



# THE DATASHEET OF SNGS-2B



# FIBER, WIRE & CABLE MANAGEMENT



	CABLE CLAMPS & CLIPS .....	178 - 199
	TWIST TIES .....	195 - 197
	WIRE SADDLES .....	200 - 207
	FLAT CABLE CLAMPS & CLIPS.....	207 - 212
	CABLE TIES, STRAPS & MOUNTS .....	213 - 234
	CABLE DUCT, CONDUIT & WRAPS.....	235 - 239
	WRAPS & SLEEVING .....	240 - 247
	FIBER MANAGEMENT .....	248 - 255
	CAPS & PLUGS.....	256 - 258
	GROMMETS & BUSHINGS.....	259 - 279
	CABLE GLANDS .....	270 - 271

# FIBER, WIRE & CABLE MANAGEMENT



# CABLE CLAMPS

## SPN/SPNW Series 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.	Ø D Holding		Ø H Hole		B		A		E Ref.		C		Bulk Pack Qty
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
SPN-3	3/16	4.8	0.266	6.7	0.500	12.7	0.650	16.5	0.500	12.7	0.260	6.6	500
SPN-4	1/4	6.4	0.266	6.7	0.500	12.7	0.650	16.5	0.530	13.5	0.260	6.6	500
SPNW-4	1/4	6.4	0.406	10.3	0.625	15.9	0.750	19.1	0.530	13.5	0.313	7.9	100
SPN-5	5/16	7.9	0.266	6.7	0.500	12.7	0.650	16.5	0.560	14.2	0.260	6.6	500
SPNW-5	5/16	7.9	0.406	10.3	0.625	15.9	0.750	19.1	0.560	14.2	0.313	7.9	100
SPN-6	3/8	9.5	0.266	6.7	0.500	12.7	0.650	16.5	0.590	15	0.260	6.6	500
SPNW-6	3/8	9.5	0.406	10.3	0.625	15.9	0.750	19.1	0.590	15	0.313	7.9	100
SPN-7	7/16	11.1	0.266	6.7	0.500	12.7	0.650	16.5	0.620	15.7	0.260	6.6	500
SPNW-7	7/16	11.1	0.406	10.3	0.625	15.9	0.750	19.1	0.620	15.7	0.313	7.9	100
SPN-8	1/2	12.7	0.266	6.7	0.500	12.7	0.650	16.5	0.650	16.5	0.260	6.6	500
SPNW-8	1/2	12.7	0.406	10.3	0.625	15.9	0.750	19.1	0.650	16.5	0.313	7.9	100
SPN-9	9/16	14.3	0.266	6.7	0.500	12.7	0.650	16.5	0.750	19.1	0.260	6.6	500
SPN-10	5/8	15.9	0.266	6.7	0.500	12.7	0.650	16.5	0.780	19.8	0.260	6.6	500
SPNW-10	5/8	15.9	0.406	10.3	0.625	15.9	0.750	19.1	0.780	19.8	0.313	7.9	100
SPN-11	11/16	17.5	0.266	6.7	0.500	12.7	0.650	16.5	0.810	20.6	0.260	6.6	500
SPNW-11	11/16	17.5	0.406	10.3	0.625	15.9	0.750	19.1	0.810	20.6	0.313	7.9	100
SPN-12	3/4	19.1	0.266	6.7	0.500	12.7	0.650	16.5	0.840	21.3	0.260	6.6	500
SPN-14	7/8	22.2	0.266	6.7	0.500	12.7	0.650	16.5	0.900	22.9	0.260	6.6	100
SPNW-14	7/8	22.2	0.406	10.3	0.625	15.9	0.750	19.1	0.900	22.9	0.313	7.9	100
SPN-16	1	25.4	0.266	6.7	0.500	12.7	0.650	16.5	0.960	24.4	0.260	6.6	100
SPNW-16	1	25.4	0.406	10.3	0.625	15.9	0.750	19.1	0.960	24.4	0.313	7.9	100
SPN-18	1-1/8	28.6	0.266	6.7	0.500	12.7	0.650	16.5	1.050	26.7	0.260	6.6	100
SPN-20	1-1/4	31.8	0.266	6.7	0.500	12.7	0.650	16.5	1.110	28.2	0.260	6.6	100
SPNW-20	1-1/4	31.8	0.406	10.3	0.625	15.9	0.750	19.1	1.110	28.2	0.313	7.9	100

## NE Series Aluminum 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.	Ø D Holding		Ø H Hole		W		E Ref.		T		Bulk Pack Qty
	in	mm	in	mm	in	mm	in	mm	in	mm	
NE3	3/16	4.8	0.204	5.2	0.375	9.5	0.50	12.7	1/32	0.8	1000
NE4	1/4	6.4	0.204	5.2	0.375	9.5	0.53	13.5	1/32	0.8	1000
NE5	5/16	7.9	0.204	5.2	0.375	9.5	0.56	14.2	1/32	0.8	1000
NE6	3/8	9.5	0.204	5.2	0.375	9.5	0.59	15.0	1/32	0.8	1000
NE7	7/16	11.1	0.204	5.2	0.375	9.5	0.62	15.7	1/32	0.8	1000
NE8	1/2	12.7	0.204	5.2	0.375	9.5	0.65	16.5	1/32	0.8	1000
NE9	9/16	14.3	0.204	5.2	0.375	9.5	0.75	19.1	1/32	0.8	1000
NE10	5/8	15.9	0.204	5.2	0.375	9.5	0.78	19.8	1/32	0.8	1000
NE11	11/16	17.5	0.204	5.2	0.500	12.7	0.81	20.6	1/16	1.6	500
NE12	3/4	19.1	0.204	5.2	0.500	12.7	0.84	21.3	1/16	1.6	500
NE14	7/8	22.2	0.204	5.2	0.500	12.7	0.90	22.9	1/16	1.6	500
NE16	1	25.4	0.204	5.2	0.500	12.7	0.96	24.4	1/16	1.6	500
NE18	1-1/8	28.6	0.204	5.2	0.500	12.7	1.05	26.7	1/16	1.6	500
NE20	1-1/4	31.8	0.204	5.2	0.500	12.7	1.11	28.2	1/16	1.6	500

## AL Series Aluminum Clamp



**Specifications:**

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

**Features:**

- Corrosion resistant
- Protects and holds cable, wire, hoses and loom

Item No.	Ø D Holding		Ø H Hole		W		E Ref.		T		Bulk Pack Qty
	in	mm	in	mm	in	mm	in	mm	in	mm	
AL2A	1/8	3.2	0.204	5.2	0.375	9.5	0.46	11.7	1/32	0.8	1000
AL3A	3/16	4.8	0.204	5.2	0.375	9.5	0.50	12.7	1/32	0.8	1000
AL4A	1/4	6.4	0.204	5.2	0.375	9.5	0.53	13.5	1/32	0.8	1000
AL5A	5/16	7.9	0.204	5.2	0.375	9.5	0.56	14.2	1/32	0.8	1000
AL6A	3/8	9.5	0.204	5.2	0.375	9.5	0.59	15.0	1/32	0.8	1000
AL7A	7/16	11.1	0.204	5.2	0.375	9.5	0.62	15.7	1/32	0.8	1000
AL8A	1/2	12.7	0.204	5.2	0.375	9.5	0.65	16.5	1/32	0.8	1000
AL9A	9/16	14.3	0.204	5.2	0.375	9.5	0.75	19.1	1/32	0.8	1000
AL10A	5/8	15.9	0.204	5.2	0.375	9.5	0.78	19.8	1/32	0.8	1000
AL11	11/16	17.5	0.204	5.2	0.500	12.7	0.81	20.6	1/32	0.8	500
AL12	3/4	19.1	0.204	5.2	0.500	12.7	0.84	21.3	1/32	0.8	500
AL14	7/8	22.2	0.204	5.2	0.500	12.7	0.90	22.9	1/32	0.8	500
AL16	1	25.4	0.204	5.2	0.500	12.7	0.96	24.4	1/16	1.6	500
AL18	1-1/8	28.6	0.204	5.2	0.500	12.7	1.05	26.7	1/16	1.6	500
AL20	1-1/4	31.8	0.204	5.2	0.500	12.7	1.11	28.2	1/16	1.6	500

# CABLE CLAMPS



## WHC Series Wire Harness Clamp



**Specifications:**

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

**Features:**

- Can be preinstalled to chassis with cables inserted at a later time
- Cables can be removed for wiring changes or replacements



Item No.			Ø A Holding		Ø H Hole		C		B		D		E Ref.		Bulk Pack Qty
Natural	Black	Approval	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
WHC-125-01	WHC-125-01BK		0.125	3.2	0.156	4.0	0.330	8.4	0.050	1.3	0.23	5.8	0.750	19.1	1000
WHC-250-01	WHC-250-01BK		0.250	6.4	0.204	5.2	0.400	10.2	0.040	1.0	0.25	6.4	0.830	21.1	1000
WHC-375-01	WHC-375-01BK		0.375	9.5	0.204	5.2	0.400	10.2	0.050	1.3	0.19	4.8	0.830	21.1	1000
WHC-500-01	WHC-500-01BK		0.500	12.7	0.204	5.2	0.400	10.2	0.070	1.8	0.25	6.4	1.156	29.4	1000
WHC-625-01	WHC-625-01BK		0.625	15.9	0.204	5.2	0.500	12.7	0.080	2.0	0.19	4.8	1.125	28.6	1000
WHC-750-01	WHC-750-01BK		0.750	19.1	0.204	5.2	0.500	12.7	0.090	2.2	0.19	4.8	1.281	32.5	1000
WHC-1000-01	WHC-1000-01BK		1.000	25.4	0.204	5.2	0.500	12.7	0.090	2.2	0.19	4.8	1.531	38.9	500
WHC-1500-01	WHC-1500-01BK		1.500	38.1	0.204	5.2	0.500	12.7	0.100	2.5	0.19	4.8	2.125	53.9	500

## EXWHC Series Wire Harness Clamp

**Specifications:**

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

**Features:**

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



Item No.	Ø A Holding		Ø H Hole		C		D Ref.		Bulk Pack Qty
	in	mm	in	mm	in	mm	in	mm	
EXWHC2-250-01*	0.250	6.4	0.156	4.0	0.039	1.0	0.394	10.0	1000
EXWHC2-500-01	0.500	12.7	0.156	4.0	0.075	1.9	0.394	10.0	1000
EXWHC2-750-01	0.708	18.0	0.156	4.0	0.075	1.9	0.500	12.7	1000

\* No latch feature

## BHLWHC Series Blind Hole Mounted Clamp



**Specifications:**

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

**Features:**

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



Item No.	Ø A Holding		Ø Mounting Hole		B Ref.		C Ref.		Panel Thickness		Bulk Pack Qty
	in	mm	in	mm	in	mm	in	mm	in	mm	
BHLWHC-500-01	0.500	12.7	0.312	7.9	1.150	29.3	1.000	25.4	0.250	6.4	1000
BHLWHC-750-01	0.750	19.1	0.312	7.9	1.440	36.5	1.340	34.1	0.250	6.4	1000

## SMWHC Series Stud Mount Wire Harness Clip

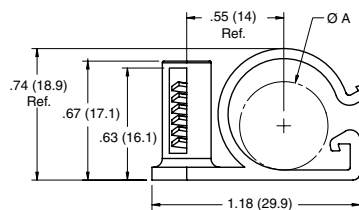


**Specifications:**

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

**Features:**

- Installed by pushing clamp onto an exposed screw or stud
- No protrusion under the chassis
- Fits several different threads; M4, M5, #8, or #10



Item No.	Ø A Holding		Mounting Method		Bulk Pack Qty
	in	mm			
SMWHC-500-01	0.500	12.7	Push onto a #8, #10, M4 or M5 Screw or Stud		500



# CABLE CLAMPS

## NM-MS25281 Series Heavy Duty Support Clamp



**Specifications:**

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

**Features:**

- Qualified to MS25281
- Strong and durable part design built for heavy duty cable applications
- NM-R series has a rib running around the inside of the clamp to grip bundle; NM-F series has no rib inside clamp
- NM-R eyelet is crimped to the top leg; the NM-F eyelet's legs protrude all the way through the bottom hole



NM-R

NM-F

Item No.	MS Part Number	Ø D Holding		Recommended Mounting Screw	W		E		Bulk Pack Qty
		in	mm		in	mm	in	mm	
NM-3-R3	MS25281-R3	3/16	4.8	#10 or M5	0.503	12.8	0.485	12.3	500
NM-4-R4	MS25281-R4	1/4	6.4	#10 or M5	0.503	12.8	0.510	13.0	500
NM-5-R5	MS25281-R5	5/16	7.9	#10 or M5	0.503	12.8	0.546	13.9	500
NM-6-R6	MS25281-R6	3/8	9.5	#10 or M5	0.503	12.8	0.578	14.7	500
NM-7-R7	MS25281-R7	7/16	11.1	#10 or M5	0.503	12.8	0.608	15.4	500
NM-8-R8	MS25281-R8	1/2	12.7	#10 or M5	0.503	12.8	0.639	16.2	500
NM-9-R9	MS25281-R9	9/16	14.3	#10 or M5	0.503	12.8	0.661	16.8	500
NM-10-R10	MS25281-R10	5/8	15.9	#10 or M5	0.553	14.1	0.706	17.9	500
NM-11-R11	MS25281-R11	11/16	17.5	#10 or M5	0.553	14.1	0.785	19.9	500
NM-12-R12	MS25281-R12	3/4	19.1	#10 or M5	0.553	14.1	0.816	20.7	500
NM-13-R13	MS25281-R13	13/16	20.6	#10 or M5	0.553	14.1	0.827	21.0	500
NM-14-R14	MS25281-R14	7/8	22.2	#10 or M5	0.553	14.1	0.878	22.3	500
NM-16-R16	MS25281-R16	1	25.4	#10 or M5	0.553	14.1	0.941	23.9	500
NM-18-R18	MS25281-R18	1-1/8	28.6	#10 or M5	0.553	14.1	0.983	25.0	500
NM-20-R20	MS25281-R20	1-1/4	31.8	#10 or M5	0.553	14.1	1.006	27.1	100
NM-22-R22	MS25281-R22	1-3/8	34.9	#10 or M5	0.553	14.1	1.110	28.2	100
NM-24-R24	MS25281-R24	1-1/2	38.1	#10 or M5	0.553	14.1	1.170	29.7	100
NM-26-R26	MS25281-R26	1-5/8	41.3	#10 or M5	0.553	14.1	1.250	31.8	100
NM-28-R28	MS25281-R28	1-3/4	44.5	#10 or M5	0.553	14.1	1.300	33.0	100
NM-3-F3	MS25281-F3	3/16	4.8	#10 or M5	0.500	12.7	0.498	12.6	500
NM-4-F4	MS25281-F4	1/4	6.4	#10 or M5	0.500	12.7	0.529	13.4	500
NM-5-F5	MS25281-F5	5/16	7.9	#10 or M5	0.500	12.7	0.560	14.2	500
NM-6-F6	MS25281-F6	3/8	9.5	#10 or M5	0.500	12.7	0.592	15.0	500
NM-7-F7	MS25281-F7	7/16	11.1	#10 or M5	0.500	12.7	0.623	15.8	500
NM-8-F8	MS25281-F8	1/2	12.7	#10 or M5	0.500	12.7	0.654	16.6	500
NM-10-F10	MS25281-F10	5/8	15.9	#10 or M5	0.600	15.2	0.783	19.9	500
NM-13-F13	MS25281-F13	13/16	20.6	#10 or M5	0.600	15.2	0.877	22.3	500

# CABLE CLAMPS



## N/NB/CCL Series Cable Clamp



**Specifications:**

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

**Features:**

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

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

## NB-3 Series Adjustable Cable Clamp

**Specifications:**

- Material: See Table
- Color: See Table

**Features:**

- Adjustable design allows you to bundle multiple diameters of wires and cables while securing in place



Item No.			Ø D Holding						E Ref.		F		G		Bulk Pack Qty
UL94 V-2 Nylon 6/6	UL94 V-0 Nylon 6/6		Inside Hole		Center Hole		Outside Hole		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	1.47	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	2.0	50.8	1.453	36.9	0.203	5.2	0.065	1.7	500

## CCA Series Adhesive Mount Cable Clamps

**Specifications:**

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

**Features:**

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



Item No.	Ø A Holding		Ø B Hole		T2		L		W		H		Bulk Pack Qty
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
CCA001A	0.22	5.5	0.197	5.0	0.118	3.0	1.02	25.8	0.53	13.4	0.48	12.2	100
CCA002A	0.30	7.5	0.197	5.0	0.126	3.2	1.13	28.8	0.53	13.4	0.57	14.5	100
CCA003A	0.47	12.0	0.209	5.3	0.118	3.0	1.37	34.8	0.65	16.5	0.73	18.5	100
CCA004A	0.55	14.0	0.197	5.0	0.126	3.2	1.44	36.5	0.65	16.4	0.77	19.5	100
CCA005A	0.59	15.0	0.197	5.0	0.106	2.7	1.50	38.2	0.63	16.0	0.80	20.3	100
CCA006A	0.67	17.0	0.189	4.8	0.122	3.1	1.63	41.3	0.61	15.6	0.98	25.0	100



# CABLE CLAMPS

## AKKL Series Adhesive Mount Adjustable Clamp

**Specifications:**

- Material: Nylon 6/6
- Color: Natural

**Features:**

- Available in High Bond Rubber Adhesive
- Locks securely and easily, reopens for routing changes
- Ratcheting clip holds bundle securely in place
- Good for high vibration applications; once closed the clip will not open until tab is released



Item No.		High Bond Rubber Adhesive	Ø E Bundle Range Ref.		A		B		C Ref.		D		Bulk Pack Qty
Acrylic Adhesive	Acrylic Adhesive		in	mm	in	mm	in	mm	in	mm	in	mm	
UL94 V-2	UL94 V-0	UL94 V-2											
AKKL-2140A-RT	AKKL-2140A-19	—	0.215 - 0.258	5.5 - 6.5	0.85	21.6	0.65	16.5	0.708	18	0.39	10.0	100
AKKL-3140A-RT	AKKL-3140A-19	• AKKL-3140-DHB	0.312 - 0.406	7.9 - 10.3	1.00	25.4	0.75	19.1	0.866	22	0.40	10.2	100
AKKL-4756A-RT	AKKL-4756A-19	• AKKL-4756-DHB	0.469 - 0.562	11.9 - 14.3	1.25	31.8	0.75	19.1	1.090	27.7	0.40	10.2	100
AKKL-5775A-RT	AKKL-5775A-19	• AKKL-5775-DHB	0.578 - 0.750	14.7 - 19.1	1.50	38.1	0.75	19.1	1.250	31.8	0.50	12.7	100
AKKL-8710A-RT	AKKL-8710A-19	—	0.875 - 1.000	22.2 - 25.4	2.00	50.8	1.00	25.4	1.750	44.5	0.50	12.7	100
AKKL-10112A-RT	AKKL-10112A-19	—	1.000 - 1.250	25.4 - 31.7	2.50	63.5	1.00	25.4	2.000	50.8	0.50	12.7	100

## AKKSL Series 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 Series Snap In Adjustable Clip

**Specifications:**

- Material: Nylon 6/6
- Color: Natural

**Features:**

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



Figure 1

Figure 2

Item No.		Figure	D Ø Bundle Range		Ø Mounting Hole		Panel Thickness		A		E Ref.		Depth		Bulk Pack Qty
UL94 V-2	UL94 V-0		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
PAKKL-3140-01	PAKKL-3140-19	1	0.310 - 0.400	7.9 - 10.2	0.250	6.4	0.030 - 0.060	0.8 - 1.5	0.75	19.1	0.94	23.8	0.350	8.9	100
PAKKL-4756-01	PAKKL-4756-19	1	0.469 - 0.563	11.9 - 14.3	0.250	6.4	0.030 - 0.060	0.8 - 1.5	1.24	31.5	1.17	29.8	0.620	15.7	100
PAKKL-5775-01	PAKKL-5775-19	2	0.578 - 0.750	14.7 - 19.1	0.250	6.4	0.030 - 0.060	0.8 - 1.5	1.50	38.1	1.36	34.5	0.750	19.1	100

## PKKL Series 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		Ø D Holding		Ø Mounting Hole		Panel Thickness		Depth		Bulk Pack Qty
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
PKKL-3	1.020	25.9	0.921	23.4	0.374	9.5	0.256	6.5	0.031 - 0.062	0.8 - 1.6	0.67	17.0	200
PKKL-3S	0.830	21.1	0.828	21.0	0.307	7.8	0.256	6.5	0.031 - 0.062	0.8 - 1.6	0.75	19.1	200
PKKL-4	1.19	30.3	1.260	32.0	0.532	13.5	0.256	6.5	0.031 - 0.062	0.8 - 1.6	0.76	19.4	100



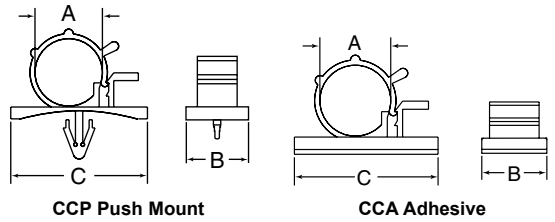
**CCP/CCA Series  
Push Mount & Adhesive Clamp**

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.	Ø A Bundle Range	Ø Mounting Hole		Panel Thickness		B		C		Bulk Pack Qty		
		in	mm	in	mm	in	mm	in	mm			
CCP001A	CCA007A	0.230 - 0.280	6.0 - 7.0	0.189	4.8	0.070 - 0.110	1.8 - 2.8	0.787	20.0	0.984	25.0	100
CCP002A	CCA008A	0.280 - 0.310	7.0 - 8.0	0.189	4.8	0.070 - 0.110	1.8 - 2.8	0.787	20.0	0.984	25.0	100
CCP003A	CCA009A	0.350 - 0.390	9.0 - 10.0	0.189	4.8	0.070 - 0.110	1.8 - 2.8	0.965	24.5	1.181	30.0	100
CCP004A	CCA010A	0.470 - 0.550	12.0 - 14.0	0.189	4.8	0.070 - 0.110	1.8 - 2.8	0.965	24.5	1.181	30.0	100
CCP005A	CCA011A	0.620 - 0.710	16.0 - 18.0	0.189	4.8	0.070 - 0.110	1.8 - 2.8	0.965	24.5	1.181	30.0	100

**WAC Series  
Webbed Adjustable Clip**

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 Ø Bundle Range		Ø Mounting Hole		Panel Thickness		Figure	Bulk Pack Qty
	in	mm	in	mm	in	mm		
WAC1-01	0.12 - 0.34	3.0 - 8.5	0.157 - 0.189	4.0 - 4.8	0.019 - 0.063	0.5 - 1.6	1	1000
WAC2-01	0.12 - 0.34	3.0 - 8.5	0.236 - 0.267	6.0 - 6.8	0.019 - 0.098	0.5 - 2.5	1	1000
WAC3-01A4-RT	0.12 - 0.34	3.0 - 8.5	Adhesive	Adhesive	Adhesive	Adhesive	2	1000

**HLCC Series  
Hinged Locking Clamp**

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				Ø Mounting Hole		Panel Thickness		Ø A Ref.		Ø B Ref.		Bulk Pack Qty
	ID		OD		in	mm	in	mm	in	mm	in	mm	
	in	mm	in	mm									
HLCC-1BK	0.20	5.0	0.28	7.1	0.26 - 0.28	6.5 - 7.0	0.03 - 0.12	.08 - 3.0	0.23	5.8	0.28	7.2	1000
HLCC-2BK	0.27	6.9	0.39	9.9	0.26 - 0.28	6.5 - 7.0	0.03 - 0.12	.08 - 3.0	0.33	8.3	0.39	10.0	1000

**KKR Series  
Adhesive Mount Clamp**

Specifications:

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



Item No.	Ø A Bundle		Max Capacity D		B		C		Bulk Pack Qty
	in	mm	in	mm	in	mm	in	mm	
KKR-5A1-RT	0.521	13.2	0.680	17.3	0.750	19.1	0.625	15.9	500



# CABLE CLAMPS

## KKL Series Adhesive Mount Locking Clamp

Specifications:

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

Features:

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



Item No.	A Bundle		B		Depth		D at Max Bundle Ref.		Bulk Pack Qty
	in	mm	in	mm	in	mm	in	mm	
KKL-4-RT	1/4	6.4	0.750	19.1	0.750	19.1	0.38	9.6	500
KKL-8-RT	1/2	12.7	1.000	25.4	1.000	25.4	0.69	17.4	100
KKL-12-RT	3/4	19.1	1.000	25.4	1.000	25.4	0.92	23.5	100

## KKD/KKDL Series Adhesive Mount Clamp



Figure 1

Figure 2

Item No.	Figure	Ø A Bundle		B		C		D at Max Bundle Ref.		Bulk Pack Qty
		in	mm	in	mm	in	mm	in	mm	
KKDL-4-RT	2	0.125	3.2	0.50	12.7	0.500	12.7	0.28	7.1	500
KKDL-8-RT	2	0.219	5.6	0.75	19.1	0.750	19.1	0.43	10.9	100
KKD-4-RT	1	0.250	6.4	0.50	12.7	0.500	12.7	0.40	10.2	500
KKD-8-RT	1	0.500	12.7	0.75	19.1	0.750	19.1	0.73	18.5	100
KKD-12-RT	1	0.750	19.1	1.13	28.6	1.000	25.4	1.02	25.9	100
KKD-16-RT	1	1.000	25.4	1.50	38.1	1.250	31.8	1.30	33.0	100

Specifications:

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

## KKJ Series Adhesive Mount Clamp



Item No.		Ø A Bundle		B		C		D at Max Bundle Ref.		Bulk Pack Qty
		in	mm	in	mm	in	mm	in	mm	
KKJ-2-RT	1/8	3.2	0.843	21.4	1.00	25.4	1/4	6.4	1000	
KKJ-3-RT	3/16	4.8	0.875	22.2	1.25	31.8	5/16	7.9	1000	
KKJ-4-RT	1/4	6.4	0.906	23.0	1.50	38.1	13/32	10.3	1000	
KKJ-5-RT	5/16	7.9	1.219	31.0	1.75	44.5	7/16	11.1	1000	
KKJ-6-RT	3/8	9.5	1.281	32.5	2.00	50.8	17/32	13.5	1000	

Specifications:

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

## MKKJ Series Mini Adhesive Mount Clamp



Specifications:

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

Features:

- Clear color hides clamp

Item No.	Ø A Bundle		B		C		D at Max Bundle Ref.		Bulk Pack Qty
	in	mm	in	mm	in	mm	in	mm	
MKKJ-2-RT	0.125	3.2	0.437	11.1	0.375	9.5	0.234	6.0	1000
MKKJ-3-RT	0.187	4.8	0.625	15.9	0.437	11.1	0.328	8.3	1000
MKKJ-4-RT	0.250	6.4	0.656	16.7	0.500	12.7	0.406	10.3	1000
MKKJ-5-RT	0.312	7.9	0.812	20.6	0.562	14.3	0.484	12.3	1000
MKKJ-6-RT	0.375	9.5	0.875	22.2	0.625	15.9	0.562	14.3	1000

## FREE SAMPLES

ON THOUSANDS OF FIBER, WIRE & CABLE MANAGEMENT PRODUCTS

order samples online at  
[www.essentracomponents.com](http://www.essentracomponents.com)

# CABLE CLAMPS



## Adhesive Mount Clamp

**Specifications:**

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

**Features:**

- Strong adhesion for quick and easy installation
- One size fits a range of cable diameters



Item No.	Holding Capacity d		W		L		Bulk Pack Qty
	in	mm	in	mm	in	mm	
460317	0.441	11.2	0.630	16.0	1.173	29.8	1000

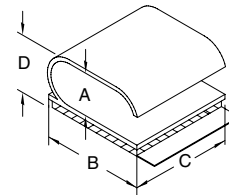
## KKF Series Adhesive Mount Clamp

**Specifications:**

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

**Features:**

- Can hold three wire leads (such as air conditioning leads)



Item No.	Holding Capacity A		B		C		Max Capacity D		Bulk Pack Qty
	in	mm	in	mm	in	mm	in	mm	
KKF-10X4-RT	0.20 x 0.56	5.1 x 14.3	0.750	19.1	0.750	19.1	0.36	9.1	100

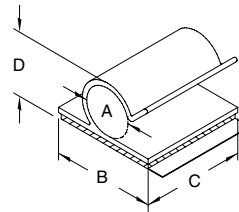
## KKC Series Adhesive Mount Clamp

**Specifications:**

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

**Features:**

- For securely clamping cable or tubing



Item No.	Holding Capacity A		B		C		D		Bulk Pack Qty
	in	mm	in	mm	in	mm	in	mm	
KKC-2-RT	1/8	3.2	0.750	19.1	0.750	19.1	0.31	7.9	500
KKC-3-RT	3/16	4.8	0.750	19.1	0.750	19.1	0.33	8.4	500
KKC-4-RT	1/4	6.4	0.750	19.1	0.750	19.1	0.42	10.7	500
KKC-5-RT	5/16	7.9	0.750	19.1	0.750	19.1	0.48	12.2	500
KKC-6-RT	3/8	9.5	0.750	19.1	0.750	19.1	0.60	15.2	500
KKC-8-RT	1/2	12.7	1.000	25.4	1.000	25.4	0.69	17.5	100
KKC-12-RT	3/4	19.1	1.000	25.4	1.000	25.4	0.94	23.9	100

## UC/HUC Series Adhesive Mount U Clamp



Figure 1

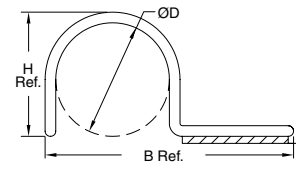


Figure 2



**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	1/8	3.2	1.219	30.9	0.172	4.4	0.625	15.9	1000
HUC-2-RT	2	1/8	3.2	0.718	18.3	0.172	4.4	0.625	15.9	1000
UC-4-RT	1	1/4	6.4	1.344	34.1	0.297	7.5	0.625	15.9	1000
HUC-4-RT	2	1/4	6.4	1.343	34.1	0.297	7.5	0.625	15.9	1000
UC-6-RT	1	3/8	9.5	1.469	37.3	0.422	10.7	0.625	15.9	1000
UC-8-RT	1	1/2	12.7	1.594	40.4	0.547	13.9	0.625	15.9	1000



# CABLE CLIPS & CLAMPS

## KKU Series Adhesive Mount Clamp



**Specifications:**

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

**Features:**

- To hold wires, cords, or cables in place

Item No.	Ø A Bundle		B		C		D Ref.		Bulk Pack Qty
	in	mm	in	mm	in	mm	in	mm	
KKU-2-RT	1/8	3.2	0.750	19.1	0.750	19.1	0.281	7.1	500
KKU-4-RT	1/4	6.4	0.750	19.1	0.750	19.1	0.468	11.9	500
KKU-6-RT	3/8	9.5	0.750	19.1	0.750	19.1	0.593	15.1	500
KKU-8-RT	1/2	12.7	1.000	25.4	1.000	25.4	0.687	17.5	100
KKU-9-RT	9/16	14.3	1.000	25.4	1.000	25.4	0.750	19.1	100
KKU-12-RT	3/4	19.1	1.000	25.4	1.000	25.4	0.906	23.0	100

## WCK/MWCK Series Adhesive Mount Clips

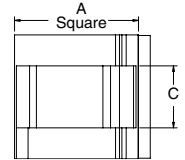


Figure 1

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		C		D		F		Bulk Pack Qty
			in	mm	in	mm	in	mm	in	mm	
WCK-180-01A-RT	1	Ⓢ	0.63	16.0	0.31	7.9	0.340	8.6	0.16	4.0	1000
WCK-280-01A4-RT	1	—	0.75	19.0	0.39	10.0	0.263	6.7	0.22	5.7	1000
WCK-460-01A-RT	1	Ⓢ	0.99	25.1	0.47	11.9	0.45	11.4	0.28	7.1	1000
MWCK-460-01A4-RT	2	—	0.75	19.0	0.47	11.9	0.45	11.4	0.28	7.1	1000
WCK-720-01A-RT	2	—	1.00	25.4	0.50	12.7	0.72	18.3	0.54	13.6	1000

## WCA Series Adhesive Mount Clips



Figure 1

Figure 2

**Specifications:**

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

**Features:**

- Designed to support lightweight wire bundles when properly applied on any clean, smooth, grease-free surface



Figure 3

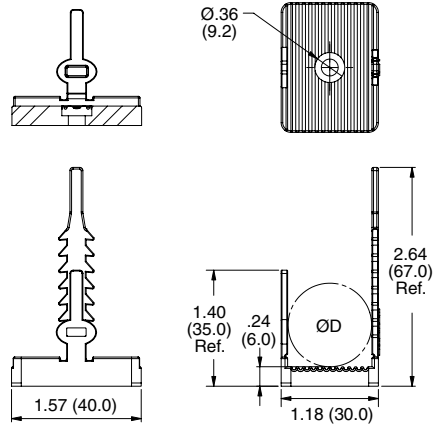
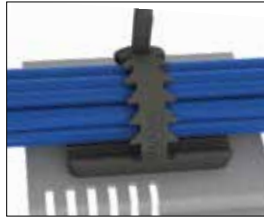
Figure 4

Item No.	Figure	L		L1		W		W1		H		H1		Bulk Pack Qty
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
WCA001A	1	0.51	13.0	0.354	9.0	0.37	9.5	0.26	6.5	0.20	5.2	0.11	2.8	100
WCA002A	2	0.63	16.0	0.190	4.8	0.61	15.5	0.35	9.0	0.27	6.8	0.19	4.8	100
WCA004A	3	1.06	27.0	0.58	14.8	0.67	17.0	0.12	3.1	0.34	8.7	0.22	5.5	100
WCA005A	4	0.75	19.0	0.23	5.9	0.75	19.0	0.39	10.0	0.28	7.2	0.19	4.9	100

## CABLE CLIPS & CLAMPS



### UMB Series Universal Rubber Clamp



**Specifications:**

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

**Features:**

- Flexible, serrated buckle style clamp provides a tight grip to the bundle
- Large, ribbed base gives the cables extra surface area which provides some strain relief
- Two mounting styles available: #10 screw or adhesive

Item No.	Mounting Method	D Approx. Max Cable Ø Bundle		Bulk Pack Qty
		in	mm	
UMB-1	#10 or M5 Screw	0.79	20.0	200
UMB-1A-RT	Adhesive	0.79	20.0	200

### WM Series Adhesive Mount Wire Mounts



**Specifications:**

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

**Features:**

- Mounted over wires to hold them in place
- Quick, secure mounting

Figure 1

Figure 2

Item No.	Figure	E		F		A		B		C		D		Bulk Pack Qty
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
WM-1A	1	0.150	3.8	0.102	2.6	0.551	14.0	0.472	12.0	0.138	3.5	0.201	5.1	1000
WM-2A	1	0.189	4.8	0.102	2.6	0.945	24.0	0.472	12.0	0.142	3.6	0.378	9.6	500
WM-3A	1	0.189	4.8	0.102	2.6	0.787	20.0	0.472	12.0	0.142	3.6	0.299	7.6	500
WM-4A	1	0.205	5.2	0.110	2.8	0.945	24.0	0.472	12.0	0.150	3.8	0.370	9.4	500
WM-5A	2	0.189	4.8	0.102	2.6	0.945	24.0	0.472	12.0	0.142	3.6	0.378	9.6	500
WM-6A	2	0.189	4.8	0.122	3.1	0.945	24.0	0.472	12.0	0.161	4.1	0.378	9.6	500
WM-7A	2	0.205	5.2	0.122	3.1	0.945	24.0	0.472	12.0	0.161	4.1	0.370	9.4	500

# PLASTIC FASTENERS

800 847 0486

www.essentracomponents.com





# CABLE CLIPS & CLAMPS

## HURC/DHURC/HURCBH/HURCS/DHURCS Series U Clamp



Figure 1



Figure 2



Figure 3

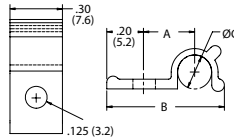


Figure 4

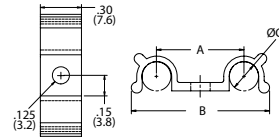


Figure 5

Specifications:

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

Item No.	Figure	Ø C Bundle		Ø Mounting Hole		Approval	A		B Ref.		Panel Thickness		Bulk Pack Qty
		in	mm	in	mm		in	mm	in	mm	in	mm	
HURC-2-01	1	0.125	3.2	0.125	3.2	RU	0.20	5.1	0.49	12.4	0.062	1.6	1000
HURC-3-01	1	0.187	4.8	0.125	3.2	RU	0.24	6.1	0.56	14.2	0.062	1.6	1000
HURC-4-01	1	0.250	6.4	0.125	3.2	RU	0.27	6.9	0.62	15.7	0.062	1.6	1000
HURC1-2-01	1	0.125	3.2	0.125	3.2	RU	0.20	5.1	0.49	12.4	0.093	2.4	1000
HURC1-3-01	1	0.187	4.8	0.125	3.2	RU	0.24	6.1	0.56	14.2	0.093	2.4	1000
HURC1-4-01	1	0.250	6.4	0.125	3.2	RU	0.27	6.9	0.62	15.7	0.093	2.4	1000
DHURC-2-01	2	0.125	3.2	0.125	3.2	RU	0.41	10.4	0.66	16.8	0.062	1.6	1000
DHURC-3-01	2	0.187	4.8	0.125	3.2	RU	0.48	12.2	0.79	20.1	0.062	1.6	1000
DHURC-4-01	2	0.250	6.4	0.125	3.2	RU	0.55	14.0	0.94	23.9	0.062	1.6	1000
HURCS-2-01	4	0.125	3.2	0.125	3.2	—	0.25	6.2	0.59	15.0	—	—	1000
HURCS-3-01	4	0.187	4.8	0.125	3.2	—	0.28	7.1	0.65	15.6	—	—	1000
HURCS-4-01	4	0.250	6.4	0.125	3.2	—	0.32	8.1	0.72	18.3	—	—	1000
DHURCS-2-01	5	0.125	3.2	0.125	3.2	—	0.49	12.4	0.75	19.0	—	—	1000
DHURCS-3-01	5	0.187	4.8	0.125	3.2	—	0.56	14.2	0.89	22.6	—	—	1000
DHURCS-4-01	5	0.250	6.4	0.125	3.2	—	0.64	16.2	1.02	25.9	—	—	1000
HURCBH-2-01	3	0.125	3.2	0.250	6.4	—	0.49	12.4	0.17	4.3	0.250	6.4	1000
HURCBH-3-01	3	0.187	4.8	0.250	6.4	—	0.56	14.2	0.24	6.1	0.250	6.4	1000
HURCBH-4-01	3	0.250	6.4	0.250	6.4	—	0.62	15.7	0.30	7.6	0.250	6.4	1000

## SRC Series Split Routing Clamp



Specifications:

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

Features:

- Split design allows bundles to be loaded by separating the clip at the base
- Cannot be removed without removing the clip from the blind side of the application

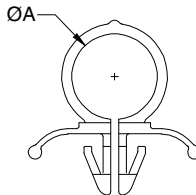


Figure 1

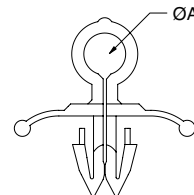


Figure 2

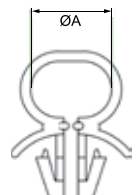


Figure 3

Item No.	Approval	Figure	Ø A Bundle		Hole Diameter		Panel Thickness		Color	Bulk Pack Qty
			In	mm	In	mm	In	mm		
SRC-1-01	—	2	.197	5.0	.246	6.2	0.079 - 0.118	2.0 - 3.0	Natural	1000
SRC-4-01	RU	1	.250	6.4	.250	6.4	0.050 - 0.060	1.3 - 1.5	Natural	1000
• 101 001 000 202	—	3	.413	10.5	.250	6.4	0.028 - 0.079	0.7 - 2.0	Grey	500
SRC-7-01	RU	1	.438	11.1	.250	6.4	0.050 - 0.060	1.3 - 1.5	Natural	1000
SRC-8-01	RU	1	.500	12.7	.250	6.4	0.050 - 0.060	1.3 - 1.5	Natural	1000
• 101 001 400 202	—	3	.551	14.0	.250	6.4	0.028 - 0.079	0.7 - 2.0	Grey	500
SRC-10-01	—	1	.625	15.9	.250	6.4	0.050 - 0.060	1.3 - 1.5	Natural	1000
• 101 002 100 202	—	3	.846	21.5	.250	6.4	0.028 - 0.079	0.7 - 2.0	Grey	250
• 101 003 000 202	—	3	1.181	30.0	.250	6.4	0.028 - 0.079	0.7 - 2.0	Grey	250

# CABLE CLIPS & CLAMPS



## SRCC Series Strain Relief Clamp



Figure 1



Figure 2

**Specifications:**

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

**Features:**

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

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

## D Series 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	1.25	31.8	0.51	13.0	100
D-1.5	1.457	37.0	2.175	55.3	1.65	41.9	0.66	16.8	100

## CH/RSC Series Snap In Cable Hanger



**Specifications:**

- Material: See Table
- Color: See Table

**Features:**

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

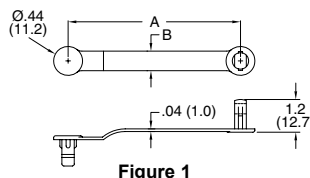


Figure 1



Figure 2

Item No.	Color		Figure	Ø Max Bundle		Ø Mounting Hole		A Ref		B		Material	Bulk Pack Qty
	Natural	Black		in	mm	in	mm	in	mm	in	mm		
CH-1-01	CH-1-01BK	1	0.375	9.5	0.250	6.4	1.750	44.5	0.297	7.5	UL94 V-2 Nylon 6/6	1000	
CH-2-01	CH-2-01BK	1	0.625	15.9	0.250	6.4	2.625	66.7	0.297	7.5	UL94 V-2 Nylon 6/6	1000	
CH-1-10	CH-1-10BK	1	0.375	9.5	0.250	6.4	1.750	44.5	0.297	7.5	UL94 HB Polypropylene	1000	
CH-2-10	CH-2-10BK	1	0.625	15.9	0.250	6.4	2.625	66.7	0.297	7.5	UL94 HB Polypropylene	1000	
—	RSC-3-01	2	0.218	5.6	0.189	4.8	1.100	28.0	0.160	4.0	UL94 V-2 Nylon 6/6	1000	
—	RSC-4-01	2	0.250	6.4	0.189	4.8	1.300	33.0	0.240	6.0	UL94 V-2 Nylon 6/6	1000	
—	RSC-6-01	2	0.375	9.5	0.189	4.8	1.690	43.0	0.240	6.0	UL94 V-2 Nylon 6/6	1000	
—	RSC-9-01	2	0.625	15.9	0.189	4.8	2.480	63.0	0.240	6.0	UL94 V-2 Nylon 6/6	1000	



# CABLE CLIPS & CLAMPS

## V Series 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.	Ø D Holding		Ø F Hole Ref.		A Ref.		C Ref.		H Ref.		L		Figure	Bulk Pack Qty
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm		
V-1000	0.25	6.4	0.094	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	0.094	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	0.094	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	0.094	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	0.094	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	0.094	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	0.094	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	0.156	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	0.156	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	0.156	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	0.156	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	0.156	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	0.156	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	0.156	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	0.156	4.0	2.44	61.9	2.61	66.3	.75	19.1	1.50	38.1	3	100

## VM Series Screw Mount Component Clip



Figure 1



Figure 2



Figure 3

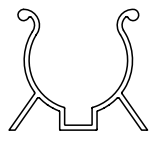


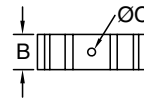
Figure 4

**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.	Ø D Holding		C Hole Ø		A Ref.		B		E		F Ref.		Figure	Bulk Pack Qty
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm		
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

# CABLE CLIPS & CLAMPS



## ASK/RAK Series Adhesive Mount Aluminum Clamp



**Specifications:**

- Material: Aluminum, Bright Finish

**Features:**

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



Figure 1



Figure 2

Item No.	Figure	Ø Max Bundle		A		B Base Depth		Bulk Pack Qty
		in	mm	in	mm	in	mm	
ASK-3	1	0.234	6.0	0.44	11.3	0.66	16.8	250
ASK-6	1	0.375	9.5	0.62	15.7	0.74	18.8	250
RAK-1	2	0.234	6.0	0.44	11.3	0.67	17.1	250
RAK-2	2	0.375	9.5	0.64	16.3	0.76	19.3	250

## VCC Series Vinyl Coated Adjustable Steel Clamp



**Specifications:**

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

**Features:**

- For bundling and clamping cable or tubing securely
- Vinyl coating grips and insulates the cable
- Easily bends and forms to desired shape for varying holding diameters

Item No.	Ø Bundle		C Ref.		L Ref.		W Ref.		A		Ø B		Pack Qty	Bulk Pack Qty
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm		
VCC-83028	0.22	5.7	0.71	18.0	1.10	28.0	0.12	3.0	0.315	8.0	0.118	3.0	1	1000
VCC-83535	0.31	7.9	0.98	25.0	1.34	35.0	0.20	5.0	0.315	8.0	0.138	3.5	1	1000
VCC-83540	0.37	9.5	1.18	30.0	1.57	40.0	0.12	3.0	0.315	8.0	0.138	3.5	1	1000
VCC-63048	0.50	12.7	1.57	40.0	1.89	48.0	0.08	2.0	0.236	6.0	0.118	3.0	1	1000
VCC-84554	0.52	13.3	1.65	42.0	2.13	54.0	0.19	4.8	0.315	8.0	0.177	4.5	1	1000
VCC-63254	0.57	14.6	1.81	46.0	2.13	54.0	0.14	3.6	0.236	6.0	0.126	3.2	1	1000
VCC-83664	0.66	16.9	2.09	53.0	2.52	64.0	0.20	5.0	0.315	8.0	0.161	4.1	1	1000
VCC-84576	0.81	20.7	2.56	65.0	2.99	76.0	0.18	4.5	0.315	8.0	0.177	4.5	1	1000
VCC-84584	0.90	22.9	2.83	72.0	3.31	84.0	0.18	4.5	0.315	8.0	0.177	4.5	1	1000
VCC-845126	1.40	35.6	4.41	112.0	4.96	126.0	0.24	6.0	0.315	8.0	0.177	4.5	1	100

## PCC Series 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.		B		C Ref.		D Ref.		Bulk Pack Qty
	in	mm	in	mm	in	mm	in	mm	
PCC-5	0.31	8.0	0.31	8.0	0.59	15.0	0.08	2.1	1000
PCC-9	0.55	14.0	0.55	14.0	0.98	25.0	0.14	3.5	500
PCC-12	0.75	19.0	0.75	19.0	1.58	40.0	0.16	4.0	500

## PFC Series 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 diameters

Item No.	A Ref.		B Ref.		C Ref.		D		E		Bulk Pack Qty
	in	mm	in	mm	in	mm	in	mm	in	mm	
PFC-25M	0.189	4.8	0.494	12.6	0.437	11.1	0.397	10.1	0.751	19.1	1000
PFC-50M	0.205	5.2	0.573	14.6	0.555	14.1	0.553	14.1	0.982	25.0	1000



# CABLE CLIPS & CLAMPS

## RWS/RWSB Series Round Clamp



Figure 1



Figure 2

Specifications:

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

Features:

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



Figure 3



Item No.		Mounting Method	Approval	Figure	Ø D Holding		Mounting Hole		Panel Thickness		Depth		Color	Bulk Pack Qty
UL94 V-2	UL94 V-0				in	mm	in	mm	in	mm	in	mm		
RWS-10-01	RWS-10-19	Snap-In		1	0.625	15.9	Ø 250	6.4	0.030 - 0.060	0.8 - 1.5	0.297	17.5	Natural	1000
RWS-10-01BK	—	Snap-In		1	0.625	15.9	Ø 250	6.4	0.030 - 0.060	0.8 - 1.5	0.297	17.5	Black	1000
RWS-16-01	RWS-16-19	Snap-In		2	1.000	25.4	.250 Square	6.4	0.058 - 0.064	1.5 - 1.6	0.297	17.5	Natural	1000
RWS-16-01BK	—	Snap-In		2	1.000	25.4	.250 Square	6.4	0.058 - 0.064	1.5 - 1.6	0.297	17.5	Black	1000
RWSB-10-01A-RT	—	Adhesive	—	3	0.625	15.9	—	—	—	—	1.000	25.4	Natural	1000
RWSB-16-01A-RT	—	Adhesive	—	3	1.000	25.4	—	—	—	—	1.000	25.4	Natural	1000
RWSB-10-01	—	Screw	—	3	0.625	15.9	—	—	—	—	1.000	25.4	Natural	1000
RWSB-16-01	—	Screw	—	3	1.000	25.4	—	—	—	—	1.000	25.4	Natural	1000

## WCB Series Cord Clip On Adhesive Base



Specifications:

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

Features:

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

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

## SCCA/SCCB Series Standoff Cable Clip



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.		Figure	Ø Max Bundle		A		Bulk Pack Qty
UL94 V-2	UL94 V-0		in	mm	in	mm	
SCCA-1-01	SCCA-1-19	1	0.87	22.0	0.16	4.0	1000
SCCA-2-01	SCCA-2-19	1	0.87	22.0	0.24	6.0	1000
SCCA-3-01	SCCA-3-19	1	0.87	22.0	0.32	8.0	1000
SCCA-4-01	—	1	0.87	22.0	0.39	10.0	1000
SCCA-5-01	SCCA-5-19	1	0.87	22.0	0.47	12.0	1000
SCCB-1-01	SCCB-1-19	2	0.43	11.0	0.16	4.0	1000
SCCB-2-01	—	2	0.43	11.0	0.24	6.0	1000
SCCB-3-01	SCCB-3-19	2	0.43	11.0	0.32	8.0	1000
SCCB-4-01	—	2	0.43	11.0	0.39	10.0	1000
SCCB-5-01	SCCB-5-19	2	0.43	11.0	0.47	12.0	1000
SCCB-6-01	—	2	0.43	11.0	1.18	30.0	1000

# CABLE CLIPS & CLAMPS



## SLCS/SLCSE Series Standoff Locking Clip



Figure 1

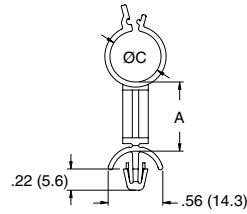


Figure 2



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Natural
- Mounting Hole: .187 (4.8)
- SLCS/SLCSE Panel Thickness: 0.031 - 0.078 (0.8 - 2.0)
- SLCSE2 Panel Thickness: 0.078 - 0.160 (2.0 - 4.0)

**Features:**

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

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

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

## SHK/SHKE/SHKBS Series 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		B Ref.		C Ref.		Ø Mounting Hole		Panel Thickness		Bulk Pack Qty
			in	mm	in	mm	in	mm	in	mm	in	mm	
SHK-6-01	RU	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	RU	1	0.500	12.7	0.540	13.6	0.770	19.5	0.187	4.8	0.031 - 0.78	0.8 - 2.0	1000
SHKE-6-01	—	1	0.375	9.5	0.810	20.6	1.140	29.0	0.187	4.8	0.031 - 0.78	0.8 - 2.0	1000
SHKE-8-01	—	1	0.500	12.7	0.810	20.6	1.140	29.0	0.187	4.8	0.031 - 0.78	0.8 - 2.0	1000
SHKBS-4-01A-RT	—	2	0.250	6.4	—	—	—	—	—	—	—	—	1000
SHKBS-8-01A-RT	—	2	0.500	12.7	—	—	—	—	—	—	—	—	1000

## STL-8 Series Standoff Twist 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.	Ø Bundle		Hole Ø		Min Board Thickness		Bulk Pack Qty
	in	mm	in	mm	in	mm	
STL-8-450-2-01	0.400 - 0.500	10.2 - 12.7	0.250	6.4	0.250	7.2	1000



# TWIST TIES

## STL Series 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	Ø D Bundle		A Spacer Length		B Ref.		Bulk Pack Qty
STL Basic Style	STL-1	STL-3	STL-6		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	UL	0.200 - 0.300	5.1 - 7.6	0.187	4.8	0.750	19.1	1000
STL-250-8-01	STL-1-250-8-01	STL-3-250-8-01	STL-6-250-8-01	UL	0.200 - 0.300	5.1 - 7.6	0.500	12.7	0.750	19.1	1000
STL-350-3-01	STL-1-350-3-01	STL-3-350-3-01	STL-6-350-3-01	UL	0.300 - 0.400	7.6 - 10.2	0.187	4.8	0.910	23.1	1000
STL-350-8-01	STL-1-350-8-01	STL-3-350-8-01	STL-6-350-8-01	UL	0.300 - 0.400	7.6 - 10.2	0.500	12.7	0.910	23.1	1000
STL-450-3-01	STL-1-450-3-01	STL-3-450-3-01	STL-6-450-3-01	UL	0.400 - 0.500	10.2 - 12.7	0.187	4.8	1.090	27.7	1000
STL-450-8-01	STL-1-450-8-01	STL-3-450-8-01	STL-6-450-8-01	UL	0.400 - 0.500	10.2 - 12.7	0.500	12.7	1.090	27.7	1000
STL-600-3-01	STL-1-600-3-01	STL-3-600-3-01	STL-6-600-3-01	UL	0.500 - 0.600	12.7 - 15.2	0.187	4.8	1.280	32.5	1000
STL-600-8-01	STL-1-600-8-01	STL-3-600-8-01	STL-6-600-8-01	UL	0.500 - 0.600	12.7 - 15.2	0.500	12.7	1.280	32.5	1000
STL-750-3-01	STL-1-750-3-01	STL-3-750-3-01	STL-6-750-3-01	UL	0.700 - 0.800	17.8 - 20.3	0.187	4.8	1.450	36.8	1000
STL-750-8-01	STL-1-750-8-01	STL-3-750-8-01	STL-6-750-8-01	UL	0.700 - 0.800	17.8 - 20.3	0.500	12.7	1.450	36.8	1000

## BHKL Series 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	Ø B Bundle		A		C Ref.		Bulk Pack Qty
		in	mm	in	mm	in	mm	
BHKL-350-4-01	UL	0.300 - 0.400	7.6 - 10.2	0.250	6.4	1.000	25.4	1000
BHKL-350-10-01	UL	0.300 - 0.400	7.6 - 10.2	0.625	15.9	1.000	25.4	1000
BHKL-450-4-01	UL	0.400 - 0.500	10.2 - 12.7	0.250	6.4	1.125	28.6	1000
BHKL-450-6-01	UL	0.400 - 0.500	10.2 - 12.7	0.375	9.5	1.125	28.6	1000
BHKL-750-4-01	UL	0.700 - 0.800	17.8 - 20.3	0.250	6.4	1.500	38.1	1000
BHKL-750-6-01	UL	0.700 - 0.800	17.8 - 20.3	0.375	9.5	1.500	38.1	1000

## KLBS Series 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		Ø B Bundle		C Ref.		Bulk Pack Qty
		in	mm	in	mm	in	mm	
KLBS-350-401A	UL	0.250	6.4	0.300 - 0.400	7.6 - 10.2	1.281	32.5	1000
KLBS-3508-01A	UL	0.500	12.7	0.300 - 0.400	7.6 - 10.2	1.531	38.9	1000
KLBS-35012-01A	UL	0.750	19.1	0.300 - 0.400	7.6 - 10.2	1.781	45.2	1000
KLBS-35016-01A	UL	1.000	25.4	0.300 - 0.400	7.6 - 10.2	2.031	51.6	1000



**KLB Series  
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	Ø B Bundle		A Ref.		Base Depth		Bulk Pack Qty
		in	mm	in	mm	in	mm	
KLB-350A-RT		0.300 - 0.400	7.6 - 10.2	1.070	27.2	0.510	13.0	1000
KLB-450A-RT		0.400 - 0.500	10.2 - 12.7	1.230	31.2	0.510	13.0	1000
KLB-750A-RT		0.700 - 0.800	17.8 - 20.3	1.580	40.1	0.510	13.0	1000

**TLFB Series  
Twist Lock on Flexible Adhesive Base**

**Specifications:**

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

**Features:**

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



Item No.	Approval	Ø B Bundle		A Ref.		Base Depth		Bulk Pack Qty
		in	mm	in	mm	in	mm	
TLFB-350-01A1		0.300 - 0.400	0.08 - 10.2	1.150	29.3	0.500	12.7	1000
TLFB-450-01A1		0.400 - 0.500	10.2 - 12.7	1.270	32.3	0.500	12.7	1000
TLFB-750-01A1		0.700 - 0.800	17.8 - 20.3	1.610	40.9	0.500	12.7	1000

**TLJ Series  
Snap In Twist Lock**

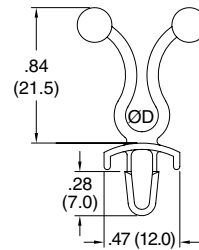


**Specifications:**

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

**SKL/SKLO Series  
Side Entry & 45° Curly Lock**



**Specifications:**

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

**Features:**

- Gathers and routes wires
- Ends twist into place with very little effort
- Releasable and reusable for easy wire bundling
- Eases installation in hard to reach places



Figure 1



Figure 2

Item No.	Approval	Figure	Ø A Bundle		B Ref.		Bulk Pack Qty
			in	mm	in	mm	
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 Series Screw Mount Hinged 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
- Hinged design makes it easier to adjust your wire angles as needed for the application
- Screw mount design for easy and fast assembly



Figure 1



Figure 2



Item No.	Approval	Ø D Bundle		Ø H Hole		Recommended Screw Size	A		B		Figure	Bulk Pack Qty
		in	mm	in	mm		in	mm	in	mm		
TLH-800-01		0.750 - 0.850	19.0 - 21.6	0.160	4.1	#6 or M3	0.75	19.0	0.67	17.0	1	1000
TLH-500-01	—	0.450 - 0.550	11.4 - 14.0	0.170	4.2	#8 or M4	0.56	14.2	0.55	14.0	1	1000
TLHE-1-750-01	—	0.700 - 0.800	17.8 - 20.3	0.204	5.2	#10 or M5	0.75	19.0	0.67	17.0	1	1000
KLH-750-01		0.700 - 0.800	17.8 - 20.3	0.204	5.2	#10 or M5	0.75	19.0	0.75	19.0	2	1000

## TL/TT Series 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	Ø B Bundle		A Ref.		Bulk Pack Qty
		in	mm	in	mm	
TT001A	—	0.150 - 0.190	3.8 - 4.8	0.85	21.6	100
TL-250		0.200 - 0.300	5.1 - 7.6	0.90	22.9	1000
TL-350		0.300 - 0.400	7.6 - 10.2	1.03	26.1	1000
TL-450		0.400 - 0.500	10.2 - 12.7	1.20	30.5	1000
TL-600		0.550 - 0.650	14.0 - 16.5	1.33	33.7	1000
TL-750		0.700 - 0.800	17.8 - 20.3	1.55	39.4	1000
TL-950		Max 1.000	25.4	1.70	43.4	1000
TL-1125		Max 1.187	30.2	2.19	55.6	1000
TL-1375		Max 1.437	36.5	2.68	68.1	1000
TL-1500		Max 1.562	39.7	2.93	74.4	1000
TL-1750		Max 1.812	46.0	3.45	87.6	1000

## KL Series 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	Ø B Bundle		A Ref.		Bulk Pack Qty
		in	mm	in	mm	
KL-125		0.125 - 0.150	3.2 - 3.8	0.48	12.2	1000
KL-200		0.160 - 0.240	4.1 - 6.1	0.82	20.7	1000
KL-250		0.200 - 0.300	5.1 - 7.6	0.91	23.0	1000
KL-350		0.300 - 0.400	7.6 - 10.2	1.03	26.2	1000
KL-450		0.400 - 0.500	10.2 - 12.7	1.20	30.5	1000
KL-600		0.550 - 0.650	14.0 - 16.5	1.25	31.8	1000
KL-750		0.700 - 0.800	17.8 - 20.3	1.52	38.6	1000
KL-950		0.900 - 1.000	22.9 - 25.4	1.75	44.5	1000

# TWIST TIES/CABLE CLIPS & CLAMPS



## WTLH Series 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.	Ø Bundle D		Ø H Hole		Recommended Screw Size	Bulk Pack Qty
	in	mm	in	mm		
WTLH90-300-4-01	0.140 - 0.480	3.6 - 12.2	0.130	3.3	#4 or M3	500
WTLH90-300-6-01	0.140 - 0.480	3.6 - 12.2	0.150	3.8	#6 or M3.5	500
WTLH90300-M4-01	0.140 - 0.480	3.6 - 12.2	0.170	4.3	#8 or M4	500

## DTL Series 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.	Ø A and Ø B Bundle		C		D Ref.		E Ref.		Bulk Pack Qty
	in	mm	in	mm	in	mm	in	mm	
DTL2525-4-01	0.200 - 0.300	5.1 - 7.6	0.250	6.4	0.50	12.7	1.92	48.8	500
DTL2525-12-01	0.200 - 0.300	5.1 - 7.6	0.750	19.1	1.00	25.4	2.42	61.5	500
DTL2525-20-01	0.200 - 0.300	5.1 - 7.6	1.250	31.8	1.50	38.1	2.92	74.2	500
DTL3535-4-01	0.300 - 0.400	7.6 - 10.2	0.250	6.4	0.60	15.2	2.18	55.4	500
DTL3535-12-01	0.300 - 0.400	7.6 - 10.2	0.750	19.1	1.10	27.9	2.68	68.1	500
DTL3535-20-01	0.300 - 0.400	7.6 - 10.2	1.250	31.8	1.60	40.6	3.18	80.8	500
DTL4545-4-01	0.400 - 0.500	10.2 - 12.7	0.250	6.4	0.60	15.2	2.18	55.4	500
DTL4545-12-01	0.400 - 0.500	10.2 - 12.7	0.750	19.1	1.10	27.9	2.68	68.1	500
DTL4545-20-01	0.400 - 0.500	10.2 - 12.7	1.250	31.8	1.60	40.6	3.18	80.8	500
DTL5555-4-01	0.500 - 0.600	12.7 - 15.2	0.250	6.4	0.60	15.2	2.18	55.4	500
DTL5555-12-01	0.500 - 0.600	12.7 - 15.2	0.750	19.1	1.10	27.9	2.68	68.1	500
DTL5555-20-01	0.500 - 0.600	12.7 - 15.2	1.250	31.8	1.60	40.6	3.18	80.8	500
DTL6565-4-01	0.600 - 0.700	15.2 - 17.8	0.250	6.4	0.60	15.2	2.18	55.4	500
DTL6565-12-01	0.600 - 0.700	15.2 - 17.8	0.750	19.1	1.10	27.9	2.68	68.1	500
DTL6565-20-01	0.600 - 0.700	15.2 - 17.8	1.250	31.8	1.60	40.6	3.18	80.8	500
DTL7575-4-01	0.700 - 0.800	17.8 - 20.3	0.250	6.4	1.00	25.4	3.10	78.7	500
DTL7575-12-01	0.700 - 0.800	17.8 - 20.3	0.750	19.1	1.50	38.1	3.60	91.4	500
DTL7575-20-01	0.700 - 0.800	17.8 - 20.3	1.250	31.8	2.00	50.8	4.10	104.1	500

## SCH/SCHS Series Standoff Capacitor Holder



**Specifications:**

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

**Optional:**

1. Clamping hardware; Screw (S6B) Stainless Steel, Zinc Plating; Quick Nut (QN-6) Spring Steel C1050, Coating: Black Phosphate
2. Spacer to elevate capacitor 3/32 (2.4) from chassis
3. Anti-rotation rib (3 locations)



Item No.	Description	Bulk Pack Qty
SCHS-2	w/ Spacer, w/o Hardware (see 1 above)	100
SCH-2	w/o Spacer, w/o Hardware	100
SCHS-2-H	w/ Spacer, w/ Clamping Hardware	100
SCH-2-H	w/o Spacer, w/ Clamping Hardware	100



## CABLE CLIPS & CLEATS

### SCC Series Standoff Cable Clip Side Entry



**Specifications:**

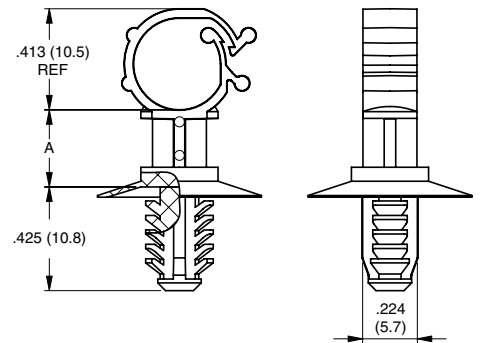
- Material: UL94 V-0 Nylon 6/6
- Color: Natural

**Features:**

- Different spacer heights to lift cables away from other components
- Cables securely held in place

Item No.	A		Ø Mounting Hole		Panel Thickness Range		Ø Max Bundle		Bulk Pack Qty
	in	mm	in	mm	in	mm	in	mm	
SCC-SE-4-19	0.157	4.0	0.256 - 0.276	6.5 - 7.0	0.031 - 0.049	0.8 - 1.25	0.354	9.0	1000
SCC-SE-8-19	0.315	8.0	0.256 - 0.276	6.5 - 7.0	0.031 - 0.049	0.8 - 1.25	0.354	9.0	1000
SCC-SE-10-19	0.394	10.0	0.256 - 0.276	6.5 - 7.0	0.031 - 0.049	0.8 - 1.25	0.354	9.0	1000
SCC-SE-12-19	0.472	12.0	0.256 - 0.276	6.5 - 7.0	0.031 - 0.049	0.8 - 1.25	0.354	9.0	1000

### SCCBH Series Standoff Cable Clip Side Entry



**Specifications:**

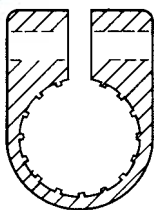
- Material: UL94 V-0 Nylon 6/6
- Color: Natural

**Features:**

- Different spacer heights to lift cables away from other components
- Cables securely held in place

Item No.	A		Ø Mounting Hole		Min. Panel Thickness		A		Ø Max Bundle		Bulk Pack Qty
	in	mm	in	mm	in	mm	in	mm	in	mm	
SCCBH-SE-4-19	0.157	4.0	0.256	6.5	0.028	0.7	0.157	4.0	0.354	9.0	1000
SCCBH-SE-8-19	0.315	8.0	0.256	6.5	0.028	0.7	0.315	8.0	0.354	9.0	1000
SCCBH-SE-10-10	0.394	10.0	0.256	6.5	0.028	0.7	0.394	10.0	0.354	9.0	1000
SCCBH-SE-12-19	0.472	12.0	0.256	6.5	0.028	0.8	0.472	12.0	0.354	9.0	1000

### Cable Cleats



**Specifications:**

- Material: Low-Density Polyethylene
- Color: Black

**Features:**

- Offers a high-strength cable restraint
- Secures cables from various forces and provides strain relief
- Corrosion resistant

Item No.	Size	Max. Cable Size		For Bolt Size		Bulk Pack Qty
		in	mm	in	mm	
12875	3	0.299	7.6	1/4	M6	100
12876	4	0.398	10.0	1/4	M6	100
12877	5	0.500	12.7	1/4	M6	100
12848	6	0.598	15.2	1/4	M6	100
12878	7	0.701	17.8	1/4	M6	100
12879	8	0.799	20.3	1/4	M6	100
12880	9	0.898	22.8	1/4	M6	100
12881	10	1.000	25.4	1/4	M6	100
12092	11	1.098	27.9	3/8	M10	50
12882	12	1.181	30.0	3/8	M10	50
12883	14	1.402	35.6	3/8	M10	50
12884	16	1.598	40.6	3/8	M10	50
12885	18	1.799	45.7	3/8	M10	50
12886	20	1.984	50.4	3/8	M10	50



**XRC Series**  
Cable Clips for Extruded Metal Rails

Specifications:

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

Features:

- Several clip styles available
- Available for several different extruded rail sizes
- Two types of mounting; quarter turn or push in



Extruded Rail



Type 1



Type 2



Type 3



Type 4

Item No.	Type	A		B		C		D		Extruded Rail Size	Bulk Pack Qty
		in	mm	in	mm	in	mm	in	mm		
XRC2-WS101	1	0.394	10.0	0.063	1.6	0.394	10.0	0.228	5.8	20 x 20	1000
XRC3-WS101	1	0.512	13.0	0.091	2.3	0.512	13.0	0.311	7.9	30 x 30	1000
XRC4-WS101	1	0.630	16.0	0.242	6.2	0.630	16.0	0.386	9.8	40 x 40	1000
XRC2-LWS01	2	0.394	10.0	0.063	1.6	0.394	10.0	0.228	5.8	20 x 20	1000
XRC3-LWS01	2	0.512	13.0	0.091	2.3	0.512	13.0	0.311	7.9	30 x 30	1000
XRC4-LWS01	2	0.630	16.0	0.242	6.2	0.630	16.0	0.386	9.8	40 x 40	1000
XRC2-WSLT01	3	0.394	10.0	0.063	1.6	0.394	10.0	0.228	5.8	20 x 20	1000
XRC3-WSLT01	3	0.512	13.0	0.091	2.3	0.512	13.0	0.311	7.9	30 x 30	1000
XRC4-WSLT01	3	0.630	16.0	0.242	6.2	0.630	16.0	0.386	9.8	40 x 40	1000
XRC2-TH01	4	0.394	10.0	0.063	1.6	0.394	10.0	0.228	5.8	20 x 20	1000
XRC3-TH01	4	0.512	13.0	0.091	2.3	0.512	13.0	0.311	7.9	30 x 30	1000
XRC4-TH01	4	0.630	16.0	0.242	6.15	0.630	16.0	0.386	9.8	40 x 40	1000

**DRC Series**  
DIN Rail Wire Saddles

Specifications:

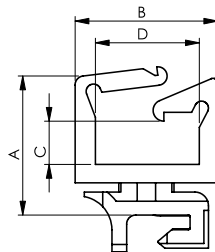
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- For use in all common DIN rail profiles
- Can be retrofitted to current installations



Type 1



Type 2



Type 3

Item No.	Type	A		B		C		D		Din Rail Style	Bulk Pack Qty
		in	mm	in	mm	in	mm	in	mm		
DRCC-WS01	1	0.583	14.8	0.606	15.4	0.189	4.8	0.437	11.1	C-Profile	1000
DRCC-LWS01	2	0.594	15.1	0.610	15.5	0.142	3.6	0.445	11.3	C-Profile	1000
DRCC-SEC01	3	0.449	11.4	0.441	11.2	0.189	4.8	0.252	6.4	C-Profile	1000
DRCT-WS01	1	0.583	14.8	0.606	15.4	0.189	4.8	0.437	11.1	Top Hat Profile	1000
DRCT-LWS01	2	0.594	15.1	0.610	15.5	0.142	3.6	0.445	11.3	Top Hat Profile	1000
DRCT-SEC01	3	0.449	11.4	0.441	11.2	0.189	4.8	0.252	6.4	Top Hat Profile	1000
DRCG-WS01	1	0.583	14.8	0.606	15.4	0.189	4.8	0.437	11.1	G-Profile	1000
DRCG-LWS01	2	0.594	15.1	0.610	15.5	0.142	3.6	0.445	11.3	G-Profile	1000
DRCG-SEC01	3	0.449	11.4	0.441	11.2	0.189	4.8	0.252	6.4	G-Profile	1000



# WIRE SADDLES

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



Figure 1



Figure 2



Specifications:

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

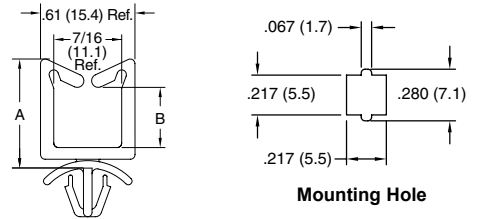
Features:

- 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

Use Essentra Rivet Number	Chassis Thickness Range	
	in	mm
SR-3535	0.010 - 0.046	0.3 - 1.2
SR-3545	0.046 - 0.081	1.2 - 2.1
SR-3550	0.069 - 0.105	1.8 - 2.7
SR-3555	0.081 - 0.120	2.1 - 3.7
SR-3560	0.109 - 0.144	2.8 - 3.7
SR-3570	0.140 - 0.180	3.6 - 4.6
SR-3580	0.180 - 0.219	4.6 - 5.6

Item No.	Figure	A		B		Ø Mounting Hole		Bulk Pack Qty
		in	mm	in	mm	in	mm	
WS-SR-1-01	1	0.45	11.4	0.17	4.3	0.142 - 0.146	3.6 - 3.7	1000
LWS-SR-1-01	2	0.45	11.4	0.14	3.6	0.142 - 0.146	3.6 - 3.7	1000
WS-SR-2-01	1	0.64	16.3	0.36	9.1	0.142 - 0.146	3.6 - 3.7	1000
LWS-SR-2-01	2	0.64	16.3	0.34	8.6	0.142 - 0.146	3.6 - 3.7	1000
WS-SR-3-01	1	1.00	25.4	0.73	18.5	0.142 - 0.146	3.6 - 3.7	1000
LWS-SR-3-01	2	1.00	25.4	0.72	18.3	0.142 - 0.146	3.6 - 3.7	1000
WS-SR-4-01	1	1.31	33.3	1.04	26.4	0.142 - 0.146	3.6 - 3.7	1000
LWS-SR-4-01	2	1.31	33.3	1.00	25.4	0.142 - 0.146	3.6 - 3.7	1000

## WS-SH Series Wire Saddle - Square Hole Mount



Specifications:

- Material: Nylon 6/6
- Color: Natural

Features:

- Mounts into a square hole to prevent rotation

Item No.		Approval	Panel Thickness		A Ref.		B Ref.		Depth		Bulk Pack Qty
UL94 V-2	UL94 V-0		in	mm	in	mm	in	mm	in	mm	
WS-SH-1-01	WS-SH-1-19	UL	0.031 - 0.078	0.8 - 2.0	0.51	13.0	0.19	4.8	0.219	5.6	1000
WS-SH-2-01	WS-SH-2-19	UL	0.031 - 0.078	0.8 - 2.0	0.70	17.8	0.39	10.0	0.219	5.6	1000
WS-SH-3-01	WS-SH-3-19	UL	0.031 - 0.078	0.8 - 2.0	1.06	26.9	0.75	19.1	0.219	5.6	1000
WS-SH-4-01	WS-SH-4-19	UL	0.031 - 0.078	0.8 - 2.0	1.37	34.8	1.07	27.2	0.219	5.6	1000

ESSENTIAL SOLUTIONS

DELIVERED



VISIT OUR WEBSITE  
[www.essentracomponents.com](http://www.essentracomponents.com)



GIVE US A CALL  
800 847 0486



SEND US AN EMAIL  
[sales@essentracomponents.com](mailto:sales@essentracomponents.com)



SEND US A FAX  
866 561 6617



**WS-SE Series**  
Wire Saddle - Side Entry



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5

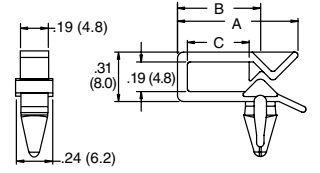


Figure 6

**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



Figure 7



Figure 8

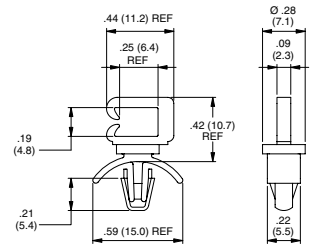


Figure 9

Item No.		Approval	Figure	A Ref.		B		C Ref.		Ø Mounting Hole		Panel Thickness		Bulk Pack Qty
UL94 V-2	UL94 V-0			in	mm	in	mm	in	mm	in	mm	in	mm	
WS-SE-A-1-01	WS-SE-A-1-19	—	1	—	—	—	—	—	—	0.187	4.8	0.031 - 0.078	0.8 - 2.0	1000
WS-SE-A-2-01	WS-SE-A-2-19	—	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	—	—	—	—	—	—	0.187	4.8	0.024 - 0.071	0.6 - 1.8	1000
WS-SE-A-4-01	WS-SE-A-4-19	—	4	—	—	—	—	—	—	0.256	6.5	0.031 - 0.078	0.8 - 2.0	1000
WS-SE1-1-01	—	UL	5	0.19	4.8	0.09	2.4	0.50	12.7	0.138	3.5	0.020 - 0.063	0.5 - 1.6	1000
WS-SE1-2-01	—	UL	5	0.26	6.7	0.16	4.2	0.59	15.1	0.138	3.5	0.020 - 0.063	0.5 - 1.6	1000
WS-SE1-3-01	—	UL	5	0.34	8.5	0.23	5.7	0.81	20.3	0.138	3.5	0.020 - 0.063	0.5 - 1.6	1000
WS-SE2-1-01	—	UL	6	0.65	16.6	0.41	10.5	0.28	7.1	0.187	4.8	0.020 - 0.063	0.5 - 1.6	1000
WS-SE2-2-01	—	UL	6	0.77	19.5	0.53	13.4	0.39	10.0	0.187	4.8	0.020 - 0.063	0.5 - 1.6	1000
WS-SE3-1-01	—	—	7	—	—	—	—	—	—	0.314	8.0	0.062 - 0.102	1.6 - 2.6	1000
LWS-SE2-1-01	—	UL	8	0.27	6.9	0.38	9.7	0.67	17.0	0.187	4.8	0.020 - 0.063	0.5 - 1.6	1000
LWS-SE2-2-01	—	UL	8	0.40	10.2	0.53	13.5	0.8	20.8	0.187	4.8	0.020 - 0.063	0.5 - 1.6	1000
—	WS-SE-C-1-19	—	9	—	—	—	—	—	—	0.187	4.8	0.031 - 0.078	0.8 - 2.0	1000

**SMWSLT Series**  
Side Mount Wire Saddle



**Specifications:**

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

**Features:**

- No protrusion through the chassis
- No risk of rotation
- Easy to install
- Removable by depressing locking tab
- Cables are locked in place yet easily removed



Mounting Dimensions



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



# WIRE SADDLES

## WS/WWS/WSBH Series Wire Saddle



Figure 1



Figure 2



Figure 3



Figure 4

Specifications:

- Material: Nylon 6/6
- Color: Natural
- Depth: 0.22 (5.6)

Features:

- Gathers and routes cables or wires
- WSBH parts are designed to mount in blind holes

Item No.		A Ref.		B Ref.		Ø Mounting Hole		Panel Thickness		Bulk Pack Qty		
UL94V-2	UL94 V-0	Approval	Figure	in	mm	in	mm	in	mm	in	mm	
WS-1-01	WS-1-19	RU	1	0.52	13.2	0.19	4.8	0.187	4.8	0.062	1.6	1000
WS-A-1-01	WS-A-1-19	RU	2	0.52	13.2	0.19	4.8	0.187	4.8	0.062	1.6	1000
WSBH-1-01	—	RU	4	0.52	13.2	0.19	4.8	0.312	7.9	0.250	6.4	1000
WS-2-01	WS-2-19	RU	1	0.71	18.0	0.38	9.7	0.187	4.8	0.062	1.6	1000
WS-A-2-01	WS-A-2-19	RU	2	0.71	18.0	0.38	9.7	0.187	4.8	0.062	1.6	1000
WS-A-2-1-01	WS-A-2-1-19	RU	2	0.71	18.0	0.38	9.7	0.187	4.8	0.062	1.6	1000
WS-A-2-2-01	WS-A-2-2-19	RU	2	0.71	18.0	0.38	9.7	0.187	4.8	0.125	3.2	1000
WSBH-2-01	—	RU	4	0.71	18.0	0.38	9.7	0.312	7.9	0.250	6.4	1000
WWS-A-2-01	WWS-A-2-19	RU	3	0.77	19.6	0.50	12.7	0.187	4.8	0.047	1.19	1000
WS-3-01	WS-3-19	RU	1	1.07	27.2	0.74	18.8	0.187	4.8	0.062	1.6	1000
WS-A-3-01	WS-A-3-19	RU	2	1.07	27.2	0.74	18.8	0.187	4.8	0.062	1.6	1000
WS-A-2-3-01	WS-A-2-3-19	RU	2	1.07	27.2	0.74	18.8	0.187	4.8	0.125	3.2	1000
WSBH-3-01	—	RU	4	1.07	27.2	0.74	18.8	0.312	7.9	0.250	6.4	1000
WWS-A-3-01	WWS-A-3-19	RU	3	1.12	28.5	0.85	21.6	0.187	4.8	0.047	1.19	1000
WS-4-01	WS-4-19	RU	1	1.38	35.0	1.05	26.7	0.187	4.8	0.062	1.6	1000
WS-A-4-01	WS-A-4-19	RU	2	1.38	35.0	1.05	26.7	0.187	4.8	0.062	1.6	1000
WS-A-2-4-01	WS-A-2-4-19	RU	2	1.38	35.0	1.05	26.7	0.187	4.8	0.125	3.2	1000
WSBH-4-01	—	RU	4	1.38	35.0	1.05	26.7	0.312	7.9	0.250	6.4	1000

## WS-9/LWS-9 Series Quarter-Turn Wire Saddle



Figure 1

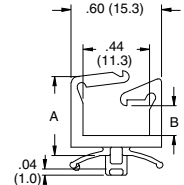


Figure 2



Mounting Hole Detail

Specifications:

- Material: UL94 V-2 Nylon 6/6
- Color: Natural
- Depth: 0.22 (5.6)

Features:

- Easily inserted and removed by turning 90°
- Low protrusion under board, only 1mm
- Available in locking and non-locking styles

Item No.		A Ref.		B Ref.		Panel Thickness		Bulk Pack Qty
Figure	in	mm	in	mm	in	mm		
WS-9-1-01	1	0.51	13.0	0.19	4.8	0.031 - 0.063	0.8 - 1.6	1000
WS-9-2-01	1	0.70	17.8	0.39	10.0	0.031 - 0.063	0.8 - 1.6	1000
WS-9-3-01	1	1.06	26.9	0.75	19.1	0.031 - 0.063	0.8 - 1.6	1000
WS-9-4-01	1	1.37	34.8	1.07	27.2	0.031 - 0.063	0.8 - 1.6	1000
LWS-9-1-01	2	0.51	13.0	0.15	3.8	0.031 - 0.063	0.8 - 1.6	1000
LWS-9-2-01	2	0.70	17.8	0.39	9.8	0.031 - 0.063	0.8 - 1.6	1000
LWS-9-3-01	2	1.06	26.9	0.75	19.1	0.031 - 0.063	0.8 - 1.6	1000
LWS-9-4-01	2	1.37	34.8	1.07	27.2	0.031 - 0.063	0.8 - 1.6	1000

WIRE SADDLES



LWS/WSLT Series  
Locking Wire/Cable Saddle

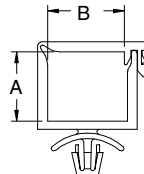


Figure 1



Figure 2



Figure 3



Figure 4



Figure 5

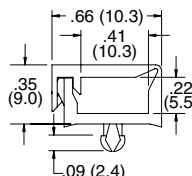


Figure 7



Figure 8



Figure 9

Specifications:

- Material: Nylon 6/6
- Color: Natural

Features:

- Cables are locked in place yet easily removable
- WSLT-9 includes a quarter-turn base
- WSLTRA has a releasable arrow-head for easy removal

Item No.		Approval	Figure	A		B		Ø Mounting Hole		Panel Thickness		Bulk Pack Qty
UL94 V-2	UL94 V-0			in	mm	in	mm	in	mm	in	mm	
• WSLC-1-01	—	—	9	0.079	6.0	0.236	6.0	0.138	3.5	0.031 - 0.087	0.8 - 2.2	1000
WSLT-3.5-2-1-01	WSLT-3.5-2-1-19	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	
• WSLC-2-01	—	—	9	0.157	4.0	0.236	6.0	0.138	3.5	0.031 - 0.087	0.8 - 2.2	1000
• WSLC-3-01	—	—	9	0.157	4.0	0.354	9.0	0.138	3.5	0.031 - 0.087	0.8 - 2.2	1000
• WSLC-5-01	—	—	9	0.157	4.0	0.472	12.0	0.138	3.5	0.031 - 0.087	0.8 - 2.2	1000
WSLT-01A-01	WSLT-01A-19	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	
• WSLC-4-01	—	—	9	0.236	6.0	0.354	9.0	0.138	3.5	0.031 - 0.087	0.8 - 2.2	1000
• WSLC-6-01	—	—	9	0.236	6.0	0.472	12.0	0.138	3.5	0.031 - 0.087	0.8 - 2.2	1000
WSLT-01-2-01	WSLT-01-2-19	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-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-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	—	—	—	—	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-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
WSLT-T-01A-19	—	—	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

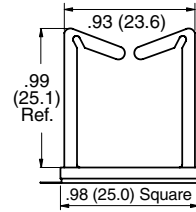


# WIRE SADDLES

## WWSB Series 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

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



Figure 1



Figure 2



Figure 3



Figure 4

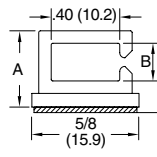


Figure 5



Figure 6



Figure 7

Specifications:

- Material: Nylon 6/6
- Color: Natural

Features:

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

Item No.		Approval	Figure	A Ref.		B Ref.		C Ref.		D Ref.		E Ref.		G Ref.		Depth		Bulk Pack Qty
UL94 V-2	UL94 V-0			in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
MWSEB-1-01A-RT	MWSEB-1-19A-RT	UL	1	0.16	4.0	0.05	1.3	0.28	7.0	0.19	4.8	0.06	1.6	0.37	9.5	See Fig. 1	1000	
MWSEB-2-01A-RT	MWSEB-2-19A-RT	UL	1	0.24	6.0	0.13	3.3	0.28	7.0	0.19	4.8	0.06	1.6	0.37	9.5	See Fig. 1	1000	
MWSEB-3-01A-RT	MWSEB-3-19A-RT	UL	1	0.29	7.3	0.12	3.0	0.35	9.0	0.26	6.6	0.08	2.0	0.50	12.7	See Fig. 1	1000	
MWSEB-4-01A-RT	MWSEB-4-19A-RT	UL	1	0.36	9.2	0.19	4.8	0.43	10.8	0.32	8.0	0.08	2.0	0.50	12.7	See Fig. 1	1000	
MWSEB-5-01A-RT	MWSEB-5-19A-RT	UL	1	0.44	11.2	0.23	5.8	0.47	11.9	0.36	9.1	0.08	2.0	0.50	12.7	See Fig. 1	1000	
MWSEB-6-01A-RT	MWSEB-6-19A-RT	UL	1	0.51	13.0	0.33	8.4	0.47	12.0	0.36	9.2	0.08	2.0	0.50	12.7	See Fig. 1	1000	
MWSB-1-01A-RT	MWSB-1-19A-RT	UL	2	—	—	—	—	—	—	—	—	—	—	—	—	See Fig. 2	1000	
WSB-2-01A-RT	—	UL	3	—	—	—	—	—	—	—	—	—	—	—	0.480	12.1	1000	
MWSSEB-1-01A-RT	MWSSEB-1-19A-RT	UL	4	—	—	—	—	—	—	—	—	—	—	—	0.375	9.5	1000	
MWSSEBE-1-01A	MWSSEBE-1-19A	UL	4	—	—	—	—	—	—	—	—	—	—	—	0.500	12.7	1000	
WS-SE-B-1-01A	—	UL	5	0.45	11.4	0.22	5.6	—	—	—	—	—	—	—	0.375	9.5	1000	
WS-SE-B-2-01A	—	UL	5	0.675	17.1	0.450	11.4	—	—	—	—	—	—	—	0.375	9.5	1000	
—	WSLTB-03A-19A	—	6	—	—	—	—	—	—	—	—	—	—	—	0.750	19.0	1000	
—	WS-SE-C-19A2-RT	—	7	—	—	—	—	—	—	—	—	—	—	—	0.374	9.5	1000	



**OFNS Series**  
Optical Fiber Wire Saddle

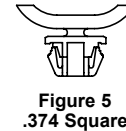
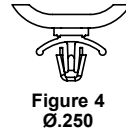
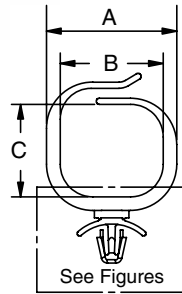


Specifications:

- Material: Nylon 6/6
- Color: Natural

Features:

- No stress is applied to fiber upon entry
- Smooth, rounded corners
- Six mounting styles



Item No.		Figure	A Ref.		B Ref.		C Ref.		Ø Mounting Hole		Panel Thickness		Depth		Bulk Pack Qty
UL94 V-2	UL94 V-0		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
OFNS-13-187-01	OFNS-13-187-19	1	1.06	26.8	0.83	21.2	0.75	19.0	0.187	4.8	0.031 - 0.079	0.8 - 2.0	0.27	6.9	1000
OFNS-13-312-01	OFNS-13-312-19	2	1.06	26.8	0.83	21.2	0.75	19.0	0.312	7.9	0.031 - 0.063	0.8 - 1.6	0.27	6.9	1000
OFNS-13-250-01	OFNS-13-250-19	4	1.06	26.8	0.83	21.2	0.75	19.0	0.250	6.4	0.031 - 0.079	0.8 - 2.0	0.27	6.9	1000
OFNS13-S9.5M-01	OFNS13-S9.5M-19	5	1.06	26.8	0.83	21.2	0.75	19.0	.374 Square	9.5 Square	0.031 - 0.079	0.8 - 2.0	0.27	6.9	1000
OFNSB-13-01A-RT	OFNSB-13-19A-RT	6	1.06	26.8	0.83	21.2	0.75	19.0	Adhesive	Adhesive	Adhesive	Adhesive	0.27	6.9	500
OFNS-16-187-01	OFNS-16-187-19	1	1.35	34.3	1.13	28.7	0.99	25.1	0.187	4.8	0.031 - 0.079	0.8 - 2.0	0.27	6.9	1000
OFNS-16-312-01	OFNS-16-312-19	2	1.35	34.3	1.13	28.7	0.99	25.1	0.312	7.9	0.031 - 0.063	0.8 - 1.6	0.27	6.9	1000
OFNS-16-S307-01	OFNS-16-S307-19	3	1.35	34.3	1.13	28.7	0.99	25.1	.307 Square	7.8 Square	0.031 - 0.079	0.8 - 2.0	0.27	6.9	1000
OFNS16-S9.5M-01	OFNS16-S9.5M-19	4	1.35	34.3	1.13	28.7	0.99	25.1	.374 Square	9.5 Square	0.031 - 0.079	0.8 - 2.0	0.27	6.9	1000
OFNSB-16-01A-RT	OFNSB-16-19A-RT	6	1.35	34.3	1.13	28.7	0.99	25.1	Adhesive	Adhesive	Adhesive	Adhesive	0.27	6.9	500
OFNS28-S9.5M-01	OFNS28-S9.5M-19	5	1.35	34.3	1.13	28.7	0.99	25.1	.374 Square	9.5 Square	0.031 - 0.079	0.8 - 2.0	0.27	6.9	500

**MOFNSA/MOFNSP/MOFNSB Series**  
Mini Optical Fiber Wire Saddle



Specifications:

- Material: Nylon 6/6
- Color: Natural

Features:

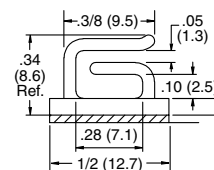
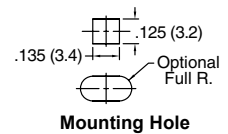
- Design eliminates stress to fiber upon entry
- Smooth, rounded corners



**Figure 1**



**Figure 2**



**Figure 3**

Item No.		Figure	Ø Mounting Hole		Panel Thickness		Depth		Bulk Pack Qty
UL94 V-2	UL94 V-0		in	mm	in	mm	in	mm	
MOFNSA-2-01	MOFNSA-2-19	1	0.125	3.2	0.093	2.4	0.125	3.2	1000
MOFNSP-2-01	MOFNSP-2-19	2	See Figure 2		0.063	1.6	0.125	3.2	1000
MOFNSB-2-01A-RT	MOFNSB-2-19A-RT	3			Adhesive Mount		0.375	9.5	1000



# WIRE SADDLES

## MWS Series Micro Wire Saddle

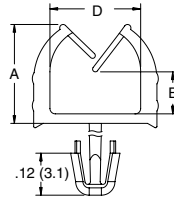


Figure 1

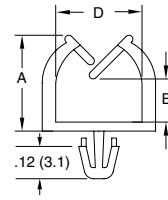


Figure 2

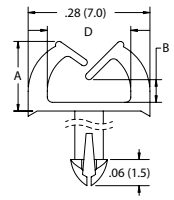


Figure 3

Specifications:

- Material: Nylon 6/6
- Color: Natural

Features:

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

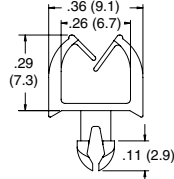


Figure 4

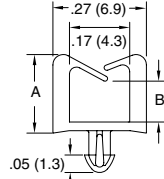


Figure 5

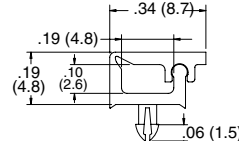


Figure 6

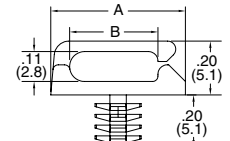


Figure 7

Item No.		A Ref.		B Ref.		D		Ø Mounting Hole		Panel Thickness		Bulk Pack Qty		
UL94 V-2	UL94 V-0	Approval	Figure	in	mm	in	mm	in	mm	in	mm			
MWSET1-1-01	MWSET1-1-19	UL	3	0.16	4.0	0.04	0.9	0.19	4.8	0.067	1.7	0.063	1.6	1000
MWSET1-1-01	MWSET1-1-1-19	UL	3	0.16	4.0	0.04	0.9	0.190	4.8	0.067	1.7	0.093	2.4	1000
MWS-1-01	MWS-1-19	UL	5	0.23	5.8	0.12	3.0	See Figure 5	0.070	1.8	0.062	1.6	1000	
MWS1-1-01	MWS1-1-19	—	5	0.23	5.8	0.12	3.0	See Figure 5	0.070	1.8	0.093	2.4	1000	
MWSET1-2-01	MWSET1-2-19	UL	3	0.24	6.0	0.11	2.9	0.19	4.8	0.067	1.7	0.063	1.6	1000
MWSET1-2-1-01	MWSET1-2-1-19	UL	3	0.24	6.0	0.11	2.9	0.19	4.8	0.067	1.7	0.093	2.4	1000
MWSEA1-1-01	MWSEA1-1-19	UL	1	0.29	7.3	0.12	3.0	0.26	6.6	0.118	3.0	0.063	1.6	1000
MWSEA2-1-01	MWSEA2-1-19	UL	1	0.29	7.3	0.12	3.0	0.26	6.6	0.138	3.5	0.063	1.6	1000
MWSEA1-1-1-01	MWSEA1-1-1-19	UL	1	0.29	7.3	0.12	3.0	0.26	6.6	0.118	3.0	0.093	2.4	1000
MWSEA2-1-1-01	MWSEA2-1-1-19	UL	1	0.29	7.3	0.12	3.0	0.26	6.6	0.138	3.5	0.093	2.4	1000
MWSEA1-2-01	MWSEA1-2-19	UL	1	0.36	9.1	0.16	3.9	0.32	8.1	0.118	3.0	0.063	1.6	1000
MWSEA2-2-01	MWSEA2-2-19	UL	1	0.36	9.1	0.16	3.9	0.32	8.1	0.138	3.5	0.063	1.6	1000
MWSEA1-1-2-01	MWSEA1-1-2-19	UL	1	0.36	9.1	0.16	3.9	0.32	8.1	0.118	3.0	0.093	2.4	1000
MWSEA2-1-2-01	MWSEA2-1-2-19	UL	1	0.36	9.1	0.16	3.9	0.32	8.1	0.138	3.5	0.093	2.4	1000
MWSEA3-2-01	MWSEA3-2-19	UL	2	0.36	9.1	0.16	3.9	0.32	8.1	0.138	3.5	0.063	1.6	1000
MWSEA1-3-01	MWSEA1-3-19	UL	1	0.44	11.2	0.24	6.0	0.36	9.1	0.118	3.0	0.063	1.6	1000
MWSEA2-3-01	MWSEA2-3-19	UL	1	0.44	11.2	0.24	6.0	0.36	9.1	0.138	3.5	0.063	1.6	1000
MWSEA1-1-3-01	MWSEA1-1-3-19	UL	1	0.44	11.2	0.24	6.0	0.36	9.1	0.118	3.0	0.093	2.4	1000
MWSEA2-1-3-01	MWSEA2-1-3-19	UL	1	0.44	11.2	0.24	6.0	0.36	9.1	0.138	3.5	0.093	2.4	1000
—	MWS-2-19	—	5	0.44	11.2	0.33	8.5	See Figure 5	0.070	1.8	0.063	1.6	1000	
—	MWS-3-19	—	5	0.44	11.2	0.33	8.5	See Figure 5	0.070	1.8	0.087	2.2	1000	
MWSEA1-4-01	MWSEA1-4-19	UL	1	0.51	13.0	0.30	7.7	0.36	9.1	0.118	3.0	0.063	1.6	1000
MWSEA2-4-01	MWSEA2-4-19	UL	1	0.51	13.0	0.30	7.7	0.36	9.1	0.138	3.5	0.063	1.6	1000
MWSEA1-1-4-01	MWSEA1-1-4-19	UL	1	0.51	13.0	0.30	7.7	0.36	9.1	0.118	3.0	0.093	2.4	1000
MWSEA2-1-4-01	MWSEA2-1-4-19	UL	1	0.51	13.0	0.30	7.7	0.36	9.1	0.138	3.5	0.093	2.4	1000
MWSET2-1-01	MWSET2-1-19	UL	4					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	0.50	12.7	0.33	8.8	See Figure 7	0.156	4.0	0.040 - 0.160	1.0 - 4.1	1000	
MBHWSSE-1-1-01	—	—	7	0.67	17.0	0.49	12.5	See Figure 7	0.156	4.0	0.040 - 0.160	1.0 - 4.1	1000	

## MWSELF/SMWS Series Standoff Micro Wire Saddle

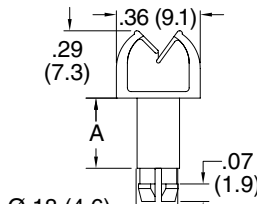


Figure 1

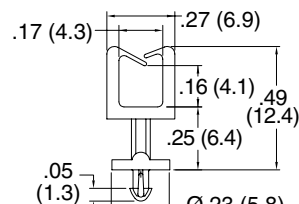


Figure 2



Specifications:

- Material: Nylon 6/6
- Color: Natural

Features:

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

Item No.		A		Ø Mounting Hole		Panel Thickness		Bulk Pack Qty	
UL94 V-2	UL94 V-0	Figure	in	mm	in	mm	in	mm	
MWSELF-1-4.1-01	MWSELF-1-4.1-19	1	0.16	4.1	0.15	3.8	0.063	1.6	1000
MWSELF-1-7.7-01	MWSELF-1-7.7-19	1	0.30	7.7	0.15	3.8	0.063	1.6	1000
MWSELF-2-4.1-01	MWSELF-2-4.1-19	1	0.16	4.1	0.15	3.8	0.079	2.0	1000
MWSELF-2-7.7-01	MWSELF-2-7.7-19	1	0.30	7.7	0.15	3.8	0.079	2.0	1000
SMWS-1-01	SMWS-1-19	2	See Figure 2		0.07	1.8	0.062	1.6	1000
SMWS1-1-01	SMWS1-1-19	2	See Figure 2		0.07	1.8	0.093	2.4	1000

# WIRE SADDLES & FLAT CABLE CLAMPS



## WSLTB/MWSLTB Series Wire Saddle Locking Top

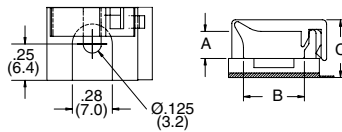


Figure 1

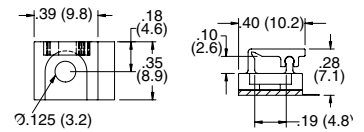


Figure 2

**Specifications:**

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

**Features:**

- Gathers, routes and locks cables and wires

Item No.	Mounting Method	Figure	A		B		C Ref.		Bulk Pack Qty
			in	mm	in	mm	in	mm	
WSLTB-01A-19A	Adhesive	1	0.19	4.8	0.42	10.7	0.41	10.4	1000
WSLTB-01A-19	#4 or M3 Screw or SR-30XX Rivet	1	0.19	4.8	0.42	10.7	0.38	9.6	1000
WSLTB-02A-19A	Adhesive	1	0.39	10.0	0.64	16.3	0.61	15.5	1000
WSLTB-02A-19	#4 or M3 Screw or SR-30XX Rivet	1	0.39	10.0	0.64	16.3	0.58	14.7	1000
MWSLTB-1-19A-RT	Adhesive	2			See Figure 2				1000
MWSLTB-1-19	#4 or M3 Screw or SR-30XX Rivet	2			See Figure 2				1000

## SWC Series 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.	Ø D Holding		Base		Bulk Pack Qty
	in	mm	in	mm	
SWC-0	0.03 - 0.06	0.8 - 1.5	0.51 x 0.38	13.0 x 9.5	1000

## MCC Series Adhesive Mount Micro Cable Clamp



**Specifications:**

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

**Features:**

- Low profile and small footprint take up little real estate
- Center rib gently grips cables
- Convenient latch is releasable for maintenance
- Easily mounted with adhesive base

Item No.	Max Cable Thickness		Max Cable Width		Bulk Pack Qty
	in	mm	in	mm	
MCC-1-01A-BK	0.040	1.0	0.23	5.8	1000

## FCWSS Series Flat Cable Wire 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		Panel Hole Ø		Panel Thickness		Bulk Pack Qty
	in	mm	in	mm	in	mm	
FCWSS-1-01BK	0.189	4.8	0.158	4.0	0.032 - 0.064	0.8 - 1.6	1000
FCWSS-2-01BK	0.394	10.0	0.158	4.0	0.032 - 0.064	0.8 - 1.6	1000

## FCCE Series Flat Cable Clamp



**Specifications:**

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

**Features:**

- Holds down ribbon cable
- Extremely low profile

Item No.	Max. Cable Width		Panel Thickness		Depth		Bulk Pack Qty
	in	mm	in	mm	in	mm	
FCCE-9-01	0.250	6.4	0.039 - 0.047	1.0 - 1.2	0.28	7.0	1000



# FLAT CABLE CLAMPS

## CFCC Series Side Load Flat Cable Clamp

**Specifications:**

- Material: See Table
- Color: See Table

**Features:**

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



Item No.	A		B Ref.		C		Depth		Material	Color	Bulk Pack Qty
	in	mm	in	mm	in	mm	in	mm			
CFCC-3-05A-RT	0.563	14.3	0.49	12.5	0.18	4.6	1.00	25.4	UL94 V-1 PPE/PS	White	1000
CFCC-4-05A-RT	0.563	14.3	0.42	10.7	0.25	6.4	1.00	25.4	UL94 V-1 PPE/PS	White	1000
CFCC-8-05A-RT	1.062	27.0	0.88	22.4	0.25	6.4	1.00	25.4	UL94 V-1 PPE/PS	White	1000
CFCC-8-04A-RT	1.062	27.0	0.88	22.4	0.25	6.4	1.00	25.4	UL94 V-0 PVC	Grey	1000

## CFCCS Series Split Flat Cable Clamp On Adhesive Base

**Specifications:**

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

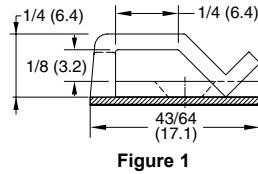
**Features:**

- Tension arm securely holds down flat ribbon cable



Item No.	Bulk Pack Qty
CFCCS-8-01A	1000

## SFCC Series Split Flat Cable Clamp



**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		Mounting Method	Figure	Bulk Pack Qty
	in	mm			
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 Series 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.	Ø Mounting Hole		Panel Thickness		Base		Bulk Pack Qty
	in	mm	in	mm	in	mm	
CFCCA-1-01	0.187	4.8	0.310 - 0.078	0.8 - 2.0	0.56 x 0.63	14.3 x 15.9	1000

## TFCCA Series Flat Cable 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		C		E		Ø Mounting Hole		Panel Thickness		Depth		Bulk Pack Qty
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
TFCCA-15-01	10	0.57	14.5	0.591	15.0	0.56	14.1	0.156	4.0	0.040 - 0.079	1.0 - 2.0	0.36	9.1	100
TFCCA-25-01	20	0.97	24.7	0.787	20.0	0.50	12.7	0.156	4.0	0.040 - 0.079	1.0 - 2.0	0.52	13.2	100
TFCCA-40-01	40	2.13	54.1	1.575	40.0	0.64	16.3	0.156	4.0	0.040 - 0.079	1.0 - 2.0	0.39	10.0	100
TFCCA-50-01	50	2.51	63.8	1.957	49.7	0.54	13.7	0.156	4.0	0.040 - 0.079	1.0 - 2.0	0.40	10.2	100

# FLAT CABLE CLAMPS



## TFCM Series 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		
<b>TFCM-25S</b>	0.87	22.0	1.06	27.0	0.12	3.0	1.26	32.0	0.39	10.0	15 Pln	200
<b>TFCM-25</b>	1.15	29.3	1.44	36.5	0.12	3.0	1.57	40.0	0.39	10.0	20 Pln	200
<b>TFCM-25M</b>	2.20	55.8	2.41	61.2	0.16	4.0	2.59	66.0	0.59	15.0	40 Pln	100

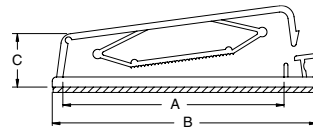
## TFCC Series Flat Cable Clamp with Tension on Adhesive Base

**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	
<b>TFCC-30-01</b>	30	1.26	32.0	1.77	45.0	0.62	15.8	0.73	18.6	100
<b>TFCC-40-01</b>	40	2.13	54.0	2.64	67.0	0.62	15.8	0.62	15.8	100
<b>TFCC-50-01</b>	50	2.57	65.2	3.09	78.4	0.62	15.8	0.74	18.8	100

## FCCS Series Flat Cable Clamp

**Specifications:**

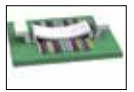
- Material: UL94 V-0 Nylon 6/6
- Color: Natural

**Features:**

- Very low profile
- Designed to firmly hold down flat ribbon cable
- Easily removable from the top of the panel



Mounting Holes



Item No.	A		B		D		Depth		Bulk Pack Qty
	in	mm	in	mm	in	mm	in	mm	
<b>FCCS-1</b>	1.06	27.0	0.59	15.0	0.13	3.4	0.28	7.0	500
<b>FCCS-2</b>	1.65	42.0	1.18	30.0	0.15	3.7	0.28	7.0	500
<b>FCCS-3</b>	1.85	47.0	1.38	35.0	0.15	3.7	0.28	7.0	500
<b>FCCS-4</b>	2.24	57.0	1.77	45.0	0.15	3.7	0.28	7.0	500
<b>FCCS-5</b>	2.83	72.0	2.36	60.0	0.15	3.7	0.28	7.0	500

## RDAFCC Series Flat Cable Clamp

**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

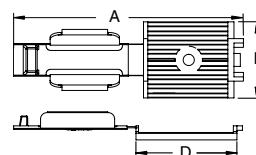


Figure 1

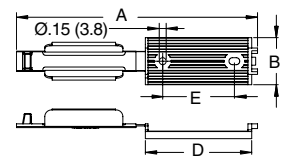


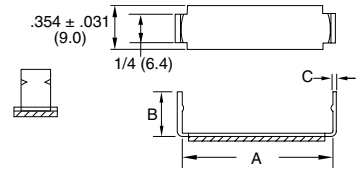
Figure 2

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	
<b>RDAFCC-25</b>	1	1.000	25.4	#6 or M3.5 Screw	2.984	75.8	0.984	25.0	1.169	29.7	—	—	100
<b>RDAFCC-25A</b>	1	1.000	25.4	Adhesive	2.984	75.8	0.984	25.0	1.169	29.7	—	—	100
<b>RDAFCC-50</b>	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
<b>RDAFCC-50A</b>	2	2.000	50.8	Adhesive	5.059	128.5	0.984	25.0	2.224	56.5	1.496	38.0	100
<b>RDAFCC-82</b>	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
<b>RDAFCC-82A</b>	2	3.000	76.2	Adhesive	7.062	179.4	1.000	25.4	3.259	82.8	1.496	38.0	100



# FLAT CABLE CLAMPS

## AFCC Series Aluminum Flat Cable Clamp on Adhesive Base



**Specifications:**

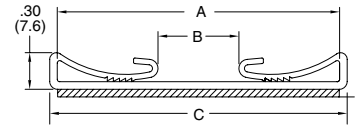
- Material: Aluminum
- Color: Bright Finish

**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	0.02	0.5	0.350	9.0	250
AFCC-12	0.750	19.1	0.250	6.4	0.02	0.5	0.350	9.0	250
AFCC-16	1.000	25.4	0.312	7.9	0.02	0.5	0.350	9.0	250
AFCC-20	1.250	31.8	0.375	9.5	0.02	0.5	0.350	9.0	250
AFCC-21	1.312	33.3	0.385	9.8	0.02	0.5	0.350	9.0	250
AFCC-24	1.500	38.1	0.437	11.1	0.02	0.5	0.350	9.0	250
AFCC-28	1.750	44.5	0.500	12.7	0.03	0.8	0.350	9.0	250
AFCC-32	2.000	50.8	0.562	14.3	0.03	0.8	0.350	9.0	250

## DFCC Series Dual Flat Cable Clamp on Adhesive Base



**Specifications:**

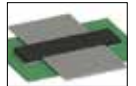
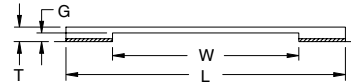
- Material: UL94 V-0 PVC
- Color: Black

**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 Series Flat Cable Clamp on Adhesive Base



**Specifications:**

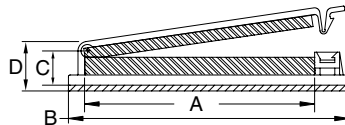
- Material: UL94 V-0 PVC
- Color: Black

**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	1.50	38.1	0.50	12.7	0.156	4.0	0.093	2.4	0.500	12.7	100
FCC-8-3-RT	2.00	50.8	1.00	25.4	0.156	4.0	0.093	2.4	0.500	12.7	100
FCC-16-3-RT	3.00	76.2	2.00	50.6	0.156	4.0	0.093	2.4	0.500	12.7	100

## FCWSF Series 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
	in	mm	in	mm	in	mm	in	mm	in	mm	Latch Side		Base Side			
FCWSF-29-19	1.24	31.5	1.78	45.1	0.30	7.7	0.44	11.1	0.74	18.9	0.13	3.3	0.13	3.3	1	100
FCWSF-30-19	1.24	31.5	1.79	45.5	0.35	9.0	0.52	13.1	0.75	19.1	0.13	3.3	0.19	4.8	1	100
FCWSF-40-19	1.55	39.3	2.09	53.0	0.37	9.3	0.53	13.4	0.75	19.1	0.13	3.3	0.19	4.8	1	100
FCWSF-50-19	2.49	63.2	3.04	77.2	0.36	9.1	0.52	13.2	0.75	19.1	0.13	3.3	0.19	4.8	1	100



**FCRC Series  
Flat Cable Routing 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
w/o Adhesive	w/ Adhesive	in	mm	in	mm	in	mm		in	mm	
FCRC-13B-4	FCRC-13B-4A-RT	2.04	51.7	1.62	41.2	0.500	12.7	FCRC-13C	2.24	56.8	100
FCRC-19B-4	FCRC-19B-4A-RT	2.72	69.1	2.31	58.7	0.500	12.7	FCRC-19C	2.92	74.2	100
FCRC-21B-4	FCRC-21B-4A-RT	2.98	75.7	2.55	64.8	0.500	12.7	FCRC-21C	3.17	80.5	100
FCRC-26B-4	FCRC-26B-4A-RT	3.66	93.0	3.24	82.3	0.500	12.7	FCRC-26C	3.86	98.0	100
FCRC-13B-6	FCRC-13B-6A-RT	2.04	51.7	1.62	41.2	0.750	19.1	FCRC-13C	2.24	56.8	100
FCRC-19B-6	FCRC-19B-6A-RT	2.72	69.1	2.31	58.7	0.750	19.1	FCRC-19C	2.92	74.2	100
FCRC-21B-6	FCRC-21B-6A-RT	2.98	75.7	2.55	64.8	0.750	19.1	FCRC-21C	3.17	80.5	100
FCRC-26B-6	FCRC-26B-6A-RT	3.66	93.0	3.24	82.3	0.750	19.1	FCRC-26C	3.86	98.0	100

**FCLC/FCLCS Series  
Flat Cable Loop 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	1.50	38.1	2.00	50.8	0.23	5.8	500
FCLC	2.50	63.5	3.00	76.2	0.25	6.4	500

**FCW Series  
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	0.74	18.9	1.24	31.5	1.78	45.1	0.30	7.7	0.44	11.1	100
FCW-30-01	FCW-30-19	30	0.75	19.1	1.24	31.5	1.79	45.5	0.35	9.0	0.52	13.1	100
FCW-40-01	FCW-40-19	40	0.75	19.1	1.55	39.3	2.09	53.0	0.37	9.3	0.53	13.4	100
FCW-50-01	FCW-50-19	50	0.75	19.1	2.49	63.2	3.04	77.2	0.36	9.1	0.52	13.2	100
FCW-50H-01	FCW-50H-19	50	0.74	18.9	2.54	64.6	3.08	78.2	0.59	15.1	0.75	19.0	100

**FCCA/FCCB Series  
Arrowhead Mounted Cable Clamp**

Specifications:

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

Features:

- Convenient releasable latch allows easy addition and removal of cables
- Easily mounted into pre-drilled holes



Figure 1



Figure 2

Item No.	Figure	L		A		B		C		Panel Thickness		Depth		Bulk Pack Qty
		in	mm	in	mm	in	mm	in	mm	in	mm			
FCCA-30A-01	1	2.56	65.0	2.10	52.0	0.75	19.1	1.18	30.0	0.030 - 0.079	0.8 - 2.0	0.39	10.0	100
FCCA-40A-01	1	2.64	67.0	5.10	53.4	0.64	16.4	1.58	40.0	0.030 - 0.079	0.8 - 2.0	0.39	10.0	100
FCCB-1	2	3.03	77.0	2.54	64.5	0.28	7.2	2.54	64.5	0.031 - 0.078	0.8 - 2.0	0.79	20.0	100
FCCB-2	2	3.03	77.0	2.54	64.5	0.54	13.7	2.54	64.5	0.031 - 0.078	0.8 - 2.0	0.79	20.0	100



# CABLE CLAMPS & CLIPS

## FCSE Series 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

Item No.	Depth		Panel Thickness Max		Bulk Pack Qty
	in	mm	in	mm	
FCSE-1	0.752	19.0	0.073	1.4	100

## HFCC Series Hinged Cable Clamp



Figure 1

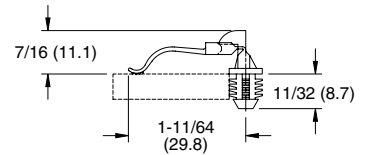


Figure 2



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		Panel Thickness		Figure	Bulk Pack Qty
	in	mm	in	mm		
HFCC-A-8-01	0.187	4.8	0.047 - 0.078	1.2 - 2.0	1	1000
HFCC-BH-8-01	0.312	7.9	0.250 min.	6.4 min.	2	1000

## TC Series Spring Clip



Specifications:

- Material: See Table
- Color: See Table

Features:

- Holds down round cable, ribbon cable, and tubing
- Mounts with a #6 screw or rivet
- Flexible enough that the cable can be removed without removing the clip
- All contact edges are rounded for product protection

Item No.	Holding Ø Max.		Mounting Screw	Material	Color	Bulk Pack Qty
	in	mm				
TC-30-1	0.37	9.4	#6 (M3/M3.5)	UL94 HB Acetal	Natural	1000
TC-30-1BK	0.37	9.4	#6 (M3/M3.5)	UL94 HB Acetal	Black	1000
TC-30-1-01	0.37	9.4	#6 (M3/M3.5)	UL94 V-2 Nylon 6/6	Natural	1000
TC-30-1-01BK	0.37	9.4	#6 (M3/M3.5)	UL94 V-2 Nylon 6/6	Black	1000

## STCV Series 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



**UMS Series**  
**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		Ø Max Bundle		R Radius		Bulk Pack Qty
w/ Adhesive	w/o Adhesive	lbs	kg	in	mm	in	mm	
UMS-16-45A-RT	UMS-16-45	50	23	1.000	25.4	0.500	12.7	100
UMS-24-45A-RT	UMS-24-45	50	23	1.500	38.1	0.750	19.1	100
UMS-32-45A-RT	UMS-32-45	50	23	2.000	50.8	1.000	25.4	100

**UCG Series**  
**Universal Cable Grip**



**Specifications:**

- Base Material: High-Density Polyethylene
- Insert Material: TPE
- Color: Black

**Features:**

- Pressure grips accommodate up to 7 cable bundles
- Cable grips are easily removed from the frame to accommodate larger cable bundles
- Cables are pushed into the product by hand and are easily removed
- Mount to panel using #6 or M3.5 screws



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

# PLASTIC FASTENERS

800 847 0486

[www.essentracomponents.com](http://www.essentracomponents.com)





# CABLE TIES

## CT/WITA Series Nylon Locking Cable Tie

### Specifications:

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

### Features:

- Complies with MS-3367 & MIL-S-23190E
- Service Temperature: -40°F to 185°F (-40°C to 85°C)
- UL 181B-C for UL non-metallic air ducts and connectors on CT080A, CT080B, CT082A & CT082B: recommended for use with R-6 & R-8 flex ducts found on page 101



Item No.		L Ref.		W Ref.		Ø Max Bundle		Tensile Strength		Classification	Bulk Pack Qty	
Natural	Black	Approval	in	mm	in	mm	in	mm	lbs			N
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	CT003E	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



**CTWR/WITA Series  
Weather Resistant Locking Cable Tie**



**Specifications:**

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

**Features:**

- Service Temperature: -40°F to 185°F (-40°C to 85°C)
- Designed for outdoor applications

Item No.	Approval	L Ref.		W Ref.		Ø Max Bundle		Tensile Strength		Classification	Bulk Pack Qty
		in	mm	in	mm	in	mm	lbs	N		
CTWR002A	UL	3.750	96.0	0.098	2.4	0.910	23.0	18	80	Miniature	100
WITA-18SF-UVB-M	UL	3.850	97.8	0.100	2.5	0.870	22.0	18	80	Miniature	1000
CTWR003A	UL	4.000	100.0	0.098	2.4	0.980	25.0	18	80	Miniature	100
WITA-18R-UVB-M	UL	4.720	120.0	0.100	2.5	1.060	26.9	18	80	Miniature	1000
CTWR004A	UL	4.750	120.0	0.098	2.5	1.180	30.0	18	80	Miniature	100
WITA-18L-UVB-M	UL	5.900	150.0	0.100	2.5	1.460	37.1	18	80	Miniature	1000
CTWR006A	UL	6.500	165.0	0.098	2.5	1.730	44.0	18	80	Miniature	100
WITA-18V-UVB-M	UL	7.870	200.0	0.100	2.5	2.130	54.1	18	80	Miniature	1000
CTWR007A	UL	8.000	203.0	0.098	2.5	2.170	55.0	18	80	Miniature	100
WITA-18X-UVB-M	UL	15.750	400.0	0.100	2.5	4.560	116.0	18	80	Miniature	1000
CTWR008A	UL	4.750	120.0	0.126	3.2	1.180	30.0	40	178	Intermediate	100
CTWR009A	UL	5.500	142.0	0.126	3.2	1.380	35.0	40	178	Intermediate	100
WITA-40R-UVB-C	UL	5.910	150.0	0.140	3.6	1.480	37.6	40	178	Intermediate	100
WITA-40L-UVB-M	UL	7.870	200.0	0.140	3.6	2.050	52.0	40	178	Intermediate	1000
CTWR101A	UL	8.000	203.0	0.126	3.2	2.170	55.0	40	178	Intermediate	100
WITA-40XL-UVB-M	UL	8.070	205.0	0.140	3.6	2.100	53.3	40	178	Intermediate	1000
CTWR1011A	UL	6.000	150.0	0.142	3.6	1.540	39.0	40	178	Intermediate	100
CTWR1012A	UL	8.000	203.0	0.142	3.6	2.170	55.0	40	178	Intermediate	100
CTWR1013A	UL	10.000	250.0	0.142	3.6	2.910	74.0	40	178	Intermediate	100
CTWR1014A	UL	10.500	265.0	0.142	3.6	3.070	78.0	40	178	Intermediate	100
CTWR1015A	UL	11.500	292.0	0.142	3.6	3.350	85.0	40	178	Intermediate	100
WITA-40VL-UVB-M	UL	11.810	300.0	0.140	3.6	3.270	83.0	40	178	Intermediate	1000
CTWR1016A	UL	13.000	330.0	0.142	3.6	3.780	96.0	40	178	Intermediate	100
CTWR1017A	UL	14.500	368.0	0.142	3.6	4.020	102.0	40	178	Intermediate	100
CTWR1018A	UL	7.000	180.0	0.142	3.6	1.930	49.0	40	178	Intermediate	100
WITA-50S-UVB-M	UL	6.300	160.0	0.180	4.6	1.520	38.7	50	222	Standard	1000
WITA-50R-UVB-M	UL	7.900	200.7	0.180	4.6	1.950	49.5	50	222	Standard	1000
CTWR19A	UL	8.000	203.0	0.181	4.6	2.170	55.0	50	222	Standard	100
CTWR020A	UL	4.750	120.0	0.189	4.8	1.180	30.0	50	222	Standard	100
CTWR021A	UL	6.500	160.0	0.189	4.8	1.650	42.0	50	222	Standard	100
CTWR022A	UL	7.500	190.0	0.189	4.8	2.050	52.0	50	222	Standard	100
CTWR023A	UL	10.000	250.0	0.189	4.8	2.910	74.0	50	222	Standard	100
CTWR024A	UL	11.000	280.0	0.189	4.8	3.190	81.0	50	222	Standard	100
WITA-50RL-UVB-M	UL	11.020	280.0	0.190	4.8	3.030	77.0	50	222	Standard	1000
CTWR025A	—	11.875	300.0	0.189	4.8	3.350	85.0	50	222	Standard	100
CTWR026A	UL	12.250	310.0	0.189	4.8	3.500	89.0	50	222	Standard	100
CTWR027A	UL	14.500	368.0	0.189	4.8	4.020	102.0	50	222	Standard	100
CTWR028A	UL	15.187	385.0	0.189	4.8	4.570	116.0	50	222	Standard	100
WITA-50L-UVB-M	UL	15.750	391.2	0.180	4.6	4.520	114.8	50	222	Standard	1000
CTWR029A	UL	17.000	432.0	0.189	4.8	4.920	125.0	50	222	Standard	100
CTWR030A	UL	17.750	450.0	0.189	4.8	5.120	130.0	50	222	Standard	100
CTWR031A	UL	19.687	500.0	0.189	4.8	5.910	150.0	50	222	Standard	100
CTWR033A	—	21.687	550.0	0.189	4.8	6.540	166.0	50	222	Standard	100
WITA-50XL-UVB-C	UL	25.000	635.0	0.190	4.8	7.480	190.0	50	222	Standard	100
CTWR063A	—	36.000	914.0	0.189	4.8	10.630	270.0	50	222	Standard	100
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	UL	8.600	218.0	0.300	7.6	2.010	51.0	120	534	Heavy Duty	500
CTWR067A	UL	9.437	240.0	0.299	7.6	2.600	66.0	120	534	Heavy Duty	100
CTWR068A	UL	11.000	280.0	0.299	7.6	3.070	78.0	120	534	Heavy Duty	100
CTWR069A	UL	11.875	300.0	0.299	7.6	3.500	88.0	120	534	Heavy Duty	100
CTWR070A	UL	13.500	340.0	0.299	7.6	3.900	99.0	120	534	Heavy Duty	100
CTWR071A	—	15.000	380.0	0.252	6.4	4.330	110.0	100	445	Heavy Duty	100
CTWR072A	UL	15.000	380.0	0.299	7.6	4.330	110.0	120	534	Heavy Duty	100
WITA-120R-UVB-D	UL	15.750	400.0	0.310	7.8	4.450	113.0	120	534	Heavy Duty	500
WITA-120L-UVB-D	UL	21.650	550.0	0.310	7.8	6.380	162.0	120	534	Heavy Duty	500
CTWR073A	UL	17.750	450.0	0.315	8.0	5.250	133.0	175	778	Heavy Duty	100
CTWR074A	UL	21.875	550.0	0.315	8.0	6.500	166.0	175	778	Heavy Duty	100
WITA-175R-UVB-L	UL	24.000	610.0	0.350	9.0	7.020	178.0	175	778	Heavy Duty	50
CTWR075A	UL	24.000	610.0	0.354	9.0	7.280	185.0	175	778	Heavy Duty	100
CTWR076A	UL	27.000	680.0	0.354	9.0	8.270	210.0	175	778	Heavy Duty	100
CTWR077A	UL	28.000	705.0	0.354	9.0	8.660	220.0	175	778	Heavy Duty	100
CTWR079A	UL	32.000	812.0	0.354	9.0	9.690	246.0	175	778	Heavy Duty	100
CTWR080A	UL	36.000	914.0	0.354	9.0	10.630	270.0	175	778	Heavy Duty	100
WITA-175L-UVB-Q	UL	36.000	914.0	0.350	9.0	10.910	277.0	175	778	Heavy Duty	25
CTWR081A	UL	46.000	1168	0.354	9.0	14.170	360.0	175	778	Heavy Duty	100
CTWR082A	UL	48.000	1219	0.354	9.0	15.000	380.0	175	778	Heavy Duty	100
CTWR084A	—	59.000	1500	0.354	9.0	18.270	464.0	175	778	Heavy Duty	100



# CABLE TIES

## CTHD Series Extra Heavy Duty Cable Tie



**Specifications:**

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

**Features:**

- Service Temperature: -40°F to 185°F (-40°C to 85°C)
- High tensile strength for demanding applications



Item No.				L		W		Ø Max Bundle		Tensile Strength		Classification	Bulk Pack Qty
Natural	Approval	Black	Approval	in	mm	in	mm	in	mm	lbs	N		
CTHD001A		CTHD001B	—	9.06	230.0	0.500	12.7	2.480	63.0	250	1113	Extra Heavy Duty	100
CTHD002A		CTHD002B	—	11.02	280.0	0.500	12.7	3.150	80.0	250	1113	Extra Heavy Duty	100
CTHD003A		CTHD003B	—	14.96	380.0	0.500	12.7	4.330	110.0	250	1113	Extra Heavy Duty	100
CTHD004A	—	CTHD004B	—	18.90	480.0	0.500	12.7	5.510	140.0	250	1113	Extra Heavy Duty	100
CTHD005A		CTHD005B		21.65	550.0	0.500	12.7	6.540	166.0	250	1113	Extra Heavy Duty	100
CTHD006A	—	CTHD006B	—	22.83	580.0	0.500	12.7	6.890	175.0	250	1113	Extra Heavy Duty	100
CTHD007A	—	CTHD007B	—	28.74	730.0	0.500	12.7	8.860	225.0	250	1113	Extra Heavy Duty	100
CTHD008A	—	CTHD008B	—	34.65	880.0	0.500	12.7	10.510	267.0	250	1113	Extra Heavy Duty	100
CTHD009A	—	CTHD009B	—	40.55	1030.0	0.500	12.7	12.480	317.0	250	1113	Extra Heavy Duty	100

## CT Series Colored Locking Cable Tie



**Specifications:**

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



Item No.					L Ref.		W Ref.		Ø Max Bundle		Tensile Strength		Classification	Bulk Pack Qty	
Green	Red	Yellow	Blue	Silver	Approval	in	mm	in	mm	in	mm	lbs			N
CT003G	CT003K	CT003Y	CT003L	CT003S		3.94	100.0	0.098	2.5	0.980	25.0	18	80	Miniature	100
CT007G	CT007K	CT007Y	CT007L	CT007S		8.00	203.0	0.098	2.5	2.170	55.0	18	80	Miniature	100
CT010G	CT010K	CT010Y	CT010L	CT010S		5.91	150.0	0.142	3.6	1.540	39.0	40	178	Intermediate	100
CT013G	CT013K	CT013Y	CT013L	CT013S		9.84	250.0	0.142	3.6	2.910	74.0	40	178	Intermediate	100
CT022G	CT022K	CT022Y	CT022L	CT022S		8.00	203.0	0.181	4.6	2.170	55.0	50	222	Standard	100
CT025G	CT025K	CT025Y	CT025L	CT025S		11.81	300.0	0.189	4.8	3.350	85.0	50	222	Standard	100
CT027G	CT027K	CT027Y	CT027L	CT027S		14.49	368.0	0.189	4.8	4.020	102.0	50	222	Standard	100
CT072G	CT072K	CT072Y	CT072L	CT072S		14.96	380.0	0.299	7.6	4.330	110.0	120	534	Heavy Duty	100

## Polypropylene Locking Cable Tie

**Specifications:**

- Material: Polypropylene
- Color: Black

**Features:**

- Excellent chemical resistance
- Moisture levels are relatively unaffected by variations in moisture levels
- Buoyant



Item No.	L Ref.		W Ref.		Ø Max Bundle		Tensile Strength		Bulk Pack Qty
	in	mm	in	mm	in	mm	lbs	N	
1293369	5.90	150.0	0.14	3.6	1.42	36.1	18	80	100
1293370	8.00	203.0	0.18	4.6	2.05	52.1	22	98	100
1293371	9.84	250.0	0.19	4.8	2.68	68.1	22	98	100
1293372	9.49	240.0	0.29	7.4	2.40	61.0	50	222	100
1293373	11.81	300.0	0.30	7.6	3.15	80.0	50	222	100
1293374	14.96	380.0	0.30	7.6	4.13	104.9	50	222	100
1293375	21.65	550.0	0.31	7.9	6.30	160	50	222	100

## WITA-V0 Series UL94 V-0 Locking Cable Tie

**Specifications:**

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



Item No.	L Ref.		W Ref.		Ø Max Bundle		Tensile Strength		Bulk Pack Qty
	in	mm	in	mm	in	mm	lbs	N	
WITA-18R-V0-M	4.72	120.0	0.100	2.5	1.060	26.9	18	80	1000
WITA-50R-V0-M	7.90	200.7	0.180	4.6	1.950	49.5	50	222	1000

# CABLE TIES & INSTALLATION TOOLS



## CTHS/WITA-HS Series Heat Stabilized Cable Tie



**Specifications:**

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

**Features:**

- Service Temperature: -40°F to 221°F (-40°C to 105°C)
- Suitable for higher temperature applications



Item No.	Approval	L Ref.		W Ref.		Ø Max Bundle		Tensile Strength		Classification	Bulk Pack Qty
		in	mm	in	mm	in	mm	lbs	N		
CT003F	RU	3.94	100.0	0.098	2.5	0.980	25.0	18	80	Miniature	100
WITA-18R-HS-M	—	4.72	120.0	0.100	2.5	1.060	26.9	18	80	Miniature	1000
CT005C	RU	5.59	142.0	0.098	2.5	1.380	35.0	18	80	Miniature	100
CT007C	RU	8.00	203.0	0.098	2.5	2.170	55.0	18	80	Miniature	100
WITA-40R-HS-M	—	5.91	150.0	0.140	3.6	1.480	37.6	40	178	Intermediate	1000
CT012D	RU	8.00	203.0	0.142	3.6	2.170	55.0	40	178	Intermediate	100
CT015C	RU	11.50	292.0	0.142	3.6	3.350	85.0	40	178	Intermediate	100
CT018C	RU	4.72	120.0	0.189	4.8	1.180	30.0	50	222	Standard	100
CT019C	RU	6.30	160.0	0.189	4.8	1.650	42.0	50	222	Standard	100
CT021C	RU	7.48	190.0	0.189	4.8	2.050	52.0	50	222	Standard	100
WITA-50R-HS-M	—	7.90	200.7	0.180	4.6	1.950	49.5	50	222	Standard	1000
CT022C	RU	8.00	203.0	0.181	4.6	2.170	55.0	50	222	Standard	100
CT024C	RU	11.02	280.0	0.189	4.8	3.190	81.0	50	222	Standard	100
WITA-50RL-HS-M	—	11.02	280.0	0.190	4.8	3.030	77.0	50	222	Standard	1000
CT025C	RU	11.81	300.0	0.189	4.8	3.350	85.0	50	222	Standard	100
CT027F	RU	14.49	368.0	0.189	4.8	4.020	102.0	50	222	Standard	100
CT029F	RU	17.00	432.0	0.189	4.8	4.920	125.0	50	222	Standard	100
CT033C	—	21.65	550.0	0.189	4.8	6.540	166.0	50	222	Standard	100
CT067C	—	9.45	240.0	0.299	7.6	2.600	66.0	120	534	Heavy Duty	100
CT072C	RU	14.96	380.0	0.299	7.6	4.330	110.0	120	534	Heavy Duty	100
CT075C	RU	24.02	610.0	0.354	9.0	7.280	185.0	175	778	Heavy Duty	100

## CTG Series Cable Tie Installation Tools



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6

Item No.	Figure	Used with Cable Ties	Features:	Pack Qty
WIT-1	1	18 - 50 lbs	Lightweight for job site installations and repairs	1
WIT-2A	2	18 - 50 lbs	Heavy duty construction - cuts tie flush when adjustable preset bundling tension is reached	1
CTG004A	3	50 - 175 lbs	Heavy duty construction	1
WIT-3A	4	18 - 50 lbs	Economy model - glass reinforced Nylon for lightweight durability	1
CTG010A	5	Stainless Steel	Tightens and cuts locking Stainless Steel ties	1
MTG-1	6	Stainless Steel	Tightens and cuts locking Stainless Steel ties	1

## CTR/WIT-RT Series Standard Releasable Cable Tie



Figure 1



Figure 2



Figure 3

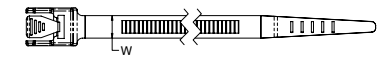


Figure 4

**Specifications:**

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

**Features:**

- Ties remain locked until intentionally released using release tab
- Great for temporary bundling purposes or future changes

Item No.	Natural		Black UV Stabilized Nylon 6/6	Approval	Figure	L Ref.		W Ref.		Ø Max Bundle		Tensile Strength		Bulk Pack Qty
	Black	Black				in	mm	in	mm	in	mm	lbs	N	
WIT-RT-1-M	—	—	WIT-RT-1-UVB-M	—	3	8.093	206.0	0.300	7.6	1.875	48.0	30	133	1000
WIT-RT-0550-M	—	—	WITRT-0550-UV-M	RU	4	5.500	139.7	0.210	5.3	1.250	31.8	40	178	1000
WIT-RT-0800-M	—	—	WITRT-0800-UV-M	RU	4	8.000	203.2	0.210	5.3	2.000	50.8	40	178	1000
WIT-RT-1050-M	—	—	—	—	4	10.500	266.7	0.210	5.3	2.500	63.5	40	178	1000
WIT-50SR-M	—	—	WIT-50SR-UVB-M	RU	2	6.000	152.4	0.190	4.8	1.500	38.1	50	222	1000
WIT-50RR-M	—	—	WIT-50RR-UVB-M	RU	2	8.000	203.2	0.190	4.8	2.000	50.8	50	222	1000
—	CTR003A	—	—	RU	1	8.000	200.0	0.299	7.6	2.000	50.0	50	222	100
WIT-50LR-M	—	—	WIT-50LR-UVB-M	—	2	11.656	295.9	0.190	4.8	3.000	76.2	50	222	1000
—	CTR005A	—	—	RU	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	—	—	—	RU	4	15.250	387.4	0.520	13.2	4.000	101.6	250	1113	25
WIT-RT-2150-Q	—	—	—	RU	4	21.500	546.1	0.520	13.2	6.000	152.4	250	1113	25
WIT-RT-2775-Q	—	—	—	RU	4	27.750	704.9	0.520	13.2	8.000	203.2	250	1113	25



# STAINLESS STEEL CABLE TIES/SPECIALTY CABLE TIES

## MT Series Stainless Steel Cable Tie



Use with Installation Tools CTG010A or MTG-1 on page 217.



See page 232 for Stainless Steel Cable Tie Holders.



**Specifications:**

- Material: See Table

**Features:**

- Temperature Range: -328°F to 1000°F (-200°C to 538°C)
- Use 316 Stainless Steel for corrosive environments
- Use Type 304 Stainless Steel for general purpose indoor/outdoor applications
- Radiation, vibration and flame resistant

Item No.			Length		Width		Ø Max Bundle		Tensile Strength		Bulk Pack Qty
304 Stainless Steel	316 Stainless Steel	Approval	in	mm	in	mm	in	mm	lbs	N	
MT-1	MT-16	RU	5.00	127.0	0.18	4.6	1.00	25.4	100	445	100
MT-2	MT-17	RU	7.91	201.0	0.18	4.6	2.00	51.0	100	445	100
MT-3	MT-18	RU	10.20	259.0	0.18	4.6	2.75	70.0	100	445	100
MT-4	MT-19	RU	14.25	362.0	0.18	4.6	4.00	102.0	100	445	100
MT-5	MT-20	RU	20.51	521.0	0.18	4.6	6.00	152.0	100	445	100
MT-6	MT-21	RU	26.73	679.0	0.18	4.6	8.00	203.0	100	445	100
MT-7	MT-22	RU	32.99	838.0	0.18	4.6	10.00	254.0	100	445	100
MT-8	MT-23	RU	39.29	998.0	0.18	4.6	12.00	304.0	100	445	50
MT-9	MT-24	RU	49.21	1250.0	0.18	4.6	15.00	380.0	100	445	50
MT-10	MT-25	RU	7.91	201.0	0.31	7.9	2.00	51.0	250	1113	100
MT-11	MT-26	RU	14.25	362.0	0.31	7.9	4.00	102.0	250	1113	100
MT-12	MT-27	RU	20.51	521.0	0.31	7.9	6.00	152.0	250	1113	100
MT-13	MT-28	RU	26.73	679.0	0.31	7.9	8.00	203.0	250	1113	100
MT-14	MT-29	RU	32.99	838.0	0.31	7.9	10.00	254.0	250	1113	50
MT-15	MT-30	RU	39.29	998.0	0.31	7.9	12.00	304.0	250	1113	50

## HDSB Series Heavy Duty Strap and Buckle



**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 buckle 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		Ø Max Bundle		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	15.00	381.0	4.00	101.6	50
HDSB1-350-L	HDSB2-350-L	350	33.00	838.2	9.70	246.4	25
HDSB1-350-XL	HDSB2-350-XL	350	50.00	1270.0	15.10	383.5	25

## 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



Item No.	L Ref.		W Ref.		Ø Max Bundle		Tensile Strength		Marker Pad		Bulk Pack Qty
	in	mm	in	mm	in	mm	lbs	N	in	mm	
WITA-F2-18R-M	4.330	110.0	0.100	2.5	0.980	25.0	18	80	1.00 x 0.31	25.0 x 7.9	1000

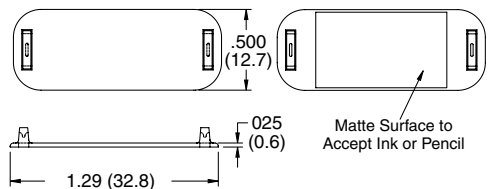
## WIT-MK-1 Marker Tag for Cable Ties

**Specifications:**

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

**Features:**

- Slide any standard cable tie up to 50 lbs. through mounting slots (ties sold separately)
- Matte surface to accept ink, pencil or marker



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

# DOUBLE HEADED & BEADED CABLE TIES



## CTDH/WITA-DH Series 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.		L		W		A Max		A Min		B Max		B Min		Tensile Strength		Bulk Pack Qty
Natural	Black UV Stabilized	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	Lbs	N	
WITA-50RLDH-M	WITA50RLDH-UV-M	8.875	225.0	0.189	4.8	2.300	59.0	0.098	2.5	2.000	52.0	0.079	2.0	50	222	1000
CTDH002A	—	11.875	300.0	0.189	4.8	3.300	83.0	0.098	2.5	3.000	76.0	0.079	2.0	50	222	1000
WITA-50LDH-M	WITA-50LDH-UV-M	14.560	370.0	0.189	4.8	4.100	105.0	0.098	2.5	3.900	98.0	0.079	2.0	50	222	1000

## BT Series Beaded Cable Tie

Specifications:

- Material: See Table
- Color: See Table

Features:

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



Item No.					A Ref. Length		Ø Max Bundle Requires 3 Bead Engagement		Bulk Pack Qty
Red UL94 HB Polypropylene	Yellow UL94 HB Polypropylene	Blue UL94 HB Polypropylene	Black UL94 HB Polypropylene	Natural UL94 V-2 Nylon 6/6	in	mm	in	mm	
BT-2-10-RD	BT-2-10-YL	BT-2-10-BL	BT-2-10-BK	BT-2-01-NT	2.50	63.5	0.563	14.3	1000
BT-4-10-RD	BT-4-10-YL	BT-4-10-BL	BT-4-10-BK	BT-4-01-NT	4.00	101.6	1.000	25.4	1000
BT-5-10-RD	BT-5-10-YL	BT-5-10-BL	BT-5-10-BK	BT-5-01-NT	5.00	127.0	1.250	31.8	1000
BT-6-10-RD	BT-6-10-YL	BT-6-10-BL	BT-6-10-BK	BT-6-01-NT	6.00	152.4	1.750	44.5	1000
BT-8-10-RD	BT-8-10-YL	BT-8-10-BL	BT-8-10-BK	BT-8-01-NT	8.75	222.3	2.375	60.3	1000
BT-10-10-RD	BT-10-10-YL	BT-10-10-BL	BT-10-10-BK	BT-10-01-NT	10.75	273.1	3.125	85.7	1000
BT-12-10-RD	BT-12-10-YL	BT-12-10-BL	BT-12-10-BK	BT-12-01-NT	12.75	323.9	3.625	92.1	1000

## LBT Series Locking Beaded Cable Tie

Specifications:

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

Features:

- Has a permanent locking feature



Item No.	Approval	Length		Width Max		Ø Max Bundle		Tensile Strength		Bulk Pack Qty
		in	mm	in	mm	in	mm	lbs	N	
LBT-18-01	FA	5.90	150.0	0.080	2.0	1.4	35.6	18	80	1000

## HT Series Hanking Cable Tie

Specifications:

- Material: Polyethylene
- Color: Natural

Features:

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



Item No.	B Ref.		C Ref.		Ø Max Bundle		Width of Strap		Bulk Pack Qty
	in	mm	in	mm	in	mm	in	mm	
HT-3.9	3.19	81.0	3.90	99.0	0.91	23.0	0.250	6.4	1000
HT-4.9	4.21	107.0	4.92	125.0	1.10	28.0	0.250	6.4	1000
HT-5.9	5.20	132.0	5.91	150.0	1.42	36.0	0.250	6.4	1000



# SCREW MOUNT & SPECIALTY CABLE TIES

## SR 1787 Series Adhesive Based Ladder Ties



**Specifications:**

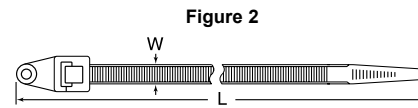
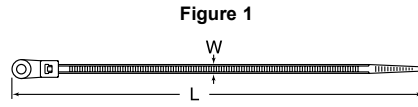
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Strap is inserted through the buckle at the adhesive base
- Ladder style allows it to be adjustable
- Strong adhesion for quick and easy assembly

Item No.	Max Cable Diameter		L		W		Bulk Pack Qty
	in	mm	in	mm	in	mm	
460297	0.669	17.0	0.984	25.0	0.709	18.0	100
460298	0.866	22.0	1.201	30.5	0.827	21.0	100
460299	1.024	26.0	1.201	30.5	0.827	21.0	100

## CTMT Series Screw Mount Cable Tie



**Specifications:**

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

**Features:**

- Mountable with single screw or bolt

Item No.	Figure	L		W		Ø Max Bundle		Tensile Strength		Screw Size	Bulk Pack Qty
		in	mm	in	mm	in	mm	lbs.	N		
CTMT001A	1	4.33	110	0.098	2.5	0.984	25	18	80	#4	100
CTMT002A	1	6.75	171.5	0.146	3.7	1.575	40	40	178	#10	100
CTMT003A	1	8.62	219	0.165	4.2	2.047	52	50	222	#10	100
CTMT006A	2	16.14	410	0.311	7.9	4.409	112	120	534	M6	100
CTMT007A	—	11.81	300	0.307	7.8	3.150	80	120	534	M6	100

## ST Series Screw Mount Beaded Cable Tie

**Specifications:**

- Material: See table
- Color: Natural

**Features:**

- Tie is easily releasable
- Polypropylene material is very flexible
- Easily and securely mounted with a #12 (M5) screw



Item No.	Material	Ø Bundle Range		Screw Size	Bulk Pack Qty
		in	mm		
ST-205	UL94 HB Polypropylene	0.250 - 1.250	6.4 - 31.8	#12	1000
ST-305	UL94 V-2 Nylon 6/6	0.250 - 1.250	6.4 - 31.8	#12	1000

## PT Series Push In Beaded Cable Tie

**Specifications:**

- Material: See table
- Color: See table

**Features:**

- Easily snaps into mounting hole
- Tie is easily releasable
- Polypropylene material is very flexible



Item No.	UL94 Horizontal Burn Polypropylene	UL94 V-2 Nylon 6/6	Color	Ø Bundle Range		Ø Mounting Hole		Panel Thickness		Bulk Pack Qty
				in	mm	in	mm	in	mm	
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

# PUSH MOUNT CABLE TIES



## WIT-A/WITBH Series Push Mount Cable Tie



Figure 1



Figure 3



Figure 4



Figure 2

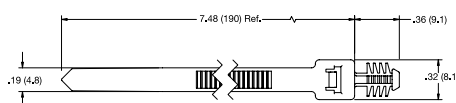


Figure 5

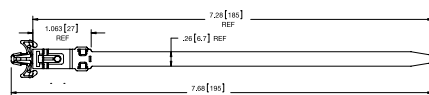


Figure 6

**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- WITBH-50R-HS Material: UL94 V-2 Heat Stabilized Nylon serviceable to 239°F
- Color: Natural

**Features:**

- Easily snaps into pre-drilled holes
- Can be mounted to installation before final assembly
- Combines a cable tie, mount and fastener in a single part
- Figures 2 and 6 are removable from the top of the board

Item No.	Figure	L Ref.		W Ref.		Ø Max Bundle		Tensile Strength		Ø Mounting Hole		Panel Thickness		Bulk Pack Qty
		in	mm	in	mm	in	mm	lbs.	N	in	mm	in	mm	
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
WIT-50RLA-M	1	8.870	225.4	0.190	4.8	2.000	50.8	50	222	0.187	4.7	0.093	2.36	1000
WIT-30RAR1-2	2	5.125	130.0	0.14	3.6	1.000	25.4	30	135	0.189	4.8	0.079 - 0.094	2.0 - 2.4	100
WIT-30LAR1-2	2	6.125	155.5	0.14	3.6	1.25	31.8	30	135	0.189	4.8	0.079 - 0.094	2.0 - 2.4	100
WIT-18RA-01	3	4.290	109.0	0.100	2.5	0.830	21.0	18	80	0.190	4.8	0.060	1.6	1000
WIT-50SA-01	3	5.240	133.0	0.190	4.8	0.910	23.0	50	222	0.250	6.4	0.060	1.6	1000
WIT-50SA-1-01	3	5.240	133.0	0.190	4.8	0.910	23.0	50	222	0.250 - 0.270	6.4 - 6.8	0.030 - 0.080	0.8 - 2.0	1000
WIT-50SRA-01	3	6.810	173.0	0.190	4.8	1.420	36.0	50	222	0.250	6.4	0.060	1.6	1000
WIT-50SRA-1-01	3	6.810	173.0	0.190	4.8	1.420	36.0	50	222	0.250 - 0.270	6.4 - 6.8	0.030 - 0.080	0.8 - 2.0	1000
WIT-50RA-01	3	7.800	198.0	0.190	4.8	1.690	43.0	50	222	0.250	6.4	0.060	1.6	500
WIT-50RA-1-01	3	7.800	198.0	0.190	4.8	1.690	43.0	50	222	0.250 - 0.270	6.4 - 6.8	0.030 - 0.080	0.8 - 2.0	500
WIT-18R1A-4-01	4	4.760	121.1	0.100	2.5	0.750	19.1	18	80	0.156	4.0	0.031 - 0.078	0.8 - 2.0	1000
WIT-18RA-4-01-M	4	4.760	121.1	0.100	2.5	0.750	19.1	18	80	0.187	4.8	0.031 - 0.078	0.8 - 2.0	1000
WIT-18R2A-4-01	4	4.760	121.1	0.100	2.5	0.750	19.1	18	80	0.187	4.8	0.062 - 0.140	1.6 - 3.6	1000
WITBH-50R	5	See Figure 5				1.750	44.5	50	228	0.25	6.4	0.250	6.4	100
WITBH-50R-HS	5	See Figure 5				1.750	44.5	50	228	0.25	6.4	0.250	6.4	100
WIT-40LAR	6	See Figure 6				1.970	50	40	178	0.187	4.8	0.020 - 0.091	0.5 - 2.3	100

## WIT-30RRA/TOAH Series Releasable Arrowhead Cable Tie



Figure 1

**Specifications:**

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

**Features:**

- Combines cable tie, mount and fastener in a single part
- Used to attach wire or cable bundles to a surface
- Easily snaps into pre-drilled holes
- WIT-30RRA part has a spacer after the arrowhead



Figure 2

Item No.	Figure	L Ref.		W Ref.		Ø Max Bundle		Tensile Strength		Ø Mounting Hole		Panel Thickness		Spacer Length		Bulk Pack Qty
		in	mm	in	mm	in	mm	lbs.	N	in	mm	in	mm	in	mm	
WIT-30RRA-4-M	1	6.312	160.3	0.141	3.6	1.250	31.8	30	135	0.187	4.8	0.030 - 0.078	0.8 - 2.0	0.280	7.1	1000
WIT-30RRA-8-M	1	6.562	166.7	0.141	3.6	1.250	31.8	30	135	0.187	4.8	0.030 - 0.078	0.8 - 2.0	0.530	13.5	1000
WIT-30RRA-12-M	1	6.812	173.0	0.141	3.6	1.250	31.8	30	135	0.187	4.8	0.030 - 0.078	0.8 - 2.0	0.780	19.8	1000
WIT-30RRA-16-M	1	7.062	179.4	0.141	3.6	1.250	31.8	30	135	0.187	4.8	0.030 - 0.078	0.8 - 2.0	1.000	25.4	1000
WIT-30RRAA-4-M	1	6.362	161.6	0.141	3.6	1.250	31.8	30	135	0.250	6.4	0.030 - 0.078	0.8 - 2.0	0.280	7.1	1000
WIT-30RRAA-8-M	1	6.614	168.0	0.141	3.6	1.250	31.8	30	135	0.250	6.4	0.030 - 0.078	0.8 - 2.0	0.530	13.5	1000
WIT-30RRAA-12-M	1	6.862	174.3	0.141	3.6	1.250	31.8	30	135	0.250	6.4	0.030 - 0.078	0.8 - 2.0	0.780	19.8	1000
WIT-30RRAA-16-M	1	7.114	180.7	0.141	3.6	1.250	31.8	30	135	0.250	6.4	0.030 - 0.078	0.8 - 2.0	1.000	25.4	1000
TOAH-18-01	2	4.670	118.6	0.280	7.1	1.125	28.5	40	178	0.250	6.4	0.062	1.6	—	—	1000



# CABLE TIES & STRAPS

## TOBS Series 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		Ø Max Bundle		Bulk Pack Qty
	in	mm	in	mm	
TOBS-18-01A-RT	#4	M3	1.125	28.5	1000

## ES Series Rubber Strap with Locking Button

**Specifications:**

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

**Features:**

- Rubber strap can be stretched and wrapped around bundles up to three times
- Grips the cables preventing movement
- For additional latch pins, order part number CS-113-6



Item No.	Ø Max Bundle		Max Perimeter		Bulk Pack Qty
	in	mm	in	mm	
ES-1	4.33	110.0	13.6	345.0	100

## RNS/LB Series Nylon 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 UL Rating	Bulk Pack Qty	Pack Qty
RNS-167	Strap	UL94 HB	100 ft.	1
LB-5	Locking Button	UL94 V-2	100	100

## RKS Series Hook and Loop Strap

**Specifications:**

- Material: Hook: Low Density Polyethylene
- Loop: Nylon Knit
- Color: Black

**Features:**

- Heavy duty hook and loop
- Features VELCRO® brand hook and loop material
- User can cut to desired length
- Excellent in reusable applications



Item No.	L Length		W Width		Bulk Pack Qty
	in	mm	in	mm	
RKS-8-6-BK	6.0	152.4	.50	12.7	10
RKS-8-8-BK	8.0	203.2	.50	12.7	10
RKS-8-12BK	12.0	304.8	.50	12.7	10
RKS-16-8-BK	8.0	203.2	1.00	25.4	10
RKS-16-12-BK	12.0	304.8	1.00	25.4	10

# HOOK AND LOOP



## RKWB/RKWFA Series Hook and Loop Clamp



**Specifications:**

- Material: Hook and Loop
- Color: Black

**Features:**

- Hook and loop design
- RKWB accommodates multiple bundle diameters; up to 1-1/2"
- RKWFA accommodates multiple bundle diameters; up to 0.75"



Item No.	Figure	Ø Max Bundle		Base		Bulk Pack Qty
		in	mm	in	mm	
RKWB-1	1	1.5	38.1	2.0 x 1.0	50.8 x 25.4	100
RKWFA-1	2	0.75	19.1	3.00 x 0.78	52.3 x 19.8	100

## RKW Series Hook and Loop Cable Tie

**Specifications:**

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

**Features:**

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



See page 233 for Hook and Loop Cable Tie Holders.

Item No.			Screw Mount	L		W		Ø Max Bundle		Bulk Pack Qty
Black	Blue	Green		in	mm	in	mm	in	mm	
RKW-6-6-BK	RKW-6-6-BL	RKW-6-6-GN	No	6.0	152.4	0.38	9.5	1.400	35.6	10
RKW-8-6-BK	RKW-8-6-BL	RKW-8-6-GN	No	6.0	152.4	0.50	12.7	1.400	35.6	10
RKW-8-8-BK	RKW-8-8-BL	RKW-8-8-GN	Yes	8.0	203.2	0.50	12.7	1.920	48.7	10
RKW-8-9-BK	RKW-8-9-BL	RKW-8-9-GN	Yes	9.0	228.6	0.50	12.7	2.140	54.4	10
RKW-8-11-BK	RKW-8-11-BL	RKW-8-11-GN	No	11.0	279.4	0.50	12.7	2.618	66.5	10
RKW-8-12-BK	RKW-8-12-BL	RKW-8-12-GN	Yes	12.0	304.8	0.50	12.7	2.856	72.5	10
RKW-8-13-BK	RKW-8-13-BL	RKW-8-13-GN	Yes	13.0	330.2	0.50	12.7	3.396	86.3	10
RKW-12-9-BK	RKW-12-9-BL	RKW-12-9-GN	Yes	9.0	228.6	0.75	19.1	2.140	54.4	10
RKW-12-15-BK	RKW-12-15-BL	RKW-12-15-GN	No	15.0	381.0	0.75	19.1	3.918	99.5	10
RKW-12-18-BK	RKW-12-18-BL	RKW-12-18-GN	No	18.0	457.2	0.75	19.1	4.716	119.8	10
RKW-12-24-BK	RKW-12-24-BL	RKW-12-24-GN	No	24.0	609.6	0.75	19.1	6.288	159.7	10

Item No.				Screw Mount	L		W		Ø Max Bundle		Bulk Pack Qty
Orange	Red	White	Yellow		in	mm	in	mm	in	mm	
RKW-6-6-OR	RKW-6-6-RD	RKW-6-6-W	RKW-6-6-YL	No	6.0	152.4	0.38	9.5	1.400	35.6	10
RKW-8-6-OR	RKW-8-6-RD	RKW-8-6-W	RKW-8-6-YL	No	6.0	152.4	0.50	12.7	1.400	35.6	10
RKW-8-8-OR	RKW-8-8-RD	RKW-8-8-W	RKW-8-8-YL	Yes	8.0	203.2	0.50	12.7	1.920	48.7	10
RKW-8-9-OR	RKW-8-9-RD	RKW-8-9-W	RKW-8-9-YL	Yes	9.0	228.6	0.50	12.7	2.140	54.4	10
RKW-8-11-OR	RKW-8-11-RD	RKW-8-11-W	RKW-8-11-YL	No	11.0	279.4	0.50	12.7	2.618	66.5	10
RKW-8-12-OR	RKW-8-12-RD	RKW-8-12-W	RKW-8-12-YL	Yes	12.0	304.8	0.50	12.7	2.856	72.5	10
RKW-8-13-OR	RKW-8-13-RD	RKW-8-13-W	RKW-8-13-YL	Yes	13.0	330.2	0.50	12.7	3.396	86.3	10
RKW-12-9-OR	RKW-12-9-RD	RKW-12-9-W	RKW-12-9-YL	Yes	9.0	228.6	0.75	19.1	2.140	54.4	10
RKW-12-15-OR	RKW-12-15-RD	RKW-12-15-W	RKW-12-15-YL	No	15.0	381.0	0.75	19.1	3.918	99.5	10
RKW-12-18-OR	RKW-12-18-RD	RKW-12-18-W	RKW-12-18-YL	No	18.0	457.2	0.75	19.1	4.716	119.8	10
RKW-12-24-OR	RKW-12-24-RD	RKW-12-24-W	RKW-12-24-YL	No	24.0	609.6	0.75	19.1	6.288	159.7	10

Item No.	Screw Mount	L		W		Ø Max Bundle		Bulk Pack Qty
		in	mm	in	mm	in	mm	
RKW-6-6-BK-C	No	6.0	152.4	0.38	9.5	1.400	35.56	100
RKW-8-6-BK-C	No	6.0	152.4	0.50	12.7	1.400	35.56	100
RKW-8-8-BK-C	Yes	8.0	203.2	0.50	12.7	1.920	48.70	100
RKW-8-9-BK-C	Yes	9.0	228.6	0.50	12.7	2.140	54.40	100
RKW-8-11-BK-C	No	11.0	279.4	0.50	12.7	2.618	66.50	100
RKW-8-12-BK-C	Yes	12.0	304.8	0.50	12.7	2.856	72.54	100
RKW-8-13-BK-C	Yes	13.0	330.2	0.50	12.7	3.396	86.25	100
RKW-12-9-BK-C	Yes	9.0	228.6	0.75	19.1	2.140	54.40	100
RKW-12-15-BK-C	No	15.0	381.0	0.75	19.1	3.918	99.52	100
RKW-12-18-BK-C	No	18.0	457.2	0.75	19.1	4.716	119.78	100
RKW-12-24-BK-C	No	24.0	609.6	0.75	19.1	6.288	159.71	100



# HOOK AND LOOP CABLE TIES & CINCH STRAPS

## RKWPR Series

### Plenum Rated Hook and Loop Cable Tie



**Specifications:**

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

**Features:**

- Meets UL94 V-2 requirements, UL #E143339
- Accepted as wire positioning device (16SA) in air handling spaces in accordance with section 300-22 paragraph (C) and (D) of the National Electrical Code
- VELCRO® brand hook and loop material



Item No.	Screw Mount	L		W		A		Bulk Pack Qty
		in	mm	in	mm	in	mm	
RKWPR-6-6	No	6.0	152.4	1.00	25.4	0.50	12.7	10
RKWPR-8-8	Yes	8.0	203.2	1.00	25.4	0.50	12.7	10
RKWPR-8-12	Yes	12.0	304.8	1.00	25.4	0.50	12.7	10
RKWPR-12-13	Yes	13.0	330.2	1.50	38.1	0.75	19.1	10

## RKWE Series

### Economy Hook and Loop Cable Tie



**Specifications:**

- Material: Hook: Low-Density Polyethylene  
Loop: Nylon Knit
- Color: Black

**Features:**

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



Item No.	L		W		A		Bulk Pack Qty
	in	mm	in	mm	in	mm	
RKWE-6-6-BK	6.0	152.4	0.75	19.1	0.38	9.5	10
RKWE-8-6-BK	6.0	152.4	1.00	25.4	0.50	12.7	10
RKWE-8-8-BK	8.0	203.2	1.00	25.4	0.50	12.7	10
RKWE-8-11-BK	11.0	279.4	1.00	25.4	0.50	12.7	10
RKWE-12-15-BK	12.0	304.8	1.50	38.1	0.75	19.1	10

## RKWDM Series

### Hook and Loop Cinch Strap with Metal Buckle



**Specifications:**

- Material: Nylon Woven Hook and Loop  
Buckle: Metal
- Color: Black

**Features:**

- Metal buckle for heavy duty industrial applications



Item No.	L Length		W		Ø Approximate Bundle w/ Hook Fully Engaged		Bulk Pack Qty
	in	mm	in	mm	in	mm	
RKWDM-16-15-BK	15.0	381.0	1.00	25.4	3.750	95.0	10
RKWDM-16-20-BK	20.0	508.0	1.00	25.4	5.500	140.0	10
RKWDM-16-22-BK	22.0	559.0	1.00	25.4	5.938	151.0	10
RKWDM-16-24-BK	24.0	610.0	1.00	25.4	6.625	168.0	10
RKWDM-32-15-BK	15.0	381.0	2.00	51.0	3.750	95.0	10
RKWDM-32-20-BK	20.0	508.0	2.00	51.0	5.500	140.0	10
RKWDM-32-22-BK	22.0	559.0	2.00	51.0	6.000	152.0	10
RKWDM-32-24-BK	24.0	610.0	2.00	51.0	6.625	168.0	10

# HOOK AND LOOP CINCH STRAPS



## RKWD Series Hook and Loop Cinch Strap

**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		Ø Approximate Bundle w/ Hook Fully Engaged		Bulk Pack Qty	
	in	mm	in	mm	in	mm		
<b>Black</b>	<b>Orange</b>							
RKWD-12-12-BK	—	12.0	305	0.75	19.1	2.875	73	10
RKWD-12-18-BK	—	18.0	457	0.75	19.1	4.750	121	10
RKWD-16-9-BK	RKWD-16-9-OR	9.0	229	1.00	25.4	1.875	48	10
RKWD-16-12-BK	RKWD-16-12-OR	12.0	305	1.00	25.4	2.875	73	10
RKWD-16-15-BK	RKWD-16-15-OR	15.0	381	1.00	25.4	3.750	95	10
RKWD-16-20-BK	RKWD-16-20-OR	20.0	508	1.00	25.4	5.500	140	10
RKWD-16-24-BK	RKWD-16-24-OR	24.0	609	1.00	25.4	6.625	168	10

## RKWDA Series Extra Long/Cut to Length Cinch Strap

**Specifications:**

- Material: Hook and Loop: Nylon Woven
- Buckle: Nylon
- Color: Black

**Features:**

- Unique cut-to-length design eliminates the need to predetermine exact strap length
- Adheres to itself along its entire length



Item No.	L		W		Ø Bundle w/ Hook Fully Engaged		Bulk Pack Qty
	in	mm	in	mm	in	mm	
RKWDA-16-20-BK	20.0	508	1.00	25.4	5.500	140	10
RKWDA-16-24-BK	24.0	609	1.00	25.4	6.325	168	10
RKWDA-16-36-BK	36.0	914	1.00	25.4	10.500	267	10
RKWDA-16-48-BK	48.0	1219	1.00	25.4	14.375	365	10
RKWDA-32-20-BK	20.0	508	2.00	50.8	5.500	140	10
RKWDA-32-24-BK	24.0	610	2.00	50.8	6.628	169	10
RKWDA-32-36-BK	36.0	914	2.00	50.8	10.500	267	10
RKWDA-32-48-BK	48.0	1219	2.00	50.8	14.375	365	10

## RKWDG/RKWDE Series Hook and Loop Cinch Strap with Grommet

**Specifications:**

- Material: Nylon Woven Hook and Loop
- Buckle: Nylon
- Grommet: Brass
- Color: Black

**Features:**

- Grommet for mounting to walls, racks and mobile carts to organize and neatly route cables
- RKWDG centers bundle over mounting point
- RKWDE offsets bundle from mounting point
- Takes the stress off horizontal cable runs



Figure 1



Figure 2

Item No.	Figure	L Length		W		Ø Approximate Bundle w/ Hook Fully Engaged		Grommet Ø Ref.		Bulk Pack Qty
		in	mm	in	mm	in	mm	in	mm	
RKWDG-16-9-BK	1	9.0	229	1.00	25.4	1.875	48	0.250	6.4	10
RKWDE-16-9-BK	2	9.0	229	1.00	25.4	1.875	48	0.250	6.4	10
RKWDG-12-12-BK	1	12.0	305	0.75	19.1	2.875	73	0.250	6.4	10
RKWDE-12-12-BK	2	10.5	267	0.75	19.1	2.375	60	0.250	6.4	10
RKWDG-16-12-BK	1	12.0	305	1.00	25.4	2.875	73	0.250	6.4	10
RKWDE-16-12-BK	2	12.0	305	1.00	25.4	2.875	73	0.250	6.4	10
RKWDG-16-15-BK	1	15.0	381	1.00	25.4	3.750	95	0.250	6.4	10
RKWDE-16-15-BK	2	15.0	381	1.00	25.4	3.750	95	0.250	6.4	10
RKWDG-12-18-BK	1	18.0	457	0.75	19.1	4.750	121	0.250	6.4	10
RKWDE-12-18-BK	2	16.5	419	0.75	19.1	4.250	108	0.250	6.4	10
RKWDG-16-20-BK	1	20.0	508	1.00	25.4	5.500	140	0.250	6.4	10
RKWDE-16-20-BK	2	20.0	508	1.00	25.4	5.500	140	0.250	6.4	10
RKWDG-16-24-BK	1	24.0	609	1.00	25.4	6.625	168	0.250	6.4	10
RKWDE-16-24-BK	2	24.0	609	1.00	25.4	6.625	168	0.250	6.4	10



# HOOK AND LOOP ROLLS

## RKWR Series

### Hook and Loop Roll



**Specifications:**

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

**Features:**

- This product features VELCRO® brand Hook and Loop material
- User can cut to desired length
- Available in two lengths; 5 yards and 25 yards



Item No.				A		Roll Length	Pack Qty
Black	Blue	Grey	Red	in	mm		
RKWR-3-BK	RKWR-3-BL	RKWR-3-GY	RKWR-3-RD	0.50	12.7	5 Yards	1
RKWR-1-BK	RKWR-1-BL	RKWR-1-GY	RKWR-1-RD	0.75	19.1	5 Yards	1
RKWR-2-BK	RKWR-2-BL	RKWR-2-GY	RKWR-2-RD	1.00	25.4	5 Yards	1
RKWR-3L-BK	RKWR-3L-BL	RKWR-3L-GY	RKWR-3L-RD	0.50	12.7	25 Yards	1
RKWR-1L-BK	RKWR-1L-BL	RKWR-1L-GY	RKWR-1L-RD	0.75	19.1	25 Yards	1
RKWR-2L-BK	RKWR-2L-BL	RKWR-2L-GY	RKWR-2L-RD	1.00	25.4	25 Yards	1

## RKWRE Series

### Economy Hook and Loop Roll



**Specifications:**

- Material: Hook: Low-Density Polyethylene  
Loop: Nylon Knit
- Color: Black

**Features:**

- This product features VELCRO® brand hook and loop material
- Similar in function and purpose to the RKWR series of rolls, these economy rolls are made from a lower-profile, economical material
- User can cut to desired length



Item No.	A		Roll Length	Pack Qty
	in	mm		
RKWRE-3L	0.50	12.7	25 Yards	1
RKWRE-1L	0.75	19.1	25 Yards	1

## RKWRPR Series

### Plenum Rated Hook and Loop Roll



**Specifications:**

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

**Features:**

- This product features VELCRO® brand hook and loop material
- Meets UL94 V-2 requirements. UL E143339
- Accepted as a wire positioning device (16SA) in air handling spaces in accordance with section 300-22 paragraph (C) and (D) of the National Electrical Code
- User can cut to desired length



Item No.	A		Roll Length	Pack Qty
	in	mm		
RKWRPR-3	0.50	12.7	5 Yards	1
RKWRPR-1	0.75	19.1	5 Yards	1
RKWRPR-2	1.00	25.4	5 Yards	1
RKWRPR-3L	0.50	12.7	25 Yards	1
RKWRPR-1L	0.75	19.1	25 Yards	1
RKWRPR-2L	1.00	25.4	25 Yards	1

CABLE TIE MOUNTS



**MFTH Series**  
**Mini Cable Tie 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



1/2" x 1/2"

Item No.		Used w/ Cable Ties	Approval	Adhesive	A		B		C	
1000/Bag	100/Bag				in	mm	in	mm	in	mm
MFTH-2-01A-RT-M	MFTH-2-01A-RT-C	18 lbs.		Acrylic	0.500	12.7	0.500	12.7	0.14	3.5
MFTH-2-01A1-M	MFTH-2-01A1-C	18 lbs.		Rubber	0.500	12.7	0.500	12.7	0.14	3.5

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

Specifications:

- Material: UL94 V-2 Nylon 6/6 (Black is UV Stabilized)
- Color: See Table

Features:

- Now available in high bond acrylic adhesive for demanding applications
- Cable ties can be inserted from all four sides
- May be secured with screws or adhesive
- Rubber adhesive develops its strength extremely fast
- Acrylic adhesive is a general purpose adhesive and gains strength with dwell time



3/4" x 3/4"

Item No. Natural			Item No. Black		Approval	Used w/ Cable Ties	Adhesive	Recommended Mounting Screw	A	B	C
1000/Bag	100/Bag	10/Bag	1000/Bag	100/Bag					in	in	in
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	0.750	0.24
FTH-5A1-RT-M	FTH-5A1-RT-C	—	—	—		18 & 40 lbs.	Rubber	#6 and M3.5 Flat Head	0.750	0.750	0.24
—	—	• FTH-5-DHB	—	—	—	18 & 40 lbs.	High Bond Acrylic	#6 and M3.5 Flat Head	0.750	0.750	0.24
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	0.750	0.24

1" x 1"

Item No. Natural			Item No. Black		Approval	Used w/ Cable Ties	Adhesive	Recommended Mounting Screw	A	B	C
1000/Bag	100/Bag	10/Bag	1000/Bag	100/Bag					in	in	in
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	1.000	0.28
FTH-7A1-RT-M	FTH-7A1-RT-C	—	—	—		50 lbs.	Rubber	#8 and M4 Flat Head	1.000	1.000	0.28
—	—	• FTH-7-DHB	—	—	—	50 lbs.	High Bond Acrylic	#8 and M4 Flat Head	1.000	1.000	0.28
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	1.000	0.28

**FTH-8/FTH-10 Series**  
**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.		Used with Cable Ties	Approval	Adhesive	Recommended Mounting Screw	A		B		C	
1000/Bag	100/Bag					in	mm	in	mm	in	mm
FTH-8A-RT-M	FTH-8A-RT-C	50 & 120 lbs.		Acrylic	2 x #6, #8 or M4	1.500	38.1	1.500	38.1	0.30	7.6

2" x 2"

Item No.		Used with Cable Ties	Approval	Adhesive	Recommended Mounting Screw	A		B		C	
1000/Bag	100/Bag					in	mm	in	mm	in	mm
FTH-10A-RT-M	FTH-10A-RT-C	50 & 120 lbs.		Acrylic	2 x #6, #8 or M4	2.000	50.8	2.00	50.8	0.30	7.6



## CABLE TIE MOUNTS

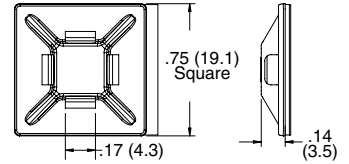
### FTH-40 Series Low Profile Cable Tie Mount with Adhesive

**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"

Item No.	Used w/ 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

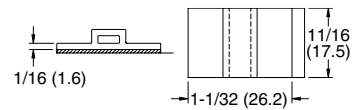
### FTH-2 Series Cable Tie Mount on Adhesive Base

**Specifications:**

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

**Features:**

- Easily applied



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

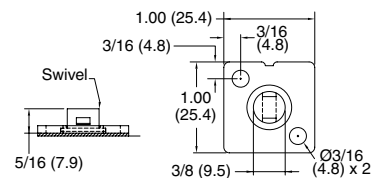
### FTH-4 Series Cable Tie Mount with Swivel

**Specifications:**

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

**Features:**

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



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

# PLASTIC FASTENERS

800 847 0486

www.essentracomponents.com



# CABLE TIE MOUNTS



## FTH-28RS Series 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 table)
- Cradle design provides stability for the bundle

Mounting Rivets for FTH-28RS		
Panel Thickness		Use Rivet Item No.
in	mm	
Up to 0.034	Up to 0.9	SR-3035
0.034 - 0.073	Up to 0.9	SR-3045
0.073 - 0.113	1.9 - 2.9	SR-3055
0.113 - 0.152	2.9 - 3.9	SR-3065
0.152 - 0.191	3.9 - 4.9	SR-3075
0.172 - 0.211	4.4 - 5.4	SR-3080
0.211 - 0.250	5.4 - 6.4	SR-3090
0.250 - 0.290	6.4 - 7.4	SR-3100

Item No.	Used w/ Cable Ties	Recommended Mounting Screw	Pack Qty
FTH-28RS-01	18 & 40 lbs.	#4, M3 Screw, SR-3XXX (See Table)	1000

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



**Specifications:**

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

**Features:**

- Mounts with screw or snap rivet (see rivet table)
- Cradle design provides stability for the bundle
- Rivets found on page 120



Figure 1



Figure 2



Figure 3

Item No.		Approval	Figure	Used w/ Cable Ties	A		B		Mounting Method	Bulk Pack Qty
1000/Bag	100/Bag				in	mm	in	mm		
FTH-13R-01-M	FTH-13R-01-C	UL	1	18 - 50 lbs.	0.17	4.3	0.32	8.1	#8 or M4 screw or rivet	1000
FTH-13S-01-M	FTH-13S-01-C	UL	2	18 - 50 lbs.	0.17	4.3	0.32	8.1	#6 or M3/#8 or M4 screw	1000
FTH-14R-01-M	FTH-14R-01-C	UL	3	18 - 120 lbs.	0.21	5.2	0.38	9.5	#10 or M5 screw or rivet	1000
FTH-14S-01-M	FTH-14S-01-C	UL	3	18 - 120 lbs.	0.26	6.6	0.49	12.5	1/4 or M6 screw	1000

Mounting Rivets for Figure 1		
Panel Thickness		Use Rivet Part Number
in	mm	
0.018 - 0.058	0.5 - 1.5	SR-4050
0.058 - 0.097	1.5 - 2.5	SR-4060
0.097 - 0.137	2.5 - 3.5	SR-4070
0.137 - 0.176	3.5 - 4.5	SR-4080
0.215 - 0.255	5.5 - 6.5	SR-4100

Mounting Rivets for Figure 3		
Panel Thickness		Use Rivet Part Number
in	mm	
0.020 - 0.048	0.5 - 1.2	SR-5055
0.048 - 0.087	1.2 - 2.2	SR-5065
0.087 - 0.127	2.2 - 3.2	SR-5075
0.127 - 0.166	3.2 - 4.2	SR-5085
0.166 - 0.205	4.2 - 5.2	SR-5095
0.205 - 0.245	5.2 - 6.2	SR-5105

## FTH-34/FTH-35 Series Screw Mount Cable Tie 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		Used with Cable Ties	Accepts Screw Size	Bulk Pack Qty
	in	mm			
FTH-34-01	0.170	4.3	18 - 50 lbs.	#8 or M4	1000
FTH-35-01	0.200	5.1	18 - 50 lbs.	#10 or M5	1000



# CABLE TIE MOUNTS

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



**Specifications:**

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

**Features:**

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



Figure 1



Figure 2

Item No.	Approval	Figure	Used w/ Cable Ties	Accepts Screw Size	Bulk Pack Qty
FTH-1-01-M		1	18 - 50 lbs.	#8 or M4	1000
FTH-11-8-01		2	18 - 50 lbs.	#8 or M4	100

## FTH-17 Series Heavy Duty Screw Mount Cable Tie Mount



**Specifications:**

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

**Features:**

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



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

## FTH-24 Series 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	Ø D		Used w/ Cable Ties	Bulk Pack Qty
			in	mm		
FTH-24-01	#10 or M5 Screw		0.21	5.2	18 - 50 lbs.	100
FTH-24-1-01	1/4 or M6 Screw		0.25	6.4	18 - 50 lbs.	100

# CABLE TIE MOUNTS



## FTH Series Snap In Cable Tie Mounts



**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 cover the mounting hole



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6



Figure 7



Figure 8



Figure 9

Item No.	Ø Mounting Hole		Panel Thickness		Used w/ Cable Ties	Bulk Pack Qty
	in	mm	in	mm		
FTH-6-01-M	—	—	—	—	18 - 50 lbs.	1000
FTH-6-01-C	—	—	—	—	18 - 50 lbs.	100
FTH-3-01-M	—	—	—	—	18 - 50 lbs.	1000
FTH-3-01-C	—	—	—	—	18 - 50 lbs.	100
FTH-39-1-01	—	—	—	—	18 lbs.	1000
FTH-29-01	—	—	—	—	18 - 50 lbs.	1000
FTH-33-01	—	—	—	—	40 - 50 lbs.	1000
FTH-41-01	—	—	—	—	18 - 50 lbs.	1000
FTH-15-01-M	—	—	—	—	18 - 40 lbs.	1000
FTH-15-01-C	—	—	—	—	18 - 40 lbs.	100
—	FTH-36-01BK	—	—	—	40 - 50 lbs.	1000
—	FTH-37-01BK	—	—	—	40 - 50 lbs.	1000

## FTH-22 Series Rivet Mount Cable Tie Mount

**Specifications:**

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

**Features:**

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



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



# CABLE TIE MOUNTS

## FTH-9 Series 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	Ø Mounting Hole		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 Series Cable Tie Mount with Cable Tie Head



**Specifications:**

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

**Features:**

- Cable tie head contained in the tie holder
- Good for application in which a bundle is already wrapped
- Simply insert the end of the cable tie for secure hold



FTH-30-01



FTH-30-1-01



Item No.	Ø Mounting Hole		Panel Thickness		Accepts Cable Ties with Tensile Lbs.	Bulk Pack Qty
	in	mm	in	mm		
FTH-30-01	0.187	4.8	0.031 - 0.078	0.8 - 2.0	18	1000
FTH-30-1-01	0.187	4.8	0.031 - 0.078	0.8 - 2.0	50	1000

## MTH1 Series Stainless Steel Tie Holder



**Specifications:**

- Material: 304 Stainless Steel

**Features:**

- Low profile design
- Mounts with a screw or rivet



See page 218 for Stainless Steel Cable Ties.



Item No.	C Hole		Recommended Mounting Screw	Bulk Pack Qty
	in	mm		
MTH1-1	0.177	4.5	#8 or M4	100
MTH1-2	0.213	5.4	#10 or M5	100
MTH1-3	0.266	6.8	1/4 or M6	100



**FTH-27 Series**  
Hook and Loop Cable Tie Mount



Specifications:

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

Features:

- Mounts 1/2" RKW Hook and Loop Ties

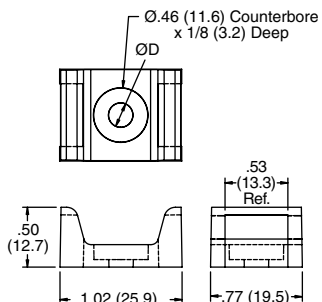


Figure 1



Figure 2

See page 223 for Hook and Loop Cable Ties.

Item No.	Color	Accepts Hook and Loop Up To Width		Figure	Mounting Method	D		A		Panel Thickness		Bulk Pack Qty
		in	mm			in	mm	in	mm	in	mm	
FTH-27-RS-01	Natural	0.510	13	1	#10, M5 or #12 Screw	0.205	5.2	—	—	—	—	1000
FTH-27-12-01	Natural	0.510	13	1	#10, M5 or #12 Screw	0.230	5.8	—	—	—	—	1000
FTH-27-1-01BK	Black	0.510	13	2	0.370 (9.5) Square Hole	—	—	0.120	3.0	0.030 - 0.080	0.8 - 2.0	500
FTH-27-2-01BK	Black	0.510	13	2	0.370 (9.5) Square Hole	—	—	0.390	10.0	0.030 - 0.080	0.8 - 2.0	500

**FTH-RKW Series**  
Hook and Loop Cable Tie Mount



Specifications:

- Material: Polyethylene
- Color: Black

Features:

- Mounts with adhesive or screws



See page 223 for Hook and Loop Cable Ties.

Item No.	Accepts Hook and Loop Up To Width		Mounting Method	A		B		C		Bulk Pack Qty
	in	mm		in	mm	in	mm	in	mm	
FTH-RKW-1	0.500	12.7	1/4" Screw	2.500	63.5	1.000	25.4	1.880	47.8	100
FTH-RKW-1A	0.500	12.7	Adhesive	2.500	63.5	1.000	25.4	1.880	47.8	100
FTH-RKW-2	1.000	25.4	1/4" Screw	3.250	82.6	1.500	38.1	2.620	66.5	100
FTH-RKW-2A	1.000	25.4	Adhesive	3.250	82.6	1.500	38.1	2.620	66.5	100



# HASSLE-FREE SERVICE



Our teams of knowledgeable, dedicated employees are committed to providing a hassle-free experience from sampling and quoting through delivery. Call us today!



# CABLE TIE MOUNTS

## Edge Mount Cable Tie Mount

**Specifications:**

- Material: UL94 V-2 Nylon 6/6 and 302 Stainless Steel
- Color: Black

**Features:**

- Push the tie holder onto the edge of panel to accept a cable tie and mount a cable bundle
- Retention of 450 lbs. based on a 0.078 panel thickness
- Available with or without a pre-installed cable tie
- Types 1 through 5 do not come with cable tie pre-installed



Type 1



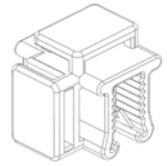
Type 2



Type 3



Type 4



Type 5



Type 6



Type 7



Type 8



Type 9

Item No.	Used w/ Cable Ties	Pre-Installed Cable Tie	Type	Panel Thickness		Width		Length		Height		Bulk Pack Qty
				in	mm	in	mm	in	mm	in	mm	
550243	Up to 50 Lbs.	—	1	0.028 - 0.118	0.7 - 3.0	0.472	12.0	0.591	15.0	0.622	15.8	100
550244	Up to 50 Lbs.	—	3	0.028 - 0.118	0.7 - 3.0	0.574	13.9	0.591	15.0	0.614	15.6	100
550245	Up to 50 Lbs.	—	2	0.028 - 0.118	0.7 - 3.0	0.472	12.0	0.591	15.0	0.614	15.6	100
550246	Up to 50 Lbs.	—	2	0.118 - 0.236	3.0 - 6.0	0.594	15.1	0.787	20.0	0.740	18.8	100
550247	Up to 50 Lbs.	—	3	0.028 - 0.118	0.7 - 3.0	0.547	13.9	0.591	15.0	0.614	15.6	100
550248	Up to 50 Lbs.	—	1	0.118 - 0.236	3.0 - 6.0	0.594	15.1	0.787	20.0	0.756	19.2	100
550249	Up to 50 Lbs.	—	4	0.118 - 0.236	3.0 - 6.0	0.673	17.1	0.787	20.0	0.748	19.0	100
550250	Up to 50 Lbs.	—	3	0.118 - 0.236	3.0 - 6.0	0.673	17.1	0.787	20.0	0.740	18.8	100
550251	Up to 50 Lbs.	—	5	0.028 - 0.118	0.7 - 3.0	0.594	15.1	0.591	15.0	0.594	15.1	100
550252	—	7.87 (200), 50 Lbs.	1	0.028 - 0.118	0.7 - 3.0	0.472	12.0	0.591	15.0	0.622	15.8	100
550253	—	7.87 (200), 50 Lbs.	3	0.028 - 0.118	0.7 - 3.0	0.574	13.9	0.591	15.0	0.614	15.6	100
550254	—	7.87 (200), 50 Lbs.	2	0.028 - 0.118	0.7 - 3.0	0.472	12.0	0.591	15.0	0.614	15.6	100
550255	—	7.87 (200), 50 Lbs.	2	0.118 - 0.236	3.0 - 6.0	0.594	15.1	0.787	20.0	0.740	18.8	100
550256	—	7.87 (200), 50 Lbs.	3	0.028 - 0.118	0.7 - 3.0	0.574	13.9	0.591	15.0	0.614	15.6	100
550257	—	7.87 (200), 50 Lbs.	1	0.118 - 0.236	3.0 - 6.0	0.594	15.1	0.787	20.0	0.756	19.2	100
550258	—	7.87 (200), 50 Lbs.	4	0.118 - 0.236	3.0 - 6.0	0.673	17.1	0.787	20.0	0.748	19.0	100
550259	—	7.87 (200), 50 Lbs.	3	0.118 - 0.236	3.0 - 6.0	0.673	17.1	0.787	20.0	0.740	18.8	100
550260	—	7.87 (200), 50 Lbs.	5	0.028 - 0.118	0.7 - 3.0	0.594	15.1	0.591	15.0	0.594	15.1	100
550277	—	5.51 (140), 40 Lbs.	6	0.028 - 0.118	0.7 - 3.0	0.591	15.0	0.787	20.0	6.575	167.0	100
550278	—	5.51 (140), 40 Lbs.	7	0.028 - 0.118	0.7 - 3.0	0.591	15.0	0.787	20.0	6.614	168.0	500
550279	—	5.51 (140), 40 Lbs.	8	0.028 - 0.118	0.7 - 3.0	0.591	15.0	0.787	20.0	6.575	167.0	100
550280	—	5.51 (140), 40 Lbs.	9	0.028 - 0.118	0.7 - 3.0	0.591	15.0	0.787	20.0	6.575	167.0	100

## FTH-31 Series

### Edge Mount Cable Tie Mount



**Specifications:**

- Material: UL94 V-2 Nylon 6/6 and 304 Stainless Steel
- Color: Black

**Features:**

- Push the tie holder onto the edge of panel to accept a cable tie and mount a cable bundle
- Tie can be inserted from all four sides
- Retention Force:  
Steel Panel .03 (0.8) thick: 5 Lbs.  
Steel Panel .12 (3) thick: 10 Lbs.  
Plastic Panel .09-.12 (2.4-3) thick: 33 Lbs.



Item No.	Panel Thickness		Accepts Cable Ties w/ Tensile lbs.	Bulk Pack Qty
	in	mm		
FTH-31-01	0.03 - 0.12	0.8 - 3.0	40 - 50 lbs.	1000

# CABLE DUCT



## RX Series 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		Bulk Pack Qty
w/o Adhesive	w/ Adhesive	in	mm	in	mm	in	mm	
RX1313-0	RX1313-4	0.49 x 0.49	12.5 x 12.5	0.171	110.0	19.7	500.0	112
RX1616-0	RX1616-4	0.63 x 0.63	16.0 x 16.0	0.287	185.0	19.7	500.0	84
RX2020-0	RX2020-4	0.79 x 0.79	20.0 x 20.0	0.496	320.0	19.7	500.0	112
RX2525-0	RX2525-4	0.98 x 0.98	25.0 x 25.0	0.775	500.0	19.7	500.0	70
RX3030-0	RX3030-4	1.18 x 1.18	30.0 x 30.0	1.116	720.0	19.7	500.0	50
RX4040-0	RX4040-4	1.57 x 1.5759	40.0 x 40.0	2.046	1320.0	19.7	500.0	50
RX5050-0	RX5050-4	1.97 x 1.99	50.0 x 50.0	3.162	2040.0	19.7	500.0	32

## SRWD Series Slotted Wire Duct



**Specifications:**

- Material: PVC
- Color: 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		In Pack	Pack Qty
		in	mm	in	mm	in	mm	in	mm		ft	m		
SRWD-1015		1.000	25.4	1.500	38.1	0.79	20.0	0.31	8.0	1	6.5	2.0	78 ft	1
SRWD-1515		1.500	38.1	1.500	38.1	0.79	20.0	0.31	8.0	1	6.5	2.0	78 ft	1
SRWD-1520		1.500	38.1	2.000	50.8	0.79	20.0	0.31	8.0	1	6.5	2.0	52 ft	1
SRWDN1-1530		1.500	38.1	3.000	76.2	0.39	10.0	0.16	4.0	1	6.5	2.0	78 ft	1
SRWD-2020		2.000	50.8	2.000	50.8	0.79	20.0	0.31	8.0	1	6.5	2.0	52 ft	1
SRWDN1-2030		2.000	50.8	3.000	76.2	0.39	10.0	0.16	4.0	1	6.5	2.0	78 ft	1
SRWD-4020		4.000	101.6	2.000	50.8	0.79	20.0	0.31	8.0	2	6.5	2.0	26 ft	1

## SCD Series Single Cable Duct

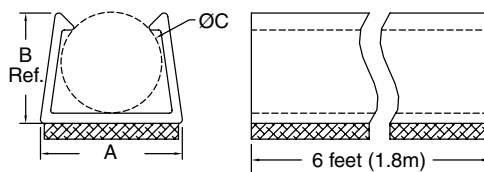


**Specifications:**

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

**Features:**

- Designed to route single coax or computer cable
- Supplied in 6 foot lengths
- Adhesive base for easy mounting



Item No.	C Holding Ø		A		B Ref.		Cable Recommendations	Length		In Pack	Pack Qty
	in	mm	in	mm	in	mm		ft	m		
SCD-1521	0.156 - 0.218	4.0 - 5.5	0.30	7.6	0.25	6.4	RG58	6	1.8	60 ft	1
SCD-2228	0.218 - 0.280	5.5 - 7.1	0.36	9.1	0.29	6.6	RG59, RG62, RG6, 9 Line	6	1.8	60 ft	1



# CABLE DUCT, FLEXIBLE CONDUIT & FITTINGS

## SRL Series Locking Duct on Adhesive Base



**Specifications:**

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

**Features:**

- Adhesive base for fast, easy installation
- When lid is shut the cables are locked into place
- Lightweight and aesthetically pleasing



Item No.	A		B		W		C Ref.		Length		In Pack	Pack Qty
	in	mm	in	mm	in	mm	in	mm	ft	m		
SRL1-3-WH6A	0.625	15.9	0.40	10.2	0.81	20.7	0.49	12.3	6	1.8	72 ft	1
SRL1-5-WH6A	0.750	19.1	0.58	14.7	0.99	25.1	0.67	8.5	6	1.8	72 ft	1
SRL1-10-WH6A	1.125	28.6	0.82	20.8	1.52	38.3	0.95	24.1	6	1.8	72 ft	1

## CF Series PVC Coated Metal Conduit

**Specifications:**

- Material: PVC Coated Steel in Coil
- Color: Black

**Features:**

- Designed to be liquid-tight and has high tensile strength
- Good resistance to corrosion and high heat



Item No.	Sizes	A ID Min		B OD Min		Roll Length		w	Pack Qty
		in	mm	in	mm	ft	m		
CF3020A	3/8	0.393	10.00	0.570	14.50	164	50	1	
CF3060A	1/2	0.496	12.60	0.637	16.20	164	50	1	
CF3090A	3/4	0.826	21.00	0.960	24.40	164	50	1	
CF3140A	1	1.035	26.30	1.204	30.60	164	50	1	
CF3160A	1-1/4	1.377	35.00	1.598	40.60	98	30	1	
CF3180A	1-1/2	1.586	40.30	1.811	46.00	82	25	1	
CF3200A	2	2.031	51.60	2.299	58.40	65	20	1	

## MCF Series PVC Coated Metal Conduit

**Specifications:**

- Material: Zinc Alloy
- Connection Type: Set Screw EMT Pipe

**Features:**

- Connects convoluted metal conduit to EMT pipe in order to protect wires or cables



Item No.	EMT Pipe	Sizes	Used With Metal Conduit	Mounting Hole		Bulk Pack Qty
				in	mm	
MCF04A	1/2		CF3060A	0.767	19.50	50
MCF06A	3/4		CF3090A	1.027	26.10	50
MCF08A	1		CF3140A	1.267	32.20	30
MCF10A	1-1/4		CF3160A	1.523	38.70	20
MCF12A	1-1/2		CF3180A	2.035	51.70	10
MCF14A	2		CF3200A	2.515	63.90	5

## MCF Series Fittings for PVC Pipe to Metal Conduit

**Specifications:**

- Material: Zinc Alloy
- Connection Type: Set Screw EMT Pipe

**Features:**

- Connects convoluted metal conduit to PVC pipe in order to protect wires or cables



Item No.	PVC Pipe	Sizes	Used With Metal Conduit	Mounting Hole		Bulk Pack Qty
				in	mm	
MCF106A	3/4		CF3090A	1.091	27.70	50
MCF108A	1		CF3140A	1.350	34.30	30
MCF110A	1-1/4		CF3160A	1.724	43.80	20
MCF112A	1-1/2		CF3180A	2.035	51.70	10
MCF114A	2		CF3200A	2.516	63.90	5

# FLEXIBLE CONDUIT & FITTINGS



## NPT, PG & Metric Threads Metal Conduit Fittings

Specifications:

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



Features:

- Provides strong pull out strength and anti-vibration properties
- Eliminates chance of cutting into conduit and creating leak paths
- Reusable



Item No.	Thread	Max Joint F1		Used w/ Metal Conduit	Thread OD C1		Ø 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

## FCA200 Series Flexible Conduit Fittings

Specifications:

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



Features:

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



Item No.	Ø Mounting Hole		Used w/ Plastic Conduit	D2		D3		L1		L2		L3		Bulk Pack Qty
	in	mm		in	mm	in	mm	in	mm	in	mm	in	mm	
FCA200A	0.567	14.4	CF001A	0.248	6.3	0.295	7.5	0.382	9.7	0.728	18.5	0.626	15.9	50
FCA202A	0.626	15.9	CF003A	0.433	11	0.425	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

## FCA Series Flexible Conduit Adapters

Specifications:

- Material: UL94 HB ABS
- Color: Grey

Features:

- FCA02A to FCA08A can be used to connect plastic convoluted conduit
- FCA102A to FCA108A can be used to connect plastic convoluted conduit to PVC pipe

### Conduit to Conduit Connector

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



Conduit to Conduit



### Conduit to PVC Pipe

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



Conduit to PVC Pipe





# FLEXIBLE CONDUIT & FITTINGS

## CF Series Unsplit Polyethylene Conduit

**Specifications:**

- Material: High-Density Polyethylene
- Color: Grey
- Temperature Range: -40°F to 200°F (-40°C to 93°C)

**Features:**

- Wire and cable protection for electrical harnesses
- Can also be used to protect hydraulic hoses
- Flexible body allows for easy corner/elbow wiring



Item No.	Ø Nominal		A		B		C		Roll Length		Pack Qty
	in	mm	in	mm	in	mm	in	mm	ft	m	
CF001A	1/4	0.291	7.390	0.402	10.21	0.104	2.64	984	300	1	
CF002A	3/8	0.421	10.69	0.555	14.10	0.080	2.04	328	100	1	
CF003A	3/8	0.421	10.69	0.630	16.00	0.130	3.30	328	100	1	
CF004A	1/2	0.543	13.79	0.787	19.99	0.124	3.14	328	100	1	
CF005A	5/8	0.555	14.10	0.866	22.00	0.144	3.66	328	100	1	
CF006A	11/16	0.677	17.20	0.866	22.00	0.124	3.14	328	100	1	
CF007A	3/4	0.720	18.29	0.984	24.99	0.162	4.12	328	100	1	
CF008A	7/8	0.835	21.21	1.016	25.81	0.124	3.14	328	100	1	
CF009A	1	0.957	24.31	1.260	32.00	0.142	3.61	164	50	1	
CF010A	1-1/8	1.130	28.70	1.339	34.01	0.124	3.14	164	50	1	
CF011A	1-1/4	1.228	31.19	1.575	40.01	0.162	4.12	164	50	1	
CF012A	1-3/8	1.374	34.90	1.654	42.01	0.124	3.14	164	50	1	
CF013A	1-1/2	1.575	40.00	1.890	48.01	0.124	3.14	164	50	1	
CF014A	1-5/8	1.559	39.60	1.969	50.01	0.191	4.85	164	50	1	

## CF Series Unsplit Nylon Conduit

**Specifications:**

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

**Features:**

- Wire and cable protection for electrical harnesses
- Can also be used to protect hydraulic hoses
- Flexible body allows for easy corner/elbow wiring



Item No.	Ø Nominal	A Min		A Max		B Min		B Max		Wall Thickness		Roll Length		Pack Qty
		in	mm	in	mm	in	mm	in	mm	in	mm	ft	m	
CF1010A	1/4	0.237	6.02	0.266	6.76	0.375	9.53	0.400	10.16	0.040	1.02	2500	762	1
CF1020A	3/8	0.341	8.66	0.380	9.65	0.497	12.62	0.526	13.36	0.040	1.02	1500	457.2	1
CF1040A	7/16	0.399	10.13	0.437	11.10	0.573	14.55	0.597	15.16	0.050	1.27	1500	457.2	1
CF1060A	1/2	0.473	12.01	0.516	13.11	0.664	16.87	0.700	17.78	0.050	1.27	1000	304.8	1
CF1080A	5/8	0.603	15.32	0.639	16.23	0.805	20.45	0.837	21.26	0.050	1.27	700	213.4	1
CF1090A	3/4	0.707	17.96	0.759	19.28	0.950	24.13	0.989	25.12	0.050	1.27	450	137.2	1
900081	7/8	0.848	21.54	0.898	22.81	1.107	28.12	1.151	29.24	0.050	1.27	400	121.9	1
CF1140A	1	1.020	25.91	1.069	27.16	1.251	31.78	1.304	33.13	0.060	1.52	250	76.2	1
CF1140B*	1	1.020	25.91	1.069	27.16	1.251	31.78	1.304	33.13	0.060	1.52	250	76.2	1
CF1150A	1-1/8	1.122	28.50	1.176	29.86	1.356	34.58	1.413	35.88	0.060	1.52	200	60.9	1
900082	1-1/4	1.199	30.45	1.257	31.93	1.446	36.73	1.500	38.10	0.060	1.52	200	60.9	1

\* No grey stripe

## CS Series Split Polypropylene Conduit

**Specifications:**

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

**Features:**

- Split design for easy installation and removal of wiring
- Wire and cable protection for electrical harnesses
- Flexible body allows for corner/elbow wiring
- Can be used to protect hydraulic hoses



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

# FLEXIBLE CONDUIT, FITTINGS & WRAPS



## CS (Nylon) Series Split Nylon Conduit

**Specifications:**

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



**Features:**

- Split design for easy installation and removal of wiring
- Cable protection for electrical wiring harnesses
- Flexible body allows for corner/elbow wiring
- Can be used to protect hydraulic hoses
- Split design for easy installation



Item No.	Ø Nominal	A Min		A Max		B Min		B Max		Wall Thickness		Roll Length		Pack Qty
		in	mm	in	mm	in	mm	in	mm	in	mm	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 Series EZ Dispenser Split Nylon Conduit

**Specifications:**

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



**Features:**

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



Item No.	Ø Nominal	A Min		A Max		B Min		B Max		Wall Thickness		Roll Length		Pack Qty
		in	mm	in	mm	in	mm	in	mm	in	mm	Ft	m	
CSEZ1010A	1/4	0.256	6.50	0.276	7.01	0.373	9.47	0.398	10.11	0.040	1.02	100	30.48	1
CSEZ1030A	3/8	0.368	9.35	0.398	10.11	0.494	12.56	0.525	13.32	0.050	1.27	100	30.48	1
CSEZ1060A	1/2	0.473	12.01	0.516	13.11	0.664	16.87	0.700	17.78	0.050	1.27	100	30.48	1
CSEZ1080A	5/8	0.603	15.32	0.639	16.23	0.805	20.45	0.837	21.26	0.050	1.27	100	30.48	1
CSEZ1090A	3/4	0.707	17.96	0.759	19.28	0.950	24.13	0.989	25.12	0.050	1.27	100	30.48	1
CSEZ1140A	1	1.020	25.91	1.069	27.16	1.251	31.78	1.304	33.13	0.060	1.52	50	15.24	1

## Edge Mount Conduit Holder



**Specifications:**

- Material: Heat Stabilized Nylon 6/6 and 302 Stainless Steel
- Color: Black

**Features:**

- Holds a variety of sizes of corrugated tubing in place
- Easy to install by pushing onto plastic or metal sheet edge
- Ideal for applications where holes or adhesive is not suitable

Item No.	Type	Tube Size mm	Panel Thickness		Width		Length		Height to Center		Bulk Pack Qty
			in	mm	in	mm	in	mm	in	mm	
550261	1	4.5	0.028 - 0.118	0.7 - 3	0.591	15	0.591	15	0.610	15.5	100
550262	2	4.5	0.028 - 0.118	0.7 - 3	0.591	15	0.591	15	0.610	15.5	100
550263	3	4.5	0.028 - 0.118	0.7 - 3	0.787	20	0.591	15	0.256	6.5	100
550264	3	4.5	0.118 - 0.236	3 - 6	0.787	20	0.787	20	0.303	7.7	100
550265	4	4.5	0.118 - 0.236	3 - 6	0.787	20	0.787	20	0.728	18.5	100
550266	4	7.5	0.118 - 0.236	3 - 6	0.591	15	0.591	15	0.689	17.5	100
550267	1	10	0.118 - 0.236	3 - 6	0.472	12	0.866	22	0.728	18.5	100
550268	3	10	0.028 - 0.118	0.7 - 3	0.866	22	0.591	15	0.343	8.7	100
550269	3	10	0.118 - 0.236	3 - 6	0.866	22	0.787	20	0.350	8.9	100
550270	4	2 x 10	0.028 - 0.118	0.7 - 3	0.472	12	1.339	34	0.764	19.4	100
550271	5	2 x 10	0.028 - 0.118	0.7 - 3	0.591	15	1.614	41	0.535	13.6	100
550272	6	2 x 10	0.028 - 0.118	0.7 - 3	1.181	30	0.591	15	0.335 / 0.728	—	100
550273	3	13	0.028 - 0.118	0.7 - 3	0.591	15	0.591	15	0.413	10.5	100
550274	2	13	0.118 - 0.236	3 - 6	0.906	23	0.787	20	0.917	23.3	100
550275	1	13	0.118 - 0.236	3 - 6	0.512	13	0.906	23	0.787	20	100
550276	2	17	0.028 - 0.118	0.7 - 3	1.181	30	0.591	15	0.894	22.7	100



# WRAPS

## SHR Series Slit Harness Wrap



**Specifications:**

- Material: See Table
- Color: Black

**Features:**

- Protects wires from wear
- Easy to install



Item No.		Max Bundle Range		A		B		C		Roll Length		Installation Tool	Pack Qty
UL94 V-0 Nylon 6	Nylon 6	LDPE	Approval	In	mm	In	mm	In	mm	In	mm	Part Number	
SHR-05-6V0B	SHR-05-6NB	SHR-05-PPB	UL	0.240	6.0	0.200	5.0	0.032	0.8	0.390	10.0	CAT-05-PP-BL	1
SHR-08-6V0B	SHR-08-6NB	SHR-08-PPB	UL	0.390	10.0	0.310	8.0	0.032	0.8	0.390	10.0	CAT-08-PP	1
SHR-15-6V0B	SHR-15-6NB	SHR-15-PPB	UL	0.630	16.0	0.590	15.0	0.032	0.8	0.550	14.0	CAT-15-PP	1
SHR-20-6V0B	SHR-20-6NB	SHR-20-PPB	UL	0.900	23.0	0.790	20.0	0.035	0.9	0.670	17.0	CAT-20-PP	1
SHR-25-6V0B	SHR-25-6NB	SHR-25-PPB	UL	0.980	25.0	0.980	25.0	0.039	1.0	0.790	20.0	CAT-25-PP	1
SHR-32-6V0B	SHR-32-6NB	SHR-32-PPB	UL	1.250	32.0	1.250	32.0	0.050	1.3	0.980	24.9	CAT-32-PP	1

## CAT Series Installation Tool for SHR



**Features:**

- The easiest and quickest way to wrap cables
- Insert cables into the CAT installation tool
- Feed the slit end of the wrap over the horn of the tool and "zip" the wires into a neat bundle
- Allows for breakout of the cables
- Provides abrasion protection

Item No.	Ø Max Bundle B		To Be Used With	Pack Qty
	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 Series SHR Clip

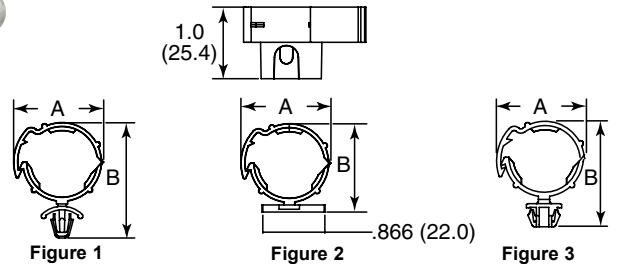


**Specifications:**

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

**Features:**

- Adjustable clips to hold both the SHR-20 and SHR-25 slit harness wrap (see above)
- Internal ribs grip the wrap securely



Item No.	Ø Holding	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 0.252 in. (6.4 mm) Hole in a 0.031-0.079 in. (0.8-2.0 mm) Panel	1.140	29.0	1.670	42.5	500
SHR-C2	To hold SHR-20 & SHR-25	2	#8 or M4 Screw	1.180	30.0	1.280	32.5	500
SHR-C3	To hold SHR-20 & SHR-25	2	Adhesive	1.180	30.0	1.280	32.5	500
SHR-C4	To hold SHR-20 & SHR-25	3	Snaps into a 0.370 in. (9.5 mm) Square Hole in a 0.031-0.079 in. (0.8-2.0 mm) Panel	1.180	30.0	1.630	40.5	500

## HR Series Spiral Wrap



**Specifications:**

- Material: See Table
- Color: See Table



Item No.		Bundle Range		A Ref.		B		C Ref.		Roll Length		Pack Qty		
UL94 HB Nylon	Polyethylene	LDPE	Approval	in	mm	in	mm	in	mm	in	mm	ft	m	
HR2N-1/8	—	—	UL	0.062 - 0.500	1.6 - 12.7	0.125	3.2	0.020	0.5	0.170	4.3	100	30.48	1
HR3N-3/16	—	—	UL	0.125 - 1.000	3.2 - 25.4	0.187	4.8	0.020	0.5	0.250	6.4	100	30.48	1
HR4N-1/4	—	—	UL	0.187 - 1.500	4.8 - 38.7	0.250	6.4	0.025	0.6	0.300	7.6	100	30.48	1
HR6N-3/8	—	—	UL	0.312 - 2.000	7.9 - 50.8	0.375	9.5	0.035	0.9	0.380	9.5	100	30.48	1
HR8N-1/2	—	—	UL	0.750 - 3.000	19.1 - 76.2	0.500	12.7	0.040	1.0	0.500	12.7	100	30.48	1
—	HR2P-1/8	—	UL	0.062 - 0.375	1.6 - 9.5	0.125	3.2	0.020	0.5	0.170	4.3	100	30.48	1
—	HR3P-3/16	—	UL	0.125 - 1.000	3.2 - 25.4	0.187	4.8	0.030	0.8	0.250	6.4	100	30.48	1
—	HR4P-1/4	—	UL	0.187 - 1.000	4.8 - 25.4	0.250	6.4	0.050	1.3	0.300	7.6	100	30.48	1
—	HR6P-3/8	—	UL	0.312 - 2.000	7.9 - 50.8	0.375	9.5	0.050	1.3	0.380	9.5	100	30.48	1
—	HR8P-1/2	—	UL	0.750 - 3.000	19.1 - 76.2	0.500	12.7	0.060	1.5	0.500	12.7	100	30.48	1
—	—	HR4U-1/4	UL	0.187 - 0.750	4.8 - 19.1	0.250	6.4	0.050	1.3	0.300	7.6	100	30.48	1
—	—	HR6U-3/8	UL	0.312 - 2.000	7.9 - 50.8	0.375	9.5	0.050	1.3	0.380	9.5	100	30.48	1
—	—	HR8U-1/2	UL	0.750 - 3.500	19.1 - 88.9	0.500	12.7	0.060	1.5	0.500	12.7	100	30.48	1



**Polyester Expandable Braided Sleeving**



Specifications:

- Material: Polyester
- Flammability: VW-1
- Color: Black

Features:

- The open weave construction allows for easy installation reducing assembly cost
- Cut and abrasion resistant with high thermal properties
- Used on wire harnessing applications where durability and low cost are essential
- Cuts cleanly with a hot knife



Item No.	Nominal Size		Expansion Range				Roll Length		Pack Qty
	in	mm	Min (in)	Max (in)	Min (mm)	Max (mm)	ft	m	
900303	1/8	3	0.039	0.236	1	6	200	60.9	1
900304	1/4	6	0.118	0.354	3	9	200	60.9	1
900305	5/16	8	0.197	0.630	5	16	100	30.5	1
900306	3/8	10	0.276	0.748	7	19	100	30.5	1
900307	1/2	12	0.315	0.945	8	24	100	30.5	1
900308	5/8	15	0.394	1.063	10	27	100	30.5	1
900309	3/4	20	0.551	1.181	14	30	50	15.2	1
900310	1	25	0.709	1.378	18	35	50	15.2	1
900311	1-1/4	30	0.787	1.969	20	50	50	15.2	1
900312	1-1/2	40	1.181	2.362	30	60	50	15.2	1
900313	1-3/4	45	1.378	2.953	35	75	50	15.2	1
900314	2	50	1.575	3.150	40	80	50	15.2	1
900315	2-1/2	64	1.772	4.134	45	105	50	15.2	1
900302	3	76	2.520	3.150	64	80	50	15.2	1

**Nylon Expandable Sleeving**



Specifications:

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

Features:

- Offers excellent abrasion resistance while maintaining a high degree of flexibility and durability
- Provides a smooth and slick surface that resists snags when dragged over a rough surface
- Cuts cleanly with a hot knife



Item No.	Nominal Flat Width		Expanded Range				Roll Length		Pack Qty
	in	mm	Min (in)	Max (in)	Min (mm)	Max (mm)	ft	m	
900426	1/8	3	0.039	0.236	1	6	200	60.9	1
900427	1/4	6	0.118	0.354	3	9	200	60.9	1
900428	5/16	8	0.197	0.630	5	16	100	30.5	1
900429	3/8	10	0.276	0.748	7	19	100	30.5	1
900430	1/2	12	0.315	0.945	8	24	100	30.5	1
900431	5/8	16	0.394	1.063	10	27	100	30.5	1
900432	3/4	19	0.551	1.181	14	30	50	15.2	1
900433	1	25	0.709	1.378	18	35	50	15.2	1
900434	1-1/4	32	0.787	1.969	20	50	50	15.2	1
900435	1-1/2	38	1.181	2.362	30	60	50	15.2	1
900436	1-3/4	45	1.378	2.953	35	75	50	15.2	1
900483	2	50	1.575	3.150	40	80	50	15.2	1
900484	2-1/2	64	1.772	4.134	45	105	50	15.2	1
900485	3	76	2.520	4.724	64	120	50	15.2	1



# BRAIDED SLEEVING

## PPS UL94 V-0 Expandable Sleeve



**Specifications:**

- Material: Polyphenylene Sulfide
- Flammability: UL94 V-0
- Color: Black

**Features:**

- Used on flame retardant and high temperature cable assemblies and wire harness applications
- Lightweight sleeve that has chemical resistance, low wear, dimensional stability, and low moisture stability
- Cuts cleanly with a hot knife

Item No.	Nominal Flat Width		Expanded Range				Roll Length		Pack Qty
	in	mm	Min (in)	Max (in)	Min (mm)	Max (mm)	ft	m	
900437	1/8	3	0.039	0.236	1	6	200	60.9	1
900438	1/4	6	0.118	0.354	3	9	200	60.9	1
900439	5/16	8	0.197	0.630	5	16	100	30.5	1
900440	3/8	10	0.276	0.748	7	19	100	30.5	1
900441	1/2	12	0.315	0.945	8	24	100	30.5	1
900442	5/8	16	0.394	1.063	10	27	100	30.5	1
900443	3/4	19	0.551	1.181	14	30	50	15.2	1
900444	1	25	0.709	1.378	18	35	50	15.2	1
900445	1-1/4	32	0.787	1.969	20	50	50	15.2	1
900446	1-1/2	38	1.181	2.362	30	60	50	15.2	1
900479	1-3/4	45	1.378	2.953	35	75	50	15.2	1
900449	2	50	1.575	3.150	40	80	50	15.2	1
900450	2-1/2	64	1.772	4.134	45	105	50	15.2	1
900451	3	76	2.520	4.724	64	120	50	15.2	1

## PET Anti-Abrasion Sleeve



**Specifications:**

- Material: Polyethylene Terephthalate
- Flammability: VW-1
- Color: Black

**Features:**

- Has 300% more abrasion resistance than the standard polyester expandable sleeve
- Exceptional mechanical properties
- Cuts cleanly with a hot knife

Item No.	Nominal Flat Width		Expanded Range				Roll Length		Pack Qty
	in	mm	Min (in)	Max (in)	Min (mm)	Max (mm)	ft	m	
900461	1/8	3	0.039	0.236	1	6	200	60.9	1
900462	1/4	6	0.118	0.354	3	9	200	60.9	1
900463	5/16	8	0.197	0.630	5	16	100	30.5	1
900464	3/8	10	0.276	0.748	7	19	100	30.5	1
900465	1/2	12	0.315	0.945	8	24	100	30.5	1
900466	5/8	16	0.394	1.063	10	27	100	30.5	1
900467	3/4	19	0.551	1.181	14	30	50	15.2	1
900468	1	25	0.709	1.378	18	35	50	15.2	1
900469	1-1/4	32	0.787	1.969	20	50	50	15.2	1
900470	1-1/2	38	1.181	2.362	30	60	50	15.2	1
900471	1-3/4	45	1.378	2.953	35	75	50	15.2	1
900472	2	50	1.575	3.150	40	80	50	15.2	1
900473	2-1/2	64	1.772	4.134	45	105	50	15.2	1
900474	3	76	2.520	4.724	64	120	50	15.2	1

## Scissor Cut Sleeve



**Specifications:**

- Material: Polyester
- Flammability: VW-1
- 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

Item No.	Approval	Nominal Size		Expansion Range			Roll Length		Pack Qty	
		in	mm	Min in	Max mm	Max mm	ft	m		
900289	PS	1/8	3	0.039	1	0.197	5	200	60.98	1
900290	PS	1/4	6	0.118	3	0.315	8	200	60.98	1
900291	PS	5/16	8	0.197	5	0.394	10	100	30.49	1
900292	PS	3/8	10	0.276	7	0.472	12	100	30.49	1
900293	PS	1/2	12	0.315	8	0.551	14	100	30.49	1
900294	PS	5/8	15	0.394	10	0.709	18	100	30.49	1
900295	PS	3/4	20	0.551	14	0.906	23	50	15.24	1
900296	PS	1	25	0.709	18	1.102	28	50	15.24	1
900297	PS	1-1/4	30	0.787	20	1.378	35	50	15.24	1
900298	PS	1-1/2	40	1.181	30	1.654	42	50	15.24	1
900299	PS	1-3/4	45	1.378	35	1.890	48	50	15.24	1
900300	PS	2	50	1.575	40	2.126	54	50	15.24	1
900301	PS	2-1/2	64	1.772	45	2.756	70	50	15.24	1
900302	PS	3	76	2.520	64	3.150	80	50	15.24	1



**Thermal Protection Sleeve**

Specifications:

- Material: Nomex™ Fiber
- Flammability: UL94 V-0
- Color: Natural

Features:

- Provides thermal protection and high abrasion resistance
- Soft feel and smooth appearance makes installation easy
- Cuts easily with standard scissors
- Operating Range: -320°F to 662°F (-196°C to 350°C)



Item No.	Nominal Size		Expansion Range		Roll Length		Pack Qty
	in	mm	in	mm	ft	m	
900365	0.118	3	0.039	0.157	100	30.48	1
900366	0.236	6	0.196	0.314	100	30.48	1
900367	0.314	8	0.236	0.393	100	30.48	1
900368	0.393	10	0.275	0.511	100	30.48	1
900369	0.472	12	0.314	0.629	100	30.48	1
900370	0.591	15	0.393	0.787	100	30.48	1
900371	0.787	20	0.551	1.023	100	30.48	1
900372	0.984	25	0.708	1.299	100	30.48	1
900373	1.181	30	0.787	1.535	100	30.48	1
900374	1.574	40	1.181	2.047	100	30.48	1
900375	1.968	50	1.574	2.559	100	30.48	1

**Self Closing Wrap**

Specifications:

- Material: Polyester Monofilament
- Flammability: DIN5510, VW-1
- Color: Black

Features:

- The self closing 25% overlap design allows easy access to the bundle inside
- Can be assembled over components after they have already been installed
- Excellent flame resistance, heat dispersion, and durable protection
- Installation tool to zip cables in available in most sizes
- Cuts cleanly with a hot knife



Item No.	ID		Ø Max Bundle		Installation Tool Part Number	Roll Length		Pack Qty
	in	mm	in	mm		ft	m	
900412	0.196	5	0.236	6	900475	100	30.5	1
900413	0.314	8	0.354	9	900475	100	30.5	1
900414	0.511	13	0.551	14	900476	100	30.5	1
900415	0.748	19	0.787	20	900478	100	30.5	1
900416	0.984	25	1.023	26	900478	100	30.5	1
900417	1.496	38	1.574	40	—	100	30.5	1

**Self Closing Braided Wrap**

Specifications:

- Material: Polyester
- Flammability: UL94 V-2
- Color: Black

Features:

- The self closing 25% overlap design allows easy access to the bundle inside
- Can be assembled over components after they have already been installed
- Lightweight and abrasion resistant
- Installation tool to zip cables in available in most sizes
- Cuts cleanly with a hot knife



Item No.	ID		Ø Max Bundle		Installation Tool Part Number	Roll Length		Pack Qty
	in	mm	in	mm		ft	m	
900452	0.236	6	0.275	7	900475	100	30.5	1
900453	0.354	9	0.393	10	900476	100	30.5	1
900454	0.511	13	0.551	14	900476	100	30.5	1
900455	0.629	16	0.669	17	900477	100	30.5	1
900456	0.748	19	0.787	20	900478	100	30.5	1
900457	0.984	25	1.023	26	900478	100	30.5	1
900458	1.259	32	1.299	33	—	50	15.2	1
900459	1.496	38	1.574	40	—	50	15.2	1
900460	1.968	50	2.047	52	—	50	15.2	1



## HOSE OR CABLE WRAP SLEEVES

### Hook and Loop Braided Cable or Hose Wrap



**Specifications:**

- Material: Polyester and Nylon
- Flammability: VW-1
- Color: Black

**Features:**

- Easily opened and closed
- Can be easily installed over connectors, fittings, splices, cables and hoses
- Breakouts can be made by bringing cables out through hook and loop
- Open weave design easily conforms to many irregular shapes

Item No.	Nominal Size		Max Bundle Dia.		Hook & Loop Width		Roll Length		Pack Qty
	in	mm	in	mm	in	mm	ft	m	
900360	0.512	13	0.315	8	0.394	10	164	50	1
900361	0.748	19	0.472	12	0.394	10	164	50	1
900362	1.260	32	0.787	20	0.787	20	164	50	1
900363	2.008	51	1.260	32	0.787	20	164	50	1
900364	2.520	64	1.575	40	0.787	20	164	50	1

### Quick Assemble Hook and Loop Cable or Hose Sleeve



**Specifications:**

- Material: Polyester with Hook and Loop
- Flammability: VW-1
- Color: Black

**Features:**

- Non-expanable sleeve is easily opened and closed
- Lightweight, high strength, excellent flame and abrasion resistance
- Can be easily installed over connectors, fittings, splices, cables and hoses
- Breakouts can be made by bringing cables out through hook and loop

Item No.	ID		Spread Width		Roll Length		Pack Qty
	in	mm	in	mm	ft	m	
900328	0.787	20	3.149	80	82	25	1
900329	0.984	25	3.740	95	82	25	1
900330	1.181	30	4.527	115	82	25	1
900331	1.377	35	5.118	130	82	25	1
900332	1.574	40	5.748	146	82	25	1
900333	1.771	45	6.377	162	82	25	1
900334	1.968	50	7.007	178	82	25	1

### Hose & Cable Protection Sleeve



**Specifications:**

- Material: Polyester
- Color: Black

**Features:**

- Most economical MSHA approved sleeve protection option
- Lightweight but high strength and abrasion resistant
- Protects people, environment and machinery against hydraulic hose ruptures

Item No.	Flattened Width		Round ID		Roll Length		Pack Qty
	in	mm	in	mm	ft	m	
900359	0.787	20	0.472	12	100	30.5	1
900344	0.984	25	0.591	15	100	30.5	1
900345	1.181	30	0.748	19	100	30.5	1
900346	1.378	35	0.866	22	100	30.5	1
900347	1.575	40	0.984	25	100	30.5	1
900348	1.772	45	1.102	28	100	30.5	1
900349	1.969	50	1.220	31	100	30.5	1
900350	2.362	60	1.496	38	100	30.5	1
900351	2.756	70	1.732	44	100	30.5	1
900352	3.150	80	1.969	50	100	30.5	1
900353	3.543	90	2.244	57	100	30.5	1
900354	3.937	100	2.362	60	100	30.5	1
900355	4.528	115	2.756	70	50	15.2	1
900356	5.709	145	3.543	90	50	15.2	1
900357	6.929	176	4.331	110	50	15.2	1
900358	7.874	200	4.921	125	50	15.2	1

# HOSE OR CABLE WRAP SLEEVES



## Heatshrink Braided Sleeve

### Specifications:

- Material: Polyester and Polyolefin
- Color: Black
- Shrink Ratio: 2:1
- Minimum Shrink Temperature: 176° F (80° C)
- Minimum Full Recovery Temperature: 248° F (120° C)

### Features:

- Braided sleeving will shrink when exposed to a heat source
- Unique woven construction is extremely flexible and easy to install on hoses with irregular shapes
- Provides excellent abrasion resistance and noise reduction



Item No.	Nominal Size		As Supplied ID		After Recovery ID		Roll Length		Pack Qty
	in	mm	in	mm	in	mm	ft	m	
900317	3/8	10	0.393	10	0.196	5.0	100	30.5	1
900318	1/2	12	0.472	12	0.236	6.0	100	30.5	1
900319	3/4	20	0.787	20	0.393	10.0	100	30.5	1
900320	1	25	0.984	25	0.492	12.5	100	30.5	1
900321	1-1/4	30	1.181	30	0.59	15.0	100	30.5	1
900322	1-3/8	34	1.338	34	0.669	17.0	100	30.5	1
900323	1-1/2	40	1.574	40	0.787	20.0	100	30.5	1
900324	2	50	1.968	50	0.984	25.0	100	30.5	1
900325	2-3/8	60	2.362	60	1.181	30.0	100	30.5	1
900326	2-3/4	70	2.755	70	1.377	35.0	100	30.5	1
900327	3-1/8	80	3.149	80	1.574	40.0	100	30.5	1

## 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		W	
	In	mm	In	mm
THC1A	0.260 - 0.315	6.6 - 8.0	0.197	5.0
THC2A	0.315 - 0.362	8.0 - 9.2	0.197	5.0
SHC-23	0.359 - 0.390	9.1 - 9.9	0.220	5.6
THC3A	0.362 - 0.413	9.2 - 10.5	0.197	5.0
SHC-26	0.390 - 0.468	9.9 - 11.9	0.220	5.6
THC4A	0.413 - 0.472	10.5 - 12.0	0.236	6.0
SHC-30	0.468 - 0.531	11.9 - 13.5	0.220	5.6
THC6A	0.504 - 0.591	12.8 - 15.0	0.276	7.0
SHC-32	0.531 - 0.593	13.5 - 15.1	0.220	5.6
THC7A	0.591 - 0.677	15.0 - 17.2	0.276	7.0
SHC-38	0.593 - 0.674	15.1 - 16.7	0.220	5.6
THC8A	0.670 - 0.728	17.0 - 18.5	0.276	7.0
SHC-44	0.687 - 0.812	17.5 - 20.6	0.220	5.6
THC9A	0.717 - 0.807	18.2 - 20.5	0.276	7.0
SHC-50	0.750 - 0.875	19.1 - 22.2	0.220	5.6
THC10A	0.807 - 0.906	20.5 - 23.0	0.276	7.0
THC11A	0.866 - 0.984	22.0 - 25.0	0.276	7.0
SHC-56	0.875 - 1.000	22.2 - 25.4	0.220	5.6
SHC-62	0.953 - 1.093	24.2 - 27.8	0.310	7.9
THC12A	0.984 - 1.102	25.0 - 28.0	0.276	7.0

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



# HEAT SHRINK TUBING

## HST Series 2:1 Heat Shrink Tubing

**Specifications:**

- Material: Crosslinked Polyolefin
- Color: See Table
- Operating Temperature: -67°F to 257°F (-55°C to 125°C)
- Minimum Shrink Temperature: 158°F (70°C)
- Minimum Full Recovery Temperature: 212°F (100°C)
- Shrink Ratio: 2:1

**Features:**

- UL Approval: 125°C VW-1 600V File No. E204071
- RoHS Compliant
- Widely used in the communication, electronics and automotive fields
- Excellent electrical and physical properties
- Provided in standard roll lengths
- Flame retardant
- Highly flexible
- Comes in a variety of colors to color code wires, cables, terminals and components
- Provided in mini or standard roll lengths



Item No.	As Supplied				After Recovery				Roll Length		Pack Qty		
	Black	Red	Blue	White	ID Min		ID Max		Wall Thickness Min				
					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	1
495687	—	495756	—	1/16	0.063	1.60	0.031	0.80	0.014	0.36	492	150	1
495688	—	495757	495826	3/32	0.094	2.40	0.047	1.20	0.017	0.44	492	150	1
495689	495712	495758	495827	1/8	0.126	3.20	0.063	1.60	0.017	0.44	492	150	1
495690	495713	495759	495828	3/16	0.189	4.80	0.094	2.40	0.020	0.51	246	75	1
495691	495714	495760	495829	1/4	0.252	6.40	0.126	3.20	0.022	0.56	246	75	1
495692	495715	495761	495830	3/8	0.374	9.50	0.189	4.80	0.022	0.56	246	75	1
495693	495716	495762	495831	1/2	0.500	12.70	0.252	6.40	0.026	0.65	164	50	1
495694	495717	—	495832	5/8	0.630	16.00	0.315	8.00	0.027	0.69	164	50	1
495695	495718	495764	495833	3/4	0.748	19.00	0.374	9.50	0.031	0.80	98.4	30	1
HST022A	—	—	—	15/16	0.913	23.20	0.433	11.00	0.030	0.80	164	50	1
495696	495719	495765	495834	1	1.000	25.40	0.500	12.70	0.035	0.90	98.4	30	1
495697	495720	495766	495835	1-1/4	1.260	32.00	0.630	16.00	0.040	1.02	98.4	30	1
495698	495721	495767	—	1-1/2	1.500	38.10	0.748	19.00	0.040	1.02	98.4	30	1
HST028A	—	—	—	2-3/32	2.087	53.00	0.984	25.00	0.039	1.00	164	50	1

## HST CLEAR Series 2:1 Clear Heat Shrink Tubing

**Specifications:**

- Material: Crosslinked Polyolefin
- Color: Clear (100% Transparent)
- Operating Temperature: -67° F to 221° F (-55° C to 105° C)
- Minimum Shrink Temperature: 158°F (70°C)
- Minimum Full Recovery Temperature: 203°F (95°C)
- Shrink Ratio: 2:1

**Features:**

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



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

# HEAT SHRINK TUBING



## HST YG Series

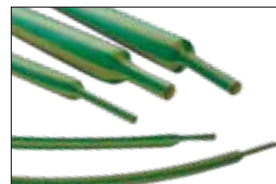
### 2:1 Yellow & Green Striped Heat Shrink Tubing

**Specifications:**

- Material: Crosslinked Polyolefin
- Color: Yellow and Green Striped
- Operating Temperature: -67° F to 275° F (-55° C to 135° C)
- Minimum Shrink Temperature: 158° F (70° C)
- Minimum Full Recovery Temperature: 212° F (100° C)

**Features:**

- UL Approval: 125°C VW-1 600V File No. E204071
- RoHS Compliant
- Outstanding physical, chemical and electrical properties
- Easy to install and makes identifying ground conductors easier
- Highly flame retardant and UV resistant



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

## HST 3:1 Series

### 3:1 Heat Shrink Tubing

**Specifications:**

- Material: Crosslinked Polyolefin
- Color: See Table
- Operating Temperature: -67° F to 257° F (-55° C to 125° C)
- Minimum Shrink Temperature: 158° F (70° C)
- Minimum Full Recovery Temperature: 212° F (100° C)

**Features:**

- UL Approval: 125°C VW-1 600V File No. E204071
- RoHS Compliant
- Widely used for electrical insulation
- Flame retardant and highly flexible
- Protects in line components, disconnect terminals and splices
- Variety of colors to code wires, cables, terminals and components



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

## HST ADHESIVE Series

### 3:1 Adhesive Lined Heat Shrink Tubing

**Specifications:**

- Material: Crosslinked Adhesive Lined Polyolefin
- Color: See Table
- Operating Temperature: -67° F to 257° F (-55° C to 125° C)
- Minimum Shrink Temperature: 176° F (80° C)
- Minimum Full Recovery Temperature: 230° F (110° C)
- Shrink Ratio: 3:1



**Features:**

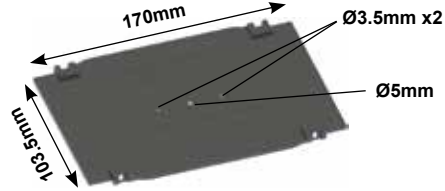
- UL Approval: 125°C VW-1 600V File No. E204071
- RoHS Compliant
- UV Resistant and flame retardant (with the exception of clear)
- Provides insulation and sealing on applications like wire splices and harnesses
- Comes in a variety of colors to code wires, cables, terminals and components
- Provided in standard roll lengths and pre-cut length in packs

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



## FIBER SPLICE ACCESSORIES

### OFST Series 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:**

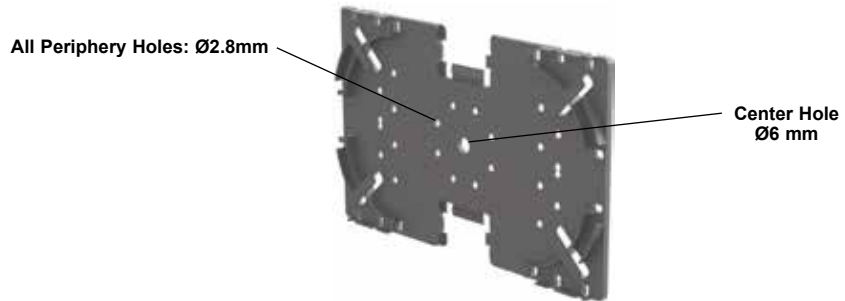
- Color: See Table

**Features:**

- Lid, trays, and hinges are sold separately or in a kit: OFST-A-P-1
- Stackable to any number of trays
- Inter-tray fiber routing possible through slots along one of the long sides of the tray
- Color coded hinges indicate side of tray to open from. Part numbers are OFSTH-1-RED and OFSTH-1-GRN.
- Can be used with OFSH splice holders, OFSP splice protectors and OFBLT bend limiting tubing
- Three mounting holes go through the lid and trays

Item No.	Color	Description	Bulk Pack Qty
OFST-1-L	Black	Splice Tray Lid	10
OFST-1-M	Black	Splice Tray Managed with Radius Control & Dark Fiber Storage	10
OFST-1-P	Black	Splice Tray Plain with Basic Storage Facility	10
OFST-A-P-1	Black	1 x OFST-1-L, 1 x OFST-1-P, 2 x OFSTH-1-RED, 2 x OFSTH-1-GRN	10
OFSTH-1-GRN	Green	OF Splice Tray Hinge	20
OFSTH-1-RED	Red	OF Splice Tray Hinge	20

### EFA04-25-001 Series Splice Tray



**Specifications:**

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

**Features:**

- Molded-in features maintain bend radius at 30mm
- Accepts Fiber Clips EFA04-61, 63 and 64-001
- Accepts 16-way Fiber Clip EFA04-06 and 08-001 broken into a 4-way segment for holding splicing components

Item No.	L x W		Thickness		Bulk Pack Qty
	in	mm	in	mm	
EFA04-25-001	5.197 x 3.228	132.0 x 82.0	0.260	6.6	50

# FIBER BEND LIMITING TUBING



## OFBLT Series Optical Fiber Bend Limiting Tubing



**Specifications:**

- Material: See Table
- Color: See Table

**Features:**

- Optical Fiber Bend-Limiting Tubing offers the ultimate protection to fibers, eliminating problems such as crushing, kinking, and micro-bending, while supplying a self-managing solution for routing of fiber
- Provides superior crush protection against micro fiber bends over conventional corrugated tubing
- Limits the bend in a fiber by controlling radius to a minimum of 30mm
- Has a smooth inner bore for ease of use and elimination of micro-bending
- Suitable for blown fiber applications over short distance and for curbside FTTH/FTTB applications

Item No.		Style	D		d		Bulk Pack Qty	Pack Qty
White Polypropylene	Black UL94 V-0 PBT		in	mm	in	mm		
OFBLT-3-1-05-PP	OFBLT-31-05V0	Standard	0.195	4.95	0.122	3.1	100 Meters	1
OFBLT-42-635PP	OFBLT-42-635V0	Standard	0.250	6.35	0.165	4.1	100 Meters	1
OFBLTP-42-635PP	OFBLTP-42-635V0	Pull-Cord	0.250	6.35	0.165	4.1	100 Meters	1

## OFBLT-C Series OFBLT Tubing Clip

**Specifications:**

- Material: See Table
- Color: Natural

**Features:**

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



Item No.		Ø Max Bundle		Ø Mounting Hole		Panel Thickness		Bulk Pack Qty
UL94 V-2 Nylon 6/6	UL94 V-0 Nylon 6/6	in	mm	in	mm	in	mm	
OFBLT-C1-5-01	OFBLT-C1-5-19	0.17	4.3	0.25	6.4	0.031 - 0.078	0.8 - 2.0	1000

## TPCE Series Tube Clip

**Specifications:**

- Material: See Table
- Color: Natural

**Features:**

- Holds a 5mm diameter tube or pipe
- Excellent for above board routing requirements
- Cupped base provides stability and covers the entire hole



Item No.		A		Ø D Max Bundle		Ø Mounting Hole		Panel Thickness		Bulk Pack Qty
UL94 V-2 Nylon 6/6	UL94 V-0 Nylon 6/6	in	mm	in	mm	in	mm	in	mm	
TPCE5-51-4M-01	TPCE5-51-4M-19	0.157	4.0	0.200	5.1	0.256	6.5	0.031 - 0.063	0.8 - 1.6	1000
TPCE5-51-6M-01	TPCE5-51-6M-19	0.236	6.0	0.200	5.1	0.256	6.5	0.031 - 0.063	0.8 - 1.6	1000
TPCE5-51-8M-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 Series OFBLT Tubing Saddle

**Specifications:**

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

**Features:**

- Holds the 5mm OFBLT (see above)
- The saddle is placed over the tubing and closed down to engage on the external grooves of the tube
- Secure attachment is completed by pressing the retaining feet through the location holes
- OFTGSP-2 has two sets of mounting prongs requiring two holes



Figure 1



Figure 2



Item No.	Figure	Ø Mounting Hole		Panel Thickness		Bulk Pack Qty
		in	mm	in	mm	
OFTGSP-1-05-19	1	0.250	6.4	0.095	2.4	100
OFTGSP-2-05-19	2	0.197	5.0	0.071	1.8	100



# FIBER BEND LIMITING TUBING & SPLICE HOLDERS

## OFSMB - OFBLT Series Slotted Multi 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 Series Splice Holder

**Specifications:**

- Material: See Table
- Color: Black

**Features:**

- OFSH-T-6 holds up to 6 x 3mm fiber or components
- OFSH-T-12 holds up to 12 crimp splice protectors
- Splice Holders can be used with OFST Series Splice Trays



Figure 1

Figure 2



Item No.	Figure	Material	Ø Component		No. of Slots	Bulk Pack Qty
			in	mm		
OFSH-T-6-GFBLK	1	Glass-Filled Nylon 6/6	0.118	3.0	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 Series Splice Holder

**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



Figure 1

Figure 2

Item No.	Mounting Method	Ø Component		Figure	Bulk Pack Qty
		In	mm		
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 Series Splice Holder

**Specifications:**

- Material: See Table
- Color: Natural

**Features:**

- Holds 12 2.7mm splices or four 4.2mm splices
- Fastens with either an adhesive pad provided, or with a #4 screw or rivet
- Stackable



Item No.		Ø Component		No. of Positions	Bulk Pack Qty
UL94 V-2 Nylon 6/6	UL94 V-0 Nylon 6/6	mm			
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 Series  
Fiber Holder**



**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		No. of Slots	No. of Cables	Depth		Bulk Pack Qty
		in	mm			in	mm	
OFEB-3-19	1	0.118	3.0	3	6	0.300	7.6	1000
OFHB3-4-19A-RT	2	0.118	3.0	4	4	0.375	9.5	1000
OFHB2-4A1-RT-19	3	0.079	2.0	2	4	0.375	9.5	1000

**OFB-BH/OFB3P Series  
Fiber Holder**



**Specifications:**

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

**Features:**

- Holds multiple cable fibers



Item No.	Figure	Ø Hole		Panel Thickness		Ø Cable		No. of Slots	No. of Cables	Depth		Bulk Pack Qty
		in	mm	in	mm	in	mm			in	mm	
OFB-BH-6-19	1	0.312	7.9	0.250	6.4	0.079	2.0	3	6	0.197	5.0	1000
OFB-BH-9-19	2	0.312	7.9	0.250	6.4	8 x 0.086, 1 x 0.158	8 x 2.2, 1 x 4.0	5	9	0.236	6.0	1000
OFB3P-4-19	3	0.187	4.7	0.064	1.6	0.118	3.0	4	8	0.200	5.1	1000

**EFA04-6X Series  
Fiber Clip**



**Specifications:**

- Material: UL94 V-0 Nylon 6
- Color: See Table

**Features:**

- Holds two components parallel
- Available to hold three different diameters; 4.5mm, 5.5mm, 6mm
- Designed for use in the Splice Tray EFA04-25-001
- Can be mounted by screw, rivet, or with adhesive pad
- EFA04-61-001 has anti-rotation pins to securely mount with screw or rivet



Item No.		Ø Cable		No. of Slots	A		Ø H		Recommended Mounting Screw	Bulk Pack Qty	
Clip Only	Clip & Adhesive Pad	Color	in		mm	in	mm	in			mm
EFA04-61-001	EFA04-61-ASS	Red	0.236	6.0	2	0.315	8.0	0.126	3.2	#4, #5 or M3	100
EFA04-63-001	EFA04-63-ASS	Green	0.216	5.5	2	0.289	7.33	0.106	2.7	#3 or M2.5	100
EFA04-64-001	EFA04-64-ASS	Yellow	0.177	4.5	2	0.289	7.33	0.106	2.7	#3 or M2.5	100

**EFA04-02 Series  
Fiber Clip**



**Specifications:**

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

**Features:**

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

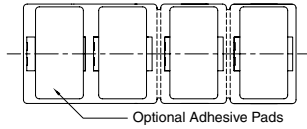


Item No.	Ø Cable		No. of Slots	Contents	Bulk Pack Qty
	in	mm			
EFA04-02-ASS	0.118	3.0	3	Clip with Adhesive Pad	100



# FIBER CLIPS & GUIDES

## EFA04 Series Fiber Clip



Optional Adhesive Pads

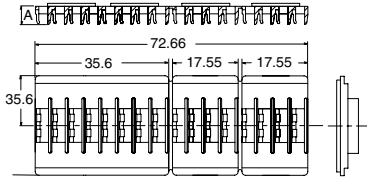


Figure 1

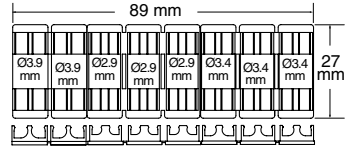


Figure 2

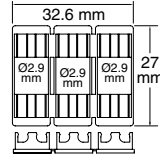


Figure 3

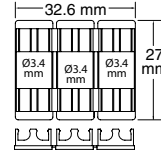


Figure 4

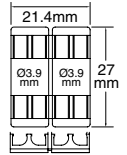


Figure 5

**Specifications:**

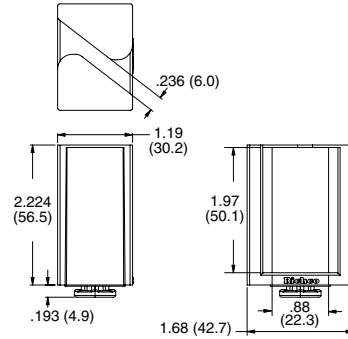
- Material: UL94 V-0 Nylon 6
- Color: See Table

**Features:**

- EFA04-06, EFA04-08, and EFA04-18 can be broken apart to form individual clips
- Various mounting options are available

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

## OFRB Series Fiber Rack Bracket



**Specifications:**

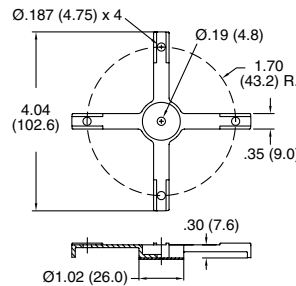
- Material: UL94 V-0 Nylon 6/6
- Color: Black

**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

## OFBS Series Fiber Support Base



**Specifications:**

- Material: See Table
- Color: Natural

**Features:**

- Constructs a path for spooling fiber optic cables
- Designed for use in fiber optic patch panel applications
- Center hole is for mounting the base with a #8 screw or SR-5XXX rivet found on page 121
- Any Essentra wire routing device that is designed to snap into a 0.187 hole and a 0.062" panel can be mounted to this base; popular options are OFNS, STL, WS and LWS series

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

# FIBER CLIPS & GUIDES



## OFCC/OFCG Series Fiber Coiling Clip



Figure 1



Figure 2



Figure 1

Figure 2



**Specifications:**

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

**Features:**

- OFCG snaps onto OFCC to form a clip with a smooth, curved surface to accommodate fiber optic bundles
- OFCC and OFCG sold separately
- Limits the bend radius of the fiber

Item No.	Figure	Bulk Pack Qty.
OFCC-16A-RT	1	100
OFCG-16	2	100

## EFA04 Series Fiber Guide



Figure 1



Figure 2

**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



Figure 3

Item No.				Height		No. of Mounting Holes	Max Fiber Storage	Bulk Pack Qty.
Guide Only	Guide with Adhesive Pad(s)	Guide with SRHR-3555 Rivets	Figure	Guide Radius	In			
EFA04-60-001	EFA04-60-P01	EFA04-60-R01	1	Straight	0.197	5.0	2	100
EFA04-34-001	EFA04-34-P01	EFA04-34-R01	2	30 mm Radius Corner Guide	0.197	5.0	2	100
EFA04-34-010	EFA04-34-P10	EFA04-34-R10	2	30 mm Radius Corner Guide	0.315	8.0	2	100
EFA04-34-004	EFA04-34-P04	EFA04-34-R04	2	30 mm Radius Corner Guide	0.472	12.0	2	100
EFA04-34-002	EFA04-34-P02	EFA04-34-R02	2	35 mm Radius Corner Guide	0.189	4.8	2	100
EFA04-34-005	EFA04-34-P05	EFA04-34-R05	2	35 mm Radius Corner Guide	0.472	12.0	2	100
EFA04-34-003	EFA04-34-P03	EFA04-34-R03	2	40 mm Radius Corner Guide	0.189	4.8	2	100
EFA04-34-006	EFA04-34-P06	—	2	40 mm Radius Corner Guide	0.472	12.0	2	100
EFA04-34-007	EFA04-34-P07	EFA04-34-R07	2	30-37 mm Radius Ribbon Fiber Corner Guide	0.216	5.5	2	100
EFA04-04-001	EFA04-04-ASS	—	3	25 mm Radius Fiber Reel	0.157	4.0	8	2.5 m of 900 Micron Fiber
EFA04-21-001	EFA04-21-ASS	—	3	25 mm Radius Fiber Reel	0.250	6.4	8	4.5 m of 900 Micron Fiber
EFA04-10-001	EFA04-10-ASS	—	3	30 mm Radius Fiber Reel	0.153	3.9	8	3.0 m of 900 Micron Fiber
EFA04-14-001	EFA04-14-ASS	—	3	30 mm Radius Fiber Reel	0.488	12.4	8	9.0 m of 900 Micron Fiber
EFA04-76-001	—	—	3	35 mm Radius Fiber Reel	0.315	8.0	8	15.0 m of 900 Micron Fiber
EFA04-23-001	—	—	3	40 mm Radius Fiber Reel	0.250	6.4	4	7.0 m of 900 Micron Fiber

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



Figure 1



Figure 2

**Specifications:**

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

**Features:**

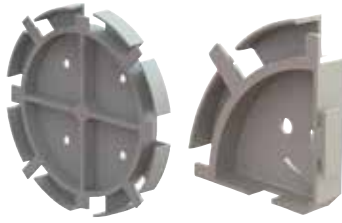
- EFA04-53-ASS is used to stack multiple EFA04 fiber reels, and retained with an included spring clip
- EFA04-27-ASS is used to space the EFA04 fiber reel off the PC Board (top of the standoff snaps into holes in the fiber reel)
- Mounted from the bottom of the board with included rivet

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



# FIBER GUIDES & STORAGE

## OFS Series 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 Series Flexible Fiber Guide System

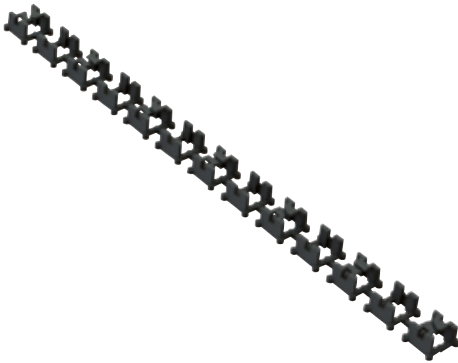


Figure 1



Figure 2

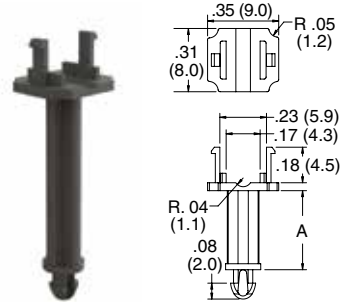


Figure 3

#### Specifications:

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

#### Features:

- Fully modular, flexible system giving complete fiber management and protection
- Unique spine allows the guide to be oriented in all planes
- For use with 250 and 900 micron fiber
- Fiber can enter and exit at any point, without risk of fiber snagging or kinking
- Angled and straight lugs located along the guide prevent the fiber from springing out
- 25mm maximum bend radius when flexed
- Guide can be cut to various lengths at flexible link sections
- Two types of support posts; OFFGSP-F for mounting flush to the panel, and OFFGSP-R that raises the guide 5mm
- Guide snaps easily into the support posts



Item No.	Figure	Description	Ø Mounting Hole		Panel Thickness		A		Bulk Pack Qty.
			in	mm	in	mm	in	mm	
OFFG-165M-19-BK	1	Fiber Guide	—	—	—	—	—	—	100
OFFGSP-F-19-BK	2	Flat Fiber Guide Support	0.098	2.5	0.063	1.6	—	—	100
OFFGSP-R-05-BK	3	Fiber Guide Spacer	0.098	2.5	0.063	1.6	0.200	5.0	100

# FIBER MANAGEMENT & DUST CAPS



## EFA70-07 Series 900 Micron Strain Relief 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 Series 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 Series Quick Panel Mount Strain Relief Gland Kit



**Specifications:**

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

**Features:**

- Acts as a cable gland for jacketed fiber, preventing the cable from being pulled out of the device
- The plastic body mounts directly on the panel, and the jacketed cable is passed through the center hole
- On the inside of the panel, the cable's Kevlar strands are clamped to the plastic body using one of two clamping sleeves (whichever is appropriate)
- Secured in the panel with a mounting bolt
- On the outside of the panel, a flexible boot is attached to the plastic body, providing control over the bend-radius of the cable exiting the strain-relief assembly

Item No.	Ø Jacketed Fiber		A		Bulk Pack Qty.
	In	mm	In	mm	
EFA52-02-ASS	0.118	3.0	0.138	3.5	250
EFA52-05-ASS	0.079	2.0	0.098	2.5	250

## EFA02-43 Series Connector Adapter Dust 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



# DUST CAPS

## EFA02 Series Connector Dust Caps and Plugs



Figure 1



Figure 2

**Specifications:**

- Material: See Table
- Color: See Table

**Features:**

- The EFA02-14-001 plugs an SC connects and does not require a dust chain (other dust caps in this series require the retaining chain and cannot be sold separately)
- The steel caps are threaded onto the connector adapters
- Provides mechanical and environmental protection to adaptors when unmated
- Stainless Steel construction suitable for harsh environments
- 2.5" long chain

Item No.	Material		Bulk Pack Qty.
	Figure 1 Stainless Steel Cap & Chain	Figure 2 Black TPE Plug & Optional Stainless Steel Chain	
EFA02-04-ASS	SMA Adapter Dust Cap & Chain	—	100
EFA02-07-ASS	DIN Adapter Dust Cap & Chain	—	100
EFA02-09-ASS	FC Adapter Dust Cap & Chain	—	100
EFA02-10-ASS	ST Adapter Dust Cap & Chain	—	100
EFA02-14-001	—	SC Adapter Dust Plug	250
EFA02-14-ASS	—	EFA02-14-001 Dust Plug with Chain	250

## EFA02-03 Series FC Connector Port Dust Cap

**Specifications:**

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

**Features:**

- Dust caps are threaded onto the FC connector adapter providing protection from outside elements



Item No.	Color	Bulk Pack Qty.
EFA02-03-001	Natural	500
EFA02-03-002	Black	500
EFA02-03-003	Green	500
EFA02-03-004	White	500
EFA02-03-005	Red	500

## EFA02-35 Series ST Connector Port Dust 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 Series 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	
EFA02-11-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 Series  
Connector Plugs**



**Figure 1**



**Figure 2**



**Figure 3**

**Specifications:**

- Material: Silicone Rubber
- Color: Black

**Features:**

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

Item No.	Figure	Connector Port	A		Bulk Pack Qty.
			in	mm	
CP-RJ11	1	RJ11	0.410	10.5	1000
CP-RJ45	1	RJ45	0.490	12.5	1000
CP-USB-A	2	USB-A	—	—	1000
CP-USB-B	3	USB-B	—	—	1000

**USB-A Series  
USB Connector Caps**



**Specifications:**

- Material: Polyethylene
- Color: Natural

**Features:**

- Protective dust cover for USB-A connectors



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

**BPE Series  
Connector Port Plugs**



**Figure 1**

**Figure 2**

**Specifications:**

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

**Features:**

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

**Recommended Mounting Holes**

Item No.	Color	Mounting Hole Figure	L1		L2		A		B		C		D		E		Bulk Pack Qty.
			in	mm	in	mm	in	mm	in	mm	in	mm	in	mm			
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	Ø4.70	Ø12	Ø3.60	Ø9.2	Ø4.70	Ø12	0.300	7.7	0.059	1.5	1000



# CONNECTOR CAPS & PLUGS/SHEET METAL PLUGS

## PGM/PLH Series Standard Locking Hole Plug

**Specifications:**

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

**Features:**

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



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

## LTP Series IP67 Liquid Tight Plug

**Specifications:**

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

**Features:**

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



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

## BP Series Flexible Hole Plug

**Specifications:**

- Material: TPE
- Color: Black

**Features:**

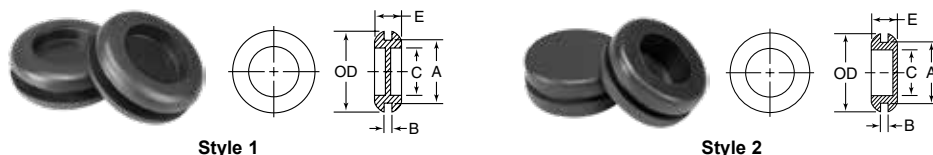
- Each size covers a range of panel thicknesses
- Designed to fit standard metric holes
- Very resistant to oils, acids and alkalis



Item No.	Panel Hole d		Panel Thickness h		OD		Bulk Pack Qty.
	in	mm	in	mm	in	mm	
BP-16230	0.394	10.0	0.032 - 0.079	0.8 - 2.0	0.76	19.3	1000
BP-16231	0.472	12.0	0.032 - 0.079	0.8 - 2.0	0.83	21.0	1000
BP-16232	0.551	14.0	0.032 - 0.079	0.8 - 2.0	0.91	23.0	1000
BP-16233	0.630	16.0	0.032 - 0.079	0.8 - 2.0	0.98	25.0	1000
BP-16234	0.709	18.0	0.032 - 0.079	0.8 - 2.0	1.06	27.0	1000
BP-16236	0.866	22.0	0.032 - 0.079	0.8 - 2.0	1.23	31.2	1000
BP-3	0.866	22.0	0.063 - 0.118	1.6 - 3.0	1.10	28.0	1000
BP-4	1.043	26.5	0.063 - 0.118	1.6 - 3.0	1.28	32.5	1000
BP-16238	1.181	30.0	0.032 - 0.079	0.8 - 2.0	1.55	39.4	1000



**GRD/DG/DGB Series  
Diaphragm Grommet**

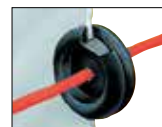


**Specifications:**

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

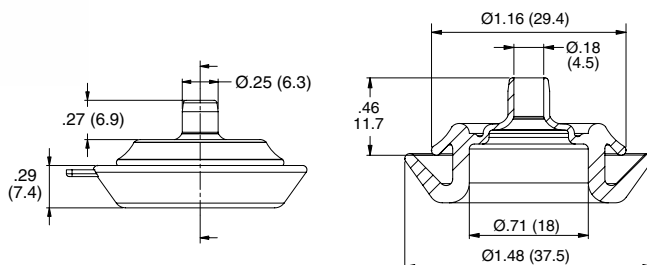
**Features:**

- 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	Ø Mounting Hole A		Panel Thickness		C Ref.		OD		E		Bulk Pack Qty.
		in	mm	in	mm	in	mm	in	mm	in	mm	
DGB-2.5	2	0.25	6.4	0.03	0.8	0.16	4.1	0.37	9.4	0.14	3.6	1000
DGB-4	2	0.39	9.9	0.06	1.5	0.25	6.4	0.50	12.7	0.26	6.6	1000
DGB-6	2	0.43	11.0	0.06	1.5	0.31	8.0	0.69	17.5	0.31	8.0	1000
DGB-5	2	0.49	12.5	0.06	1.5	0.37	9.5	0.62	15.7	0.25	6.4	1000
DG-19426	1	0.63	16.0	0.06	1.5	0.43	11.0	0.75	19.0	0.23	5.8	1000
DGB-7	2	0.63	16.0	0.06	1.5	0.43	11.0	0.75	19.0	0.31	8.0	1000
GRD1062091PA	1	0.63	16.0	0.09	2.4	0.49	12.5	0.87	22.0	0.32	8.0	5000
GRD2075061PA	2	0.75	19.0	0.06	1.5	0.63	16.0	1.00	25.4	0.28	7.0	4000
DGB-11	2	0.75	19.0	0.06	1.5	0.63	16.0	1.00	25.4	0.28	7.0	1000
DG-15512	1	0.75	19.0	0.08	2.0	0.63	15.9	1.00	25.5	0.31	7.9	1000
DG-10134	1	0.75	19.0	0.09	2.4	0.61	15.5	1.00	25.5	0.35	8.8	1000
GRD1075121PA	1	0.75	19.0	0.12	3.0	0.61	15.5	1.00	25.5	0.37	9.5	2500
DG-10187	1	0.79	20.0	0.06	1.5	0.61	15.5	1.00	25.5	0.32	8.0	1000
DGB-10	2	0.87	22.0	0.06	1.5	0.72	18.4	1.00	25.5	0.31	8.0	1000
GRD2087061PA	2	0.87	22.0	0.06	1.5	0.74	18.8	1.00	25.5	0.31	8.0	4000
DGB-13	2	1.00	25.4	0.06	1.5	0.81	20.5	1.18	30.0	0.31	8.0	1000
GRD2100061PA	2	1.00	25.4	0.06	1.5	0.81	20.5	1.18	30.0	0.31	8.0	2000
GRD1100091PA	1	1.00	25.5	0.09	2.4	0.75	19.0	1.44	36.5	0.33	8.4	2000
GRD1125091PA	1	1.26	32.0	0.09	2.4	0.98	25.0	1.54	39.0	0.32	8.0	1000
GRD1125151PA	1	1.26	32.0	0.16	4.0	1.00	25.5	1.54	39.0	0.38	9.5	1000
GRD21625375PA	2	1.63	42.0	0.09	2.4	1.22	31.0	1.93	49.0	0.40	10.1	1000

**AHG Series  
Angular Hole Grommet**



**Specifications:**

- Materials: EPDM, 60 Shore A
- Color: Black

**Features:**

- Allows cables to pass through a panel at a maximum 45° angle

Item No.	Ø Cable Size		Panel Thickness D		Mounting Hole Ø		Bulk Pack Qty.
	in	mm	in	mm	in	mm	
AHG-1	0.197 - 0.276	5.0 - 7.0	0.079 - 0.098	2.0 - 2.5	0.945	24.0	500



# GROMMETS & GROMMET SLEEVES

## GRS/RGS Series Grommet Sleeve



Style 1



Style 2

**Specifications:**

- Material: Flexible PVC
- Color: Black

**Features:**

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



Item No.	Style	Ø Hole B		Panel Thickness D		A Ø		C Ø		E1		F		Bulk Pack Qty.
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
GRS1030151A	1	0.300	7.6	0.156	4.0	0.560	14.2	0.240	6.1	0.311	7.9	1.250	31.8	5000
RGS1-60466	1	0.343	8.7	0.062	1.6	0.560	14.2	0.200	5.1	0.280	7.1	1.650	42.0	4000
GRS1037091A	1	0.374	9.5	0.094	2.4	0.560	14.2	0.250	6.4	0.311	7.9	0.562	14.3	10000
RGS2-12462	2	0.500	12.7	0.125	3.2	0.595	15.1	0.375	9.5	0.468	11.9	1.398	35.5	1000
GRS2050121A	2	0.500	12.7	0.125	3.2	0.595	15.1	0.375	9.5	0.468	11.9	1.398	35.5	2000
RGS2-51409	2	0.500	12.7	0.031	0.8	0.750	19.1	0.381	9.7	0.480	12.2	1.055	26.8	1000
GRS2050031A	2	0.500	12.7	0.031	0.8	0.750	19.1	0.381	9.7	0.480	12.2	1.055	26.8	4000

## GRC Series Stepped Grommet



**Specifications:**

- Material: Flexible PVC
- Color: Black

**Features:**

- Protects wires, cables, tubing, hoses
- Accommodates a range of cable sizes
- Can be used as a blanking plug until cut



Item No.	Panel Hole Size A		Panel Thickness B		Length L		Cable Range		Bulk Pack Qty.
	in	mm	in	mm	in	mm	in	mm	
1251347	0.500	12.7	0.120	3.0	1.270	32.5	0.200 - 0.350	5.0 - 9.0	1000
1251348	0.830	21.0	0.120	3.0	1.080	27.5	0.200 - 0.670	5.0 - 17.0	1000
1251349	1.020	26.0	0.120	3.0	1.160	29.5	0.390 - 0.870	10.0 - 22.0	1000

## HG Series TPE Flexible Hole Grommet

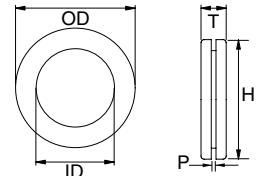


**Specifications:**

- Material: UL94 HB TPE
- Color: Black
- Temperature Range: -58°F to 203°F (-50°C - 95°C)

**Features:**

- Suitable for outdoor use in accordance with UL 746C



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



**GRO Series  
Flexible Hole  
Grommet**



**Specifications:**

- Material: See Table
- Color: Black

**Features:**

- Standard PVC material is non-staining; resistant to ozone, acids, and sunlight; with excellent aging qualities



Item No.	PVC	TPR	Panel Hole Size A		Panel Thickness B		ID C		OD D		Overall Height E		PVC Shore A Rating	Bulk Pack Qty.
			in	mm	in	mm	in	mm	in	mm	in	mm		
GRO018031A	• 15057		0.188	4.8	0.031	0.8	0.109	2.8	0.315	8.0	0.188	4.8	55	10000
GRO018061A	• 15058		0.188	4.8	0.063	1.6	0.125	3.2	0.315	8.0	0.250	6.4	55	10000
GRO023041A	—		0.234	6.0	0.047	1.2	0.125	3.2	0.346	8.8	0.156	4.0	55	10000
GRO025031A	• 15060		0.252	6.4	0.031	0.8	0.156	4.0	0.375	9.5	0.156	4.0	43	10000
GRO025061A	• 15059		0.252	6.4	0.063	1.6	0.156	4.0	0.375	9.5	0.248	6.3	55	10000
—	• 15061		0.252	6.4	0.063	1.6	0.188	4.8	0.375	9.5	0.276	7.0	—	10000
GRO025062A	—		0.252	6.4	0.063	1.6	0.188	4.8	0.375	9.5	0.281	7.1	55	10000
GRO025121A	• 15062		0.252	6.4	0.118	3.0	0.156	4.0	0.375	9.5	0.315	8.0	43	10000
GRO028091A	—		0.281	7.1	0.094	2.4	0.188	4.8	0.438	11.1	0.281	7.1	55	10000
GRO031121A	—		0.313	7.9	0.063	1.6	0.118	3.0	0.433	11.0	0.315	8.0	55	10000
—	• 15064		0.315	8.0	0.031	0.8	0.188	4.8	0.433	11.0	0.188	4.8	55	10000
GRO031061A	—		0.315	8.0	0.031	0.8	0.216	5.5	0.433	11.0	0.216	5.5	43	10000
—	• 15065		0.315	8.0	0.063	1.6	0.216	5.5	0.433	11.0	0.216	5.5	—	10000
GRO031031A	—		0.315	8.0	0.031	0.8	0.188	4.8	0.433	11.0	0.188	4.8	55	10000
—	• 15072		0.375	9.5	0.014	1.2	0.276	7.0	0.543	13.8	0.156	4.0	—	10000
—	• 15067		0.375	9.5	0.063	1.6	0.188	4.8	0.492	12.5	0.268	6.8	—	10000
GRO037061A	• 15069		0.375	9.5	0.063	1.6	0.250	6.4	0.559	14.2	0.250	6.4	55	10000
GRO037091A	—		0.375	9.5	0.063	1.6	0.250	6.4	0.559	14.2	0.276	7.0	55	10000
—	• 15073		0.375	9.5	0.063	1.6	0.315	8.0	0.559	14.2	0.188	4.8	—	10000
—	• 15074		0.375	9.5	0.063	1.6	0.315	8.0	0.559	14.2	0.315	8.0	—	10000
GRO031041A	—		0.375	9.5	0.047	1.2	0.219	5.6	0.438	11.1	0.156	4.0	55	10000
—	• 15068		0.375	9.5	0.095	2.4	0.250	6.4	0.559	14.2	0.276	7.0	—	10000
GRO037041A	—		0.375	9.5	0.047	1.2	0.281	7.1	0.563	14.3	0.188	4.8	55	10000
—	• 15071		0.402	10.2	0.047	1.2	0.276	7.0	0.543	13.8	0.177	4.5	—	10000
GRO040061A	—		0.406	10.3	0.063	1.6	0.283	7.2	0.563	14.3	0.156	4.0	55	10000
GRO043061A	• 15075		0.433	11.0	0.063	1.6	0.315	8.0	0.559	14.2	0.188	4.8	55	10000
—	• 15076		0.433	11.0	0.063	1.6	0.315	8.0	0.559	14.2	0.315	8.0	—	10000
—	• 15078		0.433	11.0	0.063	1.6	0.315	8.0	0.630	16.0	0.250	6.4	—	10000
GRO046071A	—		0.469	11.9	0.078	2.0	0.378	9.6	0.688	17.5	0.266	6.8	55	10000
—	• 15079		0.492	12.5	0.063	1.6	0.250	6.4	0.630	16.0	0.315	8.0	—	10000
—	• 15080		0.492	12.5	0.063	1.6	0.315	8.0	0.630	16.0	0.250	6.4	—	10000
GRO050061A	• 15084		0.492	12.5	0.063	1.6	0.375	9.5	0.669	17.0	0.276	7.0	55	10000
—	• 15086		0.492	12.5	0.063	1.6	0.433	11.0	0.478	19.0	0.250	6.4	—	10000
GRO050121A	• 15081		0.492	12.5	0.118	3.0	0.315	8.0	0.630	16.0	0.315	8.0	55	10000
GRO050122A	• 15083		0.492	12.5	0.118	3.0	0.375	9.5	0.669	17.0	0.346	8.8	55	10000
GRO056061A	• 15087		0.559	14.2	0.063	1.6	0.433	11.0	0.748	19.0	0.250	6.4	55	10000
GRO062031A	—		0.625	15.9	0.031	0.8	0.438	11.1	0.748	19.0	0.375	9.5	55	10000
GRO062041A	• 15089		0.629	16.0	0.047	1.2	0.493	12.5	0.807	20.5	0.276	7.0	55	10000
GRO068031A	—		0.688	17.5	0.031	0.8	0.563	14.3	0.875	22.2	0.281	7.1	55	10000
GRO068061A	• 15090		0.688	17.5	0.063	1.6	0.493	12.5	0.866	22.0	0.250	6.4	55	8000
GRO068062A	—		0.688	17.5	0.063	1.6	0.559	14.2	0.866	22.0	0.188	4.8	55	10000
GRO068121A	—		0.688	17.5	0.125	3.2	0.500	12.7	0.875	22.2	0.313	7.9	55	8000
—	• 15096		0.748	19.0	0.063	1.6	0.492	12.5	1.004	25.5	0.250	6.4	—	2500
GRO075061A	—		0.748	19.0	0.063	1.6	0.629	16.0	0.866	22.0	0.216	5.5	55	10000
—	• 15093		0.748	19.0	0.063	1.6	0.629	16.0	0.945	24.0	0.236	6.0	—	7000
GRO075062A	—		0.748	19.0	0.063	1.6	0.689	17.5	0.945	24.0	0.188	4.8	55	10000
—	• 15095		0.787	20.0	0.063	1.6	0.630	16.0	0.945	24.0	0.256	6.5	—	7000
GRO081041A	—		0.807	20.5	0.047	1.2	0.630	16.0	1.063	27.0	0.315	8.0	55	4000
-	• 15098		0.807	20.5	0.047	1.2	0.630	16.0	1.063	27.0	0.315	8.0	—	10000
GRO087121A	—		0.875	22.3	0.125	3.2	0.625	15.9	1.063	27.0	0.375	9.5	55	4000
GRO100041A	—		1.000	25.4	0.047	1.2	0.728	18.5	1.236	31.4	0.297	7.5	55	2000
GRO100061A	• 15099		1.000	25.4	0.063	1.6	0.728	18.5	1.236	31.4	0.315	8.0	55	4000
GRO100062A	—		1.000	25.2	0.063	1.6	0.866	22.0	1.181	30.0	0.315	8.0	55	4000
—	• 15101		1.000	25.5	0.063	1.6	0.866	22.0	1.181	30.0	0.315	8.0	—	10000
GRO100121A	-		1.000	25.4	0.125	3.2	0.750	19.1	1.250	31.8	0.375	9.5	55	2000
GRO125061A	• 15102		1.220	31.0	0.063	1.6	1.000	25.4	1.496	38.0	0.307	7.8	55	2000
GRO125031A	—		1.260	32.0	0.031	0.8	1.000	25.4	1.750	44.5	0.250	6.4	55	2000
GRO125121A	—		1.250	31.8	0.125	3.2	1.000	25.4	1.500	38.1	0.359	9.1	55	2000
GRO150061A	• 15105		1.457	37.0	0.063	1.6	1.228	31.2	1.791	45.5	0.375	9.5	55	1000
GRO150121A	• 15104		1.500	38.0	0.118	3.0	1.250	32.0	1.813	46.0	0.438	11.0	55	1000
GRO175061A	—		1.750	44.5	0.063	1.6	1.500	38.1	2.000	50.8	0.375	9.5	55	1000
GRO175121A	—		1.750	44.5	0.125	3.2	1.500	38.1	2.000	50.8	0.375	9.5	55	1000
GRO200061A	• 15106		2.000	50.0	0.063	1.6	1.750	45.0	2.375	60.0	0.406	10.0	55	500
GRO200121A	—		2.000	50.8	0.125	3.2	1.750	44.5	2.375	60.3	0.469	11.9	55	500



# GROMMETS

## GR Series 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		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	15000
GR3041A	0.250	6.4	0.063	1.6	0.156	4.0	0.375	9.5	0.188	4.8	12000
GR3053A	0.281	7.2	0.094	2.4	0.188	4.8	0.438	11.1	0.219	5.6	8000
GR3081A	0.313	7.9	0.063	1.6	0.188	4.8	0.438	11.1	0.188	4.8	10000
GR3047A	0.313	7.9	0.063	1.6	0.219	5.6	0.438	11.1	0.188	4.8	15000
GR3401A	0.313	7.9	0.094	2.4	0.109	2.8	0.500	12.7	0.219	5.6	5000
GR3146A	0.313	7.9	0.125	3.2	0.188	4.8	0.438	11.1	0.250	6.4	10000
GR3105A	0.313	7.9	0.250	6.4	0.188	4.8	0.438	11.1	0.375	9.5	5000
GR3165A	0.375	9.5	0.063	1.6	0.250	6.4	0.563	14.3	0.250	6.4	6000
GR3164A	0.375	9.5	0.094	2.4	0.250	6.4	0.500	12.7	0.250	6.4	5000
GR3166A	0.375	9.5	0.125	3.2	0.250	6.4	0.500	12.7	0.281	7.2	5000
GR3028A	0.375	9.5	0.188	4.8	0.188	4.8	0.625	15.9	0.375	9.5	3300
GR3009A	0.375	9.5	0.375	9.5	0.313	7.9	0.563	14.3	0.500	12.7	3000
GR3400A	0.406	10.3	0.125	3.2	0.266	6.8	0.625	15.9	0.375	9.5	6000
GR3002A	0.438	11.1	0.063	1.6	0.250	6.4	0.625	15.9	0.188	4.8	5000
GR3104A	0.438	11.1	0.094	2.4	0.313	7.9	0.625	15.9	0.313	7.9	4000
GR3127A	0.438	11.1	0.188	4.8	0.250	6.4	0.625	15.9	0.313	7.9	2500
GR3384A	0.465	11.8	0.095	2.4	0.250	6.4	0.765	19.4	0.294	7.5	5000
GR3027A	0.469	11.9	0.250	6.4	0.250	6.4	0.625	15.9	0.500	12.7	5000
GR3016A	0.500	12.7	0.125	3.2	0.375	9.5	0.625	15.9	0.406	10.3	7000
GR3250A	0.500	12.7	0.125	3.2	0.375	9.5	0.625	15.9	0.313	7.9	7000
GR3091A	0.500	12.7	0.188	4.8	0.250	6.4	0.625	15.9	0.438	11.1	3500
GR3033A	0.500	12.7	0.250	6.4	0.375	9.5	0.750	19.1	0.500	12.7	4800
GR3209A	0.500	12.7	0.375	9.5	0.375	9.5	0.625	15.9	0.625	15.9	5500
GR3017A	0.531	13.5	0.125	3.2	0.375	9.5	0.750	19.1	0.375	9.5	5000
GR3065A	0.563	14.3	0.063	1.6	0.313	7.9	0.813	20.6	0.313	7.9	4000
GR3035A	0.563	14.3	0.188	4.8	0.375	9.5	0.813	20.6	0.375	9.5	5000
GR3123A	0.563	14.3	0.375	9.5	0.375	9.5	0.750	19.1	0.750	19.1	2000
GR3076A	0.625	15.9	0.063	1.6	0.375	9.5	0.875	22.2	0.313	7.9	5000
GR3150A	0.625	15.9	0.125	3.2	0.375	9.5	0.875	22.2	0.375	9.5	4000
GR3110A	0.625	15.9	0.250	6.4	0.375	9.5	0.875	22.2	0.500	12.7	2700
GR3183A	0.625	15.9	0.375	9.5	0.406	10.3	0.813	20.6	0.625	15.9	2000
GR3131A	0.688	17.5	0.188	4.8	0.438	11.1	0.938	23.8	0.438	11.1	3000
GR3218A	0.750	19.1	0.156	4.0	0.500	12.7	0.938	23.8	0.406	10.3	3000
GR3132A	0.813	20.6	0.188	4.8	0.500	12.7	1.063	27.0	0.438	11.1	2000
GR3134A	0.813	20.6	0.188	4.8	0.563	14.3	1.063	27.0	0.438	11.1	1600
GR3113A	0.813	20.6	0.250	6.4	0.563	14.3	1.063	27.0	0.500	12.7	1500
GR3080A	0.875	22.2	0.063	1.6	0.625	15.9	1.125	28.6	0.313	7.9	2500
GR3155A	0.875	22.2	0.125	3.2	0.625	15.88	1.125	28.58	0.375	9.53	2400
GR3100A	0.875	22.2	0.188	4.8	0.563	14.3	1.063	27.0	0.438	11.1	2500
GR3135A	0.875	22.2	0.188	4.8	0.625	15.9	1.125	28.6	0.438	11.1	2000
GR3114A	0.875	22.2	0.250	6.4	0.625	15.9	1.125	28.6	0.500	12.7	1500
GR3101A	0.875	22.2	0.375	9.5	0.563	14.3	1.063	27.0	0.625	15.9	1500
GR3342A	0.969	24.6	0.375	9.5	0.688	17.5	1.313	33.3	0.625	15.9	1000
GR3068A	1.000	25.4	0.063	1.6	0.688	17.5	1.313	33.3	0.375	9.5	1500
GR3156A	1.000	25.4	0.125	3.2	0.688	17.5	1.313	33.3	0.438	11.1	1500
GR3136A	1.000	25.4	0.188	4.8	0.688	17.5	1.313	33.3	0.500	12.7	1500
GR3115A	1.000	25.4	0.250	6.4	0.688	17.5	1.313	33.3	0.563	14.3	1200
GR3390A	1.000	25.4	0.250	6.4	0.875	22.2	1.250	31.8	0.625	15.9	1000
GR3219A	1.000	25.4	0.266	6.8	0.500	12.7	1.375	34.9	0.500	12.7	1100
GR3031A	1.063	27.0	0.063	1.6	0.750	19.1	1.375	34.9	0.375	9.5	1000
GR3157A	1.063	27.0	0.125	3.2	0.750	19.1	1.375	34.9	0.438	11.1	1400
GR3137A	1.063	27.0	0.188	4.8	0.750	19.1	1.375	34.9	0.500	12.7	1000
GR3116A	1.063	27.0	0.250	6.4	0.750	19.1	1.375	34.9	0.563	14.3	1200
GR3246A	1.188	30.2	0.141	3.6	0.875	22.2	1.375	34.9	0.406	10.3	1800
GR3158A	1.250	31.8	0.125	3.2	0.750	19.1	1.625	41.3	0.313	7.9	1300
GR3160A	1.250	31.8	0.125	3.2	0.875	22.2	1.625	41.3	0.500	12.7	850
GR3259A	1.250	31.8	0.125	3.2	0.875	22.2	1.562	39.7	0.750	19.1	550
GR3138A	1.250	31.8	0.188	4.8	0.875	22.2	1.625	41.3	0.563	14.3	750
GR3117A	1.250	31.8	0.250	6.4	0.750	19.1	1.625	41.3	0.438	11.1	1000
GR3118A	1.250	31.8	0.250	6.4	0.875	22.2	1.625	41.3	0.625	15.9	800
GR3062A	1.250	31.8	0.250	6.4	1.000	25.4	1.500	38.1	0.500	12.7	1000
GR3410A	1.250	31.8	0.470	11.9	0.750	19.1	1.500	38.1	0.660	16.8	600
GR3072A	1.375	34.9	0.063	1.6	1.000	25.4	1.750	44.5	0.438	11.1	700
GR3161A	1.375	34.9	0.125	3.2	1.000	25.4	1.750	44.5	0.500	12.7	700
GR3139A	1.375	34.9	0.188	4.8	1.000	25.4	1.750	44.5	0.563	14.3	500
GR3119A	1.375	34.9	0.250	6.4	1.000	25.4	1.750	44.5	0.625	15.9	500
GR3064A	1.500	38.1	0.063	1.6	1.125	28.6	1.875	47.6	0.375	9.5	700
GR3180A	1.500	38.1	0.156	4.0	1.188	30.2	1.750	44.5	0.406	10.3	800
GR3262A	1.500	38.1	0.250	6.4	1.250	31.8	2.000	50.8	0.516	13.1	500
GR3267A	1.500	38.1	0.250	6.4	1.250	31.8	1.750	44.5	0.500	12.7	600
GR3087A	1.625	41.3	0.063	1.6	0.875	22.2	2.000	50.8	0.438	11.1	600
GR3383A	1.625	41.3	0.125	3.2	1.375	34.9	1.875	47.6	0.406	10.3	750
GR3266A	1.625	41.3	0.188	4.8	1.250	31.8	1.875	47.6	0.500	12.7	700
GR3173A	1.703	43.3	0.516	13.1	1.500	38.1	2.094	53.2	0.752	19.1	400
GR3073A	1.750	44.5	0.063	1.6	1.500	38.1	2.125	54.0	0.438	11.1	500
GR3409A	1.750	44.5	0.075	1.9	1.625	41.3	2.100	53.3	0.260	6.6	900
GR3163A	1.750	44.5	0.125	3.2	1.500	38.1	2.125	54.0	0.500	12.7	600
GR3141A	1.750	44.5	0.188	4.8	1.500	38.1	2.125	54.0	0.563	14.3	500
GR3121A	1.750	44.5	0.250	6.4	1.500	38.1	2.125	54.0	0.625	15.9	400
GR3295A	1.750	44.5	0.375	9.5	1.500	38.1	2.125	54.0	0.750	19.1	300
GR3301A	2.000	50.8	0.094	2.4	1.500	38.1	2.375	60.3	0.375	9.5	450
GR3239A	2.000	50.8	0.188	4.8	1.625	41.3	2.250	57.2	0.750	19.1	600
GR3296A	2.000	50.8	0.250	6.4	1.750	44.5	2.500	63.5	0.531	13.5	300
GR3334A	2.000	50.8	0.250	6.4	1.750	44.5	2.500	63.5	0.560	14.2	300
GR3145A	2.500	63.5	0.063	1.6	2.125	54.0	2.875	73.0	0.438	11.1	300
GR3318A	2.500	63.5	0.250	6.4	2.000	50.8	3.000	76.2	0.563	14.3	200
GR3404A	2.500	63.5	0.250	6.4	2.250	57.2	3.000	76.2	0.625	15.9	175
GR3405A	2.500	63.5	0.328	8.3	2.250	57.2	3.000	76.2	0.719	18.3	175
GR3406A	2.500	63.5	0.375	9.5	2.250	57.2	3.000	76.2	0.750	19.1	175



Metric Hole Grommet



Specifications:

- Material: See Table
- Color: Black

Features:

- Protects wires, cables, tubing, and hoses
- Installs instantly by simply snapping into hole
- Excellent adhesion, designed to fit standard sheet metal holes
- EPDM is a heat resistant material for use in extreme temperature environments: -40° - 257°F

Item No.		Mounting Hole d2	Panel Hole Thickness h		d1	D	H	Bulk Pack Qty.
PVC	EPDM	mm	mm					
498021	498062	5.0	1.0	2.0	8.0	4.0	1000	
498022	498063	5.0	1.5	2.0	8.0	4.5	1000	
498023	498064	5.0	2.0	2.0	8.0	5.0	1000	
498024	498065	5.0	1.0	3.0	8.0	4.0	1000	
498025	498066	5.0	1.5	3.0	8.0	4.5	1000	
498026	498067	5.0	2.0	3.0	8.0	5.0	1000	
498027	498068	7.0	1.5	3.0	10.0	6.0	500	
498028	498070	8.0	1.0	4.0	11.0	8.0	500	
498029	498071	8.0	2.0	4.0	11.0	6.0	500	
498030	498072	8.0	3.0	4.0	11.0	7.0	500	
498031	498073	8.0	1.0	6.0	11.0	5.0	500	
498032	498074	8.0	2.0	6.0	11.0	6.0	500	
—	498075	9.0	1.0	6.0	12.0	5.0	500	
—	498076	9.0	1.5	6.0	12.0	5.5	500	
—	498077	9.0	2.0	6.0	12.0	6.0	500	
—	498078	9.0	3.0	6.0	12.0	7.0	500	
—	498079	9.0	4.0	6.0	12.0	8.0	500	
498033	498080	10.0	1.0	6.0	14.0	6.0	500	
498034	498081	10.0	1.5	6.0	14.0	6.5	500	
498035	498082	10.0	2.0	6.0	14.0	7.0	500	
498036	498083	10.0	3.0	6.0	14.0	8.0	500	
498037	498084	10.0	1.0	8.0	14.0	6.0	500	
498038	498085	10.0	1.5	8.0	14.0	6.5	500	
498039	498086	10.0	2.0	8.0	14.0	7.0	500	
498040	498087	10.0	3.0	8.0	14.0	8.0	500	
—	498088	11.0	1.0	8.0	16.0	6.0	250	
—	498089	11.0	2.0	8.0	16.0	7.0	250	
—	498090	11.0	3.0	8.0	16.0	8.0	250	
—	498091	11.0	4.0	8.0	16.0	9.0	250	
498041	498092	12.0	1.0	8.0	16.0	6.0	250	
498042	498093	12.0	2.0	8.0	16.0	7.0	250	
498043	498094	12.0	3.0	8.0	16.0	8.0	250	
498044	498095	12.0	4.0	8.0	16.0	9.0	250	
498045	498096	12.0	1.0	10.0	16.0	6.0	250	
498046	498097	12.0	1.5	10.0	16.0	6.5	250	
498047	498098	12.0	2.0	10.0	16.0	7.0	250	
498048	498099	12.0	3.0	10.0	16.0	8.0	250	
—	498100	14.0	1.0	11.0	18.0	6.0	250	
—	498101	14.0	2.0	11.0	18.0	7.0	250	
—	498102	14.0	3.0	11.0	18.0	8.0	250	
498049	498103	15.0	1.0	11.0	20.0	6.0	250	
498050	498104	15.0	2.0	11.0	20.0	7.0	250	
498051	498105	15.0	3.0	11.0	20.0	8.0	250	
498052	498106	15.0	4.0	11.0	20.0	9.0	250	
498053	498107	18.0	1.0	12.0	22.0	6.0	250	
498054	498108	18.0	2.0	12.0	22.0	7.0	250	
498055	498109	18.0	3.0	12.0	22.0	8.0	250	
498056	498110	18.0	4.0	12.0	22.0	9.0	250	
498057	498111	22.0	1.0	16.0	27.0	7.0	100	
498058	498112	22.0	1.5	16.0	27.0	7.5	100	
498059	498113	22.0	2.0	16.0	27.0	8.0	100	
498060	498114	22.0	3.0	16.0	27.0	9.0	100	
498061	498115	22.0	4.0	16.0	27.0	10.0	100	
—	198116	27.0	1.0	21.0	34.0	9.0	50	
—	498117	27.0	2.0	21.0	34.0	10.0	50	
—	498118	27.0	3.0	21.0	34.0	11.0	50	
—	498119	27.0	4.0	21.0	34.0	12.0	50	
—	498120	40.0	1.0	31.0	48.0	12.0	25	
—	498121	40.0	2.0	31.0	48.0	13.0	25	
—	498122	40.0	3.0	31.0	48.0	14.0	25	
—	498123	40.0	4.0	31.0	48.0	15.0	25	
—	498124	52.0	1.0	41.0	60.0	13.0	10	
—	498125	52.0	2.0	41.0	60.0	14.0	10	
—	498126	52.0	3.0	41.0	60.0	15.0	10	
—	498127	52.0	4.0	41.0	60.0	16.0	10	



# GROMMETS & BUSHINGS

## GRQ/QFG Series 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.		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)	in	mm	in	mm	
16200	16210	16220	—	0.394	10.0	0.236	6.0	5000
QFG-16200	—	QFG-16220	—	0.394	10.0	0.236	6.0	1000
16201	16211	16221	—	0.433	11.0	0.276	7.0	10000
QFG-16201	—	—	—	0.433	11.0	0.276	7.0	1000
16202	16212	16222	—	0.472	12.0	0.315	8.0	10000
—	—	QFG-16222	—	0.472	12.0	0.315	8.0	1000
16203	16213	16223	—	0.551	14.0	0.394	10.0	10000
QFG-16203	—	QFG-16223	—	0.551	14.0	0.394	10.0	1000
16204	16214	16224	—	0.630	16.0	0.472	12.0	10000
QFG-16204	—	QFG-16224	—	0.630	16.0	0.472	12.0	1000
16205	16215	16225	—	0.709	18.0	0.551	14.0	10000
QFG-16205	—	—	—	0.709	18.0	0.551	14.0	1000
—	—	—	QFG-1	0.728-0.787	18.5-20.0	0.512	13.0	1000
16206	16216	16226	—	0.787	20.0	0.630	16.0	4000
16207	16217	16227	—	0.866	22.0	0.709	18.0	4000
QFG-16207	—	—	—	0.866	22.0	0.709	18.0	1000
—	—	—	QFG-2	0.984-1.024	25.0-26.0	0.709	18.0	1000
16208	16218	16228	—	1.024	26.0	0.866	22.0	4000
—	—	QFG-16228	—	1.024	26.0	0.866	22.0	1000
16209	16219	16229	—	1.102	28.0	0.945	24.0	2000
QFG-16209	—	QFG-16229	—	1.102	28.0	0.945	24.0	1000

## PGSB/BSI Series Closed Insulation Bushing



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	Ø Mounting Hole		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	in	mm	
PGSB-0305	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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

(Continued on next page)



**PGSB/BSI Series (continued)**  
**Closed Insulation Bushing**



Item No.	Approval	Ø Mounting Hole		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	in	mm	
PGSB-24	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	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	RU	3.000	76.2	0.250	6.4	3.160	80.3	2.470	62.7	0.720	18.2	—	—	350

**PGSA Series**  
**Shallow Open Insulation Bushing**



**Specifications:**

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

**Features:**

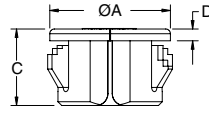
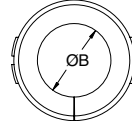
- Molded with shallow overall height for applications with limited space
- Open design allows bushing to be assembled into holes that already contain a bundle
- Protects wires, cables, and tubing from sharp edges of sheet metal holes

Item No.	Approval	Mounting Hole Ø		Panel Thickness Range		OD A Ref.		ID B		Overall Height C		Bulk Pack Qty.
		in	mm	in	mm	in	mm	in	mm	in	mm	
PGSA-0407A	RU	0.276	7.0	0.016 - 0.039	0.4 - 1.0	0.410	10.4	0.190	4.8	0.200	5.0	1000
PGSA-1013A	RU	0.512	13.0	0.039 - 0.059	1.0 - 1.5	0.640	16.2	0.360	9.2	0.210	5.3	500
PGSA-1316A	RU	0.630	16.0	0.039 - 0.055	1.0 - 1.4	0.760	19.4	0.480	12.2	0.210	5.4	500
PGSA-1519A	RU	0.748	19.0	0.039 - 0.059	1.0 - 1.5	0.890	22.7	0.560	14.3	0.220	5.7	500
PGSA-1822A	RU	0.866	22.0	0.031 - 0.063	0.8 - 1.6	1.000	25.5	0.690	17.6	0.220	5.6	500
PGSA-2024A1	RU	0.945	24.0	0.031 - 0.047	0.8 - 1.2	1.060	27.0	0.770	19.5	0.210	5.3	500
PGSA-2024A	RU	0.945	24.0	0.039 - 0.063	1.0 - 1.6	1.060	27.0	0.770	19.5	0.210	5.3	500
PGSA-2327A	RU	1.067	27.1	0.016 - 0.039	0.4 - 1.0	1.380	35.1	0.900	22.9	0.240	6.0	200
PGSA-2529A	RU	1.142	29.0	0.016 - 0.043	0.4 - 1.1	1.380	35.1	0.970	24.5	0.280	7.0	200



# BUSHINGS

## PGSB-A Series Standard Open Insulation Bushing



**Specifications:**

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

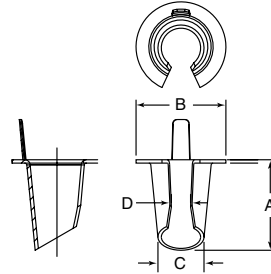
**Features:**

- 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		Panel Thickness Range		OD A Ref.		ID B		Overall Height C		Head Height D		Bulk Pack Qty.
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
PGSB-0609A		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 Series Armor Bushing



**Specifications:**

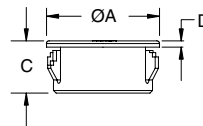
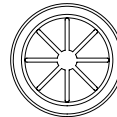
- Material: Polypropylene
- Color: Red

**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		B		C		D		Cable Size	Trade Size	Bulk Pack Qty.
			in	mm	in	mm	in	mm	in	mm			
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

## PGSD Series 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		Max Panel Thickness		OD A		Max ID		Overall Height C		Head Height D		Bulk Pack Qty.
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
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

# BUSHINGS & GROMMETS



## PGSC Series 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		Max Panel Thickness		OD A		Max ID		Overall Height C		Head Height D		Bulk Pack Qty.
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
PGSC-1319A	UL	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	UL	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	UL	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	UL	1.095 - 1.102	27.8 - 28.0	0.031 - 0.118	0.8 - 3.0	1.161	29.5	0.815	20.7	0.453	11.5	0.039	1.0	200

## GFA Series NAS1368 Flip Grommet



**Specifications:**

- Material: UL94 V-2 Nylon 6/6
- Color: Light Green

**Features:**

- Installed by inserting the “un-flipped” grommet into the hole (forming dies - not supplied by Essentra - on each side of the hole are pressed together until the grommet “flips” over itself, creating a flange on both sides of the hole)
- 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.	Ø Mounting Hole		Max Recommended Panel Thickness		NAS1368 Panel Thickness Range		T	A Ref.		B		C Ref.		D		Bulk Pack Qty.	
		in	mm	in	mm	in	mm		in	mm	in	mm	in	mm	in	mm		
GFA-N4A	NAS1368-N4A	0.375	9.5	0.030	0.8	0.025 - 0.080	0.6 - 2.0	0.235	6.0	0.567	14.4	0.367	9.3	0.251	6.4	0.058	1.5	100
GFA-N4B	NAS1368-N4B	0.375	9.5	0.100	2.5	0.081 - 0.140	2.1 - 3.6	0.295	7.5	0.567	14.4	0.367	9.3	0.251	6.4	0.058	1.5	100
GFA-N6A	NAS1368-N6A	0.500	12.7	0.030	0.8	0.025 - 0.080	0.6 - 2.0	0.235	6.0	0.692	17.6	0.492	12.5	0.376	9.6	0.058	1.5	100
GFA-N6B	NAS1368-N6B	0.500	12.7	0.090	2.3	0.081 - 0.140	2.1 - 3.6	0.295	7.5	0.692	17.6	0.492	12.5	0.376	9.6	0.058	1.5	100
GFA-N6C	NAS1368-N6C	0.500	12.7	0.160	4.1	0.141 - 0.200	3.6 - 5.1	0.360	9.1	0.692	17.6	0.492	12.5	0.376	9.6	0.058	1.5	100
GFA-N8A	NAS1368-N8A	0.625	15.9	0.030	0.8	0.025 - 0.080	0.6 - 2.0	0.235	6.0	0.815	20.7	0.615	15.6	0.499	12.7	0.058	1.5	100
GFA-N8B	NAS1368-N8B	0.625	15.9	0.090	2.3	0.081 - 0.140	2.1 - 3.6	0.295	7.5	0.815	20.7	0.615	15.6	0.499	12.7	0.058	1.5	100
GFA-N10A	NAS1368-N10A	0.781	19.8	0.030	0.8	0.025 - 0.080	0.6 - 2.0	0.235	6.0	0.971	24.7	0.771	19.6	0.605	15.4	0.083	2.1	100
GFA-N10B	NAS1368-N10B	0.781	19.8	0.080	2.0	0.081 - 0.140	2.1 - 3.6	0.295	7.5	0.971	24.7	0.771	19.6	0.605	15.4	0.083	2.1	100
GFA-N10D	NAS1368-N10D	0.781	19.8	0.210	5.3	0.201 - 0.250	5.1 - 6.4	0.420	10.7	0.971	24.7	0.771	19.6	0.605	15.4	0.083	2.1	100
GFA-N12A	NAS1368-N12A	0.906	23.0	0.020	0.5	0.025 - 0.080	0.6 - 2.0	0.235	6.0	1.096	27.8	0.896	22.8	0.730	18.5	0.083	2.1	100
GFA-N12B	NAS1368-N12B	0.906	23.0	0.070	1.8	0.081 - 0.140	2.1 - 3.6	0.295	7.5	1.096	27.8	0.896	22.8	0.730	18.5	0.083	2.1	100
GFA-N14A	NAS1368-N14A	1.031	26.2	0.020	0.5	0.025 - 0.080	0.6 - 2.0	0.235	6.0	1.221	31.0	1.021	25.9	0.855	21.7	0.083	2.1	100
GFA-N14B	NAS1368-N14B	1.031	26.2	0.070	1.8	0.081 - 0.140	2.1 - 3.6	0.295	7.5	1.221	31.0	1.021	25.9	0.855	21.7	0.083	2.1	100

## SB Series 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		Max Panel Thickness		ID		Ø A		Overall OD B		Bulk Pack Qty.
	in	mm	in	mm	in	mm	in	mm	in	mm	
SB-1	0.375	9.5	0.125	3.2	0.150	3.8	0.360	9.1	0.450	11.4	500
SB-2	0.437	11.1	0.125	3.2	0.220	5.6	0.430	10.9	0.550	14.0	500
SB-3	0.500	12.7	0.125	3.2	0.280	7.1	0.490	12.4	0.630	16.0	500



# GROMMETS & BUSHINGS

## PLV Series 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 and emissions to escape



Item No.	Approvals	Ø Hole		Max Panel Thickness		Ø Head B		Thickness C		Bulk Pack Qty.
		in	mm	in	mm	in	mm	in	mm	
62MP0750V		0.750	19.1	0.125	3.2	0.906	23.0	0.406	10.3	1000
62MP0875V		0.875	22.2	0.125	3.2	1.016	25.8	0.453	11.5	1000
62MP1000V		1.000	25.4	0.125	3.2	1.203	30.6	0.453	11.5	500

## GR67/LTG Series IP67 Liquid Tight Grommet



**Specifications:**

- Material: EPDM
- Color: Grey (Black for LTG-199017)

**Features:**

- Confirms to IP67 standard for watertight seal
- Acts as a blanking plug until cable is installed
- Designed to withstand vibration



Item No.	Fits	Panel Hole		Panel Thickness		Cable Size		Bulk Pack Qty.
		in	mm	in	mm	in	mm	
LTG-199017	PG-7	0.492	12.5	0.020 - 0.079	0.5 - 2.0	0.138 - 0.197	3.5 - 5.0	1000
GR67464121A	PG-7	0.492	12.5	0.020 - 0.079	0.5 - 2.0	0.138 - 0.197	3.5 - 5.0	1000
GR6739897A	PG-9	0.630	16.0	0.039 - 0.157	1.0 - 4.0	0.197 - 0.276	5.0 - 7.0	1000
GR6734715A	PG-11	0.748	19.0	0.039 - 0.157	1.0 - 4.0	0.276 - 0.394	7.0 - 10.0	1000
GR6734716A	PG-16	0.906	23.0	0.039 - 0.157	1.0 - 4.0	0.394 - 0.551	10.0 - 14.0	1000
GR6743021A	PG-21	1.142	29.0	0.039 - 0.157	1.0 - 4.0	0.551 - 0.787	14.0 - 20.0	1000
GR67464122A	PG-29	1.496	38.0	0.039 - 0.157	1.0 - 4.0	0.787 - 1.024	20.0 - 26.0	250
GR67464123A	PG-36	1.890	48.0	0.039 - 0.157	1.0 - 4.0	1.024 - 1.378	26.0 - 35.0	250
GR67M16A	M16	0.650	16.5	0.039 - 0.157	1.0 - 4.0	0.197 - 0.354	5.0 - 9.0	1000
GR67M20A	M20	0.807	20.5	0.039 - 0.157	1.0 - 4.0	0.276 - 0.512	7.0 - 13.0	1000
GR67M25A	M25	1.004	25.5	0.059 - 0.157	1.5 - 4.0	0.394 - 0.670	10.0 - 17.0	1000
GR67M32A	M32	1.280	32.5	0.039 - 0.157	1.0 - 4.0	0.551 - 0.787	14.0 - 20.0	500
GR67M40A	M40	1.594	40.5	0.059 - 0.157	1.5 - 4.0	0.750 - 1.024	19.0 - 26.0	250
GR67M50A	M50	1.988	50.5	0.039 - 0.157	1.0 - 4.0	1.024 - 1.338	26.0 - 34.0	250

## Push In Flexible Grommet



**Specifications:**

- Material: Polyethylene and TPE
- Color: Grey

**Features:**

- Dust tight
- Quick and easy mounting
- For enclosures with more than .079 (2.0) thickness



Item No.	Ø d Hole		D OD		Ø Cable Range		Bulk Pack Qty.
	in	mm	in	mm	in	mm	
494632	0.630	16.0	0.835	21.2	0.039 - 0.354	1.0 - 9.0	100
494633	0.787	20.0	0.992	25.2	0.039 - 0.512	1.0 - 13.0	100
494634	0.984	25.0	1.189	30.2	0.039 - 0.709	1.0 - 18.0	100
494635	1.260	32.0	1.465	37.2	0.039 - 0.984	1.0 - 25.0	50

# STRAIN RELIEF BUSHINGS



## SRB/BSR Series 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



Item No.	Approvals	Cross Section	Cable Type	Gauge (AWG)	Cable Size		Ø A		Flats B		Max Panel		Length D		Width C Ref.		Bulk Pack Qty.
					in	Strap Type	in	mm	in	mm	in	mm	in	mm	in	mm	
SRB-F-1	RU	—	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	RU	—	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
23MP04N40	RU	⊗	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
	RU	⊗	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
23MP04K40	RU	⊗	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
	RU	⊗	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
SRB-F-6	RU	⊗	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
	RU	—	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
	RU	—	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
	RU	—	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	RU	—	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
	RU	—	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	RU	—	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
	RU	—	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
23MP04K10	RU	⊗	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
	RU	⊗	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
	RU	⊗	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
	RU	⊗	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
23MP05N40	RU	⊗	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
	RU	⊗	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
	RU	⊗	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
	RU	⊗	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
23MP05P40	RU	⊗	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
	RU	⊗	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
	RU	⊗	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
	RU	⊗	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
SRB-R-1	RU	⊗	Round SV	—	0.252	Y	0.500	12.7	0.453	11.5	0.062	1.6	0.437	11.1	0.559	14.2	1000
	RU	⊗	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
	RU	⊗	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
	RU	⊗	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	RU	—	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	RU	—	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
23MP06N40	RU	⊗	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
	RU	⊗	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
23MP06W10	RU	⊗	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
	RU	⊗	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
SRB-R-7	RU	—	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	RU	—	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
23MP06P34	RU	⊗	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
	RU	⊗	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
	RU	⊗	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
	RU	⊗	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
23MP06L10	RU	⊗	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
	RU	⊗	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
	RU	⊗	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
	RU	⊗	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
23MP07K30	RU	⊗	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
	RU	⊗	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
	RU	⊗	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
	RU	⊗	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
23MP06N34	RU	⊗	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
	RU	⊗	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
SRB-R-9	RU	—	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
	RU	—	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	RU	—	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
	RU	—	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



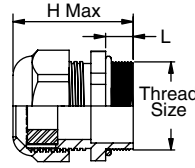
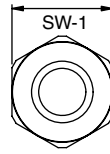
# CABLE GLANDS

## CG-NPT Series 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



### Optional Locknuts

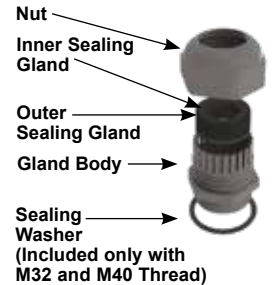
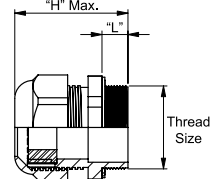
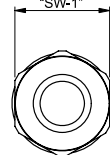
Item No.	Thread Size	Locking Nuts		Bulk Pack Qty.	
		Across Flats			Thickness
		in	mm		
CGNPT050B	NPT-1/4	0.748	19.0	0.216 5.5 100	
CGLN-NPT-3/8-BK	NPT-3/8	0.866	22.0	0.197 5.0 100	
CGLN-NPT-1/2-BK	NPT-1/2	1.063	27.0	0.236 6.0 100	
CGLN-NPT-3/4-BK	NPT-3/4	1.417	36.0	0.276 7.0 100	
CGLN-NPT-1-BK	NPT-1	1.654	42.0	0.276 7.0 100	

### 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.	Approval	Cable Ø Range Min		Cable Ø Range Max		Thread Size	Mounting Hole		L		SW-1		H Max Ref.		Bulk Pack Qty.
		in	mm	in	mm		in	mm	in	mm	in	mm			
CG-NPT-1/4-1-BK	—	0.157	4.0	0.315	8.0	NPT-1/4	0.524	13.3	0.354	9.0	0.748	19.0	1.378	35.0	100
CG-NPT-3/8-1-BK	UL	0.118	3.0	0.276	7.0	NPT-3/8	0.670	17.0	0.571	14.5	0.866	22.0	1.750	44.5	100
CG-NPT-3/8-2-BK	UL	0.197	5.0	0.394	10.0	NPT-3/8	0.670	17.0	0.571	14.5	0.866	22.0	1.750	44.5	100
CG-NPT-1/2-1-BK	UL	0.197	5.0	0.236	9.0	NPT-1/2	0.875	22.2	0.571	14.5	0.945	24.0	1.770	45.0	100
CG-NPT-1/2-2-BK	UL	0.276	7.0	0.472	12.0	NPT-1/2	0.875	22.2	0.591	15.0	1.063	27.0	1.870	47.5	100
CG-NPT-1/2-3-BK	UL	0.394	10.0	0.551	14.0	NPT-1/2	0.875	22.2	0.591	15.0	1.063	27.0	1.870	47.5	100
CG-NPT-3/4-1-BK	UL	0.354	9.0	0.630	16.0	NPT-3/4	1.068	27.1	0.591	15.0	1.299	33.0	2.050	52.0	50
CG-NPT-3/4-2-BK	UL	0.551	14.0	0.709	18.0	NPT-3/4	1.068	27.1	0.591	15.0	1.299	33.0	2.050	52.0	50
CG-NPT-1-1-BK	UL	0.472	12.0	0.787	20.0	NPT-1	1.350	34.3	0.709	18.0	1.654	42.0	2.380	60.5	25
CG-NPT-1-2-BK	UL	0.748	19.0	0.984	25.0	NPT-1	1.350	34.3	0.709	18.0	1.654	42.0	2.380	60.5	25

## CG-M Series Cable 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.	Approval	Ø Cable Range Min		Ø Cable Range Max		Thread Size	Mounting Hole		L		SW-1		H Max Ref.		Pack Qty.	Bulk Pack Qty.
		in	mm	in	mm		in	mm	in	mm	in	mm				
CG-M12-1-BK	UL	0.079	2.0	0.197	5.0	M12	0.480	12.2	0.315	8.0	0.591	15.0	1.220	31.0	1	100
CG-M16-1-BK	UL	0.118	3.0	0.394	10.0	M16	0.638	16.2	0.315	8.0	0.787	20.0	1.398	35.5	1	100
CG-M20-1-BK	UL	0.197	5.0	0.512	13.0	M20	0.795	20.2	0.315	8.0	0.945	24.0	1.417	36.0	1	100
CG-M25-1-BK	UL	0.315	8.0	0.669	17.0	M25	0.992	25.2	0.315	8.0	1.142	29.0	1.623	43.0	1	50
CG-M32-1-BK	UL	0.472	12	0.827	21.0	M32	1.268	32.2	0.394	10.0	1.417	36.0	1.968	50.0	1	25
CG-M40-1-BK	UL	0.630	16	1.102	28.0	M40	1.583	40.2	0.394	10.0	1.811	46.0	2.008	51.0	1	10

### Optional Locknuts

Item No.	Thread Size	Locking Nuts		Pack Qty.	Bulk Pack Qty.	
		Across Flats				Thickness
		in	mm			
CGLN-M12-BK	M12	0.339	17.0	0.197	5.0 1	
CGLN-M16-BK	M16	0.866	22.0	0.197	5.0 1	
CGLN-M20-BK	M20	1.063	27.0	0.236	6.0 1	
CGLN-M25-BK	M25	1.260	32.0	0.236	6.0 1	
CGLN-M32-BK	M32	1.614	41.0	0.276	7.0 1	
CGLN-M40-BK	M40	1.969	50.0	0.276	7.0 1	

# CABLE GLANDS



## CG-PG Series 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
- Temperature Range: -4°F - 212°F (-20°C -100°C)

**Features:**

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

**Optional Locknuts**

Item No.	Thread Size	Across Flats		Thickness		Pack Qty.	Bulk Pack Qty.
		In	mm	In	mm		
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.	Approval	Ø Cable Range Min		Ø Cable Range Max		Thread Size	Mounting Hole		L		SW-1		H Max Ref.		Pack Qty.	Bulk Pack Qty.
		in	mm	in	mm		in	mm	in	mm	in	mm	in	mm		
CG-PG7-1-BK	UL	0.079	2.0	0.197	5.0	PG7	0.500	12.7	0.315	8.0	0.591	15.0	1.201	30.5	1	100
CG-PG7-2-BK	UL	0.118	3.0	0.256	6.5	PG7	0.500	12.7	0.315	8.0	0.591	15.0	1.201	30.5	1	100
CG-PG9-1-BK	UL	0.079	2.0	0.236	6.0	PG9	0.606	15.4	0.315	8.0	0.748	19.0	1.339	34.0	1	100
CG-PG9-2-BK	UL	0.157	4.0	0.315	8.0	PG9	0.606	15.4	0.315	8.0	0.748	19.0	1.339	34.0	1	100
CG-PG11-1-BK	UL	0.118	3.0	0.276	7.0	PG11	0.740	18.8	0.315	8.0	0.866	22.0	1.457	37.0	1	100
CG-PG11-2-BK	UL	0.197	5.0	0.394	10.0	PG11	0.740	18.8	0.315	8.0	0.866	22.0	1.457	37.0	1	100
CG-PG13.5-1-BK	UL	0.236	6.0	0.472	12.0	PG13.5	0.815	20.7	0.354	9.0	0.945	24.0	1.535	39.0	1	100
CG-PG16-1-BK	UL	0.394	10.0	0.551	14.0	PG16	0.898	22.8	0.394	10.0	1.063	27.0	1.673	42.5	1	50
CG-PG21-1-BK	UL	0.236	9.0	0.630	16.0	PG21	1.126	28.6	0.433	11.0	1.299	33.0	1.870	47.5	1	50
CG-PG21-2-BK	UL	0.512	13.0	0.709	18.0	PG21	1.126	28.6	0.433	11.0	1.299	33.0	1.870	47.5	1	50
CG-PG29-1-BK	UL	0.472	12.0	0.787	20.0	PG29	1.472	37.4	0.433	11.0	1.654	42.0	2.087	53.0	1	25
CG-PG36-1-BK	UL	0.787	20.0	1.024	26.0	PG36	1.870	47.5	0.512	13.0	2.087	53.0	2.402	61.0	1	10
CG-PG36-2-BK	UL	0.866	22.0	1.260	32.0	PG36	1.870	47.5	0.512	13.0	2.087	53.0	2.402	61.0	1	10

## CGRA Series 90° NPT Cable Glands



**Specifications:**

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

**Features:**

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

**Optional Parts**

LNPT - NPT Locknuts			
Locknut Item No.	NPT Thread	Pack Qty.	Bulk Pack Qty.
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 (Min/Max)		Pack Qty.	Bulk Pack Qty.
			in	mm	in	mm	in	mm	in	mm				
CGRA011A	3/8	0.687	1.909	48.5	0.461	11.7	0.657	16.7	1.181	30.0	0.197 - 0.354	5.0 - 8.0	1	20
CGRA015A	1/2	0.875	2.031	51.6	0.579	14.7	0.724	18.4	1.228	31.2	0.393 - 0.512	10.0 - 13.0	1	20
CGRA018A	3/4	1.0625	2.539	64.5	0.583	14.8	0.878	22.3	1.638	41.6	0.512 - 0.630	13.0 - 16.0	1	20
CGRA020A	1-1/4	1.687	3.346	85.0	0.740	18.8	1.220	31.0	2.087	53.0	0.866 - 1.412	22.0 - 29.0	1	10



# PANEL HOLE PLUGS & CABLE GROMMETS

## Metric & PG Threaded Rubber Plug



**Specifications:**

- Material: Silicone Rubber
- Color: Black

**Features:**

- Can be pushed into place using a blunt tipped tool
- Used to give water tight protection to spare holes that need to be closed off
- Pull tab for easy removal
- Fits standard Metric and PG sizes



Item No.	Cable Gland Sizes	Ø Hole		Panel Thickness Range		d		D		h		Bulk Pack Qty.
		in	mm	in	mm	in	mm	in	mm	in	mm	
551846	PG7/M12	0.480 - 0.492	12.2 - 12.5	0.039 - 0.079	1.0 - 2.0	0.571	14.5	0.968	24.6	0.189	4.8	1000
551847	PG9/M16	0.606 - 0.638	15.4 - 16.2	0.039 - 0.079	1.0 - 2.0	0.689	17.5	1.087	27.6	0.197	5.0	500
551848	PG11/PG13.5/M20	0.740 - 0.815	18.8 - 20.7	0.039 - 0.079	1.0 - 2.0	0.905	23.0	1.346	34.2	0.236	6.0	500
551849	PG16	0.898	22.8	0.039 - 0.079	1.0 - 2.0	1.024	26.0	1.520	38.6	0.256	6.5	200
551850	PG21/M25	0.992 - 1.126	25.2 - 28.6	0.039 - 0.079	1.0 - 2.0	1.220	31.0	1.732	44.0	0.295	7.5	100
551851	M32	1.268 - 1.394	32.2 - 35.4	0.039 - 0.079	1.0 - 2.0	1.575	40.0	2.205	56.0	0.354	9.0	100

## CGA Series Cable Grommet

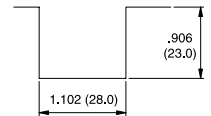


**Specifications:**

- Material: Silicone Rubber, 70 Shore A
- Color: Black

**Features:**

- Routes cables and protects wires from sharp edges
- "Wings" are flexible so it can accept various diameters and shapes
- Continuous working temperature of 300°F



**Recommended Panel Cut-Out**

Item No.	Ø Maximum Bundle		Panel Thickness		Bulk Pack Qty.
	in	mm	in	mm	
1258288	0.591	15.0	0.039	1.0	1000

## CGB Series Cable Grommet

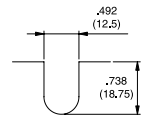
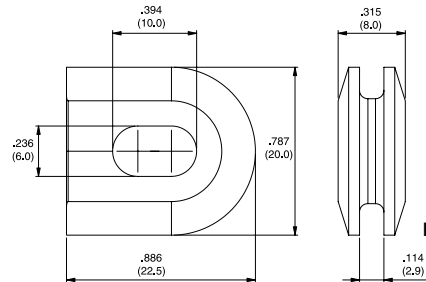


**Specifications:**

- Material: Silicone Rubber, 65 Shore A
- Color: Black

**Features:**

- Routes cables and protects wires from sharp edges
- "Wings" are flexible so it can accept various diameters and shapes
- Continuous working temperature of 350°F



**Recommended Panel Cut-Out**

Item No.	Bundle Area		Max Panel Thickness		Bulk Pack Qty.
	in	mm	in	mm	
CGB-1	0.394 x 0.236	10.0 x 6.0	0.110	2.8	1000

## CGC Series Cable Grommet

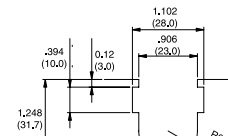
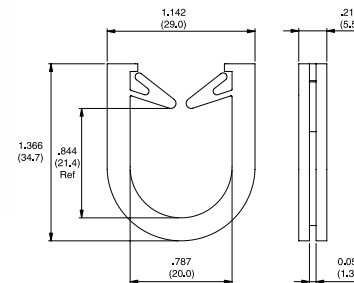


**Specifications:**

- Material: Nylon 6/6
- Color: Natural

**Features:**

- Routes cables and protects wires from sharp edges
- "Wings" are flexible so it can accept various diameters and shapes
- Cables may be inserted and removed



**Recommended Panel Cut-Out**

Item No.	Bundle Area		Max Panel Thickness		Bulk Pack Qty.
	in	mm	in	mm	
CGC-1-01	0.844 x 0.787	21.4 x 20.0	0.047	1.2	250



**EHWSE/EWSE/EWSJS Series**  
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		Depth		Bulk Pack Qty.
				in	mm	in	mm	
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 Series**  
Edge Wire Saddle



Specifications:

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

Features:

- Snaps into cutout on the board
- Routes cables and protects wires from sharp edges



Recommended Panel Cut-Out

Item No.	Approval	Panel Thickness		A		B		C		D		Depth		Bulk Pack Qty.
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
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 Series Hinged Edge Wire Saddle

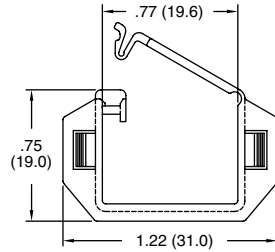
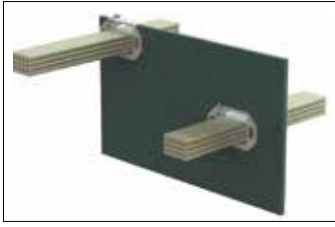


Figure 1

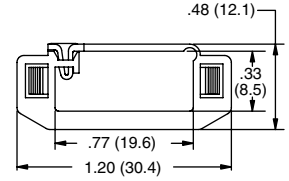


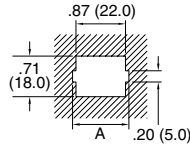
Figure 2

**Specifications:**

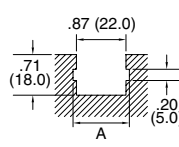
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

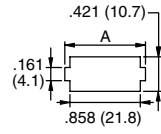
- Routes cables and protects them from sharp edges
- Installed in a mounting slot; edge or through-hole
- Hinged latch allows retrofitting into pre-existing applications



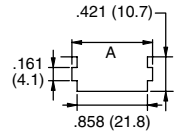
Thru Hole Panel Cut-Out



Edge Hole Panel Cut-Out



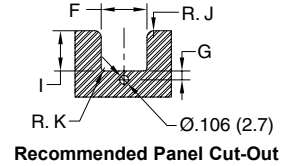
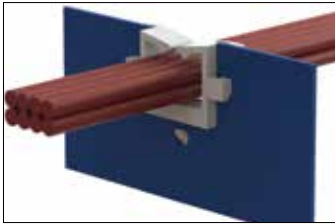
Thru Hole Panel Cut-Out



Edge Hole Panel Cut-Out

Item No.	Figure	Panel Thickness		A		Depth		Bulk Pack Qty.
		in	mm	in	mm	in	mm	
HEWSE-22-01	1	0.020 - 0.063	0.5 - 1.6	0.980	25.0	0.260	6.6	1000
HEWSE-25-01	2	0.031 - 0.063	0.8 - 1.6	0.980	25.0	0.260	6.6	1000
HEWSE-25-01	2	0.079	2.0	1.020	26.0	0.260	6.6	1000

## LEWSE Series Edge Wire 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.	B Ref.	C Ref.	D	E	F	I	G	R. J	R. K	Bulk Pack Qty.
		in	in	in	in	in	in	in	in	in	in	
LEWSE-14-01	0.031 - 0.063	0.780	0.460	0.290	0.640	0.160	0.551	0.484	0.106	0.079	0.039	1000
LEWSE-19-01	0.031 - 0.063	1.060	0.660	0.590	0.980	0.150	0.756	0.831	0.100	0.079	0.039	1000
LEWSE-21-01	0.031 - 0.063	1.130	0.660	0.580	0.980	0.150	0.827	0.827	0.100	0.079	0.060	1000
LEWSE-27-01	0.031 - 0.063	1.370	0.900	0.910	1.310	0.120	10.630	1.140	0.106	0.079	0.060	1000

## MCCG Series Metal Cushioned Grommet

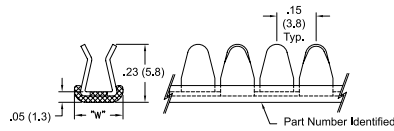


Figure 1

**Specifications:**

- Material: 304 Stainless Steel, Coated with Black Nylon 1
- Cushion: UL94 V-0 TPE (60 Shore D)
- Temperature Range: -40°F - 285°F (-40°C - 140°C)

**Features:**

- Dielectric Strength: 1500 volts @ 60Hz
- Flexible polymer cushion gives additional abrasion protection
- Sold in 100 foot reels that can be cut to length using metal shears
- The MCCGF is the more flexible of the two due to the design

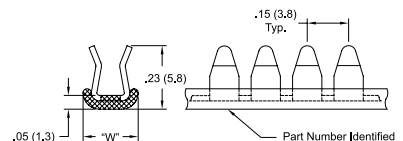


Figure 2

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

# GROMMET EDGING



## MCG/MCGF Series Metal Grommet



Figure 1

Specifications:

- Material: 304 Stainless Steel, Coated with Black Nylon 11 and a cushion of TPE 60 Shore D UL94V-0 rating
- Color: See Table
- Temperature Range: -40°F - 285°F (-40°C - 140°C)

Features:

- Dielectric Strength: 1000 Volts @ 60Hz
- Locks onto panel with finger pressure
- Sold in 100 foot reels that can be cut to length using metal shears
- The MCGF is the more flexible of the two due to the design

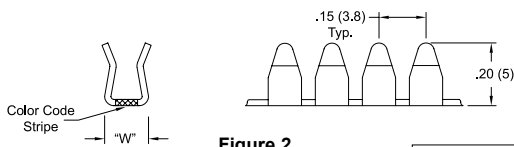


Figure 2



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

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

Specifications:

- Material Options:  
UL94 HB Nylon Temperature Range: -40°F - 248°F (-40°C - 120°C)  
Polyethylene: Temperature Range: -40°F - 149°F (-40°C - 65°C)
- Color: See Table

Features:

- Adhesive provides self-retaining grip eliminating the need for epoxy
- Sizes 6, 7, and 8 are extra flexible
- Solid version is for straight edges
- Serrated version for round, square, and rectangular holes
- Polyethylene material is very flexible



Solid Profile Item No.		Serrated Profile Item No.		Material	Panel Thickness Range		A Ref.		B Ref.		C Ref.		Roll Length	Pack Qty.
Natural	Black	Natural	Black		in	mm	in	mm	in	mm	in	mm		
NGSG-2	—	SNGSG-2	SNGSG-2B	UL94 HB Nylon	0.037 - 0.071	0.9 - 1.8	0.172	4.4	0.031	0.8	0.109	2.8	100	1
NGSG-2.5	—	SNGSG-2.5	—	UL94 HB Nylon	0.072 - 0.105	1.8 - 2.7	0.172	4.4	0.031	0.8	0.109	2.8	100	1
NGSG-3	—	SNGSG-3	—	UL94 HB Nylon	0.106 - 0.164	2.7 - 4.2	0.188	4.8	0.047	1.2	0.156	4.0	100	1
PGSG-2	PGSG-2B	SPGSG-2	SPGSG-2B	Polyethylene	0.037 - 0.071	0.9 - 1.8	0.172	4.4	0.031	0.8	0.109	2.8	100	1
PGSG-6	PGSG-6B	SPGSG-6	—	Polyethylene	0.037 - 0.071	0.9 - 1.8	0.160	4.1	0.025	0.6	0.060	1.5	100	1
PGSG-2.5	PGSG-2.5B	SPGSG-2.5	SPGSG-2.5B	Polyethylene	0.072 - 0.105	1.8 - 2.7	0.172	4.4	0.031	0.8	0.109	2.8	100	1
—	—	SPGSG-7	—	Polyethylene	0.072 - 0.105	1.8 - 2.7	0.188	4.8	0.035	0.9	0.100	2.5	100	1
PGSG-3	PGSG-3B	SPGSG-3	SPGSG-3B	Polyethylene	0.106 - 0.164	2.7 - 4.2	0.188	4.8	0.047	1.2	0.156	4.0	100	1
—	—	SPGSG-8	—	Polyethylene	0.106 - 0.164	2.7 - 4.2	0.188	4.8	0.035	0.9	0.156	4.0	100	1

## NGS/PGS/SNGS/SPGS Series Continuous Grommet Edging

Specifications:

- Material: See Table
- Color: See Table

Features:

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

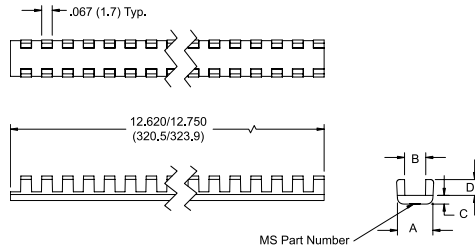
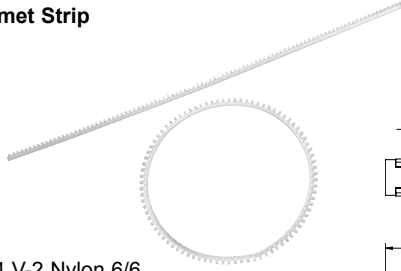


Solid Profile Item No.		Serrated Profile Item No.		Material	Panel Thickness Range		A Ref.		B Ref.		C Ref.		Roll Length	Pack Qty.
Natural	Black	Natural	Black		in	mm	in	mm	in	mm	in	mm		
NGS-1	—	SNGS-1	SNGS-1B	UL94 HB Nylon	0.026 - 0.036	0.7 - 0.9	0.125	3.2	0.031	0.8	0.031	0.8	100	1
NGS-2	—	SNGS-2	SNGS-2B	UL94 HB Nylon	0.037 - 0.071	0.9 - 1.8	0.172	4.4	0.031	0.8	0.109	2.8	100	1
—	—	SNGS-2.5	SNGS-2.5B	UL94 HB Nylon	0.072 - 0.105	1.8 - 2.7	0.172	4.4	0.031	0.8	0.109	2.8	100	1
—	—	SNGS-3	SNGS-3B	UL94 HB Nylon	0.106 - 0.164	2.7 - 4.2	0.188	4.8	0.047	1.2	0.156	4.0	100	1
—	—	SNGS-4	SNGS-4B	UL94 HB Nylon	0.164 - 0.187	4.2 - 4.7	0.188	4.8	0.047	1.2	0.188	4.8	100	1
—	—	SNGS-5	—	UL94 HB Nylon	0.188 - 0.250	4.8 - 6.4	0.188	4.8	0.047	1.2	0.250	6.4	100	1
PGS-1	PGS-1B	SPGS-1	—	Polyethylene	0.026 - 0.036	0.7 - 0.9	0.125	3.2	0.031	0.8	0.031	0.8	100	1
PGS-2	—	SPGS-2	—	Polyethylene	0.037 - 0.071	0.9 - 1.8	0.172	4.4	0.031	0.8	0.109	2.8	100	1
PGS-2.5	PGS-2.5B	SPGS-2.5	SPGS-2.5B	Polyethylene	0.072 - 0.105	1.8 - 2.7	0.172	4.4	0.031	0.8	0.109	2.8	100	1
PGS-3	—	SPGS-3	—	Polyethylene	0.106 - 0.164	2.7 - 4.2	0.188	4.8	0.047	1.2	0.156	4.0	100	1



# GROMMET EDGING

## MGS Series MS21266 Grommet Strip



**Specifications:**

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

**Features:**

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



Item No.	Militart Part Number	Panel Thickness	A	B	C	D	Bulk Pack Qty.
MGS-1-01	MS21266-1N	0.015 - 0.052	0.150	0.056	0.055	0.100	100
MGS-2-01	MS21266-2N	0.052 - 0.085	0.175	0.090	0.055	0.100	100
MGS-3-01	MS21266-3N	0.085 - 0.128	0.220	0.131	0.055	0.100	100
MGS-4-01	MS21266-4N	0.128 - 0.192	0.325	0.195	0.070	0.160	100
MGS-5-01	MS21266-5N	0.192 - 0.255	0.385	0.260	0.070	0.170	100
MGS-6-01	MS21266-6N	0.255 - 0.318	0.445	0.320	0.075	0.180	100
MGS-8-01	MS21266-8N	0.380 - 0.510	0.640	0.515	0.075	0.180	50

## RG Series Rubber Grommet Edging



**Specifications:**

- Material: TPE
- Color: Black

**Features:**

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



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

## GRE Series PVC Grommet Edging



**Specifications:**

- Material: Soft PVC
- Color: Black

**Features:**

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



Item No.	Panel Thickness A		Panel Thickness B		Overall Width C		Roll Length		Pack Qty.
	in	mm	in	mm	in	mm	ft	m	
GRE32343A	0.031	0.78	0.047	1.19	0.276	7.01	164	50	1
GRE34074A	0.039	0.99	0.079	2.00	0.315	8.00	164	50	1
GRE34075A	0.059	1.49	0.110	2.79	0.374	9.50	164	50	1
GRE34076A	0.106	2.69	0.149	3.78	0.413	10.49	164	50	1
GRE34077A	0.146	3.70	0.204	5.18	0.433	11.00	164	50	1
GRE34078A	0.209	5.30	0.267	6.78	0.512	13.00	164	50	1



**DSC Series  
Nylon Grommet Edging**



Specifications:

- Material: UL94 HB MDS Filled Nylon
- Color: Gray

Features:

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



Item No.	A Fits Panel Thickness		B		C Ref		Wall Thickness		Length		Bulk Pack Qty.	Pack Qty.
	in	mm	in	mm	in	mm	in	mm	ft	m		
DSC-5-48	0.062	1.6	0.300	7.6	0.031	0.8	0.031	0.8	4	1.22	100 Ft	1
DSC-1-48	0.125	3.2	0.375	9.5	0.020	0.5	0.047	1.2	4	1.22	100 Ft	1
DSC-2-48	0.188	4.8	0.500	12.7	0.031	0.8	0.047	1.2	4	1.22	100 Ft	1
DSC-3-48	0.250	6.4	0.625	15.9	0.045	1.1	0.063	1.6	4	1.22	100 Ft	1

**CH Series  
Polystyrene Channel**



Specifications:

- Material: ULB94 HB Polystyrene
- Color: White

Features:

- Protects from sharp edges
- Binds and frames
- Sold in 4 foot lengths that can be cut to desired length



Item No.	Fits Panel Thickness		A Ref		B Ref		C Min.		Figure	Length		Bulk Pack Qty.	Pack Qty.
	in	mm	in	mm	in	mm	in	mm		ft	m		
CH200X250-48	0.250	6.4	0.200	5.1	0.375	9.5	0.25	6.4	1	4	1.22	100 ft	1
CH15X50-48	0.050	1.3	0.015	0.4	0.437	11.1	0.05	1.3	1	4	1.22	100 ft	1
CH20X141-48	0.140	3.6	0.020	0.5	0.562	14.3	0.14	3.6	2	4	1.22	100 ft	1

**OS Series  
Straight Terminal 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

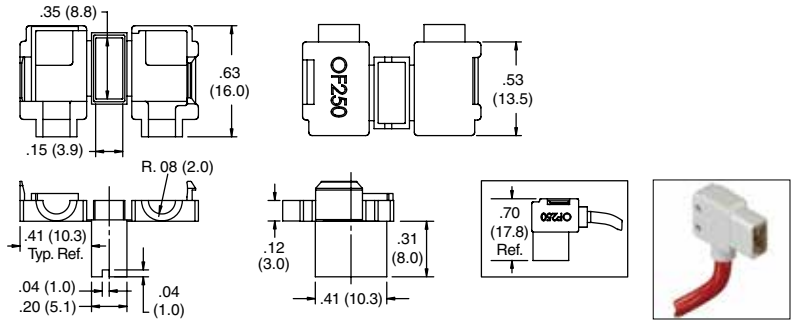


Item No.	Approval	Terminal Type	Ø Wire		A		B		C		D		E		F		G		H		R.J		K		Bulk Pack Qty.
			in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
OS-187	UL	Straight Type 187 Series	9/64	3.6	0.346	8.8	0.240	6.1	0.106	2.7	0.102	2.6	0.268	6.8	0.039	1.0	0.154	3.9	0.594	15.1	0.071	1.8	0.295	7.5	500
OS-250	UL	Straight Type 187 Series	5/32	3.8	0.386	9.8	0.311	7.9	0.164	3.4	0.110	2.8	0.315	8.0	0.039	1.0	0.185	4.7	0.728	18.5	0.081	2.1	0.358	9.1	500



# INSULATORS

## OF Series 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		Bulk Pack Qty.
			in	mm	
OF-250		Flag Type 250 Series	0.150	3.9	500

## Quick Fit Straight Terminal Insulator

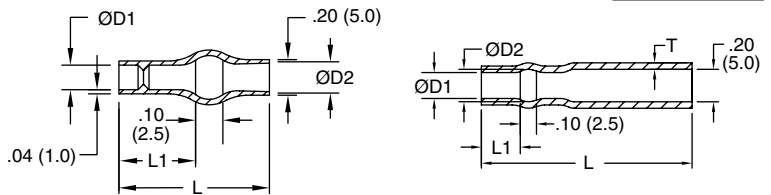


Figure 1

Figure 2

**Specifications:**

- Material: UL94 V-0 Soft PVC
- Color: Transparent Blue
- UL Temperature Range: 221°F (105°C)
- UL Voltage: 600V

**Features:**

- Replaces heat shrink tubing
- Made from a specially formulated soft PVC for fast, flexible installation
- Transparent for visual inspection
- No corrosion when exposed to copper

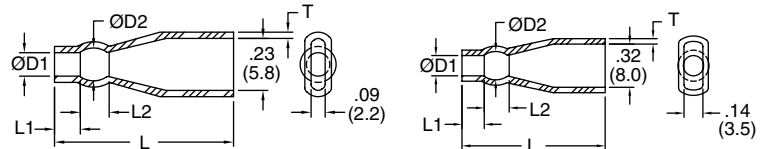


Figure 3

Figure 4

Item No.	Figure	Wire OD Range		Wire Gauge	Ø D1		Ø D2		L1		L2		L		T		Bulk Pack Qty.
		in	mm		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
224225	1	0.580-0.091	1.5-2.3	22-18	0.100	2.5	0.160	4.1	0.240	6.1	—	—	0.510	13.0	—	—	1000
224230	1	0.068-0.113	1.7-2.9	20-18	0.120	3.0	0.160	4.1	0.240	6.1	—	—	0.510	13.0	—	—	1000
215025	2	0.580-0.091	1.5-2.3	22-18	0.100	2.5	0.160	4.1	0.240	6.1	—	—	1.300	33.0	.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

## Quick Fit Flag Terminal Insulator

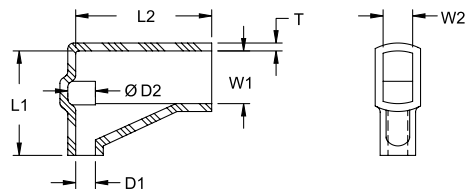


**Specifications:**

- Material: UL94 V-0 Soft PVC
- Color: Transparent Blue
- UL Temperature Range: 221°F (105°C)
- UL Voltage: 600V

**Features:**

- Replaces heat shrink tubing
- Made from a specially formulated soft PVC for fast, flexible installation
- Transparent for visual inspection
- No corrosion when exposed to copper



Item No.	Wire OD Range		Wire Gauge	Ø D1		Ø D2		L1		L2		W1		W2		T	Bulk Pack Qty.	
	in	mm		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm			
248532	0.071 - 0.126	1.8 - 3.2	18 - 16	0.130	3.2	0.170	4.2	0.530	13.5	0.690	17.5	0.340	8.5	0.180	4.5	0.040	1.0	1000
248548	0.133 - 0.190	2.9 - 4.8	14 - 12	0.190	4.8	0.230	5.8	0.530	13.5	0.690	17.5	0.340	8.5	0.180	4.5	0.040	1.0	1000

# DESK GROMMETS



## WMRG Series Round Desk Grommets



**Specifications:**

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

**Features:**

- Used extensively on office furniture and computer desks to eliminate the clutter of wires and cables
- Several shapes and styles; most can be coordinated to match the color of your desk surface
- Layer packed for your convenience and to protect the surface during shipping



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

## WMUG Series Round Umbrella Table Grommets

**Specifications:**

- Material: K-Resin
- Color: Clear



**Features:**

- Umbrella grommets are used on patio and casual furniture to protect tables from umbrella damage
- The plug finishes the table when the umbrella is not present

Item No.	Ø To Fit Hole		Type	Pack Qty.	Bulk Pack Qty.
	in	in			
WMUG100C	2.000		Bushing/Ring	1	900
WMUG110D		fits into WMUG100C	Cover/Lid	1	900

## WMTG Series Rectangular Table Grommets



**Specifications:**

- Material: See Table
- Color: Black
- Surface Finish: Textured

**Features:**

- Wire management grommets are used extensively on office furniture and computer desks to eliminate the clutter of wires and cables

Item No.	Type	Style	A			B		C		Ø To Fit Hole		Material	Surface Finish	Bulk Pack Qty.
			in	in	in	in	in	in	in	in				
WMTG100A	B	3-Piece	3.500	2.125	0.700	3.250	1.875	3.250	1.875	3.250	1.875	ABS	Textured	525
WMTG110A	B	3-Piece	3.500	2.125	1.250	3.230	1.865	3.230	1.865	3.230	1.865	ABS	Textured	315
WMTG120A	A	2-Piece	3.475	2.102	1.250	3.250	1.865	3.250	1.865	3.250	1.865	ABS	Textured	189
WMTG150A	B	2-Piece	3.500	2.134	1.287	3.250	1.865	3.250	1.865	3.250	1.865	ABS	Textured	320
WMTG170A	C	2-Piece	3.365	2.245	1.750	3.125	2.000	3.125	2.000	3.125	2.000	ABS	Textured	204
WMTG180A	D	2-Piece	4.020	2.010	0.775	3.770	1.750	3.770	1.750	3.770	1.750	Polypropylene	Textured	288

## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- ⊖ [View SNGS-2B on WIN SOURCE](#)
- ⊖ [Essentra Components Information](#)

## Optimize Your Supply Chain with WIN SOURCE Solutions

- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management