panel Thickness In	Panel Thickness mm	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 In	Panel Thickness mm	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
Screw Mount Cable Tie Mount





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 In	Ø Hole D mm	Used with Cable Ties	Accepts Screw Size	Bulk Pack Qty.
FTH-34-01	0.170	4.3	18 thru 50 lbs	#8 or M4	1000
FTH-35-01	0.200	5.1	18 thru 50 lbs	#10 or M5	1000

CABLE TIE MOUNTS

TMS
Screw In Saddle Mount

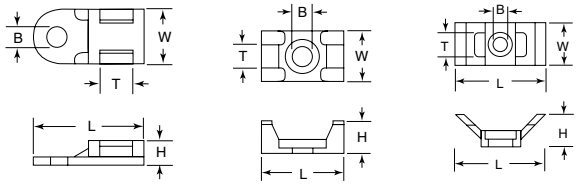


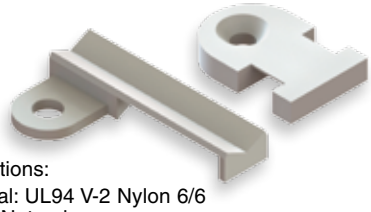
Figure 1 Figure 2 Figure 3

Specifications:
- Material: UL 94 V-2 Nylon 6/6
- Color: Natural

Features:
- Saddle design provides maximum stability to wire bundles
- To apply, simply fix mount with a screw
- RoHS compliant

Item No.	Figure	Length In	Length mm	Width In	Width mm	Height In	Height mm	Mounting Hole Ø B In	Mounting Hole Ø B mm	Screw Size	Slot Width T In	Slot Width T mm	Use with Cable Tie Classification	Bulk Pack Qty.
TMS001A	1	0.748	19.00	0.374	9.50	0.197	5.00	0.145	3.70	#6 / M3	0.197	5.00	Miniature, Intermediate, Standard	100
TMS002A	2	0.591	15.00	0.394	10.00	0.276	7.00	0.138	3.50	#6 / M3	0.197	5.00	Miniature, Intermediate, Standard	100
TMS003A	2	0.906	23.00	0.630	16.00	0.354	9.00	0.248	6.30	1/4-20 / M6	0.354	9.00	Standard, Heavy Duty	100
TMS005A	3	1.181	30.00	0.579	14.70	0.457	11.60	0.205	5.20	#10 / M5	0.366	9.30	Standard, Heavy Duty	100

FTH-1 / FTH-11
Low Profile Screw Mount Cable Tie Mount



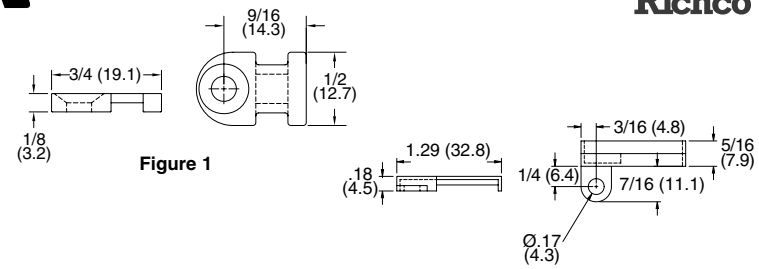


Figure 1

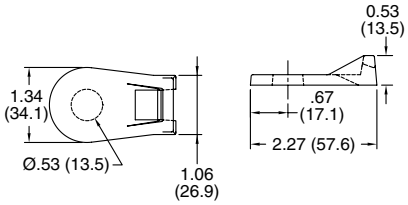
Figure 2

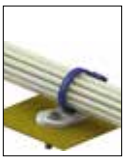
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:
- Mounts with a #8 or M4 flat head screw
- Low profile for limited space
- FTH-11-8-01 secures bundle with multiple cable ties

Item No.	Approval	Figure	Used with 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

FTH-17
Heavy Duty Screw Mount Cable Tie Mount



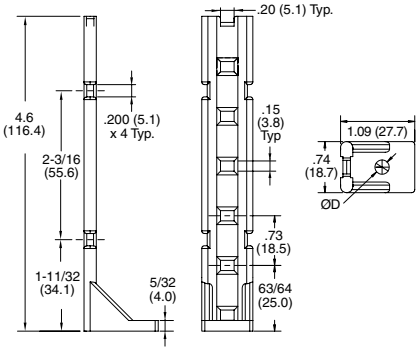


Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:
- Can be used for ties up to 250 lbs.
- Low profile for tight spaces

Item No.	Accepts Screw Size	Used with Cable Ties	Bulk Pack Qty.
FTH-17-8-01	1/2 (M12)	All Ties	100

FTH-24
Screw Mount Wire Harness Cable Tie Mount



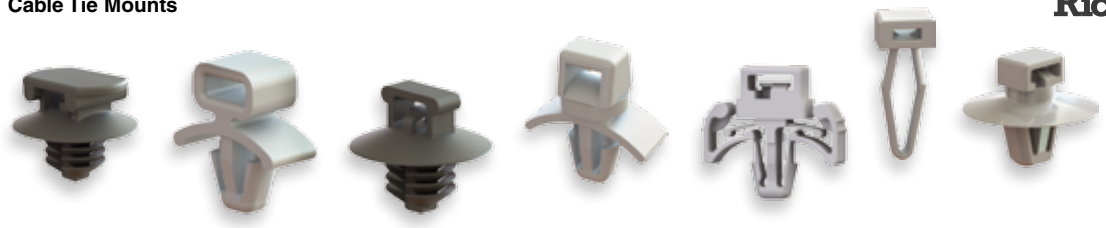
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:
- Allows tying up multiple bundles of cables
- Supports cable bundles above the surface

Item No.	Mounting Method	Approval	D Ø In	D Ø mm	Used with Cable Ties	Bulk Pack Qty.
FTH-24-01	#10 or M5 Screw		0.210	5.2	18 - 50 lbs	100
FTH-24-1-01	1/4 or M6 Screw		0.250	6.4	18 - 50 lbs	100

FTH
Snap In Cable Tie Mounts

Richco



Expanded Line

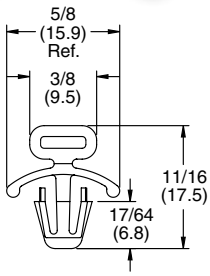


Figure 1

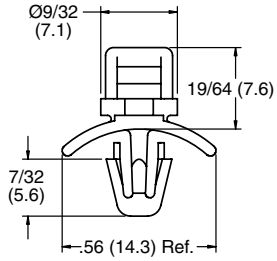


Figure 2

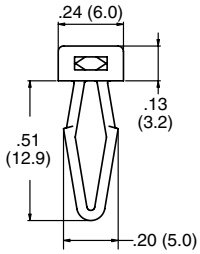


Figure 3

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

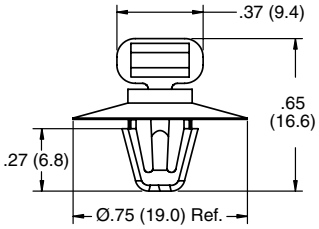


Figure 4

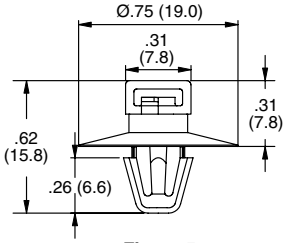


Figure 5

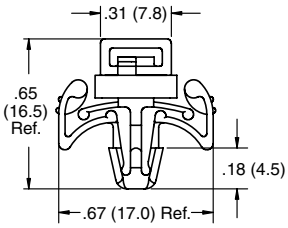


Figure 6

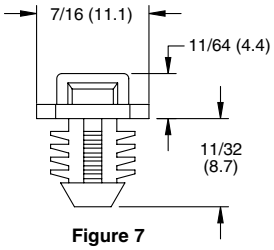


Figure 7

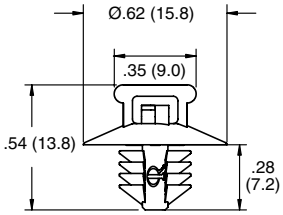


Figure 8

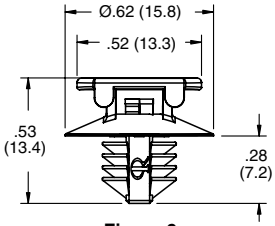
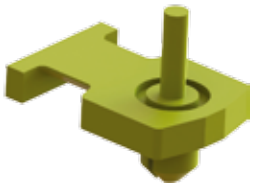


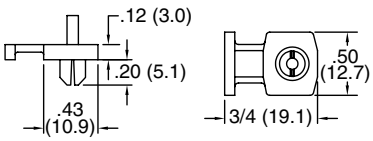
Figure 9

Item No. Natural	Item No. Black	Approval	Figure	Mounting Hole Ø In	Mounting Hole Ø mm	Panel Thickness In	Panel Thickness mm	Used with Cable Ties	Bulk Pack Qty.
FTH-6-01-M	—	UL	1	0.250	6.4	0.047 - 0.109	1.2 - 2.8	18 - 50 lbs	1000
FTH-6-01-C	—	UL	1	0.250	6.4	0.047 - 0.109	1.2 - 2.8	18 - 50 lbs	100
FTH-3-01-M	—	UL	2	0.187	4.8	0.031 - 0.078	0.8 - 2.0	18 - 50 lbs	1000
FTH-3-01-C	—	UL	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	—	UL	7	0.312	7.8	0.250	6.4	18 - 40 lbs	1000
FTH-15-01-C	—	UL	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

FTH-22
Rivet Mount Cable Tie Mount

Richco





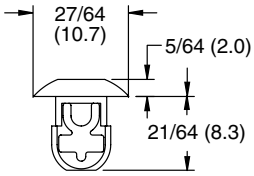
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Yellow

Features:
- Rivet designed into part expands to lock the tie holder in place
- Low profile design for where space is limited

Item No.	Mounting Hole Ø In	Mounting Hole Ø mm	Panel Thickness In	Panel Thickness mm	Used with Cable Ties	Bulk Pack Qty.
FTH-22-01	0.196	5.0	0.030 - 0.125	0.8 - 3.2	18 - 50 lbs	1000

CABLE TIE MOUNTS

FTH-9
Reverse Mount Cable Tie Mount

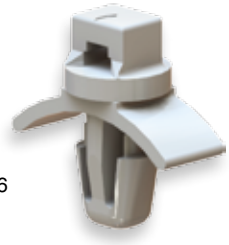


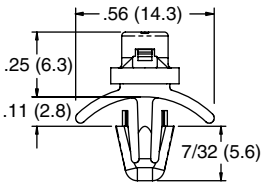
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

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

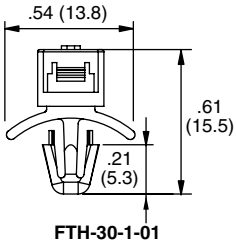
Item No.	Approval	Mounting Hole Ø		Panel Thickness		Accepts Cable Ties with Tensile Lbs	Bulk Pack Qty.
		In	mm	In	mm		
FTH-9-01-M		0.250	6.4	0.125	3.2	18 - 50	1000
FTH-9-01-C		0.250	6.4	0.125	3.2	18 - 50	100

FTH-30
Cable Tie Mount with Cable Tie Head





FTH-30-01



FTH-30-1-01

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

Item No.	Mounting Hole Ø		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

WPM
Masonry Mount Cable Tie Mount

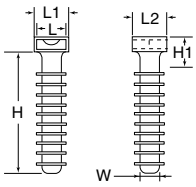


Figure 1

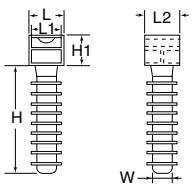


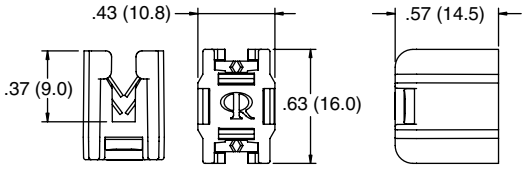
Figure 2

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

Features:
- Masonry mount
- Simply press into a pre-drilled hole

Item No.	Figure	H		H1		W		L		L1		L2		Use With Cable Tie Classification	Bulk Pack Qty.
		In	mm	In	mm	In	mm	In	mm	In	mm	In	mm		
WPM001B	1	1.457	37.00	0.248	6.30	0.394	10.00	0.500	12.70	0.382	9.70	0.490	12.50	Standard, Heavy Duty	100
WPM002A	2	1.425	36.20	0.512	13.00	0.394	10.00	0.508	12.90	0.382	9.70	0.480	12.40	Standard, Heavy Duty	100

FTH-31
Edge Mount Cable Tie Mount

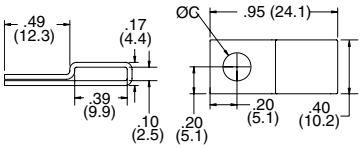


Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Black

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 with Tensile Lbs	Bulk Pack Qty.
	In	mm		
FTH-31-01	0.030 - 0.120	0.8 - 3.0	40 thru 50	1000

MTH1
Stainless Steel Tie Holder



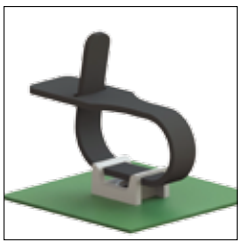
Specifications:
- Material: 304 Stainless Steel

Features:
- Low profile design
- Mounts with a screw or rivet

See page 39 for Stainless Steel Cable Ties.

Item No.	C Hole In	C Hole mm	Recommended Mounting Screw	Bulk Pack Qty.
MTH1-1	0.180	4.5	#8 or M4	100
MTH1-2	0.210	5.4	#10 or M5	100
MTH1-3	0.270	6.8	1/4 or M6	100

FTH-27
Hook & Loop Cable Tie Mount



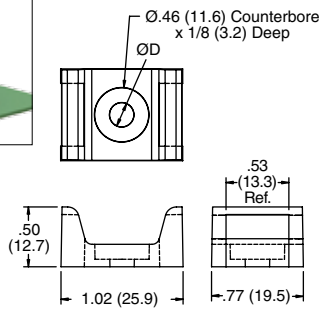


Figure 1

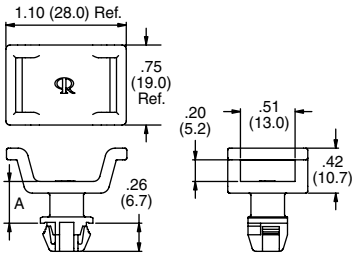


Figure 2

Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: See Chart

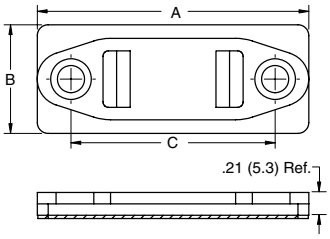
Features:
- Mounts 1/2" RKW Hook and Loop Ties

See pages 45 and 46 for Hook & Loop Cable Ties.

Item No.	Color	Accepts Hook & Loop Up To Width In	Accepts Hook & Loop Up To Width mm	Figure	Mounting Method	D In	D mm	A In	A mm	Panel Thickness In	Panel Thickness mm	Bulk Pack Qty.
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

FTH-RKW
Hook & Loop Cable Tie Mount

New



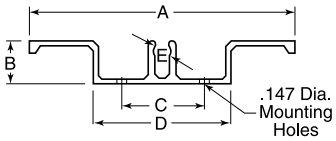
Specifications:
- Material: Polyethylene
- Color: Black

Features:
- Mounts with adhesive or screws

See pages 45 and 46 for Hook & Loop Cable Ties.

Item No.	Accepts Hook & Loop Up To Width In	Accepts Hook & Loop Up To Width mm	Mounting Method	A In	A mm	B In	B mm	C In	C mm	Bulk Pack Qty.
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

COR
Cord Wrap



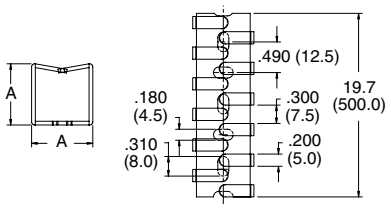
Specifications:
- Material: Aluminum
- Color: See Chart
- Anodized finish

Features:
- Keeps cords neat and from being pulled

Item No.	Color	A In	A mm	B In	B mm	C In	C mm	D In	D mm	E In	E mm	Pack Qty.
COR20-2	Black	3.750	95.3	1.000	25.4	0.750	19.1	1.375	34.9	0.350	8.9	1
COR10-1	Clear	4.750	120.7	0.750	19.1	1.500	38.1	2.500	63.5	0.350	8.9	1
COR10-2	Black	4.750	120.7	0.750	19.1	1.500	38.1	2.500	63.5	0.350	8.9	1

DUCT

RX
Flexible Duct

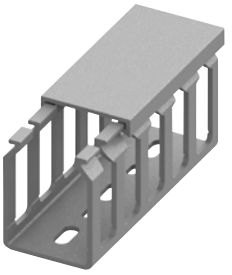


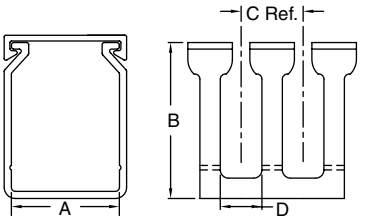
Specifications:
- Material: UL94 V-2 Polypropylene
- Color: Grey

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		Pack Qty.	Bulk Pack Qty.
Screw Mount	Adhesive Mount	In	mm	In	mm	In	mm		
RX1313-0	RX1313-4	0.492 x 0.492	12.5 x 12.5	0.171	110.0	19.700	500.0	1	112
RX1616-0	RX1616-4	0.630 x 0.630	16.0 x 16.0	0.287	185.0	19.700	500.0	1	84
RX2020-0	RX2020-4	0.787 x 0.787	20.0 x 20.0	0.496	320.0	19.700	500.0	1	112
RX2525-0	RX2525-4	0.984 x 0.984	25.0 x 25.0	0.775	500.0	19.700	500.0	1	70
RX3030-0	RX3030-4	1.181 x 1.181	30.0 x 30.0	1.116	720.0	19.700	500.0	1	50
RX4040-0	RX4040-4	1.575 x 1.575	40.0 x 40.0	2.046	1320.0	19.700	500.0	1	50
RX5050-0	RX5050-4	1.969 x 1.969	50.0 x 50.0	3.162	2040.0	19.700	500.0	1	32

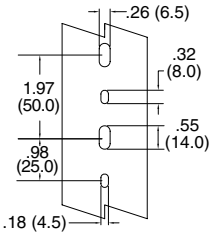
SRWD
Slotted Wire Duct



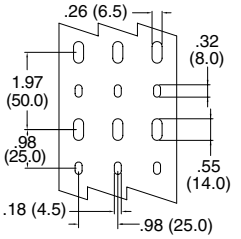


Specifications:
- Material: PVC
- Color: Grey

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

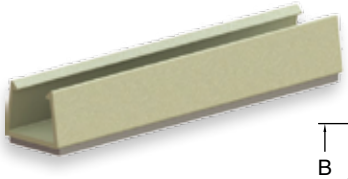


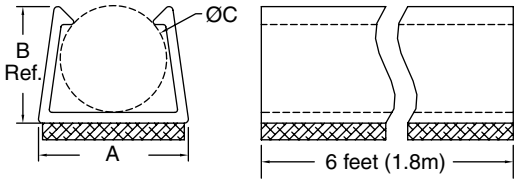
Mounting Style 2

Item No.	Approval	A		B		C		D		Mounting Style	Length		Pack Qty.	Bulk Pack Qty.
		In	mm	In	mm	In	mm	In	mm		ft	m		
SRWD-1015	UL	1.000	25.4	1.500	38.1	0.790	20.0	0.310	8.0	1	6.5	2	6.5 ft	78 ft
SRWD-1515	UL	1.500	38.1	1.500	38.1	0.790	20.0	0.310	8.0	1	6.5	2	6.5 ft	78 ft
SRWD-1520	UL	1.500	38.1	2.000	50.8	0.790	20.0	0.310	8.0	1	6.5	2	6.5 ft	52 ft
SRWDN1-1530	UL	1.500	38.1	3.000	76.2	0.390	10.0	0.160	4.0	1	6.5	2	6.5 ft	78 ft
SRWD-2020	UL	2.000	50.8	2.000	50.8	0.790	20.0	0.310	8.0	1	6.5	2	6.5 ft	52 ft
SRWDN1-2030	UL	2.000	50.8	3.000	76.2	0.390	10.0	0.160	4.0	1	6.5	2	6.5 ft	78 ft
SRWD-4020	UL	4.000	101.6	2.000	50.8	0.790	20.0	0.310	8.0	2	6.5	2	6.5 ft	26 ft

SCD
Single Cable Duct

Richco



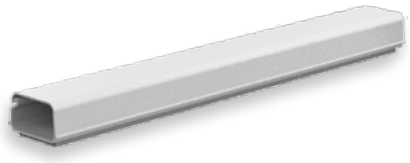


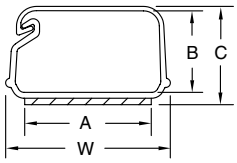
Specifications:
- Material: UL94 V-0 PVC
- Color: Tan

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.	Bulk Pack Qty.
	In	mm	In	mm	In	mm		ft	m		
SCD-1521	0.156 - 0.218	4.0 - 5.5	0.300	7.6	0.250	6.4	RG58	6	1.8	6 ft	60 ft
SCD-2228	0.218 - 0.280	5.5 - 7.1	0.360	9.1	0.290	6.6	RG59, RG62, RG6, 9 Line	6	1.8	6 ft	60 ft

SRL
Locking Duct on Adhesive Base





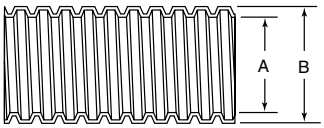
Specifications:
- Material: UL94 V-0 PVC
- Color: White

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.	Bulk Pack Qty.
	In	mm	In	mm	In	mm	In	mm	ft	m		
SRL1-3-WH6A	0.625	15.9	0.400	10.2	0.810	20.7	0.490	12.3	6	1.8	6 ft	72 ft
SRL1-5-WH6A	0.750	19.1	0.580	14.7	0.990	25.1	0.670	8.5	6	1.8	6 ft	72 ft
SRL1-10-WH6A	1.125	28.6	0.820	20.8	1.520	38.3	0.950	24.1	6	1.8	6 ft	72 ft

CF
PVC Coated Metal Conduit

New



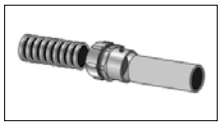
Specifications:
- Material: PVC Coated Metal
- Color: Black

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	
		In	mm	In	mm	Ft	m
CF3020A	3/8	0.393	10.00	0.570	14.50	164	50
CF3060A	1/2	0.496	12.60	0.637	16.20	164	50
CF3090A	3/4	0.826	21.00	0.960	24.40	164	50
CF3140A	1	1.035	26.30	1.204	30.60	164	50
CF3160A	1-1/4	1.377	35.00	1.598	40.60	98	30
CF3180A	1-1/2	1.586	40.30	1.811	46.00	82	25
CF3200A	2	2.031	51.60	2.299	58.40	65	20

MCF
PVC Coated Metal Conduit

New



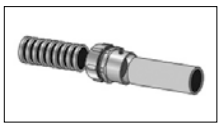
Specifications:
- Material: Zinc Alloy
- Connection Type: Set screw EMT Pipe

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
Fittings for PVC Pipe to Metal Conduit

New



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

FLEXIBLE CONDUIT & FITTINGS

NPT, PG & Metric Threads Metal Conduit Fittings

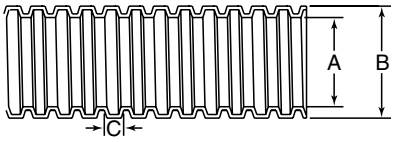
New

Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Black
- Temp Range: -40°F to 221°F (-40°C to 105°C)

Features:
- Provides strong pull out strength and anti-vibration properties
- Threading of the conduit is not necessary during installation which eliminates the chance of cutting into the conduit and creating leak paths
- Reusable

Item No.	Thread	Max Joint F1		Used With Metal Conduit	Thread OD C1		Panel Mounting Hole		Thread Length C2		Body Min ID		Bulk Pack Qty.
		In	mm		In	mm	In	mm	In	mm	In	mm	
MCF202A	NPT 1/2	0.720	18.30	**CF3020A**	0.835	21.22	0.842~0.854	21.40~21.70	0.512	13.00	0.425	10.80	50
MCF204A	NPT 3/4	0.866	22.00	**CF3090A**	1.046	26.56	1.055~1.066	26.80~27.10	0.591	15.00	0.563	14.30	50
MCF250A	PG11	0.720	18.30	**CF3020A**	0.732	18.60	0.732~0.744	18.60~18.90	0.394	10.00	0.425	10.80	50
MCF252A	PG13.5	0.720	18.30	**CF3020A**	0.803	20.40	0.803~0.814	20.40~20.70	0.394	10.00	0.425	10.80	50
MCF254A	PG16	0.720	18.30	**CF3020A**	0.886	22.50	0.885~0.897	22.50~22.80	0.433	11.00	0.425	10.80	50
MCF256A	PG16	0.866	22.00	**CF3060A**	0.886	22.50	0.885~0.897	22.50~22.80	0.394	10.00	0.563	14.30	50
MCF258A	PG21	0.866	22.00	**CF3060A**	1.114	28.30	1.110~1.120	28.30~28.70	0.492	12.50	0.563	14.30	50
MCF260A	PG21	1.043	26.50	**CF3090A**	1.114	28.30	1.110~1.120	28.30~28.70	0.472	12.00	0.709	18.00	50
MCF262A	PG29	1.358	34.50	**CF3140A**	1.457	37.00	1.450~1.470	37.00~37.40	0.472	12.00	0.933	23.70	10
MCF300A	M16X1.5	0.720	18.30	**CF3020A**	0.630	16.00	0.629~0.641	16.00~16.30	0.394	10.00	0.425	10.80	50
MCF304A	M20X1.5	0.720	18.30	**CF3020A**	0.787	20.00	0.787~0.799	20.00~20.30	0.394	10.00	0.425	10.80	50
MCF306A	M20X1.5	0.866	22.00	**CF3060A**	0.787	20.00	0.787~0.799	20.00~20.30	0.394	10.00	0.563	14.30	50
MCF310A	M25X1.5	0.720	18.30	**CF3020A**	0.984	25.00	0.984~1.000	25.00~25.40	0.472	12.00	0.425	10.80	50
MCF312A	M25X1.5	0.866	22.00	**CF3060A**	0.984	25.00	0.984~1.000	25.00~25.40	0.394	10.00	0.563	14.30	50
MCF314A	M25X1.5	1.043	26.50	**CF3090A**	0.984	25.00	0.984~1.000	25.00~25.40	0.394	10.00	0.709	18.00	50
MCF316A	M32X1.5	0.866	22.00	**CF3060A**	1.260	32.00	1.259~1.275	32.00~32.40	0.472	12.00	0.563	14.30	10
MCF318A	M32X1.5	1.358	34.50	**CF3140A**	1.260	32.00	1.259~1.275	32.00~32.40	0.394	10.00	0.933	23.70	10

CF Unsplit Polyethylene Conduit



Specifications:
- Material: HDPE
- Color: Grey
- Temp 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.	Nominal Ø	A		B		C		Roll Length	
		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
CF002A	3/8	0.421	10.69	0.555	14.10	0.080	2.04	328	100
CF003A	3/8	0.421	10.69	0.630	16.00	0.130	3.30	328	100
CF004A	1/2	0.543	13.79	0.787	19.99	0.124	3.14	328	100
CF005A	5/8	0.555	14.10	0.866	22.00	0.144	3.66	328	100
CF006A	11/16	0.677	17.20	0.866	22.00	0.124	3.14	328	100
CF007A	3/4	0.720	18.29	0.984	24.99	0.162	4.12	328	100
CF008A	7/8	0.835	21.21	1.016	25.81	0.124	3.14	328	100
CF009A	1	0.957	24.31	1.260	32.00	0.142	3.61	164	50
CF010A	1-1/8	1.130	28.70	1.339	34.01	0.124	3.14	164	50
CF011A	1-1/4	1.228	31.19	1.575	40.01	0.162	4.12	164	50
CF012A	1-3/8	1.374	34.90	1.654	42.01	0.124	3.14	164	50
CF013A	1-1/2	1.575	40.00	1.890	48.01	0.124	3.14	164	50
CF014A	1-5/8	1.559	39.60	1.969	50.01	0.191	4.85	164	50

FCA Flexible Conduit Adapters

Conduit to Conduit

Conduit to PVC Pipe

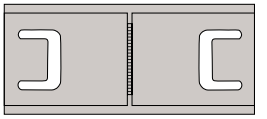
New

Specifications:
- Material: UL94 HB ABS
- Color: Grey

Features:
- FCA02A to FCA-08A can be used to connect plastic convoluted conduit
- FCA102A to FCA-108A can be used to connect plastic convoluted conduit to PVC pipe

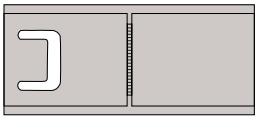
Conduit to Conduit Connector

Item No.	Used with Plastic Conduit	Bulk Pack Qty.
FCA02A	**CF004A**	20
FCA04A	**CF006A**	20
FCA06A	**CF008A**	20
FCA08A	**CF010A**	20

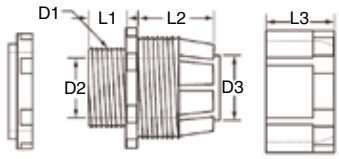


Conduit to PVC Pipe

Item No.	Used with Plastic Conduit	Bulk Pack Qty.
FCA102A	**CF004A**	20
FCA104A	**CF006A**	20
FCA106A	**CF008A**	20
FCA108A	**CF010A**	20



FCA200
Flexible Conduit Fittings



Lock Nut Body Claw Nut

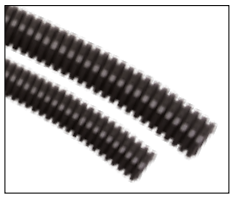
New

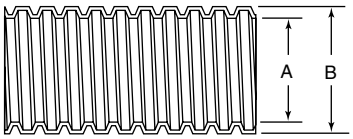
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Grey
- Temp Range: -40°F to 221°F (-40°C to 105°C)

Features:
- Connects plastic convoluted conduit to control panels, machinery, and other equipment

Item No.	Mounting Hole D1		Used With 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	0.425	10.8	0.394	10	0.705	17.9	0.618	15.7	50
FCA204A	0.630	16	**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	0.579	14.7	0.394	10	0.697	17.7	0.630	16	50
FCA208A	0.787	20	**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	**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	0.957	24.3	0.472	12	0.898	22.8	0.811	20.6	25
FCA214A	1.260	32	**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	**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	**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	**CF014A**	1.476	37.5	1.555	39.5	0.496	12.6	0.850	21.6	0.815	20.7	10

CF
Unsplit Nylon Conduit





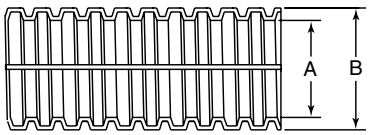
Specifications:
- Material: UL-94 HB Nylon
- Color: Black with Grey Stripe
- Temp Range: –40°F to 300°F (–40°C to 149°C)

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.	Nominal Ø In	A Min		A Max		B Min		B Max		Wall Thickness		Roll Length	
		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
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
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
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
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
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
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
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
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
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
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

* No grey stripe

CS
Split Polypropylene Conduit



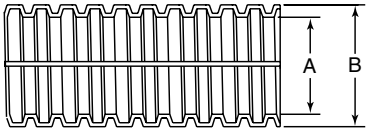
Specifications:
- Material: Polypropylene
- Color: Black
- Temp Range: –40°F to 225°F (–40°C to 107°C)

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

Item No.	Nominal Ø In	A		B		Roll Length	
		In	mm	In	mm	Ft	m
CS001A	1/4	0.291	7.39	0.402	10.21	984	300
CS002A	7/16	0.421	10.69	0.630	16.00	656	200
CS003A	1/2	0.543	13.79	0.689	17.50	656	200
CS004A	5/8	0.591	15.01	0.768	19.51	328	100
CS005A	3/4	0.760	19.30	0.937	23.80	328	100
CS006A	7/8	0.835	21.21	1.016	25.81	328	100
CS007A	1	0.957	24.31	1.260	32.00	164	50
CS008A	1	0.984	24.99	1.181	30.00	164	50
CS009A	1-1/8	1.102	27.99	1.339	34.01	164	50
CS010A	1-1/4	1.228	31.19	1.575	40.01	164	50
CS011A	1-5/8	1.559	39.59	1.969	50.00	164	50

FLEXIBLE CONDUIT, FITTINGS & WRAPS

CS (Nylon)
Split Nylon Conduit

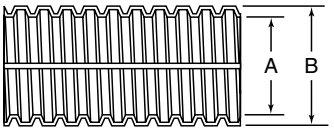


Specifications:
- Material: UL94 HB Nylon
- Color: Black with Gray Stripe
- Temp Range: –40°F to 300°F (–40°C to 149°C)

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

Item No.	Nominal Ø In	A Min		A Max		B Min		B Max		Wall Thickness		Roll Length		Pack Qty.
		In	mm	In	mm	In	mm	In	mm	In	mm	Ft	m	
CS1020A	3/8	0.341	8.66	0.380	9.65	0.497	12.62	0.526	13.36	0.040	1.02	1900	579.1	1
CS1040A	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
CS1060A	1/2	0.473	12.01	0.516	13.11	0.664	16.87	0.700	17.78	0.050	1.27	1100	335.3	1
CS1080A	5/8	0.603	15.32	0.639	16.23	0.805	20.45	0.837	21.26	0.050	1.27	800	243.8	1
CS1090A	3/4	0.707	17.96	0.759	19.28	0.950	24.13	0.989	25.12	0.050	1.27	550	164.6	1
CS1140A	1	1.020	25.91	1.069	27.16	1.251	31.78	1.304	33.13	0.006	1.52	300	91.4	1

CSEZ
EZ Dispenser Split Nylon Conduit

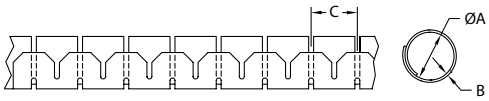


Specifications:
- Material: UL94 HB Nylon
- Color: Black with Gray Stripe
- Temperature Rating: –40°F to 300°F

Features:
- Supplied in easy pull dispenser box
- Tangle free dispenses on interior reel
- Split design for easy installation and removal

Item No.	Nominal Ø In	A Min		A Max		B Min		B Max		Wall Thickness		Roll Length		Pack Qty.
		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	.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	.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	.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	.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	.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	.060	1.52	50	15.24	1

SHR
Slit Harness Wrap

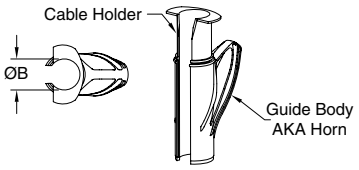


Specifications:
- Material: See Chart
- Color: Black

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**		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**		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**		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**		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**		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**		1.250	32.0	1.250	32.0	0.050	1.3	0.980	24.9	49	15	**CAT-32-PP**	**1**

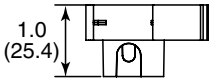
CAT
Installation Tool for SHR



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.	Max Bundle Ø B		To Be Used With	Pack Qty.
	In	mm		
CAT-05-PP-BL	0.240	6.0	**SHR-05**	**1**
CAT-08-PP	0.370	9.5	**SHR-08**	**1**
CAT-15-PP	0.630	16.0	**SHR-15**	**1**
CAT-20-PP	0.790	20.0	**SHR-20**	**1**
CAT-25-PP	0.960	24.5	**SHR-25**	**1**
CAT-32-PP	1.220	31.0	**SHR-32**	**1**

SHR-C
SHR Clip



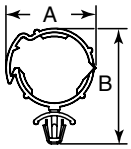


Figure 1

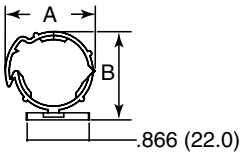


Figure 2

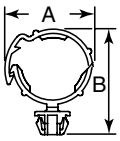


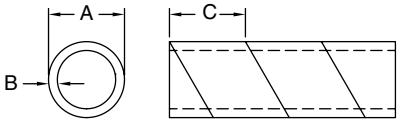
Figure 3

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 previous page)
- Internal ribs grip the wrap securely
- Releasable latch allows for easy maintenance
- Four mounting options:
  snap into round hole, snap into square hole (prevents rotation), #8 screw mount, adhesive mount

Item No.	Holding Ø	Mounting Method	Figure	A Ref		B Ref		Bulk Pack Qty.
				In	mm	In	mm	
SHR-C1	To hold SHR-20 & SHR-25	1	Snaps into a .252 In (6.4 mm) Hole in a .031-.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 .370 In (9.5 mm) Square Hole in a .031-.079 In (0.8-2.0 mm) Panel	1.180	30.0	1.630	40.5	500

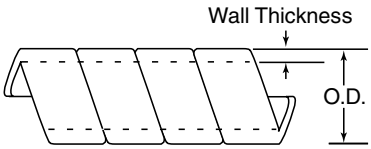
HR
Spiral Wrap



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

Item No.				Bundle Range		A Ref.		B		C Ref.		Roll Length	
Natural UL94 HB Nylon	Natural Polyethylene	Black LDPE	Approval	In	mm	In	mm	In	mm	In	mm	Ft	m
HR2N-1/8	—	—		0.062 - 0.500	1.6 - 12.7	0.125	3.2	0.020	0.5	0.170	4.3	100	30.48
HR3N-3/16	—	—		0.125 - 1.000	3.2 - 25.4	0.187	4.8	0.020	0.5	0.250	6.4	100	30.48
HR4N-1/4	—	—		0.187 - 1.500	4.8 - 38.7	0.250	6.4	0.025	0.6	0.300	7.6	100	30.48
HR6N-3/8	—	—		0.312 - 2.000	7.9 - 50.8	0.375	9.5	0.035	0.9	0.380	9.5	100	30.48
HR8N-1/2	—	—		0.750 - 3.000	19.1 - 76.2	0.500	12.7	0.040	1.0	0.500	12.7	100	30.48
—	**HR2P-1/8**	—		0.062 - 0.375	1.6 - 9.5	0.125	3.2	0.020	0.5	0.170	4.3	100	30.48
—	**HR3P-3/16**	—		0.125 - 1.000	3.2 - 25.4	0.187	4.8	0.030	0.8	0.250	6.4	100	30.48
—	**HR4P-1/4**	—		0.187 - 1.000	4.8 - 25.4	0.250	6.4	0.050	1.3	0.300	7.6	100	30.48
—	**HR6P-3/8**	—		0.312 - 2.000	7.9 - 50.8	0.375	9.5	0.050	1.3	0.380	9.5	100	30.48
—	**HR8P-1/2**	—		0.750 - 3.000	19.1 - 76.2	0.500	12.7	0.060	1.5	0.500	12.7	100	30.48
—	—	**HR4U1/4**		0.187 - 0.750	4.8 - 19.1	0.250	6.4	0.050	1.3	0.300	7.6	100	30.48
—	—	**HR6U-3/8**		0.312 - 2.000	7.9 - 50.8	0.375	9.5	0.050	1.3	0.380	9.5	100	30.48
—	—	**HR8U-1/2**		0.750 - 3.500	19.1 - 88.9	0.500	12.7	0.060	1.5	0.500	12.7	100	30.48

SGXL
UV Resistant Spiral Wrap



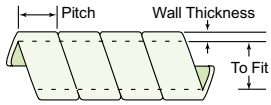
Specifications:
- Material: UV Resistant Polyethylene
- Color: Black

Features:
- Crush resistant
- Flexible and easy to install
- Protects against wear without restricting flexibility
- Allows for any point wire exiting

Item No.	OD		Wall		Bundle Range	Roll Length	
	In	mm	In	mm	In	Ft	m
SGX0125LA	1/8	3.20	0.032	0.81	1/16 to 1/4	100	30.48
SGX0187LA	3/16	4.80	0.030	0.76	1/8 to 1	100	30.48
SGX0250LA	1/4	6.40	0.040	1.02	3/16 to 2	100	30.48
SGX0375LA	3/8	9.50	0.052	1.32	5/16 to 3	100	30.48
SGX0500LA	1/2	12.70	0.062	1.57	3/8 to 4	100	30.48
SGX0625LA	5/8	15.90	0.062	1.57	5/8 to 4-1/2	100	30.48
SGX0750LA	3/4	19.10	0.065	1.65	3/4 to 5	100	30.48
SGX1000LA	1	25.40	0.095	2.41	1 to 7	100	30.48

SGX Series
TECTORGUARD™ Heavy & Medium Duty Hose Guards

ALLIANCE



Specifications:
- Material: High-Density Polyethylene
- Color: Refer to Chart

Features:
- TECTORGUARD™ protects against cuts, abrasions, crushing and ultraviolet rays that regularly destroy your 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

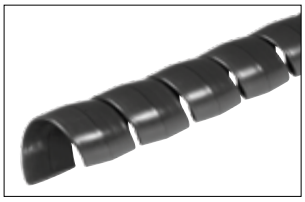
Heavy Duty - Heavy Abrasion

Black Item No.	Yellow Item No.	To Fit	Wall Thickness		Pitch		Roll Length	
		In	In	mm	In	mm	Ft	m
SGX16HA	-	0.492	0.069	1.75	0.490	12.45	100	30.48
SGX20HA	-	0.668	0.086	2.18	0.610	15.49	100	30.48
SGX25HA	SGX25HB	0.750	0.110	2.79	0.950	24.13	100	30.48
SGX32HA	SGX32HB	1.014	0.118	2.99	1.040	26.42	100	30.48
SGX39HA	SGX39HB	1.250	0.132	3.35	1.350	34.29	100	30.48
SGX45HA	SGX45HB	1.500	0.140	3.55	1.500	38.10	100	30.48
SGX50HA	-	1.600	0.150	3.81	1.530	38.68	50	15.24
SGX59HA	-	2.000	0.160	4.06	1.600	40.64	100	30.48
SGX75HA	SGX75HB	2.457	0.209	5.30	1.610	40.89	50	15.24
SGX90HA	SGX90HC	3.064	0.218	5.53	1.970	50.04	35	10.66
SGX102HA	SGX102HB	3.500	0.250	6.35	1.950	49.53	25	7.62
SGX114HA	SGX114HB	4.000	0.250	6.35	2.100	53.34	20	6.09
SGX165HA	SGX165HB	6.000	0.250	6.35	4.000	101.60	15	4.57

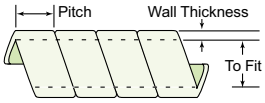
Medium Duty - Flexible with Medium Abrasion

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

SGX FRAS Series
SPIRALGUARD™ Flame Retardant Antistatic Series



MINE SAFETY APPROVED



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

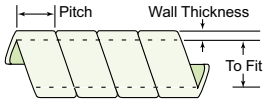
Features:
- Exceptional anti-crushing performance
- High abrasion resistance
- Good resistance to UV rays
- Reduces risk of industrial injury
- Suitable for wrapping single or multiple hoses
- Proven in arduous conditions
- Suitable for the protection of most types of hydraulic, pneumatic and industrial 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

Approvals and Certifications:
- 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	In	mm	In	mm	Ft	m
SGX16FRASA	0.472	0.089	2.25	0.510	12.95	65.62	20
SGX20FRASA	0.591	0.098	2.50	0.610	15.49	65.62	20
SGX25FRASA	0.748	0.108	2.75	0.750	19.05	65.62	20
SGX32FRASA	0.906	0.138	3.50	0.900	22.86	65.62	20
SGX40FRASA	1.201	0.167	4.25	1.140	28.96	65.62	20
SGX50FRASA	1.496	0.167	4.25	1.420	36.07	65.62	20
SGX63FRASA	1.850	0.217	5.50	1.550	39.37	65.62	20
SGX75FRASA	2.402	0.236	6.00	1.730	43.94	65.62	20
SGX90FRASA	2.776	0.276	7.00	2.000	50.80	65.62	20
SGX110FRASA	3.307	0.295	7.50	2.200	55.88	32.81	10

TFG Series
Lightweight & Flexible

Specifications:
- Material: Cellulose Acetate
- Color: Black



Features:
- Unique profile will cover much more hose surface during a bending process than any other wrap
- The inner core assures flexibility while the external profile assures resistance to abrasion and to electrical conductivity
- Lightweight and flexible
- Crush resistant
- Excellent memory

Item No.	To Fit	Wall Thickness		Pitch		Roll Length	
	In	In	mm	In	mm	Ft	m
TFG08HA	0.250	0.050	1.27	0.250	6.35	40	12.19
TFG12HA	0.370	0.050	1.27	0.250	6.35	40	12.19
TFG16HA	0.500	0.070	1.78	0.500	12.70	40	12.19
TFG20HA	0.620	0.070	1.78	0.500	12.70	40	12.19
TFG25HA	0.750	0.090	2.29	0.620	15.74	40	12.19
TFG32HA	1.000	0.090	2.29	0.620	15.74	40	12.19
TFG35HA	1.100	0.090	2.29	1.000	25.40	40	12.19
TFG39HA	1.250	0.090	2.29	1.000	25.40	40	12.19
TFG44HA	1.380	0.090	2.29	1.000	25.40	40	12.19

Item No.	To Fit	Wall Thickness		Pitch		Roll Length	
	In	In	mm	In	mm	Ft	m
TFG45HA	1.500	0.090	2.29	1.000	25.40	40	12.19
TFG50HA	1.600	0.090	2.29	1.000	25.40	40	12.19
TFG56HA	1.750	0.110	2.79	1.400	35.56	40	12.19
TFG59HA	2.000	0.130	3.30	1.400	35.56	40	12.19
TFG82HA	2.560	0.150	3.81	1.400	35.56	25	7.62
TFG90HA	3.000	0.150	3.81	1.400	35.56	25	7.62
TFG95HA	3.150	0.150	3.81	1.400	35.56	25	7.62
TFG102HA	3.500	0.150	3.81	1.000	25.40	25	7.62
TFG114HA	4.000	0.150	3.81	1.260	32.00	25	7.62

THP Series
Point of Contact Protectors

ALLIANCE

Specifications:
Material: PVC
Color: Refer to Chart

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 In	Pack Qty.	Bulk Pack Qty.
Black	Orange	Yellow			
THPSD4B	-	-	4	1	50
THP4B	THP4A	THP4C	4	1	50
THP6B	THP6A	THP6C	6	1	50
THP8B	THP8A	THP8C	8	1	50
THP10B	THP10A	THP10C	10	1	10
THP12B	THP12A	THP12C	12	1	10

Each THP Assembly Requires 3 Ties

Specifications:
- Material: UL Approved 94V-2 Nylon 6/6
- Color: Refer to Chart
- Service Temperature: –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		MaxBundle Dia.		Minimum Tensile Strength			Bulk Pack Qty.
	In	mm	In	mm	In	mm	Lbs	kgs	Classification	
UL	11-7/8	300	0.189	4.8	3.350	85	50	222	Standard	100

TQS Series
Quick Assemble Hose Sleeves

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
- Special innovative Python® hook-and-loop design closure promotes a quick and easy bundling of hose groups
- 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.	Bundle O.D.		Flat Width		Roll Length	
	In	mm	In	mm	Ft	m
TQS2A	2	50.80	7.750	196.85	150	45.72
TQS3A	3	76.20	10.900	276.86	150	45.72
TQS4A	4	101.60	14.000	355.60	150	45.72
TQS5A	5	127.00	17.250	438.15	150	45.72

Item No.	Bundle O.D.		Flat Width		Roll Length	
	In	mm	In	mm	Ft	m
TQS6A	6	152.40	20.380	517.65	150	45.72
TQS7A	7	177.80	23.500	596.90	150	45.72
TQS8A	8	203.20	26.620	676.15	150	45.72

HOSE PROTECTION

Quick Assemble Cable or Hose Sleeve

New

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.	I.D.		Spread Width		Roll Length	
	In	mm	In	mm	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

TSL Series
Mining Safety Approved Sleeve

MINE SAFETY APPROVED

Specifications:
- Material: Polyamide 6 Yarn
- Color: Black

Features:
- Protects people, environment and machinery against any possible hydraulic hose oil leakage or spills
- Very dense, yet not bulky
- Optimum UV and abrasion protection
- High degree of burst resistance; good leakage containment
- Effective in reducing the concentrated stream of pinhole leaks

Approvals and Certifications:
- M.S.H.A. Approval #M.S.H.A. IC-234/0
- Meets FED-STD-191 test method 5309 for abrasion resistance
- Meets ASTM D6770 for abrasion resistance of textile webbing

Item No.	Min Round I.D.		Max Round		External Flattened Width		Roll Length	
	In	mm	In	mm	In	mm	Ft	m
TSL067A	0.680	17.27	0.840	21.34	1.180	29.97	300	91.44
TSL079A	0.790	20.06	0.950	24.13	1.340	34.03	300	91.44
TSL091A	0.910	23.11	1.030	26.16	1.540	39.11	300	91.44
TSL098A	0.980	24.89	1.100	27.94	1.650	41.91	300	91.44
TSL106A	1.060	26.92	1.180	29.97	1.770	44.95	300	91.44
TSL122A	1.220	30.98	1.340	34.04	2.050	52.07	300	91.44
TSL142A	1.420	36.06	1.540	39.12	2.390	60.71	300	91.44
TSL157A	1.570	39.87	1.730	43.94	2.600	66.04	300	91.44
TSL173A	1.730	43.94	1.890	48.01	2.830	71.88	300	91.44
TSL185A	1.850	46.99	2.010	51.05	3.030	76.96	300	91.44
TSL217A	2.190	55.63	2.350	59.69	3.500	88.90	300	91.44
TSL236A	2.380	60.45	2.540	64.52	3.820	97.02	300	91.44
TSL260A	2.620	66.54	2.780	70.61	4.210	106.93	300	91.44
TSL287A	2.880	73.15	3.040	77.22	4.650	118.11	300	91.44
TSL366A	3.660	92.96	3.820	97.03	5.870	149.09	300	91.44
TSL441A	4.410	112.01	4.570	116.08	7.050	179.07	300	91.44

Hook and Loop Braided Cable or Hose Wrap

New

Specifications:
- Material: Polyester and Polyolefin
- Color: Black

Features:
- Provides excellent abrasion resistance and noise reduction
- Can be easily installed over connectors, fittings, splices, cables and hoses

Item No.	Nominal Size		Max Bundle Dia.		Hook& Loop Width		Roll Length	
	In	mm	In	mm	In	mm	Ft	m
900346	0.512	13	0.315	8	0.394	10	164	50
900347	0.748	19	0.472	12	0.394	10	164	50
900348	1.260	32	0.787	20	0.787	20	164	50
900349	2.008	51	1.260	32	0.787	20	164	50
900350	2.520	64	1.575	40	0.787	20	164	50

Hose & Cable Protection Sleeve

New

Specifications:
- Material: Polyester
- Color: Black

Features:
- Lightweight but high strength and abrasion resistance
- Protects people, environment and machinery against hydraulic hose ruptures

Item No.	Flattened Width		Round I.D.		Roll Length	
	In	mm	In	mm	Ft	m
900343	0.787	20	0.472	12	100	30.5
900344	0.984	25	0.591	15	100	30.5
900345	1.181	30	0.748	19	100	30.5
900346	1.378	35	0.866	22	100	30.5
900347	1.575	40	0.984	25	100	30.5
900348	1.772	45	1.102	28	100	30.5
900349	1.969	50	1.220	31	100	30.5
900350	2.362	60	1.496	38	100	30.5
900351	2.756	70	1.732	44	100	30.5
900352	3.150	80	1.969	50	100	30.5
900353	3.543	90	2.244	57	100	30.5
900354	3.937	100	2.362	60	100	30.5
900355	4.528	115	2.756	70	50	15.0
900356	5.709	145	3.543	90	50	15.0
900357	6.929	176	4.331	110	50	15.0
900358	7.874	200	4.921	125	50	15.0

FPS Series
Fire Protection Sleeve

Specifications:
- Material: Outer Sleeve - Proprietary Iron Oxide Red Silicone Rubber
  Inner Sleeve - Knitted high bulk glass fiber

Features:
- Excellent elasticity great for protecting or bundling hoses, tubes, and cables in hostile environments
- Insulation properties provide close quartered personnel with 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 min. up to 2000°F(1090°C), 15-30 sec. 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.	I.D.	Roll Length Ft
FPS1/4A	1/4"	50
FPS5/16A	5/16"	50
FPS3/8A	3/8"	50
FPS1/2A	1/2"	50
FPS5/8A	5/8"	50
FPS3/4A	3/4"	50
FPS7/8A	7/8"	50
FPS1A	1"	50
FPS1-1/4A	1-1/4"	50
FPS1-1/2A	1-1/2"	50
FPS2A	2"	50
FPS2-1/2A	2-1/2"	50
FPS3A	3"	50
FPS3-1/2A	3-1/2"	50
FPS4A	4"	50

MTS Series
Self-Bonding Silicone Tape

Specifications:
- Material: Red Silicone on a Mylar film
- –65°F (–54°C) to 500°F (260°C)

Features:
- Self-bonding – no adhesive (Sticks only to itself)
- Form fitting, making it an excellent solution for odd shapes
- Waterproof seal after 24-hour self-bonding cure
- Excellent electrical properties: dielectric strength of 300 VPM min at 356°F
- Applications: high-temperature cures, powder coating, e-coating, plating, anodizing and electrical harness wrapping

Item No.	Roll Width		Roll Length		Thickness
	In	mm	Yds	m	Mils
MTS2010A	1"	25.40	12	11	20
MTS4010A	1"	25.40	12	11	40

Thermal Protection Sleeve

New

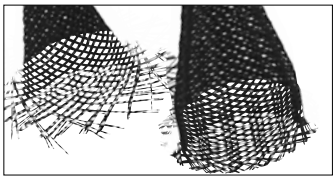
Specifications:
- Material: Nomex™ Fiber
- Color: Natural

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	
	In	mm	In	mm	Ft	m
900335	0.118	3	0.039	0.157	100	30.48
900336	0.236	6	0.196	0.314	100	30.48
900337	0.314	8	0.236	0.393	100	30.48
900338	0.393	10	0.275	0.511	100	30.48
900339	0.472	12	0.314	0.629	100	30.48
900340	0.591	15	0.393	0.787	100	30.48
900341	0.787	20	0.551	1.023	100	30.48
900342	0.984	25	0.708	1.299	100	30.48
900343	1.181	30	0.787	1.535	100	30.48
900344	1.574	40	1.181	2.047	100	30.48
900345	1.968	50	1.574	2.559	100	30.48

Scissor Cut Sleeve

New



Specifications:
- Material: Polyester
- Color: Black

Features:
- Can be cut with scissors and maintain a frayless end
- Perfect when used in the field where a hot knife is not available
- Excellent abrasion resistance
- Typically used with cables or wires

Item No.	Nominal Size		Expansion Range				Roll Length	
	In	mm	Min In	Min mm	Max In	Max mm	Ft	m
900289	0.125	3	0.039	1	0.197	5	200	60.98
900290	0.250	6	0.118	3	0.315	8	200	60.98
900291	0.312	8	0.197	5	0.394	10	100	30.49
900292	0.375	10	0.276	7	0.472	12	100	30.49
900293	0.500	12	0.315	8	0.551	14	100	30.49
900294	0.625	15	0.394	10	0.709	18	100	30.49
900295	0.750	20	0.551	14	0.906	23	50	15.24
900296	1.000	25	0.709	18	1.102	28	50	15.24
900297	1.250	30	0.787	20	1.378	35	50	15.24
900298	1.500	40	1.181	30	1.654	42	50	15.24
900299	1.750	45	1.378	35	1.890	48	50	15.24
900300	2.000	50	1.575	40	2.126	54	50	15.24
900301	2.500	64	1.772	45	2.756	70	50	15.24
900302	3.000	76	2.520	64	3.150	80	50	15.24

Textile Heatshrink Sleeve

New

Specifications:
- Material: Polyester and Polyolefin
- Color: Black
- Shrink Ratio: 2:1
- Min. Shrink Temperature: 176°F (80°C)
- Min. 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 I.D.		After Recovery I.D.		Roll Length	
	In	mm	In	mm	In	mm	Ft	m
900317	0.375	10	0.393	10	0.196	5.0	100	30.49
900318	0.500	12	0.472	12	0.236	6.0	100	30.49
900319	0.750	20	0.787	20	0.393	10.0	100	30.49
900320	1.000	25	0.984	25	0.492	12.5	100	30.49
900321	1.250	30	1.181	30	0.59	15.0	100	30.49
900322	1.338	34	1.338	34	0.669	17.0	100	30.49
900323	1.500	40	1.574	40	0.787	20.0	100	30.49
900324	2.000	50	1.968	50	0.984	25.0	100	30.49
900325	2.375	60	2.362	60	1.181	30.0	100	30.49
900326	2.750	70	2.755	70	1.377	35.0	100	30.49
900327	3.125	80	3.149	80	1.574	40.0	100	30.49

Expandable Sleeve

New

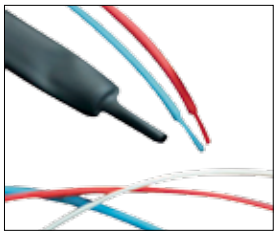
Specifications:
- Material: Polyester
- Color: Black

Features:
- The open weave construction allows for easy installation reducing assembly cost
- Cut and abrasion resistant with high thermal properties
- Flame-retardant, chemical resistant, and halogen free
- Used on wire harnessing applications where durability and low cost are essential
- Typically used with cables or wires

Item No.	Nominal Size		Expansion Range				Roll Length	
	In	mm	Min In	Min mm	Max In	Max mm	Ft	m
900303	0.125	3	0.039	1	0.236	6	200	60.98
900304	0.250	6	0.118	3	0.354	9	200	60.98
900305	0.312	8	0.197	5	0.630	16	100	30.49
900306	0.375	10	0.276	7	0.748	19	100	30.49
900307	0.500	12	0.315	8	0.945	24	100	30.49
900308	0.625	15	0.394	10	1.063	27	100	30.49
900309	0.750	20	0.551	14	1.181	30	50	15.24
900310	1.000	25	0.709	18	1.378	35	50	15.24
900311	1.250	30	0.787	20	1.969	50	50	15.24
900312	1.500	40	1.181	30	2.362	60	50	15.24
900313	1.750	45	1.378	35	2.953	75	50	15.24
900314	2.000	50	1.575	40	3.150	80	50	15.24
900315	2.500	64	1.772	45	4.134	105	50	15.24
900316	3.000	76	2.520	64	4.724	120	50	15.24

HEAT SHRINK TUBING

HST
2:1 Heat Shrink Tubing



New

Specifications:
- Material: Crosslinked Polyolefin
- Color: See Chart
- Operating Temp: -67°F to 257°F (-55°C to 125°C)
- Min. shrink temp: 158°F (70°C)
- Min. full recovery temp: 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

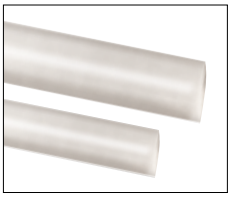
EZ Dispenser Mini Roll

Item No.				Size	As Supplied		After Recovery				Roll Length	
					Inside Ø Min		ID Max		Wall Thickness Min			
Black	Red	Blue	White	(In)	In	mm	In	mm	In	mm	ft	m
495676	495699	495745	495814	3/64	0.047	1.20	0.024	0.60	0.013	0.33	32.8	10
495677	495700	495746	495815	1/16	0.063	1.60	0.031	0.80	0.014	0.36	32.8	10
495678	495701	495747	495816	3/32	0.094	2.40	0.047	1.20	0.017	0.44	32.8	10
495679	495702	495748	495817	1/8	0.126	3.20	0.063	1.60	0.017	0.44	32.8	10
495680	495703	495749	495818	3/16	0.189	4.80	0.094	2.40	0.020	0.51	32.8	10
495681	495704	495750	495819	1/4	0.252	6.40	0.126	3.20	0.022	0.56	16.4	5
495682	495705	495751	495820	3/8	0.374	9.50	0.189	4.80	0.022	0.56	16.4	5
495683	495706	495752	495821	1/2	0.500	12.7	0.252	6.40	0.026	0.65	16.4	5
495684	495707	495753	495822	3/4	0.748	19.0	0.394	10.0	0.031	0.80	16.4	5
495685	495708	495754	495823	1	1.000	25.4	0.492	12.5	0.035	0.90	16.4	5

Standard Roll

Item No.				Size	As Supplied		After Recovery				Roll Length	
					Inside Ø Min		ID Max		Wall Thickness Min			
Black	Red	Blue	White	(In)	In	mm	In	mm	In	mm	ft	m
495686	495709	495755	495824	3/64	0.047	1.20	0.024	0.60	0.013	0.33	492	150
495687	495710	495756	495825	1/16	0.063	1.60	0.031	0.80	0.014	0.36	492	150
495688	495711	495757	495826	3/32	0.094	2.40	0.047	1.20	0.017	0.44	492	150
495689	495712	495758	495827	1/8	0.126	3.20	0.063	1.60	0.017	0.44	492	150
495690	495713	495759	495828	3/16	0.189	4.80	0.094	2.40	0.020	0.51	246	75
495691	495714	495760	495829	1/4	0.252	6.40	0.126	3.20	0.022	0.56	246	75
495692	495715	495761	495830	3/8	0.374	9.50	0.189	4.80	0.022	0.56	246	75
495693	495716	495762	495831	1/2	0.500	12.70	0.252	6.40	0.026	0.65	164	50
495694	495717	495763	495832	5/8	0.630	16.00	0.315	8.00	0.027	0.69	164	50
495695	495718	495764	495833	3/4	0.748	19.00	0.374	9.50	0.031	0.80	98.4	30
HST022A	—	—	—	15/16	0.913	23.20	0.433	11.00	0.030	0.80	164	50
495696	495719	495765	495834	1	1.000	25.40	0.500	12.70	0.035	0.90	98.4	30
495697	495720	495766	495835	1-1/4	1.260	32.00	0.630	16.00	0.040	1.02	98.4	30
495698	495721	495767	495836	1-1/2	1.500	38.10	0.748	19.00	0.040	1.02	98.4	30
HST027A	—	—	—	1-3/4	1.693	43.00	0.787	20.00	0.035	0.90	164	50
HST028A	—	—	—	2-3/32	2.087	53.00	0.984	25.00	0.039	1.00	164	50
HST029A	—	—	—	2-3/8	2.362	60.00	1.181	30.00	0.042	1.10	164	50
HST030A	—	—	—	3-1/4	3.150	80.00	1.575	40.00	0.046	1.20	164	50
HST031A	—	—	—	3-15/16	3.937	100.00	1.969	50.00	0.046	1.20	98.4	30

HST CLEAR
2:1 Clear Heat Shrink Tubing



New

Specifications:
- Material: Crosslinked Polyolefin
- Color: Clear (100% Transparent)
- Operating Temp: -67°F to 221°F (-55°C to 105°C)
- Min. shrink temp: 158°F (70°C)
- Min. full recovery temp: 203°F (95°C)
- Shrink ratio: 2:1

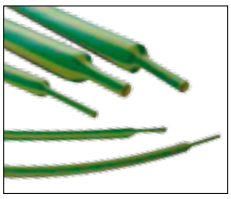
Features:
- RoHS Compliant
- Used in the appliance, automotive and on consumer goods applications
- Commercial grade for general applications where flame-retardancy is not required
- Excellent electrical and physical properties
- Provided in standard roll lengths

Item No.	Size (In)	As Supplied		After Recovery				Roll Length	
		Inside Ø Min		ID Max		Wall Thickness Min			
		In	mm	In	mm	In	mm	ft	m
495883	3/64	0.047	1.20	0.024	0.60	0.013	0.33	492	150
495884	1/16	0.063	1.60	0.031	0.80	0.014	0.36	492	150
495885	3/32	0.094	2.40	0.047	1.20	0.017	0.44	492	150
495886	1/8	0.126	3.20	0.063	1.60	0.017	0.44	492	150
495887	3/16	0.189	4.80	0.094	2.40	0.022	0.56	246	75
495888	1/4	0.252	6.40	0.126	3.20	0.022	0.56	246	75
495889	3/8	0.374	9.50	0.189	4.80	0.022	0.56	246	75
495890	1/2	0.500	12.7	0.252	6.40	0.026	0.65	164	50
495891	5/8	0.630	16.0	0.315	8.00	0.027	0.69	164	50
495892	3/4	0.748	19.0	0.374	9.50	0.031	0.80	98.4	30
495893	1	1.000	25.4	0.500	12.7	0.035	0.90	98.4	30
495894	1-1/4	1.260	32.0	0.630	16.0	0.039	1.00	98.4	30
495895	1-1/2	1.500	38.1	0.748	19.0	0.039	1.00	98.4	30

HST YG
2:1 Yellow & Green Striped Heat Shrink Tubing

Specifications:
- Material: Crosslinked Polyolefin
- Color: Yellow and Green Striped
- Operating Temp: -67°F to 275°F (-55°C to 135°C)
- Min. shrink temp: 158°F (70°C)
- Min. full recovery temp: 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



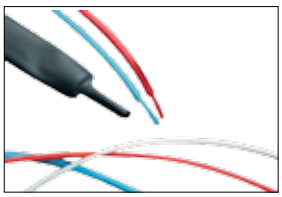
New

Item No.	Size (In)	As Supplied Inside Ø Min In	As Supplied Inside Ø Min mm	After Recovery ID Max In	After Recovery ID Max mm	After Recovery Wall Thickness Min In	After Recovery Wall Thickness Min mm	Roll Length ft	Roll Length m
495896	1/16	0.063	1.60	0.031	0.80	0.020	0.51	492	150
495897	3/32	0.094	2.40	0.047	1.20	0.020	0.51	492	150
495898	1/8	0.126	3.20	0.063	1.60	0.022	0.55	492	150
495899	3/16	0.189	4.80	0.094	2.40	0.024	0.60	246	75
495900	1/4	0.252	6.40	0.126	3.20	0.026	0.65	246	75
495901	3/8	0.374	9.50	0.189	4.80	0.030	0.75	246	75
495902	1/2	0.500	12.7	0.252	6.40	0.030	0.75	164	50
495903	3/4	0.748	19.0	0.374	9.50	0.033	0.85	98.4	30
495904	1	1.000	25.4	0.500	12.7	0.039	1.00	98.4	30
495905	1-1/2	1.500	38.1	0.748	19.0	0.045	1.15	98.4	30

HST 3:1
3:1 Heat Shrink Tubing

Specifications:
- Material: Crosslinked Polyolefin
- Color: See Chart
- Operating Temp: -67°F to 257°F (-55°C to 125°C)
- Min. shrink temp: 158°F (70°C)
- Min. full recovery temp: 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

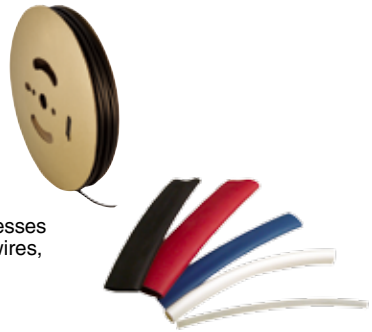


Item No. Black	Item No. Red	Item No. Blue	Item No. White	Size In	As Supplied Inside Ø Min In	As Supplied Inside Ø Min mm	After Recovery ID Max In	After Recovery ID Max mm	After Recovery Wall Thickness Min In	After Recovery Wall Thickness Min mm	Roll Length ft	Roll Length m
495906	495915	495933	495960	1/16	0.059	1.50	0.020	0.50	0.018	0.45	492	150
495907	495916	495934	495961	1/8	0.118	3.00	0.039	1.00	0.022	0.55	492	150
495908	495917	495935	495962	3/16	0.177	4.50	0.059	1.50	0.024	0.60	246	75
495909	495918	495936	495963	1/4	0.236	6.00	0.079	2.00	0.026	0.65	246	75
495910	495919	495937	495964	3/8	0.354	9.00	0.118	3.00	0.030	0.75	246	75
495911	495920	495938	495965	1/2	0.472	12.0	0.157	4.00	0.031	0.80	164	50
495912	495921	495939	495966	3/4	0.709	18.0	0.236	6.00	0.035	0.90	98.4	30
495913	495922	495940	495967	1	0.945	24.0	0.315	8.00	0.043	1.10	98.4	30
495914	495923	495941	495968	1-1/2	1.535	39.0	0.512	13.0	0.049	1.25	98.4	30

HST ADHESIVE
3:1 Adhesive Lined Heat Shrink Tubing

Specifications:
- Material: Crosslinked Adhesive Lined Polyolefin
- Color: See Table
- Operating Temp: -67°F to 257°F (-55°C to 125°C)
- Min. shrink temp: 176°F (80°C)
- Min. full recovery temp: 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



Standard Roll

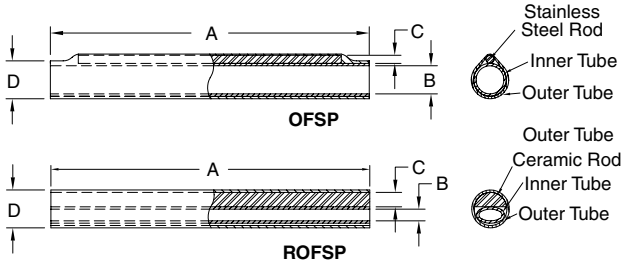
Item No. Black	Item No. Clear	Item No. Red	Item No. Blue	Item No. White	Size In	As Supplied Inside Ø Min In	As Supplied Inside Ø Min mm	After Recovery ID Max In	After Recovery ID Max mm	After Recovery Wall Thickness Min In	After Recovery Wall Thickness Min mm	Roll Length ft	Roll Length m
495987	496011	496003	496035	496083	1/8	0.118	3.00	0.039	1.00	0.039	1.00	492	150
495988	496012	496004	496036	496084	3/16	0.189	4.80	0.059	1.50	0.039	1.00	246	75
495989	496013	496005	496037	496085	1/4	0.236	6.00	0.079	2.00	0.039	1.00	246	75
495990	496014	496006	496038	496086	3/8	0.354	9.00	0.118	3.00	0.055	1.40	164	50
495991	496015	496007	496039	496087	1/2	0.472	12.00	0.157	4.00	0.063	1.60	98.4	30
495992	496016	496008	496040	496088	3/4	0.748	19.00	0.236	6.00	0.085	2.15	98.4	30
495993	496017	496009	496041	496089	1	0.945	24.00	0.315	8.00	0.094	2.40	98.4	30
495994	496018	496010	496042	496090	1-1/2	1.575	40.00	0.512	13.0	0.094	2.40	98.4	30

Pre-Cut 4 Foot (1.22m) Lengths

Item No. Black	Item No. Clear	Size In	As Supplied Inside Ø Min In	As Supplied Inside Ø Min mm	After Recovery ID Max In	After Recovery ID Max mm	After Recovery Wall Thickness Min In	After Recovery Wall Thickness Min mm	Standard Length ft	Standard Length m	Bulk Pack Qty
495995	496027	1/8	0.118	3.00	0.039	1.00	0.039	1.00	4	1.22	100
495996	496028	3/16	0.189	4.80	0.059	1.50	0.039	1.00	4	1.22	50
495997	496029	1/4	0.236	6.00	0.079	2.00	0.039	1.00	4	1.22	50
495998	496030	3/8	0.354	9.00	0.118	3.00	0.055	1.40	4	1.22	25
495999	496031	1/2	0.472	12.00	0.157	4.00	0.063	1.60	4	1.22	10
496000	496032	3/4	0.748	19.00	0.236	6.00	0.085	2.15	4	1.22	10
496001	496033	1	0.945	24.00	0.315	8.00	0.094	2.40	4	1.22	5
496002	496034	1-1/2	1.575	40.00	0.512	13.0	0.094	2.40	4	1.22	5

FIBER SPLICE ACCESSORIES

OFSP
Optical Fiber Splice Protector

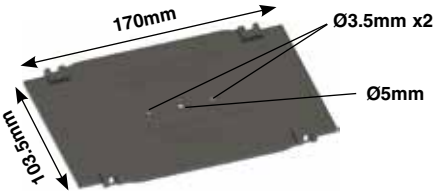


Specifications:
- Material: Outer Tube: Heat Shrink 3:1 Ratio Polyolefin Inner Tube: PE Copolymer Adhesive
- Color: Clear
- ROD:OFSP-SS; ROFSP- Ceramic

Features:
- Provides excellent protection for fiber optic splices
- The hot-melt inner tube bonds to the fiber and the heat shrinkable outer tube to encapsulate the fusion splice joint
- Provides vibration damping and an environmental seal, protecting fibers from damage and contaminants
- The stainless steel/ceramic strength member provides additional rigidity
- ROFSP is for ribbon or flat fiber splice protection
- OFSP-08 is small for space-saving miniature splice protection

Item No.	A Nominal Sleeve Length		B Inner Tube Ø		C Nominal Rod Ø		D Recovered Ø		Pack Qty.	Bulk Pack Qty.
	In	mm	In	mm	In	mm	In	mm		
OFSP-10-25	0.984	25.0	0.059	1.5	0.039	1.0	0.094	2.4	1	100
OFSP-10-30	1.181	30.0	0.059	1.5	0.039	1.0	0.094	2.4	1	100
OFSP-10-35	1.378	35.0	0.059	1.5	0.039	1.0	0.094	2.4	1	100
OFSP-10-40	1.575	40.0	0.059	1.5	0.039	1.0	0.094	2.4	1	100
OFSP-10-45	1.772	45.0	0.059	1.5	0.039	1.0	0.094	2.4	1	100
OFSP-10-61	2.402	61.0	0.059	1.5	0.039	1.0	0.094	2.4	1	100
OFSP-15-40	1.575	40.0	0.059	1.5	0.059	1.5	0.110	2.8	1	100
OFSP-15-61	2.402	61.0	0.059	1.5	0.059	1.5	0.110	2.8	1	100
OFSP-08-25	0.984	25.0	0.059	1.5	0.031	0.8	0.063	1.6	1	100
OFSP-08-40	1.575	40.0	0.020	0.5	0.031	0.8	0.063	1.6	1	100
ROFSP-40-40	1.575	40.0	0.142 x 0.039	3.6 x 1.0	0.157 x 0.071	4.0 x 1.8	0.197 x 0.118	5.0 x 3.0	1	100

OFST
Fiber Splice Tray System



OFST-1-L Splice Tray Lid

OFST-1-P
Splice Tray with Basic Storage Facility

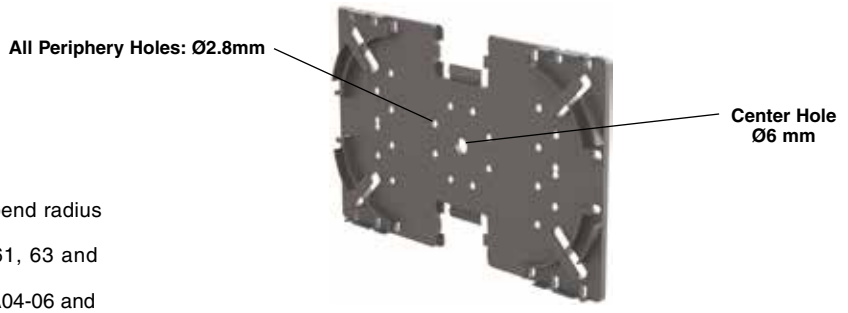
OFST-1-M
Splice Tray with Radius Control and Fiber Storage Elements

Specifications:
- Color: See Chart

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
- 3 mounting holes go through the lid and trays

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
Splice Tray

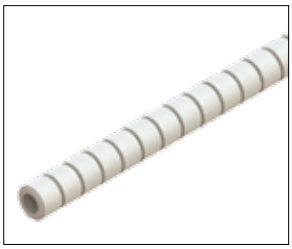


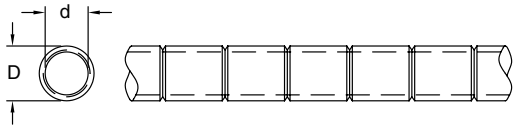
Specifications:
- Material: UL94 V-0 Nylon 6
- Color: Black

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
- An Egide/Richco product

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

OFBLT
Optical Fiber Bend Limiting Tubing





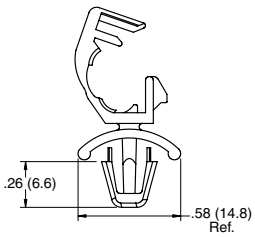
Specifications:
- Material: See Chart
- Color: See Chart

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.			D		d		Bulk Pack Qty.
White Polypropylene	Black UL94 V-0 PBT	Style	In	mm	In	mm	
OFBLT-3.1-05-PP	OFBLT-31-05V0	Standard	0.199	5.05	0.122	3.1	100 Meters
OFBLT-42-635PP	OFBLT-42-635V0	Standard	0.250	6.35	0.165	4.1	100 Meters
OFBLTP-42-635PP	OFBLTP-42-635V0	Pull-Cord	0.250	6.35	0.165	4.1	100 Meters

OFBLT-C
OFBLT Tubing Clip

Richco



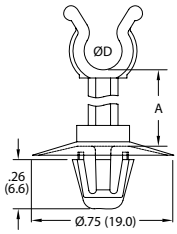
Specifications:
- Material: See Chart
- Color: Natural

Features:
- Holds the 5mm OFBLT tube (see above) or up to a 4.3mm rod
- Clamp is releasable for repairs

Item No.		Max Bundle Ø		Mounting Hole Ø		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	0.170	4.3	0.250	6.4	0.031 - 0.078	0.8 - 2.0	1000

TPCE
Tube Clip

Richco



Specifications:
- Material: See Chart
- 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		D Max Bundle Ø		Mounting Hole Ø		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
TPCE5-51-8M-01	TPCE5-51-8M-19	0.315	8.0	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
OFBLT Tubing Saddle

Richco

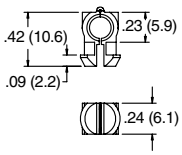


Figure 1

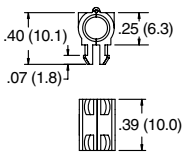
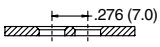


Figure 2

Recommended Mounting Hole



Recommended Mounting Holes

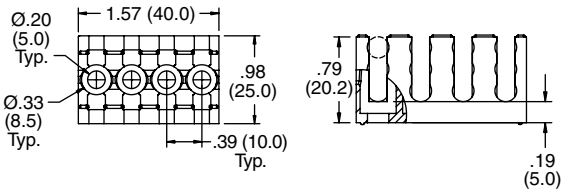
Specifications:
- Material: UL94 V-0 Nylon 6/6
- Color: Natural

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 2 holes

Item No.	Figure	Mounting Hole Ø		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
Slotted Multi Bracket



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
Splice Holder

Richco

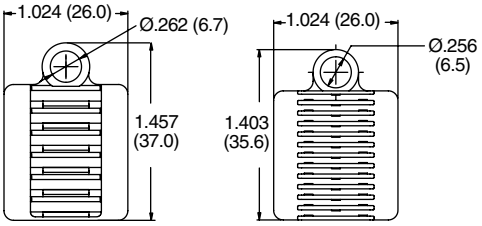
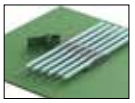


Figure 1 Figure 2



Specifications:
- Material: See Chart
- Color: Black

Features:
- OFSH-T-6 holds up to 6 x 3mm fiber or components, i.e. couplers and splice protectors
- 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 In	Ø Component mm	No. of Slots	Bulk Pack Qty.
OFSH-T-6-GFBLK	1	Glass Filled Nylon 6/6	0.118	3.0	6	100
OFSH-T-12-01BLK	2	Nylon 6/6	0.039 - 0.047	1.0 - 1.2	6	100
OFSH-T-12-19BLK	2	Nylon 6/6	0.039 - 0.047	1.0 - 1.2	12	100

OFSH2
Splice Holder

Richco

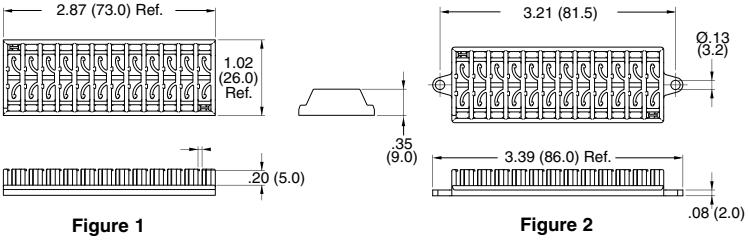


Figure 1 Figure 2

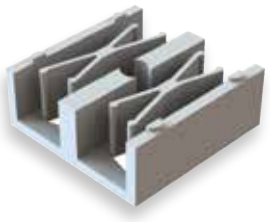
Specifications:
- Material: UL94 V-0 Nylon 6/6
- Color: Black

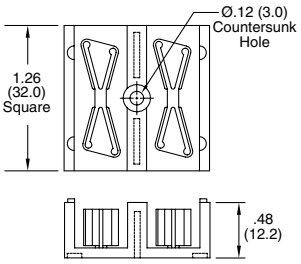
Features:
- Holds up to 24 components/splice protectors
- Flexible wings grip components up to .06 (1.6) in diameter
- Low profile to save space
- Two styles: one for mounting with an adhesive pad and one for mounting with a #4 or M3 screw
- Each slot holds up to two components

Item No.	Mounting Method	Ø Component In	Ø Component mm	Figure	Bulk Pack Qty.
OFSH2-24-1	Adhesive	Up to 0.060	Up to 1.6	1	50
OFSH2-24-2	No Adhesive	Up to 0.060	Up to 1.6	1	50
OFSH2-24-3	#4 or M3 Screws	Up to 0.060	Up to 1.6	2	50

OFSH-4
Splice Holder

Richco





Specifications:
- Material: See Chart
- Color: Natural

Features:
- Holds twelve 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. UL94 V-2 Nylon 6/6	Item No. UL94 V-0 Nylon 6/6	Ø Component mm	No. of Positions	Bulk Pack Qty.
OFSH-4-1-01LA	OFSH-4-1-19LA	2.7	12	50
OFSH-4-1-01LA	OFSH-4-1-19LA	4.2	4	50

OFEB / OFHB
Fiber Holder

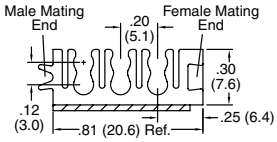


Figure 1

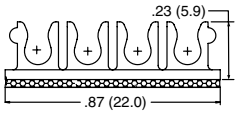


Figure 2

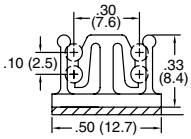


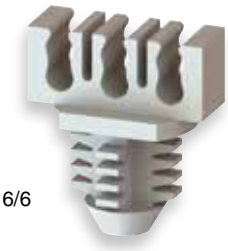
Figure 3

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

Item No.	Figure	Cable Ø In	Cable Ø mm	No. of Slots	No. of Cables	Depth In	Depth mm	Bulk Pack Qty.
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
OFHB2-4-A1-RT-19	3	0.079	2.0	2	4	0.375	9.5	1000

OFB-BH / OFB3P
Fiber Holder



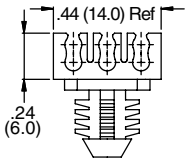


Figure 1

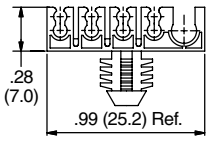


Figure 2

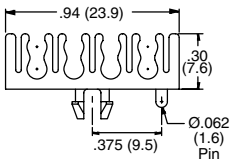


Figure 3

Specifications:
- Material: UL94 V-0 Nylon 6/6
- Color: Natural

Features:
- Holds multiple cable fibers

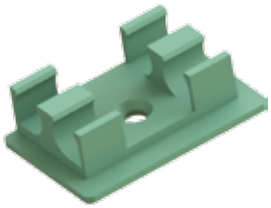
Recommended Mounting Holes

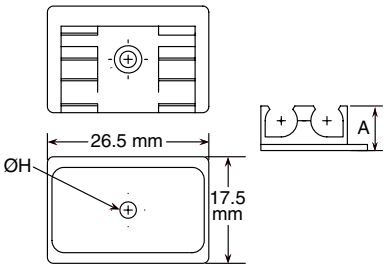
Item No.	Figure	Hole Ø In	Hole Ø mm	Panel Thickness In	Panel Thickness mm	Cable Ø In	Cable Ø mm	No. of Slots	No. of Cables	Depth In	Depth mm	Bulk Pack Qty.
OFB-BH-6-19	1	0.312	7.9	0.250	6.4	0.079	2.0	3	6	0.197	5.0	1000
OFB-BH-9-19	2	0.312	7.9	0.250	6.4	8 - 0.086, 1 - 0.158	8-2.2, 1-4.0	5	9	0.236	6.0	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
Fiber Clip

Specifications:
- Material: UL94 V-0 Nylon 6
- Color: See Chart

Features:
- Holds 2 components parallel
- Available to hold 3 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



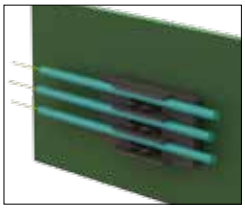


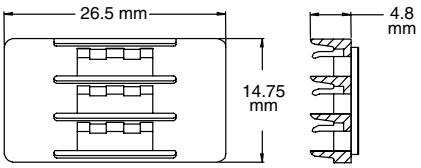
Item No. Clip Only	Item No. Clip & Adhesive Pad	Color	Cable Ø In	Cable Ø mm	No. of Slots	A In	A mm	H Ø In	H Ø mm	Recommended Mounting Screw	Bulk Pack Qty.
EFA04-61-001	EFA04-61-ASS	Red	0.236	6.0	2	0.315	8.0	0.126	3.2	#4, #5 or M3	100
EFA04-63-001	EFA04-63-ASS	Green	0.216	5.5	2	0.289	7.33	0.106	2.7	#3 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
Fiber Clip

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

Features:
- Holds three 3mm diameter components
- Adhesive pad for easy application

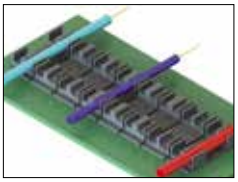




Item No.	Cable Ø In	Cable Ø mm	No. of Slots	Contents	Bulk Pack Qty.
EFA04-02-ASS	0.118	3.0	3	Clip with Adhesive Pad	100

FIBER CLIPS & GUIDES

EFA
Fiber Clip



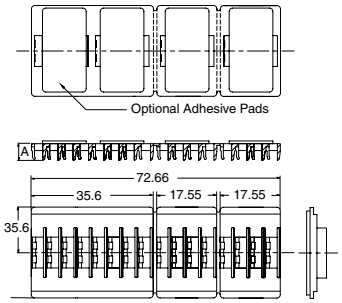


Figure 1

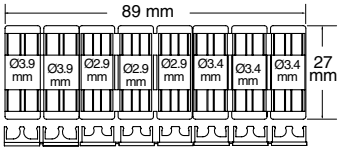


Figure 2

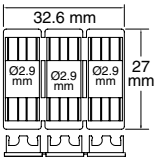


Figure 3

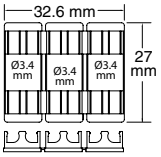


Figure 4

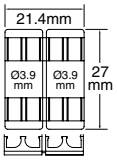


Figure 5

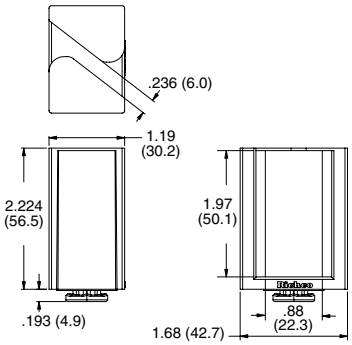
Specifications:
- Material: UL94 V-0 Nylon 6
- Color: See Chart

Features:
- EFA04-06, EFA04-08, and EFA04-18 can be broken apart to form individual clips
- Various mounting options are available
- An Egide/Richco product

Item No.				Cable Ø			Bulk Pack Qty.
Clip Only	Clip with Adhesive Pad(s)	Figure	Color	In	mm	No. of Slots	
EFA04-06-001	EFA04-06-ASS	1	Black	0.118	3.0	16	100
EFA04-08-001	EFA04-08-ASS	1	Blue	0.079	2.0	16	100
EFA04-18-001	EFA04-18-ASS	2	Black	.154, .134, .114	3.9, 3.4, 2.9	4, 6, 6 = 16	100
EFA04-71-001	EFA04-71-P01	3	Black	0.114	2.9	6	100
EFA04-71-002	EFA04-71-P02	4	Black	0.134	3.4	6	100
EFA04-71-003	EFA04-71-P03	5	Black	0.154	3.9	4	100

OFRB
Fiber Rack Bracket

Richco



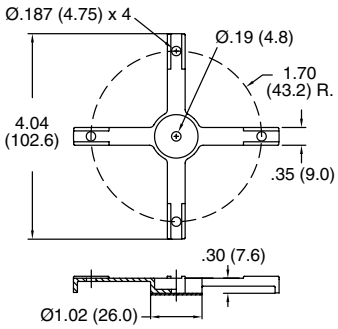
Specifications:
- Material: UL94 V-0 Nylon 6/6
- Color: Black

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

OFSB
Fiber Support Base

Richco



Specifications:
- Material: See Chart
- 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
- Any Essentra wire routing device that is designed to snap into a .187 hole and a .062” panel can be mounted to this base. Popular options are OFNS, STL, WS and LWS series

Item No.			Bulk Pack Qty.
UL94 V-2 Nylon 6/6	UL94 V-0 Nylon 6/6	Mounting Method	
OFSB-4-85-01A	OFSB-4-85-19A	Adhesive	100
OFSB-4-85-01	OFSB-4-85-19	#8 Screw of SR-5XXX Rivet	100

OFCC / OFCG
Fiber Coiling Clip

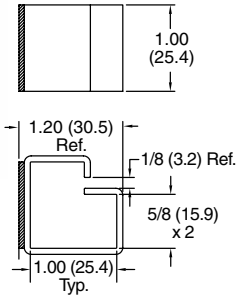


Figure 1

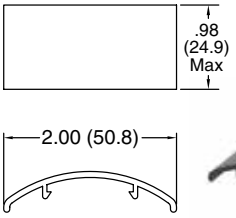
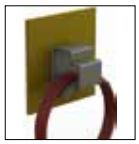


Figure 2



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
Fiber Guide

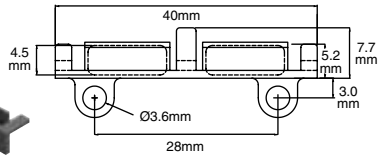


Figure 1

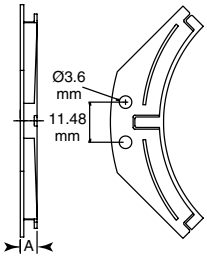


Figure 2

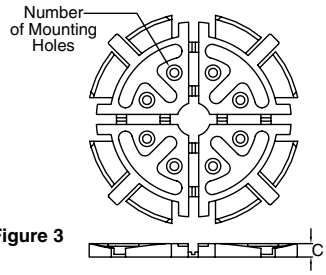


Figure 3

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.					Height				
Guide Only	Guide with Adhesive Pad(s)	Guide with SRHR-3555 Rivets	Figure	Guide Radius	In	mm	No. of Mounting Holes	Max Fiber Storage	Bulk Pack Qty.
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	EFA04-34-R06	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	EFA04-76-ASS	—	3	35 mm Radius Fiber Reel	0.315	8.0	8	15.0 m of 900 Micron Fiber	100
EFA04-23-001	EFA04-23-ASS	—	3	40 mm Radius Fiber Reel	0.250	6.4	4	7.0 m of 900 Micron Fiber	100

EFA04-53 / EFA04-27
Fiber Reel Stacking Pillar and Standoff

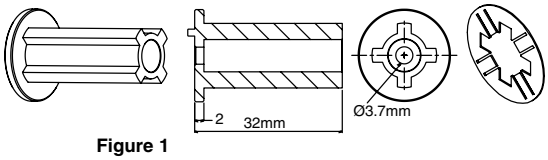


Figure 1

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

Features:
- EFA04-53-ASS is used to stack multiple EFA04 fiber reels. Once the desired number of reels are stacked, they are 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

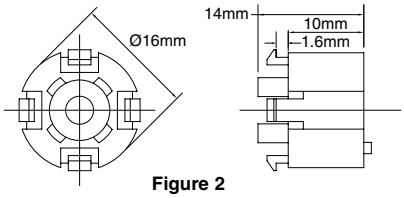
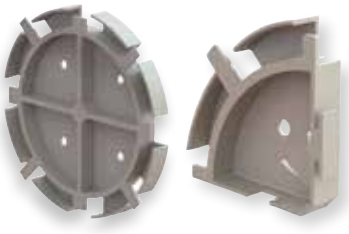


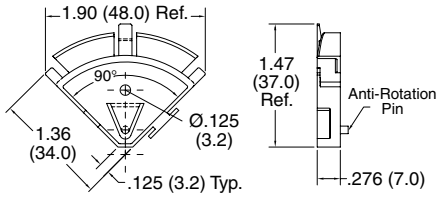
Figure 2

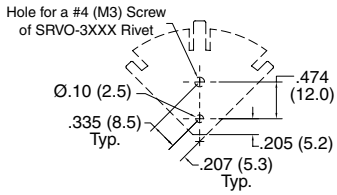
Item No.	Figure	Description	Bulk Pack Qty.
EFA04-53-ASS	1	Fiber Reel Stacking Pillar	100
EFA04-27-ASS	2	Fiber Reel Standoff	100

FIBER GUIDES & STORAGE

OFS
90° Fiber Segment, 30mm Radius







Recommended Mounting Holes

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

Item No.	Bulk Pack Qty.
OFS90-30R	100

OFFG / OFFGSP
Flexible Fiber Guide System

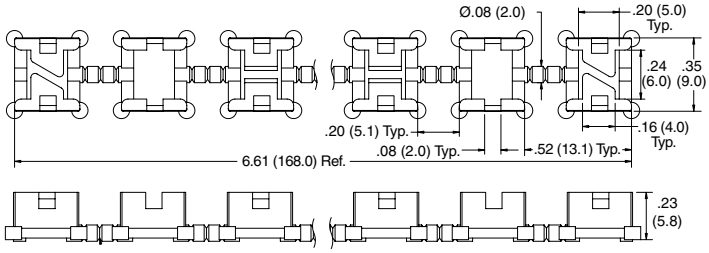


Figure 1

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 5, 10 or 16mm
- Guide snaps easily into the support posts

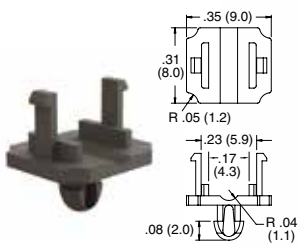


Figure 2

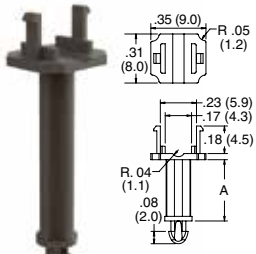
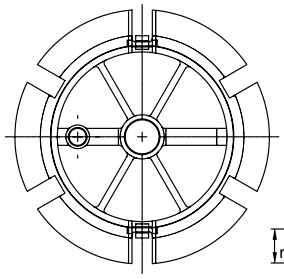
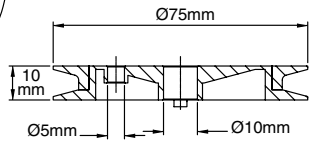


Figure 3

Item No.	Figure	Description	Mounting Hole Ø In	Mounting Hole Ø mm	Panel Thickness In	Panel Thickness mm	A In	A mm	Bulk Pack Qty.
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
OFFGSP-R-10-BK	3	Fiber Guide Spacer	0.098	2.5	0.063	1.6	0.390	10.0	100
OFFGSP-R-16-BK	3	Fiber Guide Spacer	0.098	2.5	0.063	1.6	0.630	16.0	100

EFA04-67-ASS
Two Piece Fiber Winding



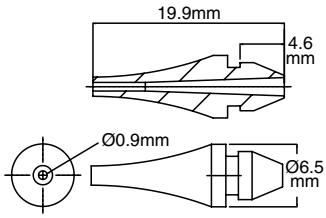


Specifications:
- Material: UL94 V-0 Nylon 6/6
- Color: Black

Features:
- Wound fiber is taped to maintain bend radius and provide identification (tape not supplied)
- Two-part reel is then disassembled for easy fiber removal
- Stores up to 8m of 900 micron fiber at a 30mm radius
- Reusable

Item No.	Bulk Pack Qty.
EFA-04-67-ASS	50

EFA70-07
900 Micron Strain Relief Boot

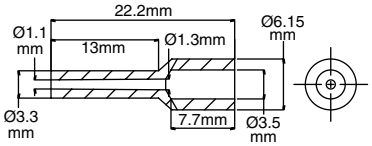


Specifications:
- Material: TPE
- Color: Black

Features:
- Provides added protection to 900 micron fiber while routing through a hole
- Limits the angle of the fiber preventing signal loss

Item No.	Hole Ø		Panel Thickness		Bulk Pack Qty.
	In	mm	In	mm	
EFA70-07-001	0.157	4.0	0.063	1.6	500

EFA70-01
900 Micron Transition Boot

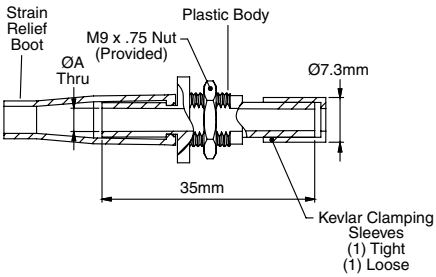


Specifications:
- Material: TPE
- Color: Black

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
Quick Panel Mount
Strain Relief Gland Kit

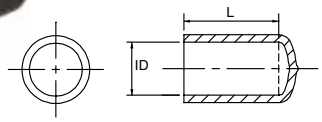


Specifications:
- Material: UL94 V-0 Nylon 6
- Color: Black

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). It is 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.	Jacketed Fiber Ø		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
Connector Adapter Dust Cap



Specifications:
- Material: PVC
- Color: Black

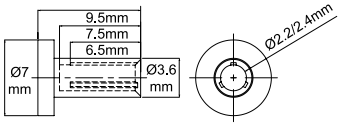
Features:
- Provides environmental protection for SMA, ST and FC connector adapters
- Made of flexible PVC to provide snug fit

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

EFA02-52-001
Ø2.5mm Ferrule Dust Cap

Specifications:
- Material: TPE, RMS-185
- Color: Black

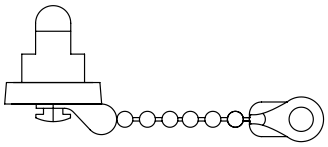
Features:
- Provides environmental protection for 2.5mm ferrules



Item No.	Bulk Pack Qty.
EFA02-52-001	500

DUST CAPS

EFA02
Connector Dust Caps

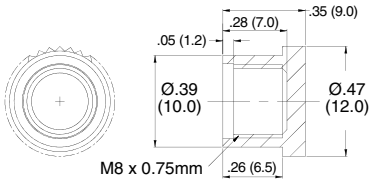


Specifications:
- Material: See Table
  Color: See Table

Features:
- The EFA02-14-001 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 adaptors when unmated
- Stainless Steel construction suitable for harsh environments
- 2.5” long chain

Item No.	Material		Bulk Pack Qty.
	Stainless Steel Cap & Chain	Black TPE Cap & 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 Cap	250
EFA02-14-ASS	—	EFA02-14-001 Dust Cap with Chain	250

EFA02-03
FC Connector Port Dust Cap

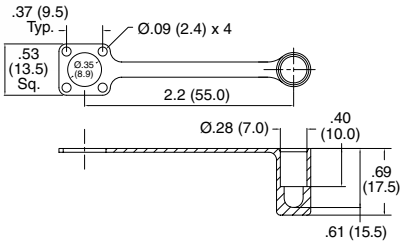


Specifications:
- Material: HDPE
- Color: See Table

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
ST Connector Port Dust Cap and Lanyard

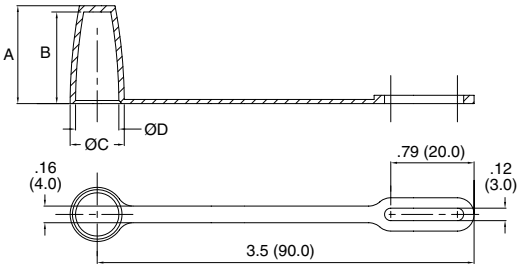


Specifications:
- Material: TPE
- Color: Black

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
Connector Port Dust Cap and Lanyard



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	
EFA02-08-ASS	Biconic Connector Dust Cap	0.930	23.5	0.870	22.0	0.510	13.0	0.410	10.4	250
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

CP
Connector Plugs

New

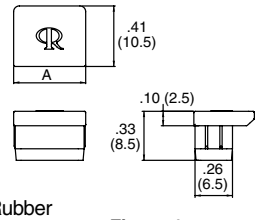


Figure 1

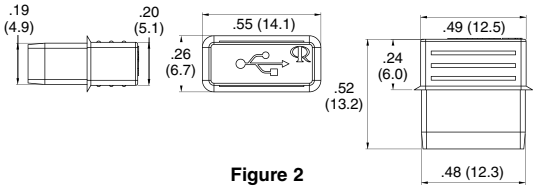


Figure 2

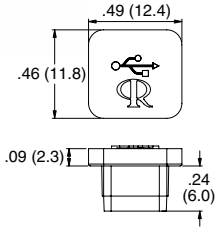


Figure 3

Specifications:
- Material: Silicone Rubber
- Color: Black

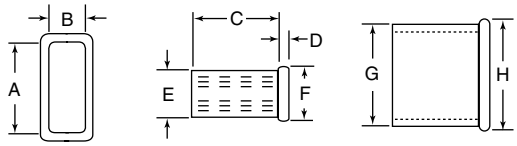
Features:
- No stress applied to the adapter's internal components upon entry
- Silicone material for high temperature applications up to 302°F (150°C)

Item No.	Figure	Connector Port	A In	A mm	Bulk Pack Qty.
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
USB Connector Caps

Specifications:
- Material: Polyethylene
- Color: Natural

Features:
- Protective dust cover

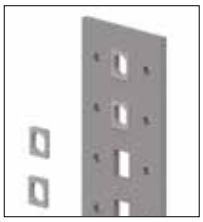


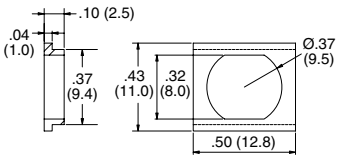
Item No.	A In	A mm	B In	B mm	C In	C mm	D In	D mm	E In	E mm	F In	F mm	G In	G mm	H In	H mm	Bulk Pack Qty.
USB0A	0.504	12.8	0.185	4.7	0.484	12.3	0.043	1.1	0.256	6.5	0.299	7.6	0.575	14.6	0.610	15.5	100

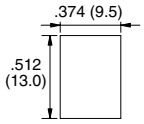
OFCA
SC to ST Connector Cutout Adapter

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

Features:
- Converts a hole cut-out for an SC connector port into a hole cut-out for an ST connector port



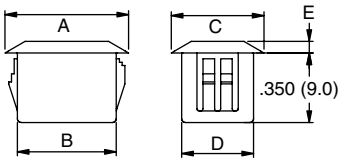




Recommended Mounting Hole

Item No.	Panel Thickness In	Panel Thickness mm	Bulk Pack Qty.
OFCA-SC/ST-01	**0.055 - 0.138**	**1.4 - 3.5**	1000

BPE
Connector Port Plugs



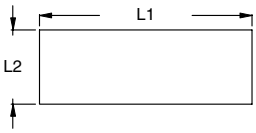


Figure 1

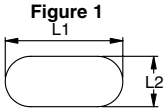


Figure 2

Recommended Mounting Holes

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

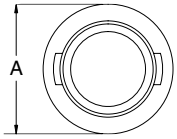
Features:
- Aesthetically pleasing, blanking off redundant connector parts
- Quick and easy installation; simply press fit in the designated hole
- ST series covers Double-D, D or round holes

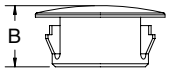
Item No.	Color	Mounting Hole Figure	L1 In	L1 mm	L2 In	L2 mm	A In	A mm	B In	B mm	C In	C mm	D In	D mm	E In	E mm	Bulk Pack Qty.
BPE-SC-1-01	Black	1	0.512	13.0	0.374	9.5	0.850	21.5	0.500	12.8	0.470	12.0	0.370	9.3	0.059	1.5	1000
BPE-SC-2-01	Black	1	0.512	13.0	0.374	9.5	0.630	16.0	0.500	12.8	0.470	12.0	0.370	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	Ø.470	Ø12	Ø.360	Ø9.2	Ø.470	Ø12	0.300	7.7	0.059	1.5	1000

PLUGS

PGM / PLH
Standard Locking Hole Plug

Richco





Expanded Line

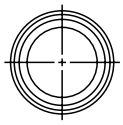
Item No.	Mounting Hole In	Mounting Hole mm	Max Panel Thickness In	Max Panel Thickness mm	OD A In	OD A mm	Overall Height B		Pack Qty.	Bulk Pack Qty.
PGM-4	0.189	4.8	0.067	1.7	0.236	6.0	0.205	5.2	1	1000
PGM-1	0.250	6.4	0.062	1.6	0.312	7.9	0.312	7.9	1	1000
PGM-6	0.252	6.4	0.067	1.7	0.299	7.6	0.221	5.6	1	1000
PGM-7	0.278	7.1	0.063	1.6	0.433	11.0	0.276	7.0	1	1000
PGM-8	0.307	7.8	0.063	1.6	0.375	9.5	0.236	6.0	1	1000
PGM-2	0.312	7.9	0.062	1.6	0.375	9.5	0.312	7.9	1	1000
PGM-33	0.375	9.5	0.125	3.2	0.468	11.9	0.406	6.4	1	1000
PGM-9	0.376	9.6	0.047	1.2	0.511	13.0	0.256	6.5	1	1000
PGM-10	0.386	9.8	0.055	1.4	0.511	13.0	0.236	6.0	1	1000
PGM-34	0.437	11.1	0.125	3.2	0.531	13.5	0.406	10.3	1	1000
PGM-3	0.468	11.9	0.062	1.6	0.531	13.5	0.250	6.4	1	1000
PGM-24	0.500	12.7	0.125	3.2	0.578	14.7	0.406	10.3	1	1000
PGM-5	0.500	12.7	0.062	1.6	0.562	14.3	0.250	6.4	1	1000
PGM-13	0.506	12.8	0.083	2.1	0.669	17.0	0.315	8.0	1	1000
PGM-11	0.531	13.5	0.062	1.6	0.593	15.1	0.250	6.4	1	500
PGM-26	0.562	14.3	0.125	3.2	0.656	16.7	0.406	10.3	1	200
PGM-27	0.625	15.9	0.125	3.2	0.718	18.2	0.406	10.3	1	200
PGM-12	0.625	15.9	0.062	1.6	0.718	18.2	0.250	6.4	1	500
PGM-16	0.628	16.0	0.079	2.0	0.787	20.0	0.315	8.0	1	500
PGM-28	0.687	17.5	0.125	3.2	0.781	19.8	0.406	10.3	1	200
PGM-19	0.746	19.0	0.125	3.2	0.925	23.5	0.413	10.5	1	500
PGM-14	0.750	19.1	0.062	1.6	0.843	21.4	0.250	6.4	1	500
PGM-15	0.781	19.8	0.062	1.6	0.890	22.6	0.250	6.4	1	500
PGM-22	0.864	22	0.118	3.0	1.024	26.0	0.378	9.6	1	500
PGM-17	0.875	22.2	0.062	1.6	0.968	24.6	0.250	6.5	1	500
PGM-29	0.875	22.2	0.125	3.2	1.125	28.6	0.453	11.5	1	200
PGM-25	1.004	25.5	0.125	3.2	1.102	28.0	0.500	12.7	1	200
PGM-32	1.097	27.9	0.125	3.2	1.218	30.9	0.465	11.8	1	200
PGM-30	1.203	30.6	0.125	3.2	1.339	34.0	0.512	13.0	1	200
PGM-18	1.250	31.8	0.125	3.2	1.375	34.9	0.465	11.8	1	200
PGM-20	1.375	35.0	0.125	3.2	1.500	38.1	0.465	11.8	1	200
PGM-31	1.500	38.1	0.125	3.2	1.671	42.4	0.465	11.8	1	200
PGM-21	1.750	44.5	0.125	3.2	1.906	48.4	0.465	11.8	1	100
PGM-23	2.000	50.8	0.125	3.2	2.170	55.1	0.470	11.9	1	100
PLH023A	2.500	63.5	0.250	6.4	2.775	70.5	0.750	19.1	1	500

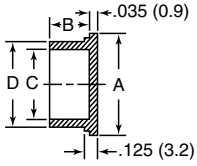
Specifications:
- Material: UL94V-2 Nylon 6/6
- Color: Black

Features:
- Each part fits multiple common sheet metal thicknesses
- Closes access sheet metal panel holes

FC CAP
Circular Connector Cap

ALLIANCE





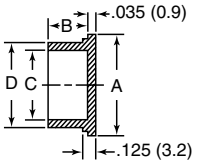
Item No.	MS90376 Dash No	To Cap Connector	A In	A mm	B In	B mm	C In	C mm	D In	D mm	Pack Qty.	Bulk Pack Qty.
FC708A	-8R	1/2	0.740	18.80	0.500	12.70	0.480	12.19	0.540	13.72	1	5000
FC710A	-10R	5/8	0.840	21.34	0.500	12.70	0.605	15.37	0.665	16.89	1	6000
FC712A	-12R	3/4	0.970	24.62	0.500	12.70	0.720	18.29	0.775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

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

FC PLUG
Circular Connector Plug

ALLIANCE

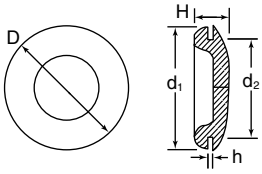


Item No.	MS90376 Dash No	To Cap Connector	A In	A mm	B In	B mm	C In	C mm	D In	D mm	Pack Qty.	Bulk Pack Qty.
FC707A	-8Y	1/2-18	0.670	17.02	0.625	15.88	0.413	10.49	0.483	12.27	1	10000
FC709B	-10Y	5/8-24	0.750	19.05	0.625	15.88	0.530	13.46	0.595	15.11	1	8000
FC711B	-12Y	3/4-20	0.860	21.84	0.625	15.88	0.655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

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

BLANKING PLUG
PVC Hole Plug

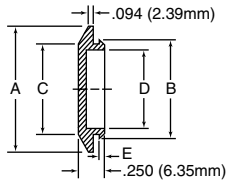


Specifications:
- Materials: PVC or TPR
- Color: Black

Features:
- PVC material: Non-staining; resistant to ozone, acids, and sunlight; with excellent aging qualities
- TPR Material: Very resistant to oils, acids and alkalies; resistant temperatures (up to 350°F, 176°C short term)

Item No.		Panel Hole d2		Panel Thickness h		OD D		Depth H		d1		Pack Qty.	Bulk Pack Qty
PVC	TPR	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	1	10000
10825B	**15151B**	0.250	6.40	0.063	1.60	0.374	9.50	0.197	5.00	0.374	9.50	1	10000
10832B	—	0.313	8.00	0.031	0.80	0.571	14.50	0.157	4.00	0.417	10.60	1	10000
10233B	—	0.313	8.00	0.063	1.60	0.571	14.50	0.177	4.50	0.417	10.60	1	10000
10488B	—	0.354	9.00	0.063	1.60	0.591	15.00	0.260	6.60	0.488	12.40	1	10000
10912B	**15155B**	0.438	11.10	0.063	1.60	0.697	17.70	0.244	6.20	0.504	12.80	1	10000
10768B	—	0.453	11.50	0.063	1.60	0.669	17.00	0.276	7.00	0.610	15.50	1	5000
15511B	—	0.469	11.90	0.047	1.20	0.689	17.50	0.280	7.10	0.626	15.90	1	10000
10502B	**15157B**	0.500	12.70	0.063	1.60	0.736	18.70	0.220	5.60	0.610	15.50	1	5000
11321B	**15158B**	0.587	14.90	0.051	1.30	0.787	20.00	0.276	7.00	0.724	18.40	1	10000
10213B	**15159B**	0.610	15.50	0.063	1.60	0.866	22.00	0.295	7.50	0.748	19.00	1	5000
40043B	—	0.625	15.90	0.063	1.60	0.748	19.00	0.280	7.10	0.748	19.00	1	10000
12914B	—	0.642	16.30	0.051	1.30	0.787	20.00	0.276	7.00	0.728	18.50	1	5000
10678B	**15160B**	0.750	19.00	0.063	1.60	0.984	25.00	0.256	6.50	0.846	21.50	1	5000
10499A	**15161B**	0.781	20.00	0.063	1.60	0.984	25.00	0.256	6.50	0.846	21.50	1	5000
11152B	**15162B**	0.866	22.00	0.094	2.40	1.122	28.50	0.323	8.20	1.047	26.60	1	3000
10902B	—	0.875	22.50	0.063	1.60	1.122	28.50	0.295	7.50	1.063	27.00	1	3000
11027B	**15164B**	0.968	24.50	0.094	2.40	1.181	30.00	0.343	8.70	1.083	27.50	1	2000
11323B	—	0.984	25.00	0.031	0.80	1.516	38.50	0.181	4.60	1.122	28.50	1	3000
10705B	**15166B**	1.000	25.40	0.063	1.60	1.260	32.00	0.354	9.00	1.114	28.30	1	3000
11148B	**15165B**	1.000	25.40	0.094	2.40	1.260	32.00	0.354	9.00	1.114	28.30	1	3000
11239B	—	1.250	31.50	0.031	0.80	1.504	38.20	0.276	7.00	1.240	31.50	1	2000
11059B	**15168B**	1.250	31.50	0.063	1.60	1.504	38.20	0.295	7.50	1.394	35.40	1	2000
11281B	**15170B**	1.260	32.00	0.122	3.10	1.504	38.20	0.354	9.00	1.394	35.40	1	2000
10877B	**15171B**	1.500	38.20	0.063	1.60	1.720	43.70	0.323	8.20	1.693	43.00	1	1500
10320B	**15172B**	2.031	51.50	0.063	1.60	2.264	57.50	0.488	12.40	2.071	52.60	1	500

S
Sheet Metal Plug

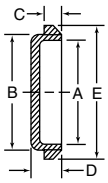


Specifications:
- Material: Low-Density Polyethylene
- Color: Black

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

Item No.	Hole Size	Max Metal Thickness		A		B		C		D		E		Pack Qty.	Bulk Pack Qty.
		In	mm	In	mm	In	mm	In	mm	In	mm	In	mm		
S1/4A	0.250	0.110	2.8	0.500	12.7	0.280	7.1	0.250	6.4	0.188	4.8	0.250	6.4	1	5000
SM3/8A	0.375	0.065	1.7	0.740	18.8	0.400	10.2	0.370	9.4	0.240	6.1	0.250	6.4	1	5000
S3/8A	0.375	0.110	2.8	0.730	18.5	0.412	10.5	0.370	9.4	0.270	6.9	0.110	2.8	1	5000
S7/16A	0.438	0.110	2.8	0.688	17.5	0.471	12.0	0.438	11.1	0.375	9.5	0.250	6.4	1	6000
S1/2A	0.500	0.075	1.9	0.875	22.2	0.570	14.5	0.510	13.0	0.375	9.5	0.115	2.9	1	6000
S9/16A	0.563	0.110	2.8	0.813	20.6	0.600	15.2	0.563	14.3	0.500	12.7	0.250	6.4	1	6000
S5/8A	0.625	0.075	1.9	0.813	20.7	0.670	17.0	0.620	15.8	0.540	13.7	0.100	2.5	1	6000
S11/16A	0.688	0.110	2.8	1.000	25.4	0.720	18.3	0.688	17.5	0.925	23.5	0.250	6.4	1	5000
SM3/4A	0.750	0.094	2.4	1.120	28.5	0.810	20.6	0.760	19.3	0.610	15.5	0.250	6.4	1	5000
S3/4A	0.750	0.110	2.8	1.125	28.6	0.790	20.1	0.760	19.3	0.623	15.8	0.115	2.9	1	6500
S13/16A	0.813	0.110	2.8	1.125	28.6	0.845	21.5	0.813	20.7	0.750	19.1	0.250	6.4	1	5000
S7/8A	0.875	0.110	2.8	1.250	31.8	0.900	22.9	0.870	22.1	0.745	18.9	0.094	2.4	1	5000
S15/16A	0.937	0.111	2.8	1.251	31.8	0.980	24.9	0.937	23.8	0.875	22.2	0.250	6.4	1	5000
S1A	1.000	0.110	2.8	1.438	36.5	1.040	26.4	1.010	25.7	0.875	22.2	0.110	2.8	1	3500
S1-3/32A	1.094	0.110	2.8	1.375	34.9	1.150	29.2	1.094	27.8	1.031	26.2	0.250	6.4	1	4000
S1-1/8A	1.125	0.110	2.8	1.500	38.1	1.180	30.0	1.125	28.6	1.063	27.0	0.250	6.4	1	3000
S1-5/16A	1.313	0.110	2.8	1.688	42.9	1.360	34.5	1.313	33.4	1.250	31.8	0.250	6.4	1	2500
S1-1/2A	1.500	0.110	2.8	1.875	47.6	1.540	39.1	1.500	38.1	1.400	35.6	0.110	2.8	1	2000
S1-3/4A	1.750	0.110	2.8	2.130	54.1	1.835	46.6	1.730	43.9	1.610	40.9	0.105	2.7	1	1500
S2A	2.000	0.110	2.8	2.375	60.3	2.060	52.3	2.000	50.8	1.938	49.2	0.250	6.4	1	1000
S2-1/8A	2.125	0.110	2.8	2.500	63.5	2.175	55.3	2.125	54.0	2.063	52.4	0.250	6.4	1	1000
S2-1/2A	2.500	0.110	2.8	3.000	76.2	2.560	65.0	2.500	63.5	2.438	61.9	0.250	6.4	1	700
S2-5/8A	2.625	0.110	2.8	3.125	79.4	2.685	68.2	2.625	66.7	2.563	65.1	0.250	6.4	1	1200
S3A	3.000	0.110	2.8	3.375	85.7	3.060	77.7	3.000	76.2	2.938	74.6	0.250	6.4	1	1000
S3-3/8A	3.375	0.110	2.8	3.750	95.3	3.435	87.3	3.375	85.7	3.313	84.2	0.250	6.4	1	500
S3-1/2A	3.500	0.110	2.8	3.875	98.4	3.560	90.4	3.500	88.9	3.438	87.3	0.250	6.4	1	600

SR
Recessed Sheet Metal Plug



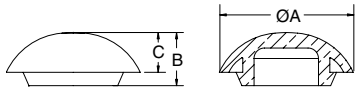
Specifications:
- Material: Low-Density Polyethylene
- Color: Black

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

Item No.	Hole Size	Max Metal Thickness		A		B		C		D		E		Pack Qty.	Bulk Pack Qty.
		In	mm	In	mm	In	mm	In	mm	In	mm	In	mm		
SR1/2A	0.500	0.110	2.8	0.510	13.1	0.550	14.0	0.090	2.3	0.290	7.4	0.850	21.6	1	3000
SR3/4A	0.750	0.180	4.6	0.750	19.2	0.800	20.3	0.190	4.8	0.380	9.7	1.156	29.4	1	4000
SR7/8A	0.875	0.180	4.6	0.875	22.2	0.920	23.4	0.190	4.8	0.380	9.7	1.250	31.8	1	3500
SR1A	1.000	0.150	3.8	1.000	25.4	1.043	26.5	0.096	2.4	0.319	8.1	1.377	35.0	1	3500
SR1-1/4A	1.250	0.120	3.0	1.280	32.5	1.330	33.8	0.120	3.1	0.350	8.9	1.615	41.0	1	2000
SR1-3/8A	1.375	0.190	4.8	1.375	34.9	1.437	36.5	0.200	5.1	0.410	10.4	1.750	44.5	1	1800
SR1-1/2A	1.500	0.125	3.2	1.515	38.5	1.555	39.5	0.120	3.1	0.350	8.9	1.875	47.6	1	1500
SR1-5/8A	1.625	0.190	4.8	1.625	41.3	1.688	42.9	0.200	5.1	0.410	10.4	2.000	50.8	1	1000
SR1-3/4A	1.750	0.190	4.8	1.750	44.5	1.812	46.0	0.200	5.1	0.410	10.4	2.125	54.0	1	1000
SR1-7/8A	1.875	0.190	4.8	1.875	47.6	1.937	49.2	0.200	5.1	0.410	10.4	2.250	57.2	1	900
SR2A	2.000	0.190	4.8	2.000	50.8	2.060	52.3	0.170	4.3	0.390	9.9	2.500	63.5	1	800
SR3A	3.000	0.190	4.8	3.000	76.2	3.065	77.9	0.200	5.1	0.410	10.4	3.500	88.9	1	300

PLUGS & GROMMETS

LTP
IP67 Liquid Tight Plug

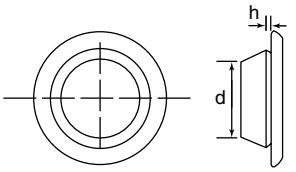


Specifications:
- Material: UL94 V-0 Silicone
- Color: Black

Features:
- Offers protection up to IP67
- Temperature Rating: -40°F to 302°F (-40°C - 150°C)

Item No.	Mounting Hole Ø		Head Ø A		Overall Height B		Head Height C		Max Panel Thickness		Pack Qty.	Bulk Pack Qty.
	In	mm	In	mm	In	mm	In	mm	In	mm		
LTP-4	0.500	12.7	0.92	23.4	0.449	11.4	0.287	7.3	0.125	3.2	1	1000
LTP-7	0.625	15.9	1.09	27.7	0.455	11.6	0.319	8.1	0.125	3.2	1	500
LTP-5	0.750	19.1	1.15	29.2	0.512	13.0	0.350	8.9	0.125	3.2	1	500
LTP-1	0.875	22.2	1.26	32.0	0.500	12.7	0.374	9.5	0.125	3.2	1	1000
LTP-6	1.000	25.4	1.41	35.8	0.559	14.2	0.398	10.1	0.125	3.2	1	200
LTP-2	1.093	27.8	1.54	39.2	0.539	13.7	0.413	10.5	0.125	3.2	1	500
LTP-3	1.375	34.9	1.82	46.2	0.579	14.7	0.433	11.0	0.125	3.2	1	200

BP
Flexible Hole Plug



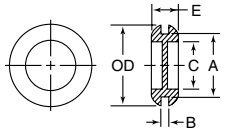
Expanded Line

Specifications:
- Material: TPR (–100°F to 300°F)
  BP: TPE
- Color: Black

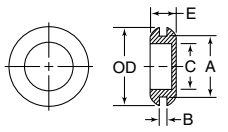
Features:
- Each size covers a range of panel thicknesses
- Designed to fit standard metric holes
- Very resistant to oils, acids and alkalies

Item No.	Panel Hole d		Panel Thickness h		Pack Qty.	Bulk Pack Qty
	In	mm	In	mm		
16230B	0.394	10.0	0.031 - 0.078	0.8 - 2.0	1	5000
16231B	0.472	12.0	0.031 - 0.078	0.8 - 2.0	1	5000
16232B	0.551	14.0	0.031 - 0.078	0.8 - 2.0	1	5000
16233B	0.630	16.0	0.031 - 0.078	0.8 - 2.0	1	5000
16234B	0.709	18.0	0.031 - 0.078	0.8 - 2.0	1	2500
16235B	0.787	20.0	0.031 - 0.078	0.8 - 2.0	1	2500
16236B	0.866	22.0	0.031 - 0.078	0.8 - 2.0	1	2500
BP-3	0.866	22.0	0.063 - 0.118	1.6 - 3.0	1	1000
16237B	0.984	25.0	0.031 - 0.078	0.8 - 2.0	1	3000
BP-4	1.043	26.5	0.063 - 0.118	1.6 - 3.0	1	1000
16238B	1.181	30.0	0.031 - 0.078	0.8 - 2.0	1	2000
10517B	1.772	45.0	0.031 - 0.078	0.8 - 2.0	1	1000

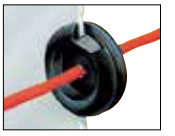
GRD / DG / DGB
Diaphragm Grommet



Style 1



Style 2



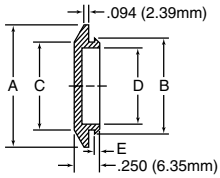
Specifications:
- Material: GRD/DG: Flexible PVC
  DGB: UL94 HB TPE
- Color: Black

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.	Style	Mounting Hole Ø A		Panel Thickness		C Ref.		OD		E		Pack Qty.	Bulk Pack Qty.
		In	mm	In	mm	In	mm	In	mm	In	mm		
GRD2025031PA	2	0.250	6.4	0.030	0.8	0.160	4.1	0.370	9.4	0.140	3.6	1	10000
DGB-2.5	2	0.250	6.4	0.030	0.8	0.160	4.1	0.370	9.4	0.140	3.6	1	1000
DGB-4	2	0.390	9.9	0.060	1.5	0.250	6.4	0.500	12.7	0.260	6.6	1	1000
GRD2039061PA	2	0.390	9.9	0.060	1.5	0.250	6.4	0.500	12.7	0.260	6.6	1	10000
DGB-6	2	0.430	11.0	0.060	1.5	0.310	8.0	0.690	17.5	0.310	8.0	1	1000
GRD2043061PA	2	0.430	11.0	0.060	1.5	0.310	8.0	0.690	17.5	0.310	8.0	1	5000
DGB-5	2	0.490	12.5	0.060	1.5	0.370	9.5	0.620	15.7	0.250	6.4	1	1000
GRD2050061PA	2	0.490	12.5	0.060	1.5	0.370	9.5	0.620	15.7	0.250	6.4	1	10000
GRD1062061PA	1	0.630	16.0	0.060	1.5	0.750	19.0	0.430	11.0	0.230	5.8	1	10000
DG-19426	1	0.630	16.0	0.060	1.5	0.750	19.0	0.430	11.0	0.230	5.8	1	1000
GRD2062061PA	2	0.630	16.0	0.060	1.6	0.750	19.0	0.438	11.0	0.310	8.0	1	5000
DGB-7	2	0.630	16.0	0.060	1.5	0.430	11.0	0.750	19.0	0.310	8.0	1	1000
DG-19427	1	0.630	16.0	0.090	2.4	0.870	22.0	0.490	12.5	0.320	8.0	1	1000
GRD1062091PA	1	0.630	16.0	0.094	2.4	0.875	22.2	0.500	12.7	0.320	8.0	1	5000
GRD2075061PA	2	0.750	19.0	0.060	1.5	1.000	25.4	0.630	15.9	0.281	7.1	1	4000
DGB-11	2	0.750	19.0	0.060	1.5	0.630	16.0	1.000	25.5	0.280	7.0	1	1000
GRD1075071PA	1	0.750	19.0	0.080	2.0	1.000	25.4	0.630	15.9	0.320	8.0	1	5000
DG-15512	1	0.750	19.0	0.080	2.0	1.000	25.4	0.630	15.9	0.320	8.0	1	1000
GRD1075091PA	1	0.750	19.0	0.090	2.4	1.000	25.4	0.563	14.3	0.344	8.7	1	5000
DG-10134	1	0.750	19.0	0.090	2.4	1.000	25.4	0.610	15.5	0.350	8.8	1	1000
DG-19429	1	0.750	19.0	0.120	2.0	1.000	25.4	0.610	15.5	0.370	9.5	1	1000
GRD1075121PA	1	0.750	19.0	0.120	3.2	1.000	25.4	0.563	14.3	0.375	9.5	1	2500
DG-10187	1	0.790	20.0	0.060	1.5	1.000	25.4	0.610	15.5	0.320	8.0	1	1000
DGB-10	2	0.870	22.0	0.060	1.5	0.720	18.4	1.000	25.5	0.310	8.0	1	1000
GRD2087061PA	2	0.875	22.0	0.060	1.6	1.000	25.4	0.750	19.0	0.310	8.0	1	4000
DGB-13	2	1.000	25.4	0.060	1.5	0.810	20.5	1.180	30.0	0.310	8.0	1	1000
GRD2100061PA	2	1.000	25.4	0.060	1.5	0.810	20.5	1.180	30.0	0.310	8.0	1	2000
DG-10806	1	1.000	25.5	0.090	2.4	1.440	36.5	0.750	19.0	0.330	8.4	1	1000
GRD1100091PA	1	1.000	25.5	0.090	2.4	1.440	36.5	0.750	19.0	0.330	8.4	1	2000
GRD1125091PA	1	1.260	32.0	0.090	2.4	1.540	39.0	0.980	25.0	0.320	8.0	1	1000
DG-19430	1	1.260	32.0	0.090	2.4	1.540	39.0	0.980	25.0	0.320	8.0	1	1000
GRD1125151PA	1	1.260	32.0	0.156	4.0	1.540	39.0	0.980	25.0	0.375	9.5	1	1000
GRD21625375PA	2	1.625	42.0	0.090	2.4	1.000	25.4	1.500	38.1	0.400	10.1	1	1000

S Series
Sheet Metal Plugs

ALLIANCE



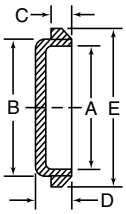
Specifications:
- Material: Low-Density Polyethylene
- Color: Black

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

Item No.	Hole Size	Max Metal Thickness		A		B		C		D		E		Pack Qty.	Bulk Pack Qty.
	In	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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	1	600

SR Series
Recessed Sheet Metal Plugs

ALLIANCE



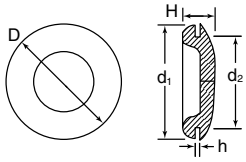
Specifications:
- Material: Low-Density Polyethylene
- Color: Black

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

Item No.	Hole Size	Max Metal Thickness		A		B		C		D		E		Pack Qty.	Bulk Pack Qty.
	In	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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	1	300

SHEET METAL PLUGS

Blanking Plug Series
PVC Hole Plugs

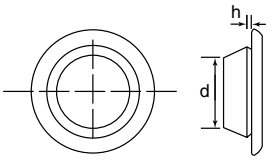


Specifications:
- Materials: PVC or TPR
- Color: Black

Features:
- PVC material: Non-staining; resistant to ozone, acids, and sunlight; with excellent aging qualities
- TPR Material: Very resistant to oils, acids and alkalies; resistant temperatures (up to 350°F, 176°C short term)

Item No.		Panel Hole Size d2		Panel Thickness h		D= O.D.		Depth H		d1		Pack Qty.	Bulk Pack Qty.
PVC	TPR	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	1	10000
10825B	**15151B**	0.250	6.40	0.063	1.60	0.374	9.50	0.197	5.00	0.374	9.50	1	10000
10832B	—	0.313	8.00	0.031	0.80	0.571	14.50	0.157	4.00	0.417	10.60	1	10000
10233B	—	0.313	8.00	0.063	1.60	0.571	14.50	0.177	4.50	0.417	10.60	1	10000
10488B	—	0.354	9.00	0.063	1.60	0.591	15.00	0.260	6.60	0.488	12.40	1	10000
10912B	**15155B**	0.438	11.10	0.063	1.60	0.697	17.70	0.244	6.20	0.504	12.80	1	10000
10768B	—	0.453	11.50	0.063	1.60	0.669	17.00	0.276	7.00	0.610	15.50	1	5000
15511B	—	0.469	11.90	0.047	1.20	0.689	17.50	0.280	7.10	0.626	15.90	1	10000
10502B	**15157B**	0.500	12.70	0.063	1.60	0.736	18.70	0.220	5.60	0.610	15.50	1	5000
11321B	**15158B**	0.587	14.90	0.051	1.30	0.787	20.00	0.276	7.00	0.724	18.40	1	10000
10213B	**15159B**	0.610	15.50	0.063	1.60	0.866	22.00	0.295	7.50	0.748	19.00	1	5000
40043B	—	0.625	15.90	0.063	1.60	0.748	19.00	0.280	7.10	0.748	19.00	1	10000
12914B	—	0.642	16.30	0.051	1.30	0.787	20.00	0.276	7.00	0.728	18.50	1	5000
10678B	**15160B**	0.750	19.00	0.063	1.60	0.984	25.00	0.256	6.50	0.846	21.50	1	5000
10499A	**15161B**	0.781	20.00	0.063	1.60	0.984	25.00	0.256	6.50	0.846	21.50	1	5000
11152B	**15162B**	0.866	22.00	0.094	2.40	1.122	28.50	0.323	8.20	1.047	26.60	1	3000
10902B	—	0.875	22.50	0.063	1.60	1.122	28.50	0.295	7.50	1.063	27.00	1	3000
11027B	**15164B**	0.968	24.50	0.094	2.40	1.181	30.00	0.343	8.70	1.083	27.50	1	2000
11323B	—	0.984	25.00	0.031	0.80	1.516	38.50	0.181	4.60	1.122	28.50	1	3000
10705B	**15166B**	1.000	25.40	0.063	1.60	1.260	32.00	0.354	9.00	1.114	28.30	1	3000
11148B	**15165B**	1.000	25.40	0.094	2.40	1.260	32.00	0.354	9.00	1.114	28.30	1	3000
11239B	—	1.250	31.50	0.031	0.80	1.504	38.20	0.276	7.00	1.240	31.50	1	2000
11059B	**15168B**	1.250	31.50	0.063	1.60	1.504	38.20	0.295	7.50	1.394	35.40	1	2000
11281B	**15170B**	1.260	32.00	0.122	3.10	1.504	38.20	0.354	9.00	1.394	35.40	1	2000
10877B	**15171B**	1.500	38.20	0.063	1.60	1.720	43.70	0.323	8.20	1.693	43.00	1	1500
10320B	**15172B**	2.031	51.50	0.063	1.60	2.264	57.50	0.488	12.40	2.071	52.60	1	500

Body Series
TPR Hole Plugs

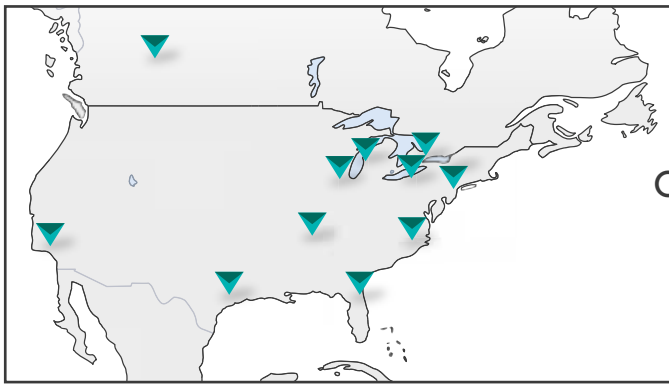


Specifications:
- Material: TPR (–100°F to 300°F)

Features:
- Each size covers a range of panel thicknesses
- Designed to fit standard metric holes
- Very resistant to oils, acids and alkalies

Item No.	Panel Hole d		Panel Thickness h		Pack Qty.	Bulk Pack Qty.
	In	mm	In	mm		
16230B	0.394	10.00	.032-.078	0.8-2.0	1	5000
16231B	0.472	12.00	.031-.078	0.8-2.0	1	5000
16232B	0.551	14.00	.031-.078	0.8-2.0	1	5000
16233B	0.630	16.00	.031-.078	0.8-2.0	1	5000
16234B	0.709	18.00	.031-.078	0.8-2.0	1	2500

Item No.	Panel Hole d		Panel Thickness h		Pack Qty.	Bulk Pack Qty.
	In	mm	In	mm		
16235B	0.787	20.00	.031-.078	0.8-2.0	1	2500
16236B	0.866	22.00	.031-.078	0.8-2.0	1	2500
16237B	0.984	25.00	.031-.078	0.8-2.0	1	3000
16238B	1.181	30.00	.031-.078	0.8-2.0	1	2000
10517B	1.772	45.00	.031-.078	0.8-2.0	1	1000

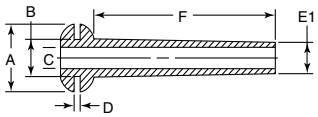


11 LOCATIONS TO SERVE YOU

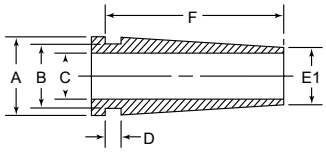
SAME DAY SHIPPING

OVER 1 BILLION PARTS IN STOCK

GRS / RGS
Grommet Sleeve



Style 1



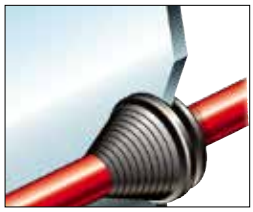
Style 2

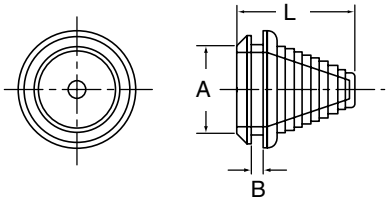
Specifications:
- Material: PVC
- Color: Black

Features:
- Sleeve design provides additional support and protection for cables/wires passing thru panel
- PVC is non-staining; resistant to ozone, acids, and sunlight; with excellent aging qualities

Item No.	Style	B Hole Ø		Panel Thickness D		A Ø		C Ø		E1		F		Pack Qty.	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	1	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	1	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	1	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	1	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	1	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	1	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	1	4000

GRC
Stepped Grommet





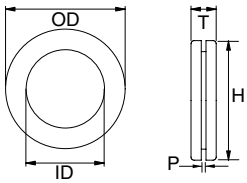
Specifications:
- Material: PVC
- Color: Black

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		Pack Qty.	Bulk Pack Qty.
	In	mm	In	mm	In	mm	In	mm		
462039	0.500	12.7	0.120	3.0	1.270	32.5	0.200 - 0.350	5.0 - 9.0	1	1000
462040	0.830	21.0	0.120	3.0	1.080	27.5	0.200 - 0.670	5.0 - 17.0	1	1000
462041	1.020	26.0	0.120	3.0	1.160	29.5	0.390 - 0.870	10.0 - 22.0	1	1000

HG
TPE Flexible Hole Grommet

Specifications:
- Material: TPE Rubber UL94 HB Flexible TPV Rated
- Color: Black
- Temperature Rating: -58°F to 203°F (-50°C - 95°C)

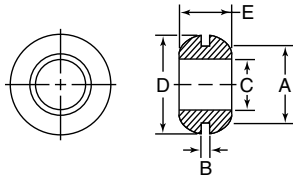


Features:
- Molded out of UL94-HB Material
- Suitable for outdoor use in accordance with UL 746C

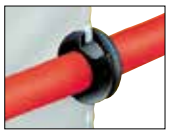
Item No.	Mounting Hole H		Panel Thickness P		ID		OD		Thickness T		Pack Qty.	Bulk Pack Qty.
	In	mm	In	mm	In	mm	In	mm	In	mm		
HG-2	0.190	4.8	0.063	1.6	0.125	3.2	0.313	8.0	0.252	6.4	1	1000
HG-2.5	0.252	6.4	0.063	1.6	0.156	4.0	0.375	9.5	0.248	6.3	1	1000
HG-3	0.305	7.7	0.032	0.8	0.188	4.8	0.430	10.9	0.188	4.8	1	1000
HG-3.5	0.315	8.0	0.063	1.6	0.219	5.5	0.430	10.9	0.217	5.5	1	1000
HG-4	0.375	9.5	0.094	2.4	0.250	6.4	0.559	14.2	0.276	7.0	1	1000
HG-5	0.430	10.9	0.063	1.6	0.313	8.0	0.562	14.3	0.188	4.8	1	1000
HG-17	0.433	11.0	0.079	2.0	0.313	8.0	0.630	16.0	0.276	7.0	1	1000
HG-6	0.492	12.5	0.063	1.6	0.375	9.5	0.669	17.0	0.276	7.0	1	1000
HG-8	0.660	16.8	0.063	1.6	0.495	12.6	0.846	21.5	0.250	6.4	1	1000
HG-9	0.675	17.1	0.063	1.6	0.558	14.2	0.875	22.2	0.188	4.8	1	1000
HG-11	0.735	18.7	0.063	1.6	0.672	17.1	0.933	23.7	0.188	4.8	1	1000
HG-10	0.742	18.8	0.063	1.6	0.610	15.5	0.875	22.2	0.219	5.6	1	1000
HG-18	0.748	19.0	0.094	2.4	0.500	12.7	0.954	24.0	0.280	7.1	1	1000
HG-12	0.976	24.8	0.063	1.6	0.734	18.6	1.234	31.3	0.313	8.0	1	1000
HG-14	0.990	25.1	0.063	1.6	0.860	21.8	1.188	30.2	0.313	8.0	1	1000
HG-16	1.240	31.5	0.063	1.6	0.970	24.6	1.500	38.1	0.313	8.0	1	1000

GROMMETS

GRO
PVC Hole Grommet



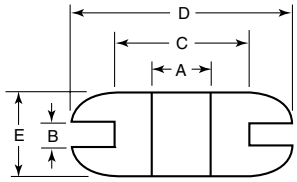
Specifications:
- Material: 55 Shore A PVC
- Color: Black



Features:
- Standard PVC material: 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 Depth E		Shore A Rating	Pack Qty.	Bulk Pack Qty.
	In	mm	In	mm	In	mm	In	mm	In	mm			
GRO018031A	0.188	4.8	0.031	0.8	0.109	2.8	0.313	7.9	0.188	4.8	55	1	10000
GRO018061A	0.188	4.8	0.063	1.6	0.125	3.2	0.313	7.9	0.250	6.4	55	1	10000
GRO023041A	0.234	6.0	0.047	1.2	0.125	3.2	0.344	8.7	0.156	4.0	55	1	10000
GRO025031A	0.250	6.4	0.031	0.8	0.156	4.0	0.375	9.5	0.156	4.0	43	1	10000
GRO025061A	0.250	6.4	0.063	1.6	0.156	4.0	0.375	9.5	0.250	6.4	55	1	10000
GRO025062A	0.250	6.4	0.063	1.6	0.188	4.8	0.375	9.5	0.281	7.1	55	1	10000
GRO025121A	0.250	6.4	0.125	3.2	0.156	4.0	0.375	9.5	0.313	7.9	43	1	10000
GRO028091A	0.281	7.1	0.094	2.4	0.188	4.8	0.438	11.1	0.281	7.1	55	1	10000
GRO031031A	0.313	7.9	0.031	0.8	0.188	4.8	0.438	11.1	0.188	4.8	55	1	10000
GRO031041A	0.313	7.9	0.047	1.2	0.219	5.6	0.438	11.1	0.156	4.0	55	1	10000
GRO031061A	0.313	7.9	0.063	1.6	0.219	5.6	0.438	11.1	0.219	5.6	43	1	10000
GRO031121A	0.313	7.9	0.125	3.2	0.125	3.2	0.438	11.1	0.313	7.9	55	1	10000
GRO037041A	0.375	9.5	0.047	1.2	0.281	7.1	0.563	14.3	0.188	4.8	55	1	10000
GRO037061A	0.375	9.5	0.063	1.6	0.250	6.4	0.563	14.3	0.250	6.4	55	1	10000
GRO037091A	0.375	9.5	0.094	2.4	0.250	6.4	0.563	14.3	0.281	7.1	55	1	10000
GRO040061A	0.406	10.3	0.063	1.6	0.281	7.1	0.563	14.3	0.156	4.0	55	1	10000
GRO043061A	0.438	11.1	0.063	1.6	0.313	7.9	0.563	14.3	0.188	4.8	55	1	10000
GRO046071A	0.469	11.9	0.078	2.0	0.375	9.5	0.688	17.5	0.266	6.8	55	1	10000
GRO050061A	0.500	12.7	0.063	1.6	0.375	9.5	0.688	17.5	0.281	7.1	55	1	10000
GRO050121A	0.500	12.7	0.125	3.2	0.313	7.9	0.625	15.9	0.313	7.9	55	1	10000
GRO050122A	0.500	12.7	0.125	3.2	0.375	9.5	0.688	17.5	0.344	8.7	55	1	10000
GRO056061A	0.563	14.3	0.063	1.6	0.438	11.1	0.750	19.1	0.250	6.4	55	1	10000
GRO062031A	0.625	15.9	0.031	0.8	0.438	11.1	0.750	19.1	0.375	9.5	55	1	10000
GRO062041A	0.625	15.9	0.047	1.2	0.500	12.7	0.813	20.6	0.281	7.1	55	1	10000
GRO068031A	0.688	17.5	0.031	0.8	0.563	14.3	0.875	22.2	0.281	7.1	55	1	10000
GRO068061A	0.688	17.5	0.063	1.6	0.500	12.7	0.875	22.2	0.250	6.4	55	1	8000
GRO068062A	0.688	17.5	0.063	1.6	0.563	14.3	0.875	22.2	0.188	4.8	55	1	10000
GRO068121A	0.688	17.5	0.125	3.2	0.500	12.7	0.875	22.2	0.313	7.9	55	1	8000
GRO075061A	0.750	19.1	0.063	1.6	0.625	15.9	0.875	22.2	0.219	5.6	55	1	10000
GRO075062A	0.750	19.1	0.063	1.6	0.629	16.0	0.938	23.8	0.188	4.8	55	1	10000
GRO081041A	0.813	20.6	0.047	1.2	0.625	15.9	1.063	27.0	0.313	7.9	55	1	4000
GRO087121A	0.875	22.3	0.125	3.2	0.625	15.9	1.063	27.0	0.375	9.5	55	1	4000
GRO100041A	1.000	25.4	0.047	1.2	0.750	19.1	1.250	31.8	0.297	7.5	55	1	2000
GRO100061A	1.000	25.4	0.063	1.6	0.750	19.1	1.250	31.8	0.313	7.9	55	1	4000
GRO100062A	1.000	25.4	0.063	1.6	0.875	22.2	1.250	31.8	0.313	7.9	55	1	4000
GRO100121A	1.000	25.4	0.125	3.2	0.750	19.1	1.250	31.8	0.375	9.5	55	1	2000
GRO125031A	1.250	31.8	0.031	0.8	1.000	25.4	1.750	44.5	0.250	6.4	55	1	2000
GRO125061A	1.250	31.8	0.063	1.6	1.000	25.4	1.500	38.1	0.297	7.5	55	1	2000
GRO125121A	1.250	31.8	0.125	3.2	1.000	25.4	1.500	38.1	0.359	9.1	55	1	2000
GRO150061A	1.500	38.1	0.063	1.6	1.250	31.8	1.813	46.0	0.375	9.5	55	1	1000
GRO150121A	1.500	38.1	0.125	3.2	1.250	31.8	1.813	46.0	0.438	11.1	55	1	1000
GRO175061A	1.750	44.5	0.063	1.6	1.500	38.1	2.000	50.8	0.375	9.5	55	1	1000
GRO175121A	1.750	44.5	0.125	3.2	1.500	38.1	2.000	50.8	0.375	9.5	55	1	1000
GRO200061A	2.000	50.8	0.063	1.6	1.750	44.5	2.375	60.3	0.406	10.3	55	1	500
GRO200121A	2.000	50.8	0.125	3.2	1.750	44.5	2.375	60.3	0.469	11.9	55	1	500

Rubber Grommet Assortments



Comes in gray metal box drawer.

Item No.	Pieces	ID Sizes	Pack Qty.	Item No.	Pieces	ID Sizes	Pack Qty.
KI-160	279	⅛ to ½	1	**KI-161**	67	½ to ¾	1

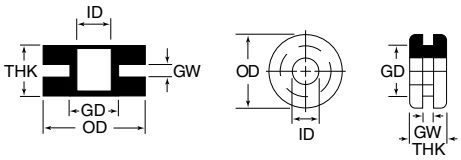
Contents - KI-161

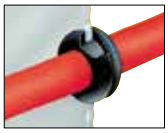
Qty.	Size A	Size B	Size C	Size D	Size E	Qty.	Size A	Size B	Size C	Size D	Size E
8	½	3/32	25/32	1	11/32	8	¾	1/16	15/16	1⅛	¼
8	½	⅛	¾	1	½	6	¾	1/16	1 1/16	1⅜	⅜
8	½	¼	13/16	1 1/16	½	8	¾	1/16	1¼	1⅝	¼
8	⅝	⅛	⅞	1⅛	⅜	5	¾	¼	1¼	1⅝	7/16
8	⅝	1/16	⅞	1⅛	5/16						

Contents - KI-160

Qty.	Size A	Size B	Size C	Size D	Size E	Qty.	Size A	Size B	Size C	Size D	Size E
15	⅛	3/32	⅜	½	5/16	10	5/16	1/16	9/16	13/16	5/16
25	5/32	1/16	¼	⅜	3/16	8	5/16	1/16	¾	1	5/16
15	5/32	3/32	¼	7/16	⅜	15	5/16	⅛	9/16	13/16	⅜
20	3/16	1/16	5/16	½	¼	10	5/16	¼	9/16	13/16	½
25	3/16	3/32	9/32	7/16	7/32	15	⅜	1/16	½	⅝	9/32
15	3/16	¼	5/16	7/16	⅜	10	⅜	1/16	⅝	⅞	11/32
15	¼	1/16	⅜	½	3/16	8	⅜	1/16	1	1¼	¼
15	¼	1/16	7/16	⅝	3/16	8	⅜	¼	⅝	⅞	½
10	¼	1/16	1	1¼	¼	15	7/16	1/16	9/16	¾	¼
15	5/16	1/16	7/16	9/16	3/16	10	½	3/32	¾	31/32	9/32

GR
Rubber Hole Grommets





Specifications:

- Material: SBR (Styrene Butadiene) 60 Durometer
- Color: Black
- Tensile Range: 30-100psi
- Temperature Range: 225°F to -50°F (107°C to -46°C)

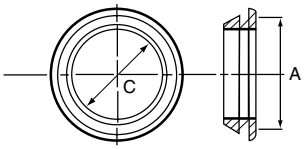
Features:

- Protects wires, cables, tubing, and hoses
- Installs instantly by simply snapping into hole
- Excellent adhesion, designed to fit standard sheet metal holes

Item No.	Panel Hole GD		Panel Thickness GW		ID		OD		Overall Thickness THK		Pack Qty.	Bulk Pack Qty.
	In	mm	In	mm	In	mm	In	mm	In	mm		
GR3001A	0.250	6.4	0.063	1.6	0.125	3.2	0.344	8.7	0.188	4.8	1	15000
GR3041A	0.250	6.4	0.063	1.6	0.156	4.0	0.375	9.5	0.188	4.8	1	12000
GR3053A	0.281	7.2	0.094	2.4	0.188	4.8	0.438	11.1	0.219	5.6	1	8000
GR3081A	0.313	7.9	0.063	1.6	0.188	4.8	0.438	11.1	0.188	4.8	1	10000
GR3047A	0.313	7.9	0.063	1.6	0.219	5.6	0.438	11.1	0.188	4.8	1	15000
GR3401A	0.313	7.9	0.094	2.4	0.109	2.8	0.500	12.7	0.219	5.6	1	5000
GR3146A	0.313	7.9	0.125	3.2	0.188	4.8	0.438	11.1	0.250	6.4	1	10000
GR3105A	0.313	7.9	0.250	6.4	0.188	4.8	0.438	11.1	0.375	9.5	1	5000
GR3165A	0.375	9.5	0.063	1.6	0.250	6.4	0.563	14.3	0.250	6.4	1	6000
GR3164A	0.375	9.5	0.094	2.4	0.250	6.4	0.500	12.7	0.250	6.4	1	5000
GR3166A	0.375	9.5	0.125	3.2	0.250	6.4	0.500	12.7	0.281	7.2	1	5000
GR3028A	0.375	9.5	0.188	4.8	0.188	4.8	0.625	15.9	0.375	9.5	1	3300
GR3009A	0.375	9.5	0.375	9.5	0.313	7.9	0.563	14.3	0.500	12.7	1	3000
GR3400A	0.406	10.3	0.125	3.2	0.266	6.8	0.625	15.9	0.375	9.5	1	6000
GR3002A	0.438	11.1	0.063	1.6	0.250	6.4	0.625	15.9	0.188	4.8	1	5000
GR3104A	0.438	11.1	0.094	2.4	0.313	7.9	0.625	15.9	0.313	7.9	1	4000
GR3127A	0.438	11.1	0.188	4.8	0.250	6.4	0.625	15.9	0.313	7.9	1	2500
GR3384A	0.465	11.8	0.095	2.4	0.250	6.4	0.765	19.4	0.294	7.5	1	5000
GR3027A	0.469	11.9	0.250	6.4	0.250	6.4	0.625	15.9	0.500	12.7	1	5000
GR3016A	0.500	12.7	0.125	3.2	0.375	9.5	0.625	15.9	0.406	10.3	1	7000
GR3250A	0.500	12.7	0.125	3.2	0.375	9.5	0.625	15.9	0.313	7.9	1	7000
GR3091A	0.500	12.7	0.188	4.8	0.250	6.4	0.625	15.9	0.438	11.1	1	3500
GR3033A	0.500	12.7	0.250	6.4	0.375	9.5	0.750	19.1	0.500	12.7	1	4800
GR3209A	0.500	12.7	0.375	9.5	0.375	9.5	0.625	15.9	0.625	15.9	1	5500
GR3017A	0.531	13.5	0.125	3.2	0.375	9.5	0.750	19.1	0.375	9.5	1	5000
GR3065A	0.563	14.3	0.063	1.6	0.313	7.9	0.813	20.6	0.313	7.9	1	4000
GR3035A	0.563	14.3	0.188	4.8	0.375	9.5	0.813	20.6	0.375	9.5	1	5000
GR3123A	0.563	14.3	0.375	9.5	0.375	9.5	0.750	19.1	0.750	19.1	1	2000
GR3076A	0.625	15.9	0.063	1.6	0.375	9.5	0.875	22.2	0.313	7.9	1	5000
GR3150A	0.625	15.9	0.125	3.2	0.375	9.5	0.875	22.2	0.375	9.5	1	4000
GR3110A	0.625	15.9	0.250	6.4	0.375	9.5	0.875	22.2	0.500	12.7	1	2700
GR3183A	0.625	15.9	0.375	9.5	0.406	10.3	0.813	20.6	0.625	15.9	1	2000
GR3131A	0.688	17.5	0.188	4.8	0.438	11.1	0.938	23.8	0.438	11.1	1	3000
GR3218A	0.750	19.1	0.156	4.0	0.500	12.7	0.938	23.8	0.406	10.3	1	3000
GR3132A	0.813	20.6	0.188	4.8	0.500	12.7	1.063	27.0	0.438	11.1	1	2000
GR3134A	0.813	20.6	0.188	4.8	0.563	14.3	1.063	27.0	0.438	11.1	1	1600
GR3113A	0.813	20.6	0.250	6.4	0.563	14.3	1.063	27.0	0.500	12.7	1	1500
GR3080A	0.875	22.2	0.063	1.6	0.625	15.9	1.125	28.6	0.313	7.9	1	2500
GR3155A	0.875	22.2	0.125	3.2	0.625	15.88	1.125	28.58	0.375	9.53	1	2400
GR3100A	0.875	22.2	0.188	4.8	0.563	14.3	1.063	27.0	0.438	11.1	1	2500
GR3135A	0.875	22.2	0.188	4.8	0.625	15.9	1.125	28.6	0.438	11.1	1	2000
GR3114A	0.875	22.2	0.250	6.4	0.625	15.9	1.125	28.6	0.500	12.7	1	1500
GR3101A	0.875	22.2	0.375	9.5	0.563	14.3	1.063	27.0	0.625	15.9	1	1500
GR3342A	0.969	24.6	0.375	9.5	0.688	17.5	1.313	33.3	0.625	15.9	1	1000
GR3068A	1.000	25.4	0.063	1.6	0.688	17.5	1.313	33.3	0.375	9.5	1	1500
GR3156A	1.000	25.4	0.125	3.2	0.688	17.5	1.313	33.3	0.438	11.1	1	1500
GR3136A	1.000	25.4	0.188	4.8	0.688	17.5	1.313	33.3	0.500	12.7	1	1500
GR3115A	1.000	25.4	0.250	6.4	0.688	17.5	1.313	33.3	0.563	14.3	1	1200
GR3390A	1.000	25.4	0.250	6.4	0.875	22.2	1.250	31.8	0.625	15.9	1	1000
GR3219A	1.000	25.4	0.266	6.8	0.500	12.7	1.375	34.9	0.500	12.7	1	1100
GR3031A	1.063	27.0	0.063	1.6	0.750	19.1	1.375	34.9	0.375	9.5	1	1000
GR3157A	1.063	27.0	0.125	3.2	0.750	19.1	1.375	34.9	0.438	11.1	1	1400
GR3137A	1.063	27.0	0.188	4.8	0.750	19.1	1.375	34.9	0.500	12.7	1	1000
GR3116A	1.063	27.0	0.250	6.4	0.750	19.1	1.375	34.9	0.563	14.3	1	1200
GR3246A	1.188	30.2	0.141	3.6	0.875	22.2	1.375	34.9	0.406	10.3	1	1800
GR3158A	1.250	31.8	0.125	3.2	0.750	19.1	1.625	41.3	0.313	7.9	1	1300
GR3160A	1.250	31.8	0.125	3.2	0.875	22.2	1.625	41.3	0.500	12.7	1	850
GR3259A	1.250	31.8	0.125	3.2	0.875	22.2	1.562	39.7	0.750	19.1	1	550
GR3138A	1.250	31.8	0.188	4.8	0.875	22.2	1.625	41.3	0.563	14.3	1	750
GR3117A	1.250	31.8	0.250	6.4	0.750	19.1	1.625	41.3	0.438	11.1	1	1000
GR3118A	1.250	31.8	0.250	6.4	0.875	22.2	1.625	41.3	0.625	15.9	1	800
GR3062A	1.250	31.8	0.250	6.4	1.000	25.4	1.500	38.1	0.500	12.7	1	1000
GR3410A	1.250	31.8	0.470	11.9	0.750	19.1	1.500	38.1	0.660	16.8	1	600
GR3072A	1.375	34.9	0.063	1.6	1.000	25.4	1.750	44.5	0.438	11.1	1	700
GR3161A	1.375	34.9	0.125	3.2	1.000	25.4	1.750	44.5	0.500	12.7	1	700
GR3139A	1.375	34.9	0.188	4.8	1.000	25.4	1.750	44.5	0.563	14.3	1	500
GR3119A	1.375	34.9	0.250	6.4	1.000	25.4	1.750	44.5	0.625	15.9	1	500
GR3064A	1.500	38.1	0.063	1.6	1.125	28.6	1.875	47.6	0.375	9.5	1	700
GR3180A	1.500	38.1	0.156	4.0	1.188	30.2	1.750	44.5	0.406	10.3	1	800
GR3262A	1.500	38.1	0.250	6.4	1.250	31.8	2.000	50.8	0.516	13.1	1	500
GR3267A	1.500	38.1	0.250	6.4	1.250	31.8	1.750	44.5	0.500	12.7	1	600
GR3087A	1.625	41.3	0.063	1.6	0.875	22.2	2.000	50.8	0.438	11.1	1	600
GR3383A	1.625	41.3	0.125	3.2	1.375	34.9	1.875	47.6	0.406	10.3	1	750
GR3266A	1.625	41.3	0.188	4.8	1.250	31.8	1.875	47.6	0.500	12.7	1	700
GR3173A	1.703	43.3	0.516	13.1	1.500	38.1	2.094	53.2	0.752	19.1	1	400
GR3073A	1.750	44.5	0.063	1.6	1.500	38.1	2.125	54.0	0.438	11.1	1	500
GR3409A	1.750	44.5	0.075	1.9	1.625	41.3	2.100	53.3	0.260	6.6	1	900
GR3163A	1.750	44.5	0.125	3.2	1.500	38.1	2.125	54.0	0.500	12.7	1	600
GR3141A	1.750	44.5	0.188	4.8	1.500	38.1	2.125	54.0	0.563	14.3	1	500
GR3121A	1.750	44.5	0.250	6.4	1.500	38.1	2.125	54.0	0.625	15.9	1	400
GR3295A	1.750	44.5	0.375	9.5	1.500	38.1	2.125	54.0	0.750	19.1	1	300
GR3301A	2.000	50.8	0.094	2.4	1.500	38.1	2.375	60.3	0.375	9.5	1	450
GR3239A	2.000	50.8	0.188	4.8	1.625	41.3	2.250	57.2	0.750	19.1	1	600
GR3296A	2.000	50.8	0.250	6.4	1.750	44.5	2.500	63.5	0.531	13.5	1	300
GR3334A	2.000	50.8	0.250	6.4	1.750	44.5	2.500	63.5	0.560	14.2	1	300
GR3145A	2.500	63.5	0.063	1.6	2.125	54.0	2.875	73.0	0.438	11.1	1	300
GR3318A	2.500	63.5	0.250	6.4	2.000	50.8	3.000	76.2	0.563	14.3	1	200
GR3404A	2.500	63.5	0.250	6.4	2.250	57.2	3.000	76.2	0.625	15.9	1	175
GR3405A	2.500	63.5	0.328	8.3	2.250	57.2	3.000	76.2	0.719	18.3	1	175
GR3406A	2.500	63.5	0.375	9.5	2.250	57.2	3.000	76.2	0.750	19.1	1	175

GROMMETS & BUSHINGS

GRQ / QFG
Quick Fit Flexible Grommet



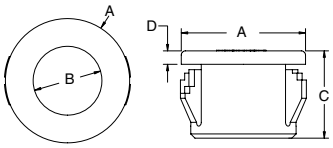
Specifications:
- Material: Elastomer
- Color: Black

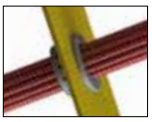
Features:
- Protects wires, cables, tubing and hoses
- Quickly snaps into hole

Item No.				Mounting Hole ØA		C ID Ref.		Pack Qty.	Bulk Pack Qty.
Panel Thickness 0.059 (1.5)	Panel Thickness 0.079 (2.0)	Panel Thickness 0.118 (3.0)	Panel Thickness 0.138 (3.5)	mm	mm	In	mm		
16200	16210	16220	—	0.394	10.0	0.236	6.0	1	5000
QFG-16200	—	QFG-16220	—	0.394	10.0	0.236	6.0	1	1000
16201	16211	16221	—	0.433	11.0	0.276	7.0	1	10000
QFG-16201	—	—	—	0.433	11.0	0.276	7.0	1	1000
16202	16212	16222	—	0.472	12.0	0.315	8.0	1	10000
—	—	QFG-16222	—	0.472	12.0	0.315	8.0	1	1000
16203	16213	16223	—	0.551	14.0	0.394	10.0	1	10000
QFG-16203	—	QFG-16223	—	0.551	14.0	0.394	10.0	1	1000
16204	16214	16224	—	0.630	16.0	0.472	12.0	1	10000
QFG-16204	—	QFG-16224	—	0.630	16.0	0.472	12.0	1	1000
16205	16215	16225	—	0.709	18.0	0.551	14.0	1	10000
QFG-16205	—	—	—	0.709	18.0	0.551	14.0	1	1000
—	—	—	QFG-1	0.728-0.787	18.5-20.0	0.512	13.0	1	1000
16206	16216	16226	—	0.787	20.0	0.630	16.0	1	4000
16207	16217	16227	—	0.866	22.0	0.709	18.0	1	4000
QFG-16207	—	—	—	0.866	22.0	0.709	18.0	1	1000
—	—	—	QFG-2	0.984-1.024	25.0-26.0	0.709	18.0	1	1000
16208	16218	16228	—	1.024	26.0	0.866	22.0	1	4000
—	—	QFG-16228	—	1.024	26.0	0.866	22.0	1	1000
16209	16219	16229	—	1.102	28.0	0.945	24.0	1	2000
QFG-16209	—	QFG-16229	—	1.102	28.0	0.945	24.0	1	1000

PGSB / BSI
Closed Insulation Bushing

Expanded Line





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

Features:
- Easy to snap into common panel thicknesses
- Protects wires, cables and tubing from sharp edges of sheet metal holes

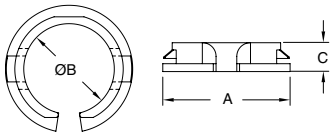
Item No.	Approval	Mounting Hole Ø		Panel Thickness		OD A		ID B		Overall Height C		Head Height D		Bulk Pack Qty.
		In	mm	In	mm	In	mm			In	mm	In	mm	
PGSB-0305	UL	0.189	4.8	0.063 - 0.067	1.6 - 1.7	0.260	6.5	0.125	3.2	0.240	6.0	0.051	1.4	1000
PGSB-1	UL	0.250	6.4	0.062	1.6	0.312	7.9	0.125	3.2	0.312	7.9	0.063	1.6	1000
PGSB-2	UL	0.312	7.9	0.062	1.6	0.375	9.5	0.187	4.7	0.312	7.9	0.063	1.6	1000
PGSB-3	UL	0.312	7.9	0.062	1.6	0.375	9.5	0.240	6.1	0.237	6.0	0.050	1.3	1000
PGSB-4	UL	0.375	9.5	0.031 - 0.125	0.8 - 3.2	0.468	11.9	0.187	4.7	0.406	10.3	0.055	1.4	1000
PGSB-5	UL	0.375	9.5	0.031 - 0.125	0.8 - 3.2	0.468	11.9	0.250	6.4	0.406	10.3	0.055	1.4	1000
PGSB-0710	UL	0.394	10.0	0.031 - 0.125	0.8 - 1.6	0.472	12.0	0.284	7.2	0.260	6.6	0.051	1.3	1000
PGSB-6	UL	0.437	11.1	0.031 - 0.125	0.8 - 3.2	0.531	13.5	0.270	6.9	0.406	10.3	0.055	1.4	500
PGSB-7	UL	0.437	11.1	0.031 - 0.125	0.8 - 3.2	0.531	13.5	0.312	7.9	0.406	10.3	0.055	1.4	500
PGSB-8	UL	0.437	11.1	0.031 - 0.125	0.8 - 3.2	0.531	13.5	0.243	6.4	0.406	10.3	0.055	1.4	500
PGSB-9	UL	0.468	11.9	0.062	1.6	0.531	13.5	0.343	8.7	0.250	6.4	0.050	1.3	500
PGSB-10	UL	0.500	12.7	0.031 - 0.125	0.8 - 3.2	0.578	14.7	0.250	6.4	0.406	10.3	0.063	1.6	500
PGSB-11	UL	0.500	12.7	0.031 - 0.125	0.8 - 3.2	0.578	14.7	0.312	7.9	0.406	10.3	0.063	1.6	500
PGSB-12	UL	0.500	12.7	0.062	1.6	0.562	14.3	0.375	9.5	0.250	6.4	0.063	1.6	500
PGSB-1013	UL	0.512	13.0	0.031 - 0.118	0.8	0.591	15.0	0.402	10.2	0.354	9.0	0.051	1.3	500
PGSB-13	UL	0.531	13.5	0.062	1.6	0.593	15.1	0.406	10.3	0.250	6.4	0.063	1.6	500
PGSB-14	UL	0.562	14.3	0.031 - 0.125	0.8 - 3.2	0.656	16.7	0.312	7.9	0.406	10.3	0.063	1.6	500
PGSB-15	UL	0.562	14.3	0.031 - 0.125	0.8 - 3.2	0.656	16.7	0.391	9.9	0.406	10.3	0.063	1.6	500
PGSB-16	UL	0.562	14.3	0.031 - 0.125	0.8 - 3.2	0.656	16.7	0.437	11.1	0.406	10.3	0.063	1.6	500
PGSB-17	UL	0.625	15.9	0.031 - 0.125	0.8 - 3.2	0.718	18.2	0.250	6.4	0.406	10.3	0.063	1.6	500
PGSB-18	UL	0.625	15.9	0.031 - 0.125	0.8 - 3.2	0.718	18.2	0.437	11.1	0.406	10.3	0.063	1.6	500
PGSB-19	UL	0.625	15.9	0.062	1.6	0.703	17.9	0.500	12.7	0.250	6.4	0.063	1.6	500
PGSB-1316	UL	0.630	16.0	0.055 - 0.139	1.4 - 3.5	0.709	18.0	0.504	12.8	0.413	10.5	0.059	1.5	500
PGSB-20	UL	0.687	17.5	0.031 - 0.125	0.8 - 3.2	0.781	19.8	0.500	12.7	0.406	10.3	0.063	1.6	200
PGSB-21	UL	0.687	17.5	0.031 - 0.125	0.8 - 3.2	0.781	19.8	0.562	14.3	0.406	10.3	0.063	1.6	200
PGSB-1519	UL	0.748	19.0	0.039 - 0.130	1.3	0.854	21.7	0.602	15.3	0.433	11.0	0.059	1.5	200
PGSB-22	UL	0.750	19.1	0.031 - 0.125	0.8 - 3.2	0.843	21.4	0.500	12.7	0.406	10.3	0.063	1.6	200
PGSB-23	UL	0.750	19.1	0.031 - 0.125	0.8 - 3.2	0.843	21.4	0.562	14.3	0.406	10.3	0.063	1.6	200
PGSB-24	UL	0.750	19.1	0.062	1.6	0.828	21.0	0.625	15.9	0.250	6.4	0.063	1.6	200
PGSB-25	UL	0.781	19.8	0.062	1.6	0.859	21.8	0.625	15.9	0.250	6.4	0.063	1.6	200
PGSB-1822	UL	0.866	22.0	0.035 - 0.091	0.9 - 2.3	0.976	24.8	0.717	18.2	0.453	11.5	0.059	1.5	500
PGSB-26	UL	0.875	22.2	0.031 - 0.125	0.8 - 3.2	0.953	24.2	0.500	12.7	0.453	11.5	0.063	1.6	200
PGSB-27	UL	0.875	22.2	0.031 - 0.125	0.8 - 3.2	0.953	24.2	0.562	14.3	0.453	11.5	0.063	1.6	200
PGSB-28	UL	0.875	22.2	0.031 - 0.125	0.8 - 3.2	0.953	24.2	0.625	15.9	0.453	11.5	0.063	1.6	200
PGSB-29	UL	0.875	22.2	0.031 - 0.125	0.8 - 3.2	0.953	24.2	0.687	17.5	0.453	11.5	0.063	1.6	200
PGSB-30	UL	0.875	22.2	0.062	1.6	0.937	23.8	0.750	19.1	0.250	6.4	0.063	1.6	200
PGSB-31	UL	1.000	25.4	0.031 - 0.125	0.8 - 3.2	1.125	28.6	0.766	19.5	0.453	11.5	0.063	1.6	200
PGSB-32	UL	1.097	27.9	0.031 - 0.125	0.8 - 3.2	1.218	31.0	0.812	20.6	0.453	11.5	0.063	1.6	100
PGSB-33	UL	1.097	27.9	0.031 - 0.125	0.8 - 3.2	1.218	31.0	0.875	22.2	0.453	11.5	0.063	1.6	100
PGSB-34	UL	1.097	27.9	0.031 - 0.125	0.8 - 3.2	1.218	31.0	0.937	23.8	0.453	11.5	0.063	1.6	100
PGSB-2428	UL	1.102	28.0	0.039 - 0.130	13.3	1.240	31.5	0.945	24.0	0.441	11.2	0.059	1.5	200
PGSB-2530	UL	1.181	30.0	0.039 - 0.122	13.1	1.319	33.5	0.984	25.0	0.453	11.5	0.071	1.8	100
PGSB-35	UL	1.250	31.8	0.031 - 0.125	0.8 - 3.2	1.312	33.3	0.937	23.8	0.453	11.5	0.063	1.6	100
PGSB-2634	UL	1.347	34.2	0.039 - 0.126	13.2	1.496	38.0	1.031	26.2	0.453	11.5	0.059	1.5	100
PGSB-36	UL	1.375	34.9	0.031 - 0.125	0.8 - 3.2	1.468	37.3	1.000	25.4	0.453	11.5	0.063	1.6	100
PGSB-37	UL	1.500	38.1	0.031 - 0.125	0.8 - 3.2	1.609	40.9	1.062	27.0	0.453	11.5	0.063	1.6	100
PGSB-38	UL	1.500	38.1	0.031 - 0.125	0.8 - 3.2	1.609	40.9	1.125	28.6	0.453	11.5	0.063	1.6	100
PGSB-39	UL	1.500	38.1	0.031 - 0.125	0.8 - 3.2	1.609	40.9	1.312	33.3	0.453	11.5	0.063	1.6	100
PGSB-40	UL	1.750	44.5	0.031 - 0.125	0.8 - 3.2	1.875	47.6	1.375	34.9	0.453	11.5	0.063	1.6	100
PGSB-41	UL	2.000	50.8	0.031 - 0.125	0.8 - 3.2	2.125	54.0	1.640	41.7	0.453	11.5	0.063	1.6	100
PGSB-42	UL	2.000	50.8	0.031 - 0.125	0.8 - 3.2	2.125	54.0	1.750	44.5	0.453	11.5	0.063	1.6	100
PGSB-43	UL	2.250	57.2	0.250	6.4	2.480	63.0	1.850	47.0	0.720	18.2	0.063	1.6	100
BSI047A	UL	3.000	76.2	0.250	6.4	3.160	80.3	2.470	62.7	.720	18.2	—	—	350

PGSA
Shallow Open Insulation Bushing

Richco

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



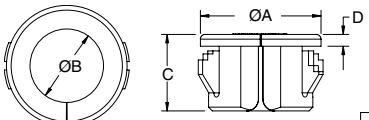
Item No.	Approval	Panel Thickness Range In	Panel Thickness Range mm	OD A Ref. In	OD A Ref. mm	ID B In	ID B mm	Overall Height C In	Overall Height C mm	Bulk Pack Qty.
PGSA-0407A		0.016 - 0.039	0.4 - 1.0	0.410	10.4	0.190	4.8	0.200	5.0	1000
PGSA-1013A		0.039 - 0.059	1.0 - 1.5	0.640	16.2	0.360	9.2	0.210	5.3	500
PGSA-1316A		0.039 - 0.055	1.0 - 1.4	0.760	19.4	0.480	12.2	0.210	5.4	500
PGSA-1519A		0.039 - 0.059	1.0 - 1.5	0.890	22.7	0.560	14.3	0.220	5.7	500
PGSA-1822A		0.031 - 0.063	0.8 - 1.6	1.000	25.5	0.690	17.6	0.220	5.6	500
PGSA-2024A1		0.031 - 0.047	0.8 - 1.2	1.060	27.0	0.770	19.5	0.210	5.3	500
PGSA-2024A		0.039 - 0.063	1.0 - 1.6	1.060	27.0	0.770	19.5	0.210	5.3	500
PGSA-2327A		0.016 - 0.039	0.4 - 1.0	1.380	35.1	0.900	22.9	0.240	6.0	200
PGSA-2529A		0.016 - 0.043	0.4 - 1.1	1.380	35.1	0.970	24.5	0.280	7.0	200

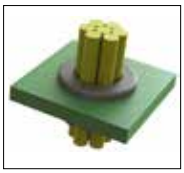
PGSB-A
Standard Open Insulation Bushing

Richco

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



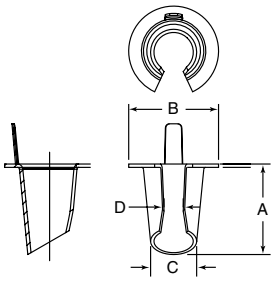


Item No.	Approval	Mounting Hole In	Mounting Hole mm	Panel Thickness Range In	Panel Thickness Range mm	OD A Ref. In	OD A Ref. mm	ID B		Overall Height C In	Overall Height C mm	Head Height D In	Head Height D mm	Bulk Pack Qty.
PGSB-0609A		0.375	9.5	0.028 - 0.067	0.7 - 1.7	0.450	11.4	0.260	6.6	0.260	6.5	0.051	1.3	1000
PGSB-1A		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
PGSB-2A		0.437	11.1	0.031 - 0.125	0.8 - 3.2	0.50	12.7	0.312	7.9	0.406	10.3	0.063	1.6	1000
PGSB-1013A		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		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
PGSB-1216A		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		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		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
PGSB-1822A		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
PGSB-9A		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
PGSB-4A		1.000	25.4	0.031 - 0.125	0.8 - 3.2	1.047	26.6	0.812	20.6	0.406	10.3	0.063	1.6	200
PGSB-5A		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		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		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		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
Armor Bushing

Specifications:
- Material: Polypropylene
- Color: Red

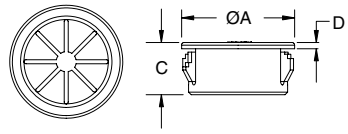
Features:
- Fits armored cable and flexible metal conduit sizes
- Features high dielectric strength and assures insulation on all sharp edges



Item No.	Approvals	Size	A In	A mm	B In	B mm	C In	C mm	D In	D mm	Cable Size	Trade Size In	Bulk Pack Qty.
ASB0A		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		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		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		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		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

GROMMETS & BUSHINGS

PGSD
Universal Bushing

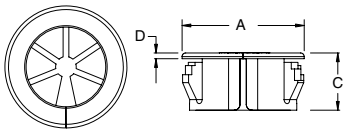


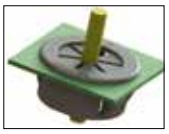
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Black

Features:
- Absorbs vibration and cushions and insulates bundles

Item No.	Approval	Mounting Hole In	Mounting Hole mm	Max Panel Thickness In	Max Panel Thickness mm	OD A In	OD A mm	Max ID In	Max ID mm	Overall Height C In	Overall Height C mm	Head Height D In	Head Height D mm	Bulk Pack Qty.
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
PGSD-6		0.625	15.9	0.125	3.2	0.729	18.5	0.437	11.1	0.406	10.3	0.063	1.6	500
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
PGSD-7		0.750	19.1	0.125	3.2	0.844	21.4	0.500	12.7	0.390	9.9	0.047	1.2	200
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
PGSD-8		0.875	22.2	0.125	3.2	0.937	23.8	0.560	14.2	0.453	11.5	0.063	1.6	200
PGSD-9		1.000	25.4	0.125	3.2	1.063	27.0	0.750	19.1	0.453	11.5	0.063	1.6	200
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
Open Universal Bushing





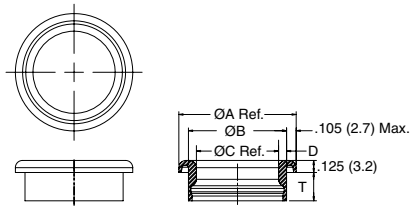
Specifications:
- Material: UL94V-2 Nylon 6/6
- Color: Black

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	Mounting Hole In	Mounting Hole mm	Max Panel Thickness In	Max Panel Thickness mm	OD A In	OD A mm	Max ID		Overall Height C In	Overall Height C mm	Head Height D In	Head Height D mm	Bulk Pack Qty.
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
NAS1368 Flip Grommet

New

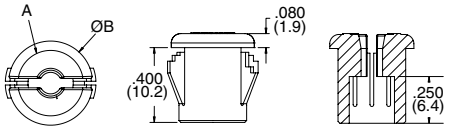


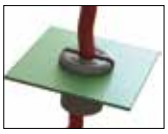
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

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
- The 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.	Mounting Hole Ø In	Mounting Hole Ø mm	Max Recommended Panel Thickness In	Max Recommended Panel Thickness mm	NAS1368 Panel Thickness Range In	NAS1368 Panel Thickness Range mm	T In	T mm	A Ref. In	A Ref. mm	B In	B mm	C Ref. In	C Ref. mm	D In	D mm	Bulk Pack Qty.
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

SB
Snub Bushing



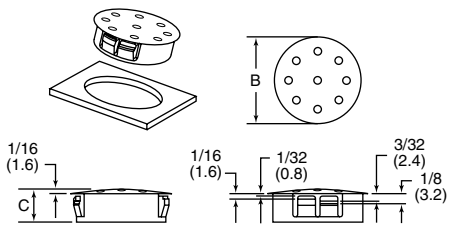


Specifications:
- Material: UL94V-2 Nylon 6/6
- Color: Black

Features:
- Bushing opens to accept cable then closes firmly when installed into hole
- Provides insulation and slight strain relief

Part Number	Panel Hole In	Panel Hole mm	Max Panel Thickness In	Max Panel Thickness mm	ID In	ID mm	Ø A		Overall OD B In	Overall OD B mm	Bulk Pack Qty.
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

PLV
Vented Locking Plug



Specifications:
- Material: UL94 V-2 Heat-Stabilized Nylon
- Color: Black

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/emissions to escape

Item No.	Approvals	Hole Ø In	Hole Ø mm	Max Panel Thickness In	Max Panel Thickness mm	Head Ø B In	Head Ø B mm	Thickness C In	Thickness C mm	Bulk Pack Qty.
PLV001A		0.750	19.1	0.125	3.2	0.906	23.0	0.406	10.3	1000
PLV002A		0.875	22.2	0.125	3.2	1.016	25.8	0.453	11.5	1000
PLV003A		1.000	25.4	0.125	3.2	1.203	30.6	0.453	11.5	500

GR67 / LTG
IP67 Liquid Tight Grommet

Specifications:
- Material: EPDM
- Color: Grey (Black for pn: 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.	Panel Hole Fits	Panel Hole In	Panel Hole mm	Panel Thickness In	Panel Thickness mm	Cable Size In	Cable Size mm	Pack Qty.	Bulk Pack Qty.
LTG-199017	PG-7	0.492	12.5	0.020 - 0.079	0.5 - 2.0	0.138 - 0.197	3.5 - 5.0	1	1000
GR67464121A	PG-7	0.492	12.5	0.020 - 0.079	0.5 - 2.0	0.138 - 0.197	3.5 - 5.0	1	1000
GR6739897A	PG-9	0.630	16.0	0.039 - 0.157	1.0 - 4.0	0.197 - 0.276	5.0 - 7.0	1	1000
GR6734715A	PG-11	0.748	19.0	0.039 - 0.157	1.0 - 4.0	0.276 - 0.394	7.0 - 10.0	1	1000
GR6734716A	PG-16	0.906	23.0	0.039 - 0.157	1.0 - 4.0	0.394 - 0.551	10.0 - 14.0	1	1000
GR6743021A	PG-21	1.142	29.0	0.039 - 0.157	1.0 - 4.0	0.551 - 0.787	14.0 - 20.0	1	1000
GR67464122A	PG-29	1.496	38.0	0.039 - 0.157	1.0 - 4.0	0.787 - 1.024	20.0 - 26.0	1	250
GR67464123A	PG-36	1.890	48.0	0.039 - 0.157	1.0 - 4.0	1.024 - 1.378	26.0 - 35.0	1	250
GR67M16A	M16	0.650	16.5	0.039 - 0.157	1.0 - 4.0	0.197 - 0.354	5.0 - 9.0	1	1000
GR67M20A	M20	0.807	20.5	0.039 - 0.157	1.0 - 4.0	0.276 - 0.512	7.0 - 13.0	1	1000
GR67M25A	M25	1.004	25.5	0.059 - 0.157	1.5 - 4.0	0.394 - 0.670	10.0 - 17.0	1	1000
GR67M32A	M32	1.280	32.5	0.039 - 0.157	1.0 - 4.0	0.551 - 0.787	14.0 - 20.0	1	500
GR67M40A	M40	1.594	40.5	0.059 - 0.157	1.5 - 4.0	0.750 - 1.024	19.0 - 26.0	1	250
GR67M50A	M50	1.988	50.5	0.039 - 0.157	1.0 - 4.0	1.024 - 1.338	26.0 - 34.0	1	250

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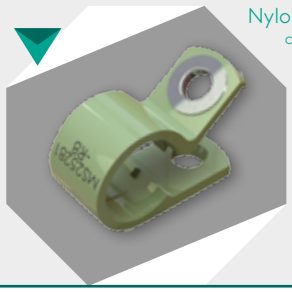
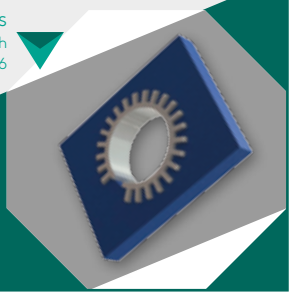
Heavy Duty Support Clamps
complies with MS25281



Nylon Spacers
complies with NSA5527

Grommet Strips
complies with NASM21266



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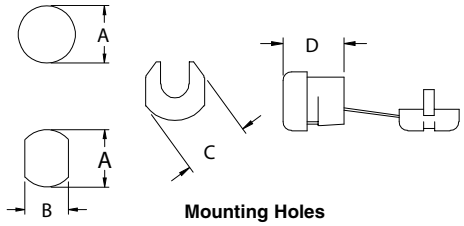
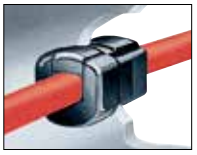
STRAIN RELIEF BUSHINGS

SRB / BSR
Strain Relief Bushing



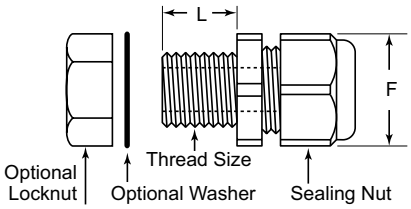
Specifications:
- Material: UL94 V-2 Nylon
- Color: Black

Features:
- Protects electronic products by absorbing the forces of pull, push and twist that may be exerted on a flexible power cord
- Securely protects cable at entry point
- To install: Position bushing on cable, press ends of bushing together with installation tool(SRPL-2) and push into hole
- Can be mounted in either a round hole or anti-rotation hole
- Easy to snap onto panels



Item No.	Approval		Cross Section	Cable Type	Gauge (AWG)	Cable Size In	Strap Type	Ø A In	Ø A mm	Flats B In	Flats B mm	Max Panel In	Max Panel mm	Length D In	Length D mm	Width C Ref. In	Width C Ref. mm	Bulk Pack Qty.
SRB-F-1			Flat	SPT-1	18/2	0.120 - 0.220	Y	0.375	9.5	0.343	8.7	0.062	1.6	0.406	10.3	0.425	10.8	1000
SRB-F-3			Flat	SPT-1	18/2	0.120 - 0.220	Y	0.433	11.1	0.390	9.9	0.062	1.6	0.406	10.3	0.476	12.1	1000
BSR001A			Flat	SPT-1	18/3	0.120 - 0.300	Y	0.500	12.7	0.465	11.8	0.100	2.5	0.406	10.3	0.578	14.7	1000
BSR001A			Flat	SPT-2	18/2	0.120 - 0.300	Y	0.500	12.7	0.465	11.8	0.100	2.5	0.406	10.3	0.578	14.7	1000
BSR001A			Flat	HPN	18/2	0.120 - 0.300	Y	0.500	12.7	0.465	11.8	0.100	2.5	0.406	10.3	0.578	14.7	1000
BSR002A			Flat	SPT-1	18/3	0.120 - 0.300	Y	0.500	12.7	0.465	11.8	0.156	4.0	0.406	10.3	0.578	14.7	1000
BSR002A			Flat	SPT-2	18/2	0.120 - 0.300	Y	0.500	12.7	0.465	11.8	0.156	4.0	0.406	10.3	0.578	14.7	1000
BSR002A			Flat	HPN	18/3	0.120 - 0.300	Y	0.500	12.7	0.465	11.8	0.156	4.0	0.406	10.3	0.578	14.7	1000
SRB-F-6			Flat	SPT-1	18/2	0.120 - 0.220	Y	0.500	12.7	0.390	9.9	0.100	2.5	0.406	10.3	0.492	12.5	1000
SRB-F-6			Flat	SPT-1	18/2	0.120 - 0.220	Y	0.500	13.1	0.390	9.9	0.100	2.5	0.406	10.3	0.492	12.5	1000
SRB-F-6			Flat	SPT-1	18/2	0.120 - 0.220	Y	0.516	12.7	0.390	9.9	0.100	2.5	0.406	10.3	0.492	12.5	1000
SRB-F-6			Flat	SPT-1	18/2	0.120 - 0.220	Y	0.516	13.1	0.390	9.9	0.100	2.5	0.406	10.3	0.492	12.5	1000
SRB-F-8			Flat	SPT-2	—	0.146 - 0.299	Y	0.500	12.7	0.465	11.8	0.062	1.6	0.406	10.3	0.547	13.9	1000
SRB-F-8			Flat	SPT-2	—	0.150 - 0.299	Y	0.516	13.1	0.465	11.8	0.062	1.6	0.406	10.3	0.547	13.9	1000
SRB-F-9			Flat	SPT-2	—	0.146 - 0.299	Y	0.500	12.7	0.465	11.8	0.100	2.5	0.406	10.3	0.547	13.9	1000
SRB-F-9			Flat	SPT-2	—	0.150 - 0.299	Y	0.516	13.1	0.465	11.8	0.100	2.5	0.406	10.3	0.547	13.9	1000
BSR003A			Flat	SPT-2	18/3	0.150 - 0.400	Y	0.500	12.7	0.460	11.7	0.095	2.4	0.495	12.6	0.565	14.4	1000
BSR003A			Flat	HPN	16/2	0.150 - 0.400	Y	0.500	12.7	0.460	11.7	0.095	2.4	0.495	12.6	0.565	14.4	1000
BSR003A			Flat	SPT-2	16/2	0.160 - 0.300	Y	0.500	12.7	0.460	11.7	0.095	2.4	0.495	12.6	0.565	14.4	1000
BSR003A			Flat	HPN	18/2	0.150 - 0.280	Y	0.500	12.7	0.460	11.7	0.095	2.4	0.495	12.6	0.565	14.4	1000
BSR003A			Flat	SPT-2	18/2	0.150 - 0.280	Y	0.500	12.7	0.460	11.7	0.095	2.4	0.495	12.6	0.565	14.4	1000
BSR004A			Round	SV	18/2	0.250	Y	0.500	12.7	0.450	11.4	0.062	1.6	0.438	11.1	0.578	14.7	1000
BSR004A			Round	SV	18/2	0.250	Y	0.500-0.515	12.7-13.1	0.450	11.4	0.062	1.6	0.438	11.1	0.578	14.7	1000
BSR004A			Round	SV	18/3	0.255	Y	0.500	12.7	0.450	11.4	0.062	1.6	0.438	11.1	0.578	14.7	1000
BSR004A			Round	SV	18/3	0.255	Y	0.500-0.515	12.7-13.1	0.450	11.4	0.062	1.6	0.438	11.1	0.578	14.7	1000
BSR004A			Round	HPD	18/2	0.290	Y	0.500	12.7	0.450	11.4	0.062	1.6	0.438	11.1	0.578	14.7	1000
BSR004A			Round	HPD	18/2	0.290	Y	0.500-0.515	12.7-13.1	0.450	11.4	0.062	1.6	0.438	11.1	0.578	14.7	1000
BSR005A			Round	SV	18/2	0.250	Y	0.500	12.7	0.450	11.4	0.100	2.5	0.438	11.1	0.578	14.7	1000
BSR005A			Round	SV	18/2	0.250	Y	0.500-0.515	12.7-13.1	0.450	11.4	0.100	2.5	0.438	11.1	0.578	14.7	1000
BSR005A			Round	SV	18/3	0.255	Y	0.500	12.7	0.450	11.4	0.100	2.5	0.438	11.1	0.578	14.7	1000
BSR005A			Round	SV	18/3	0.255	Y	0.500-0.515	12.7-13.1	0.450	11.4	0.100	2.5	0.438	11.1	0.578	14.7	1000
BSR005A			Round	HPD	16/2	0.290	Y	0.500	12.7	0.450	11.4	0.100	2.5	0.438	11.1	0.578	14.7	1000
BSR005A			Round	HPD	16/2	0.290	Y	0.500-0.515	12.7-13.1	0.450	11.4	0.100	2.5	0.438	11.1	0.578	14.7	1000
SRB-R-1			Round	SVI	—	0.252	Y	0.500	12.7	0.453	11.5	0.062	1.6	0.437	11.1	0.559	14.2	1000
SRB-R-1			Round	SVT	—	0.291	Y	0.516	13.1	0.453	11.5	0.062	1.6	0.437	11.1	0.559	14.2	1000
SRB-R-2			Round	SVI	—	0.252	Y	0.500	12.7	0.453	11.5	0.100	2.5	0.437	11.1	0.559	14.2	1000
SRB-R-2			Round	SVT	—	0.291	Y	0.516	13.1	0.453	11.5	0.100	2.5	0.437	11.1	0.559	14.2	1000
SRB-R-3			Round	SJT	18/3	0.299	Y	0.626	15.9	0.551	14.0	0.062	1.6	0.580	14.7	0.701	17.8	500
SRB-R-4			Round	SJT	18/3	0.299	Y	0.626	15.9	0.551	14.0	0.126	3.2	0.580	14.7	0.693	17.6	500
BSR006A			Round	SJT	18/2	0.300	Y	0.625	15.88	0.550	14.0	0.062	1.6	0.580	14.7	0.703	17.9	1000
BSR006A			Round	SJO	18/2	0.300	Y	0.625	15.88	0.550	14.0	0.062	1.6	0.580	14.7	0.703	17.9	1000
BSR007A			Round	SJ	18/2	0.300	Y	0.500	12.7	0.456	11.6	0.090	2.3	0.437	11.1	0.563	14.3	1000
BSR007A			Round	SJT	18/2	0.300	Y	0.500	12.7	0.456	11.6	0.090	2.3	0.437	11.1	0.563	14.3	1000
BSR007A			Round	SJO	18/2	0.300	Y	0.500	12.7	0.456	11.6	0.090	2.3	0.437	11.1	0.563	14.3	1000
SRB-R-7			Round	SJT	16/3	0.323 - 0.362	Y	0.626	15.9	0.551	14.0	0.062	1.6	0.580	14.7	0.701	17.8	500
SRB-R-8			Round	SJT	16/3	0.323 - 0.362	Y	0.626	15.9	0.551	14.0	0.126	3.2	0.580	14.7	0.681	17.3	500
BSR008A			Round	SJ	18/3	0.325 - 0.360	Y	0.650	16.5	0.550	14.0	0.125	3.2	0.580	14.7	0.703	17.9	500
BSR008A			Round	SJT	16/3	0.325 - 0.360	Y	0.650	16.5	0.550	14.0	0.125	3.2	0.580	14.7	0.703	17.9	500
BSR008A			Round	SJT	18/3	0.325 - 0.360	Y	0.650	16.5	0.550	14.0	0.125	3.2	0.580	14.7	0.703	17.9	500
BSR008A			Round	SJO	18/3	0.325 - 0.360	Y	0.650	16.5	0.550	14.0	0.125	3.2	0.580	14.7	0.703	17.9	500
BSR009A			Round	SJ	16/2	0.325 - 0.429	Z	0.625	15.9	0.550	14.0	0.125	3.2	0.666	16.9	0.725	18.4	500
BSR009A			Round	SJ	16/3	0.325 - 0.429	Z	0.625	15.9	0.550	14.0	0.125	3.2	0.666	16.9	0.725	18.4	500
BSR009A			Round	SJT	16/2	0.325 - 0.429	Z	0.625	15.9	0.550	14.0	0.125	3.2	0.666	16.9	0.725	18.4	500
BSR009A			Round	SJT	16/3	0.325 - 0.429	Z	0.625	15.9	0.550	14.0	0.125	3.2	0.666	16.9	0.725	18.4	500
BSR009A			Round	SJO	16/2	0.325 - 0.429	Z	0.625	15.9	0.550	14.0	0.125	3.2	0.666	16.9	0.725	18.4	500
BSR009A			Round	SJO	16/3	0.325 - 0.429	Z	0.625	15.9	0.550	14.0	0.125	3.2	0.666	16.9	0.725	18.4	500
BSR010A			Round	SJ	18/3	0.325 - 0.359	Z	0.875	22.2	0.770	19.6	0.125	3.2	0.750	19.1	0.922	23.4	250
BSR010A			Round	SJ	16/2	0.325 - 0.359	Z	0.875	22.2	0.770	19.6	0.125	3.2	0.750	19.1	0.922	23.4	250
BSR010A			Round	SJT	16/2	0.325 - 0.359	Z	0.875	22.2	0.770	19.6	0.125	3.2	0.750	19.1	0.922	23.4	250
BSR010A			Round	SJO	18/3	0.325 - 0.359	Z	0.875	22.2	0.770	19.6	0.125	3.2	0.750	19.1	0.922	23.4	250
BSR010A			Round	SJO	16/2	0.325 - 0.359	Z	0.875	22.2	0.770	19.6	0.125	3.2	0.750	19.1	0.922	23.4	250
BSR011A			Round	SJ	18/3	0.355	Y	0.625	15.9	0.550	14.0	0.062	1.6	0.580	14.7	0.703	17.9	1000
BSR011A			Round	SJT	18/3	0.405	Y	0.625	15.9	0.550	14.0	0.062	1.6	0.580	14.7	0.703	17.9	1000
BSR011A			Round	SJT	18/3	0.430	Y	0.625	15.9	0.550	14.0	0.062	1.6	0.580	14.7	0.703	17.9	1000
SRB-R-9			Round	SJT	14/3	0.362 - 0.413	Y	0.748	19.0	0.650	16.5	0.062	1.6	0.750	19.1	0.847	21.5	100
SRB-R-9			Round	SJT	14/3	0.433	Y	0.780	19.8	0.650	16.5	0.062	1.6	0.750	19.1	0.847	21.5	100
SRB-R-10			Round	SJT	14/3	0.362 - 0.413	Y	0.748	19.0	0.650	16.5	0.126	3.2	0.764	19.4	0.854	21.7	100
SRB-R-10			Round	SJT	14/3	0.434	Y	0.780	19.8	0.650	16.5	0.126	3.2	0.764	19.4	0.854	21.7	100

CG
NPT Cable Glands



Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: See Table
- Temperature Range: Working –40°F to 221°F (–40°C to 105°C) Intermittent up to 300°F (149°C)

Features:
- Parts designed with AVC – Essentra's variable clamping ranges to fit a wide range of diameters
- IP 68 rated protection – 5 bar
- Provides dust & water-tight performance and strain relief
- EPDM gasket & lock nut are sold separately
- For best results select a gland with the smallest maximum clamping range for your application

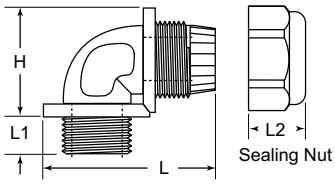
Item No.		Thread Size	Mounting Hole		Mounting Thread		Flat Sealing Nut		Variable Clamping Range (Max/Min)				Pack Qty.	Bulk Pack Qty.
Black	Silver Grey		In	mm	In	mm	In	mm	In		mm			
CG050B	CG050G	NPT - 1/4"	0.524	13.3	0.354	9.0	0.748	19.0	0.307	0.177	7.8	4.5	1	50
CG175B	CG175G	NPT - 3/8"	0.681	17.3	0.512	13.0	0.866	22.0	0.394	0.236	10.0	6.0	1	50
CG225B	CG225G	NPT - 1/2"	0.848	21.6	0.512	13.0	1.063	27.0	0.433	0.276	11.0	7.0	1	50
CG275B	CG275G	NPT - 1/2"	0.848	21.6	0.512	13.0	1.063	27.0	0.551	0.354	14.0	9.0	1	50
CG325B	CG325G	NPT - 3/4"	1.047	26.6	0.472	12.0	1.063	27.0	0.433	0.276	11.0	7.0	1	50
CG350B	CG350G	NPT - 3/4"	1.061	27.0	0.591	15.0	1.299	33.0	0.630	0.472	16.0	12.0	1	50
CG375B	CG375G	NPT - 3/4"	1.061	27.0	0.591	15.0	1.299	33.0	0.709	0.551	18.0	14.0	1	50
CG425B	CG425G	NPT - 1"	1.325	33.7	0.669	17.0	1.654	42.0	0.866	0.630	22.0	16.0	1	10
CG450B	CG450G	NPT - 1"	1.325	33.7	0.669	17.0	1.654	42.0	0.984	0.709	25.0	18.0	1	10

Optional Parts

LNPT - NPT Locknuts						
Locknut Item No.		Thread Size	Flat Locknut		Pack Qty.	Bulk Pack Qty.
Black	Silver Grey		In	mm		
LNPT050B	LNPT050G	NPT - 1/4"	0.748	19.0	1	50
LNPT100B	LNPT100G	NPT - 3/8"	0.866	22.0	1	50
LNPT200B	LNPT200G	NPT - 1/2"	1.063	27.0	1	50
LNPT300B	LNPT300G	NPT - 3/4"	1.299	33.0	1	50
LNPT400B	LNPT400G	NPT - 1"	1.654	42.0	1	10

CGW - Sealing Washers			
Sealing Gasket Item No.	For Thread Size	Pack Qty.	Bulk Pack Qty.
CGW050A	NPT-1/2"	1	50
CGW100A	NPT-3/8"	1	50
CGW200A	NPT-1/2"	1	50
CGW300A	NPT-3/4"	1	50
CGW400A	NPT-1"	1	10

CGRA
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 (149C°)

Features:
- IP 68 rated protection: 5 bar
- Provides dust & water-tight performance and strain relief
- EPDM gasket & lock nut are sold separately

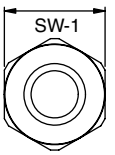
Optional Parts

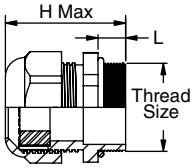
LNPT - NPT Locknuts			
Locknut Item No.	NPT Thread	Pack Qty.	Bulk Pack Qty.
LNPT100B	3/8"	1	50
LNPT200B	1/2"	1	50
LNPT300B	3/4"	1	50
LNPT005B	1-1/4"	1	10

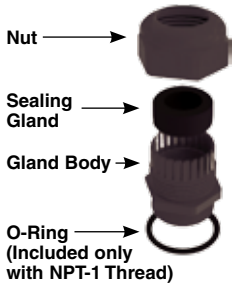
Item No.	NPT Thread	Mounting Hole	Overall Length L		Mounting Thread L1		Nut Length L2		Overall Height H		Variable Clamping Range (Max/Min)		Pack Qty.	Bulk Pack Qty.
			In	mm	In	mm	In	mm	In	mm	In	mm		
CGRA011A	3/8"	0.687	1.909	48.5	0.461	11.7	0.657	16.7	1.181	30.0	0.197 - 0.354	5.0 - 8.0	1	20
CGRA015A	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

CABLE GLANDS

CG-NPT
NPT Cable Gland







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

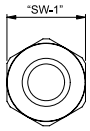
Features:
- Protection Class: IP68 - 5 Bar
- Designed for superior sealing; no O-ring is needed for smaller sizes to meet IP68 rating
- Operating temperature: -4°F - 212°F (-20°C -100°C)

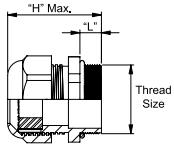
Item No.	UL Approval	Cable Ø Range Min In	Cable Ø Range Min mm	Cable Ø Range Max In	Cable Ø Range Max mm	Thread Size	Mounting Hole In	Mounting Hole mm	L In	L mm	SW-1 In	SW-1 mm	H Max Ref. In	H Max Ref. mm	Pack Qty.	Bulk Pack Qty.
CG-NPT-3/8-1-BK		0.118	3.0	0.276	7.0	NPT-3/8	0.670	17.0	0.571	14.5	0.866	22.0	1.750	44.5	1	100
CG-NPT-3/8-2-BK		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	1	100
CG-NPT-1/2-1-BK		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	1	100
CG-NPT-1/2-2-BK		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	1	100
CG-NPT-1/2-3-BK		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	1	100
CG-NPT-3/4-1-BK		0.236	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	1	50
CG-NPT-3/4-1-BK		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	1	50
CG-NPT-1-1-BK		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	1	25
CG-NPT-1-1-BK		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	1	25

Optional Parts

Locking Nuts							
		Across Flats		Thickness			
Item No.	Thread Size	In	mm	In	mm	Pack Qty.	Bulk Pack Qty.
CGLN-NPT-3/8-BK	NPT-3/8	0.866	22.0	0.197	5.0	1	100
CGLN-NPT-1/2-BK	NPT-1/2	1.063	27.0	0.236	6.0	1	100
CGLN-NPT-3/4-BK	NPT-3/4	1.417	36.0	0.276	7.0	1	100
CGLN-NPT-1-BK	NPT-1	1.654	42.0	0.276	7.0	1	100

CGPG
PG Cable Gland





Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: See Table
- Temperature Range: Working –40°F to 221°F (–40°C to 105°C) Intermittent up to 300°F (149°C)

Features:
- Parts designed with AVC – Essentra's variable clamping ranges to fit a wide range of diameters
- IP 68 rated protection – 5 bar
- Provides dust & water-tight performance and strain relief
- EPDM gasket & lock nut are sold separately

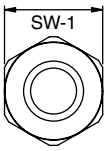
Item No. Black	Item No. Silver Grey	Thread Size	Mounting Hole In	Mounting Hole mm	Mounting Thread L In	Mounting Thread L mm	Flat Sealing Nut F In	Flat Sealing Nut F mm	Variable Clamping Range (Max/Min) In		Variable Clamping Range (Max/Min) mm		Pack Qty.	Bulk Pack Qty.
CGPG150B	CGPG150G	PG7	0.492	12.5	0.335	8.50	0.748	19	0.307	0.177	7.80	4.50	1	50
CGPG250B	CGPG250G	PG9	0.598	15.2	0.354	9.00	0.748	19	0.307	0.177	7.80	4.50	1	50
CGPG350B	CGPG350G	PG11	0.732	18.6	0.394	10.0	0.866	22	0.394	0.236	10.0	6.00	1	50
CGPG450B	CGPG450G	PG13.5	0.803	20.4	0.394	10.0	0.945	24	0.472	0.276	12.0	7.00	1	50
CGPG550B	CGPG550G	PG16	0.886	22.5	0.433	11.0	1.457	37	0.551	0.354	14.0	9.00	1	50
CGPG650B	CGPG650G	PG21	1.114	28.3	0.492	12.5	1.299	33	0.709	0.551	18.0	14.0	1	50
CGPG750B	CGPG750G	PG29	1.469	37.3	0.472	12.0	1.654	42	0.984	0.709	25.0	18.0	1	10

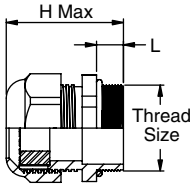
Optional Parts

LNPG – PG Locknuts						
Locknut Part Number			Flats Locknut			
Black	Silver Gray	Thread Size	In	mm	Pack Qty.	Bulk Pack Qty.
LNPG100B	LNPG100G	PG7	0.669	17.0	1	50
LNPG200B	LNPG200G	PG9	0.866	22.0	1	50
LNPG300B	LNPG300G	PG11	0.945	24.0	1	50
LNPG400B	LNPG400G	PG13.5	1.063	27.0	1	50
LNPG500B	LNPG500G	PG16	1.181	30.0	1	50
LNPG600B	LNPG600G	PG21	1.417	36.0	1	50
LNPG700B	LNPG700G	PG29	1.811	46.0	1	10

CGPW – Sealing Washers			
Sealing Gasket Part Number	Thread Size	Pack Qty.	Bulk Pack Qty.
CGPW100A	PG7	1	50
CGPW200A	PG9	1	50
CGPW300A	PG11	1	50
CGPW400A	PG13.5	1	50
CGPW500A	PG16	1	50
CGPW600A	PG21	1	50
CGPW700A	PG29	1	10

CG-PG
PG Cable Gland





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
- Operating temperature: -4°F - 212°F (-20°C -100°C)

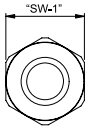
Features:
- Protection Class: IP68 - 5 Bar
- Designed for superior sealing; no O-ring needed for smaller sizes to meet IP68 rating

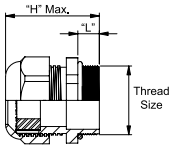
Optional Parts

Locking Nuts							
Item No.	Thread Size	Across Flats In	Across Flats mm	Thickness In	Thickness mm	Pack Qty.	Bulk Pack Qty.
CGLN-PG7-BK	PG7	0.748	19.0	0.197	5.0	1	100
CGLN-PG9-BK	PG9	0.866	22.0	0.197	5.0	1	100
CGLN-PG11-BK	PG11	0.945	24.0	0.197	5.0	1	100
CGLN-PG13.5-BK	PG13.5	1.063	27.0	0.236	6.0	1	100
CGLN-PG16-BK	PG16	1.181	30.0	0.236	6.0	1	100
CGLN-PG21-BK	PG21	1.417	36.0	0.276	7.0	1	100
CGLN-PG29-BK	PG29	1.811	46.0	0.276	7.0	1	100
CGLN-PG36-BK	PG36	2.362	60.0	0.315	8.0	1	50

Item No.	UL Approval	Cable Ø Range Min In	Cable Ø Range Min mm	Cable Ø Range Max In	Cable Ø Range Max mm	Thread Size	Mounting Hole In	Mounting Hole mm	L In	L mm	SW-1 In	SW-1 mm	H Max Ref. In	H Max Ref. mm	Pack Qty.	Bulk Pack Qty.
CG-PG7-1-BK		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		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		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		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		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		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		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		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		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		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		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		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		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

CGM
Metric Cable Gland





Specifications:
- Material: UL 94V-2 Nylon 6/6
- Colors: See Table
- Temperature Range: Working –40°F to 221°F (–40°C to 105°C) Intermittent up to 300°F (149°C)

Features:
- Parts designed with AVC – Essentra's variable clamping ranges to fit a wide range of diameters
- IP 68 rated protection: 5 bar
- Provides dust & water-tight performance and strain relief
- EPDM gasket & lock nut are sold separately
- For best results select a gland with the smallest maximum clamping range for your application

Item No. Black	Item No. Silver Grey	Thread Size	Mounting Hole In	Mounting Hole mm	Mounting Thread L In	Mounting Thread L mm	Flat Sealing Nut F In	Flat Sealing Nut F mm	Variable Clamping Range (Max/Min) In		Variable Clamping Range (Max/Min) mm		Pack Qty.	Bulk Pack Qty.
CGM150B	CGM150G	M12 X 1.5	0.472	12.0	0.354	9.00	0.748	19.0	0.307	0.177	7.80	4.50	1	50
CGM250B	CGM250G	M16 X 1.5	0.630	16.0	0.394	10.0	0.748	19.0	0.307	0.177	7.80	4.50	1	50
CGM325B	CGM325G	M20 X 1.5	0.787	20.0	0.394	10.0	0.866	22.0	0.394	0.236	10.0	6.00	1	50
CGM350B	CGM350G	M20 X 1.5	0.787	20.0	0.394	10.0	1.063	27.0	0.551	0.354	14.0	9.00	1	50
CGM425B	CGM425G	M25 X 1.5	0.984	25.0	0.472	12.0	1.063	27.0	0.551	0.354	14.0	9.00	1	50
CGM450B	CGM450G	M25 X 1.5	0.984	25.0	0.591	15.0	1.299	33.0	0.709	0.551	18.0	14.0	1	50
CGM550B	CGM550G	M32 X 1.5	1.260	32.0	0.591	15.0	1.654	42.0	0.866	0.630	22.0	16.0	1	10

Optional Parts

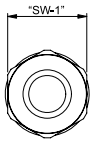
LNM – Metric Locknuts						
Locknut Part Number Black	Locknut Part Number Silver Gray	Thread Size	Flats Locknut In	Flats Locknut mm	Pack Qty.	Bulk Pack Qty.
LNM100B	LNM100G	M12 X 1.5	0.709	18	1	50
LNM200B	LNM200G	M16 X 1.5	0.866	22	1	50
LNM300B	LNM300G	M20 X 1.5	0.945	24	1	50
LNM400B	LNM400G	M25 X 1.5	1.299	33	1	50
LNM500B	LNM500G	M32 X 1.5	1.614	41	1	10

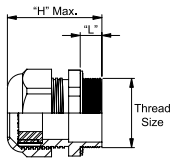
CGMW – Sealing Washers			
Sealing Gasket Part Number	Thread Size	Pack Qty.	Bulk Pack Qty.
CGMW100A	M12	1	50
CGMW200A	M16	1	50
CGMW300A	M20	1	50
CGMW400A	M25	1	50
CGMW500A	M32	1	10

CABLE GLANDS & PANEL HOLE PLUGS

CG-M
Cable Gland – 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





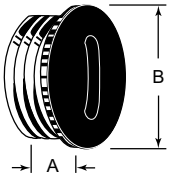
Features:
- Protection Class: IP68 - 5 Bar
- Designed for superior sealing; no Sealing Washer is needed for smaller sizes to meet IP68 rating
- Two Sealing Glands are included with all but the M12 thread. Remove the inner sealing gland for larger cable diameters

Item No.	UL Approval	Cable Ø Range Min		Cable Ø 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-M12-1-BK		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		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		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		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		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		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 Parts

Locking Nuts							
Item No.	Thread Size	Across Flats		Thickness		Pack Qty.	Bulk Pack Qty.
		In	mm	In	mm		
CGLN-M12-BK	M12	0.339	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

TBP
Metric & PG Threaded Blind Plug



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)

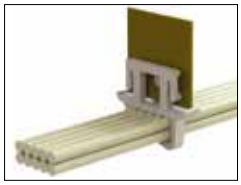
Features:
- Used to give water tight protection to spare holes that need to be closed off
- Optional: Use locknuts for closing holes without a thread

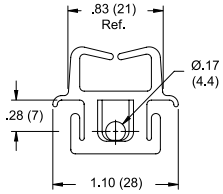
Item No.	Thread Size	A		B Ø		Bulk Pack Qty.	Optional: LockNuts
		In	mm	In	mm		
TBP02A	M12 x 1.5	0.256	6.50	0.630	16.00	100	**LNM100B**
TBP04A	M16 x 1.5	0.315	8.00	0.787	20.00	100	**LNM200B**
TBP06A	M20 x 1.5	0.315	8.00	0.984	25.00	100	**LNM300B**
TBP08A	M25 x 1.5	0.335	8.50	1.181	30.00	100	**LNM400B**
TBP10A	M32 x 1.5	0.394	10.00	1.496	38.00	50	**LNM500B**
TBP12A	M40 x 1.5	0.512	13.00	1.850	47.00	50	—
TBP14A	M50 x 1.5	0.551	14.00	2.244	57.00	10	—
TBP16A	M63 x 1.5	0.591	15.00	2.756	70.00	10	—
TBP50A	PG7	0.256	6.50	0.630	16.00	100	**LNPG100B**
TBP52A	PG9	0.256	6.50	0.748	19.00	100	**LNPG200B**
TBP54A	PG11	0.256	6.50	0.886	22.50	100	**LNPG300B**
TBP56A	PG13.5	0.276	7.00	0.992	25.20	100	**LNPG400B**
TBP58A	PG16	0.315	8.00	1.083	27.50	100	**LNPG500B**
TBP60A	PG21	0.354	9.00	1.339	34.00	100	**LNPG600B**
TBP62A	PG29	0.335	8.50	1.756	44.60	50	**LNPG700B**
TBP64A	PG36	0.433	11.00	2.165	55.00	50	—

Optional Parts

Locking Nuts				
Item No.	Thread Size	Across Flats		Bulk Pack Qty.
		In	mm	
LNM100B	M12 X 1.5	0.709	18.00	50
LNM200B	M16 X 1.5	0.866	22.00	50
LNM300B	M20 X 1.5	0.945	24.00	50
LNM400B	M25 X 1.5	1.299	33.00	50
LNM500B	M32 X 1.5	1.614	41.00	10
LNPG100B	PG7	0.669	17.00	50
LNPG200B	PG9	0.866	22.00	50
LNPG300B	PG11	0.945	24.00	50
LNPG400B	PG13.5	1.063	27.00	50
LNPG500B	PG16	1.181	30.00	50
LNPG600B	PG21	1.417	36.00	50
LNPG700B	PG29	1.811	46.00	10

EHWSE / EWSE / EWSJS
Edge Wire Saddle





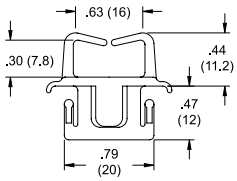
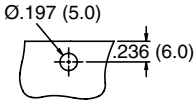
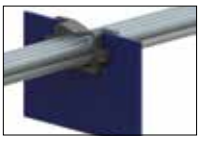


Figure 1



Recommended Mounting Hole



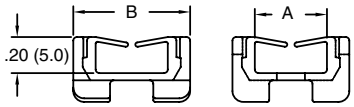
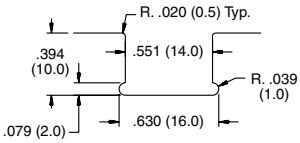
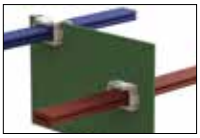


Figure 2



Recommended Panel Cut-Out



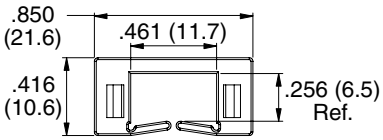
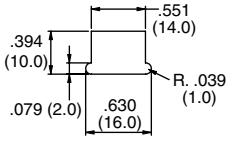
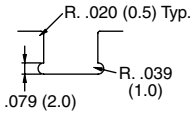


Figure 3



Thru Hole Panel Cut-Out



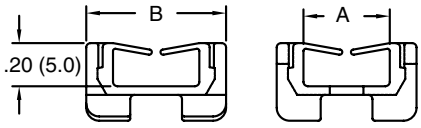
Edge Hole Panel Cut-Out

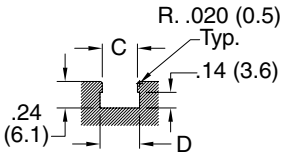
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: See Table

Features:
- Mounts vertically or horizontally
- Routes cables and protects wires from sharp edges

Item No.	Figure	Approval	Color	Panel Thickness In	Panel Thickness mm	Depth In	Depth mm	Bulk Pack Qty.
EHWSE-1-01	1	UL	Natural	0.039 - 0.079	1.0 - 2.0	0.240	6.2	1000
EWSE-1-01	2	UL	Black	0.032 - 0.078	0.8 - 1.2	0.190	4.8	1000
EWSE-2-01	2	UL	Natural	0.047 - 0.063	1.2 - 1.6	0.190	4.8	1000
EWSE-3-01	2	UL	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
Edge Wire Saddle





Recommended Panel Cut-Out

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

Item No.	UL Approval	Panel Thickness In	Panel Thickness mm	A In	A mm	B In	B mm	C In	C mm	D In	D mm	Depth In	Depth mm	Bulk Pack Qty.
EWSE-12.8-01	UL	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-8.1-01	UL	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
Hinged Edge Wire Saddle

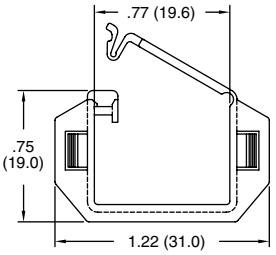


Figure 1

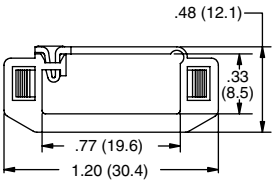
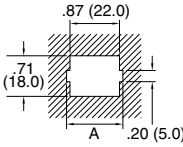


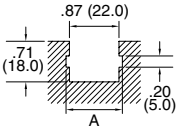
Figure 2

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

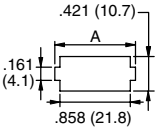
Features:
- Routes cables and protects them from sharp edges
- Installed in a mounting slot; edge or through-hole
- Hinged latch allows retrofitting into pre-existing applications



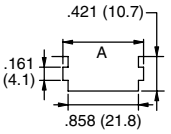
Thru Hole Panel Cut-Out



Edge Hole Panel Cut-Out



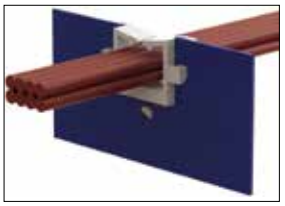
Thru Hole Panel Cut-Out

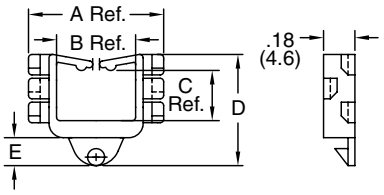


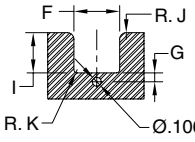
Edge Hole Panel Cut-Out

Item No.	Figure	Panel Thickness In	Panel Thickness mm	A In	A mm	Depth In	Depth mm	Bulk Pack Qty.
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
Edge Wire Saddle







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. In	B Ref. In	C Ref. In	D In	E In	F In	I In	G In	R. J In	R. K In	Bulk Pack Qty.
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
Metal Cushioned Grommet

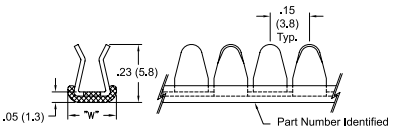


Figure 1

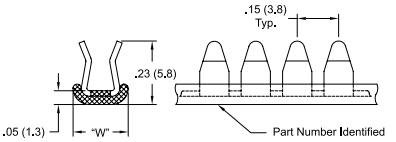


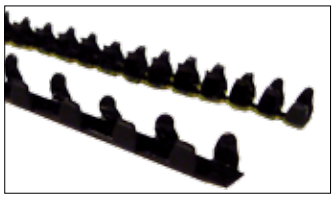
Figure 2

Specifications:
- Material: 304 Stainless Steel, Coated with Black Nylon 1
  Cushion: UL94 V-0 TPE (60 Shore D)
- Temperature Rating: -40°F (-40°C) to 285°F (140°C)
- The MCCGF is the more flexible of the two due to the design

Features:
- Dielectric Strength: 1500 volts @ 60Hz
- Flexible polymer cushion gives additional abrasion protection
- Flexible polymer cushion give additional abrasion protection
- Sold in 100 foot reels that can be cut to length using metal shears Item No. MCGS-1

Item No. Figure 1	Item No. Figure 2	Approval	Fits Panel Thickness In	Fits Panel Thickness mm	Width W In	Width W mm	Roll Length ft
MCCG-1N	**MCCGF-1N**		0.029 - 0.045	0.7 - 1.1	0.190	4.8	100
MCCG-2N	**MCCGF-2N**		0.044 - 0.056	1.1 - 1.4	0.190	4.8	100
MCCG-3N	**MCCGF-3N**		0.055 - 0.069	1.4 - 1.7	0.190	4.8	100
MCCG-4N	—		0.069 - 0.090	1.7 - 2.3	0.230	5.8	100
MCCG-6N	—		0.113 - 0.130	2.9 - 3.3	0.230	5.8	100

MCG / MCGF
Metal Grommet



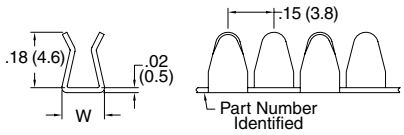


Figure 1

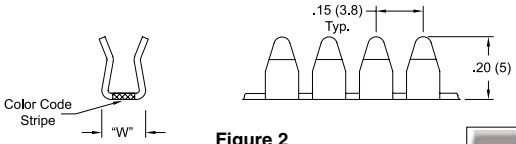


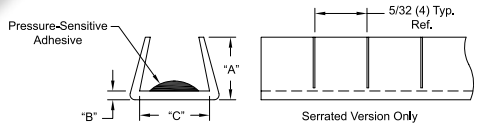
Figure 2

Specifications:
- Material: 304 Stainless Steel, coated with black nylon 11 & a cushion of TPE 60 Shore D UL94V-0 rating
- Temperature Rating: -40°F (-40°C) to 285°F (140°C)
- The MCGF is the more flexible of the two due to the design

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 Item No. MCGS-1

Item No.			Fits Panel Thickness		Width W		Color Coded	Roll Length
Figure 1	Figure 2	Approval	In	mm	In	mm		Ft
MCG-1N	—		0.029 - 0.045	0.7 - 1.1	0.140	3.6	—	100
MCG-2N	—		0.044 - 0.056	1.1 - 1.4	0.140	3.6	—	100
MCG-3N	—		0.055 - 0.069	1.4 - 1.7	0.140	3.6	—	100
MCG-4N	—		0.069 - 0.090	1.7 - 2.3	0.180	4.6	—	100
MCG-6N	—		0.113 - 0.130	2.9 - 3.3	0.180	4.6	—	100
—	MCGF-1N		0.029 - 0.045	0.7 - 1.1	0.130	3.3	White	100
—	MCGF-2N		0.044 - 0.056	1.1 - 1.4	0.130	3.3	Pink	100
—	MCGF-3N		0.055 - 0.069	1.4 - 1.7	0.130	3.3	Yellow	100

NGSG / SNGSG / PGSG / SPGSG
Continuous Grommet Edging with Adhesive

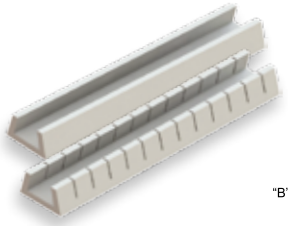


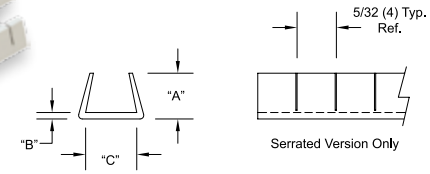
Specifications:
- Material Options:
  UL94 HB Nylon Temperature Rating: -40°F (-40°C) to 248°F (120°C)
  PE: Temperature Rating: -40°F (-40°C) to 149°F (65°C)
- Color: See Table

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.			Panel Thickness Range		A Ref.		B Ref.		C Ref.		Roll Length
Natural	Black	Natural	Black	Material	In	mm	In	mm	In	mm	In	mm	Ft
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
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
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
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
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
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
—	—	SPGSG-7	—	Polyethylene	0.072 - 0.105	1.8 - 2.7	0.188	4.8	0.035	0.9	0.100	2.5	100
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
—	—	SPGSG-8	—	Polyethylene	0.106 - 0.164	2.7 - 4.2	0.188	4.8	0.035	0.9	0.156	4.0	100

NGS / PGS / SNGS / SPGS
Continuous Grommet Edging





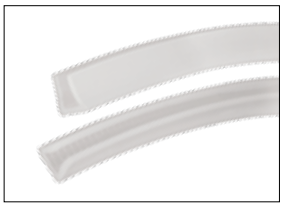
Specifications:
- Material: See Table
- Color: See Table

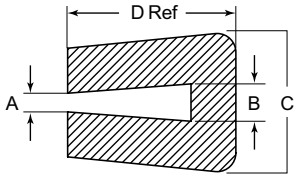
Features:
- Solid version is for straight edges
- Serrated version for round, square, and rectangular holes
- Polyethylene material is very flexible

Solid Profile Item No		Serrated Profile Item No.			Panel Thickness Range		A Ref.		B Ref.		C Ref.		Roll Length
Natural	Black	Natural	Black	Material	In	mm	In	mm	In	mm	In	mm	Ft
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
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
—	—	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
—	—	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
—	—	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
—	—	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
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
PGS-2	—	SPGS-2	—	Polyethylene	0.037-0.071	0.9 -1.8	0.172	4.4	0.031	0.8	0.109	2.8	100
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
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

GROMMET EDGING

GE
Continuous Grommet Edging



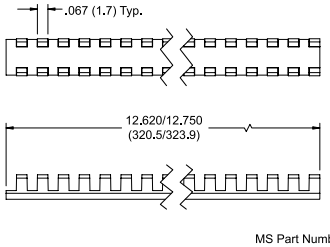


Specifications:
- Material: Polyethylene
- Color: Natural

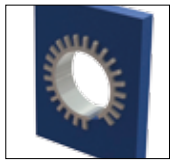
Features:
- Provides protection for sharp edges
- Cut to required length to fit edging

Item No.	A		B		C		D		Max Chassis Thickness		Roll Length	
	In	mm	In	mm	In	mm	In	mm	In	mm	Ft	m
GE001A	0.010	0.50	0.039	1.00	0.189	3.60	0.125	3.2	0.032 - 0.039	0.8 - 1.0	32.8	10
GE002A	0.024	0.60	0.047	1.20	0.148	3.40	0.125	3.2	0.039 - 0.047	1.0 -1.2	32.8	10
GE003A	0.035	0.90	0.063	1.60	0.248	4.60	0.140	3.6	0.047 - 0.063	1.2 - 1.6	32.8	10
GE004A	0.043	1.10	0.079	2.00	0.177	4.10	0.150	3.8	0.063 - 0.079	1.6 - 2.0	32.8	10
GE005A	0.047	1.20	0.095	2.40	0.197	5.10	0.175	4.5	0.079 - 0.094	2.0 - 2.4	32.8	10
GE006A	0.059	1.50	0.126	3.20	0.252	5.80	0.195	5.0	0.094 - 0.126	2.4 - 3.2	32.8	10

MGS
MS21266 Grommet Strip



Expanded Line

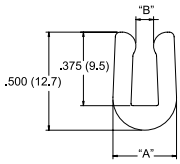


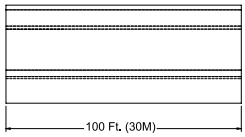
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:
- Ideally suited to cover normal and irregular shaped holes in sheet metal
- Complies with NASM21266
- Minimum hole diameter is 1"

Item No.	Militart Part Number	Panel Thickness	A	B	C	D	Bulk Pack Qty.
MGS-1-01	MS21266-1N	.015-.052	0.150	0.056	0.055	0.100	100
MGS-2-01	MS21266-2N	.052-.085	0.175	0.090	0.055	0.100	100
MGS-3-01	MS21266-3N	.085-.128	0.220	0.131	0.055	0.100	100
MGS-4-01	MS21266-4N	.128-.192	0.325	0.195	0.070	0.160	100
MGS-5-01	MS21266-5N	.192-.255	0.385	0.260	0.070	0.170	100
MGS-6-01	MS21266-6N	.255-.318	0.445	0.320	0.075	0.180	100
MGS-8-01	MS21266-8N	.380-.510	0.640	0.515	0.075	0.180	50

RG
Rubber Grommet Edging



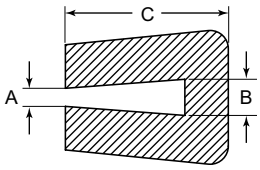


Specifications:
- Material: TPE
- Color: Black

Features:
- Supplied in rolls that can be cut to required length
- Prevents wires & cables from chafing against sharp edges

Item No.	Fits Panel Thickness		A Ref		B Max		Roll Length	
	In	mm	In	mm	In	mm	Ft	m
RG-1	0.063	1.6	0.264	6.7	0.030	0.8	100	30
RG-2	0.093	2.4	0.293	7.4	0.060	1.5	100	30
RG-3	0.125	3.2	0.324	8.2	0.090	2.3	100	30

GRE
PVC Grommet Edging

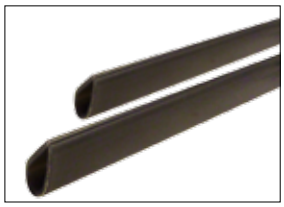


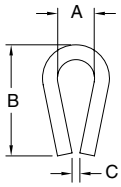
Specifications:
- Material: Soft PVC
- Color: Black

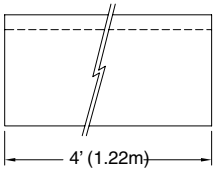
Features:
- Protects sharp or delicate edges
- Fits irregular shapes and a range of panel thicknesses
- PVC material is non-staining; resistant to ozone, acids, and sunlight; with excellent aging qualities

Item No.	Panel Thickness A		Panel Thickness B		Overall Width C		Roll Length	
	In	mm	In	mm	In	mm	Ft	m
GRE32343A	0.031	0.78	0.047	1.19	0.276	7.01	164	50
GRE34074A	0.039	0.99	0.079	2.00	0.315	8.00	164	50
GRE34075A	0.059	1.49	0.110	2.79	0.374	9.50	164	50
GRE34076A	0.106	2.69	0.149	3.78	0.413	10.49	164	50
GRE34077A	0.146	3.70	0.204	5.18	0.433	11.00	164	50
GRE34078A	0.209	5.30	0.267	6.78	0.512	13.00	164	50

DSC
Nylon Grommet Edging





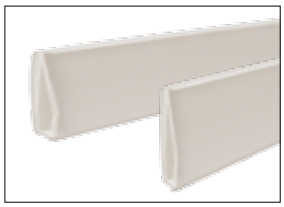


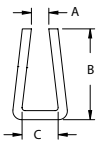
Specifications:
- Material: UL94 HB MDS Filled Nylon
- Color: Grey

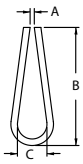
Features:
- Used as wear strips, non-abrasive edging, noise-reducing conveyor strips, framing, binding, or to protect from sharp edges
- Built-in lubricant for reduced friction and longer part life
- Resistant to ordinary solvents, mild acids and alkalis or fungus growth
- Comes in 4' lengths that can be cut to desired length

Item No.	A Fits Panel Thickness		B		C Ref		Wall Thickness		Length		Bulk 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
DSC-1-48	0.125	3.2	0.375	9.5	0.020	0.5	0.047	1.2	4	1.22	100 Ft
DSC-2-48	0.188	4.8	0.500	12.7	0.031	0.8	0.047	1.2	4	1.22	100 Ft
DSC-3-48	0.250	6.4	0.625	15.9	0.045	1.1	0.063	1.6	4	1.22	100 Ft

CH
Polystyrene Channel





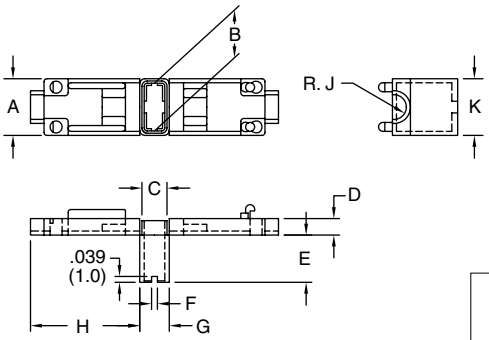


Specifications:
- Material: ULB94 HB Polystyrene
- Color: White

Features:
- Protects from sharp edges
- Binds & frames
- Sold in 4' lengths that can be cut to desired length

Item No.	Fits Panel Thickness		A Ref		B Ref		C Min.			Length		Bulk Pack Qty.
	In	mm	In	mm	In	mm	In	mm	Figure	ft	m	
CH200X250-48	0.250	6.4	0.200	5.1	0.375	9.5	.25	6.4	1	4	1.22	100 Ft
CH15X50-48	0.050	1.3	0.015	0.4	0.437	11.1	.05	1.3	1	4	1.22	100 Ft
CH20X141-48	0.140	3.6	0.020	0.5	0.562	14.3	.14	3.6	2	4	1.22	100 Ft

OS
Straight Terminal Insulator



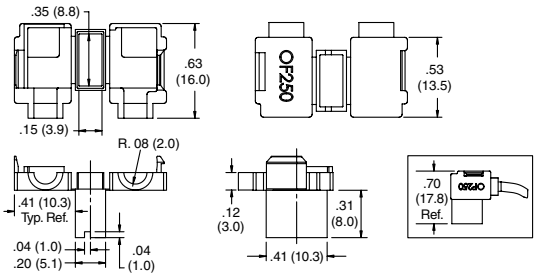
Specifications:
- Material: UL94 V-2 Nylon 6
- Color: Natural

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	Wire Ø	A	B	C	D	E	F	G	H	R. J	K	Bulk Pack Qty.
OS-187		Straight Type 187 Series	9/64 (3.6)	.346 (8.8)	.240 (6.1)	.106 (2.7)	.102 (2.6)	.268 (6.8)	.039 (1.0)	.154 (3.9)	.594 (15.1)	.071 (1.8)	.295 (7.5)	500
OS-250		Straight Type 250 Series	5/32 (3.8)	.386 (9.8)	.311 (7.9)	.164 (3.4)	.110 (2.8)	.315 (8.0)	.039 (1.0)	.185 (4.7)	.728 (18.5)	.081 (2.05)	.358 (9.1)	500

INSULATORS

OF
Flag Terminal Insulator



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 In	Wire Ø mm	Bulk Pack Qty.
OF-250		Flag Type 250 Series	0.150	3.9	500

2XXXXX
Quick Fit Straight Terminal Insulator

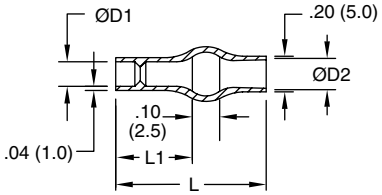


Figure 1

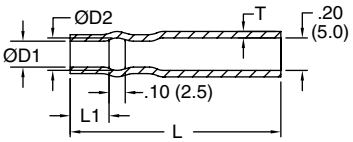


Figure 2

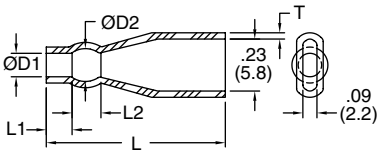


Figure 3

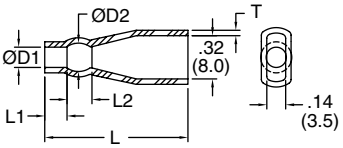


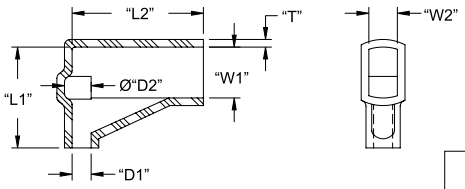
Figure 4

Specifications:
- Material: UL94 V-0 Soft PVC
- Color: Transparent Blue
- UL Temperature Rating: 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.	Approval	Figure	Wire OD Range In	Wire OD Range mm	Wire Gauge	Ø D1 In	Ø D1 mm	Ø D2 In	Ø D2 mm	L1 In	L1 mm	L2 In	L2 mm	L In	L mm	T In	T mm	Bulk Pack Qty.
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	.04	1.0	1000
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	.04	1.0	1000
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	.03	.08	1000
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	.03	.08	1000
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	.04	1.0	1000
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	.04	1.0	1000
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	.04	1.0	1000
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	.04	1.0	1000

248XXX
Quick Fit Flag Terminal Insulator



Specifications:
- Material: UL94 V-0 Soft PVC
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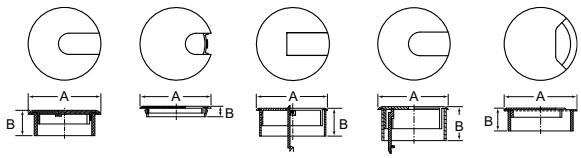
- UL Temperature Rating: 221° F (105° C)
- UL Voltage: 600V

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.	Approval	Wire OD Range In	Wire OD Range mm	Wire Gauge	Ø D1 In	Ø D1 mm	Ø D2 In	Ø D2 mm	L1 In	L1 mm	L2 In	L2 mm	W1 In	W1 mm	W2 In	W2 mm	T In	T mm	Bulk Pack Qty.
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

WMRG Series – Round Desk Grommets



Specifications:
- Material: ABS or PS
- Color: Black
- Surface Finish: Textured or Polished

Features:
- Wire management grommets are used extensively on office furniture and computer desks to eliminate the clutter of wires and cables. Our range of grommets offers several shapes and styles and most can be coordinated to match the color of your desk surface
- All grommets are layer packed for your convenience and to protect the surface during shipping.

Item No.	Type	Style	A Dimension In	B Dimension In	To Fit Hole Dia In	Material	Surface Finish	Pack Qty.	Bulk Pack Qty.
WMRG100A	A	3-PIECE	1.500	0.469	1.250	ABS	Textured	1	1000
WMRG110B	D	3-PIECE	2.250	1.000	2.000	ABS	Polished	1	400
WMRG130A	D	3-PIECE	2.250	1.000	2.000	ABS	Textured	1	600
WMRG140A	B	2-PIECE	3.000	0.540	2.500	ABS	Textured	1	750
WMRG160A	C	3-PIECE	3.000	1.050	2.750	ABS	Textured	1	400
WMRG170C	A	3-PIECE	3.000	1.050	2.750	ABS	Polished	1	300
WMRG180B	E	2-PIECE	3.625	1.100	3.250	PS	Textured	1	240
WMRG190B	D	3-PIECE	2.250	1.000	2.000	ABS	Textured	1	400

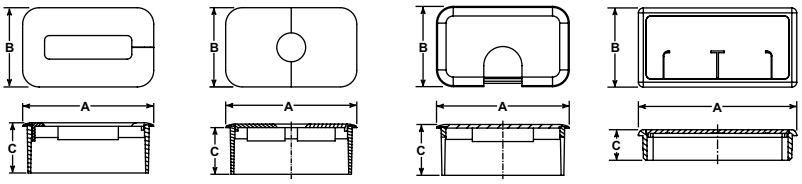
WMUG Series – Round Umbrella Table Grommets

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.	To Fit Hole Dia In	Type	Pack Qty.	Bulk Pack Qty.
WMUG100C	2.000	Bushing/Ring	1	900
WMUG110D	fits into WMUG100C	Cover/Lid	1	900

WMTG Series – Rectangular Table Grommets



Specifications:
- Material: Refer to Chart
- 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 Dimension In	B Dimension In	C Dimension In	To Fit Hole Dia In	Material	Surface Finish	Pack Qty.	Bulk Pack Qty.
WMTG100A	B	3-PIECE	3.500	2.125	0.700	3.250 x 1.875	ABS	Textured	1	525
WMTG110A	B	3-PIECE	3.500	2.125	1.250	3.230 x 1.865	ABS	Textured	1	315
WMTG120A	A	2-PIECE	3.475	2.102	1.250	3.250 x 1.865	ABS	Textured	1	189
WMTG150A	B	2-PIECE	3.500	2.134	1.287	3.250 x 1.865	ABS	Textured	1	320
WMTG170A	C	2-PIECE	3.365	2.245	1.750	3.125 x 2.000	ABS	Textured	1	204
WMTG180A	D	2-PIECE	4.020	2.010	0.775	3.770 x 1.750	Polypropylene	Textured	1	288

UL® File Number & UL® Yellow Cards

Underwriter's Laboratories Inc. (UL®), plastics classification number is used to describe the performance of the material. Tests conducted by UL® may include the determination of material flammability (burning characteristics), ignition characteristics from various thermal and electrical sources, electrical tracking and 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 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.

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.

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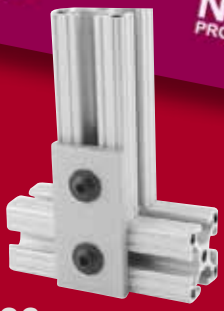

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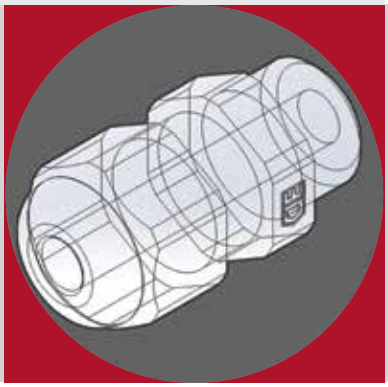

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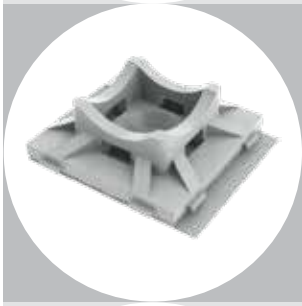

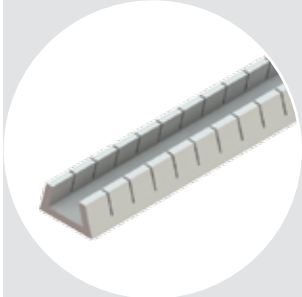

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