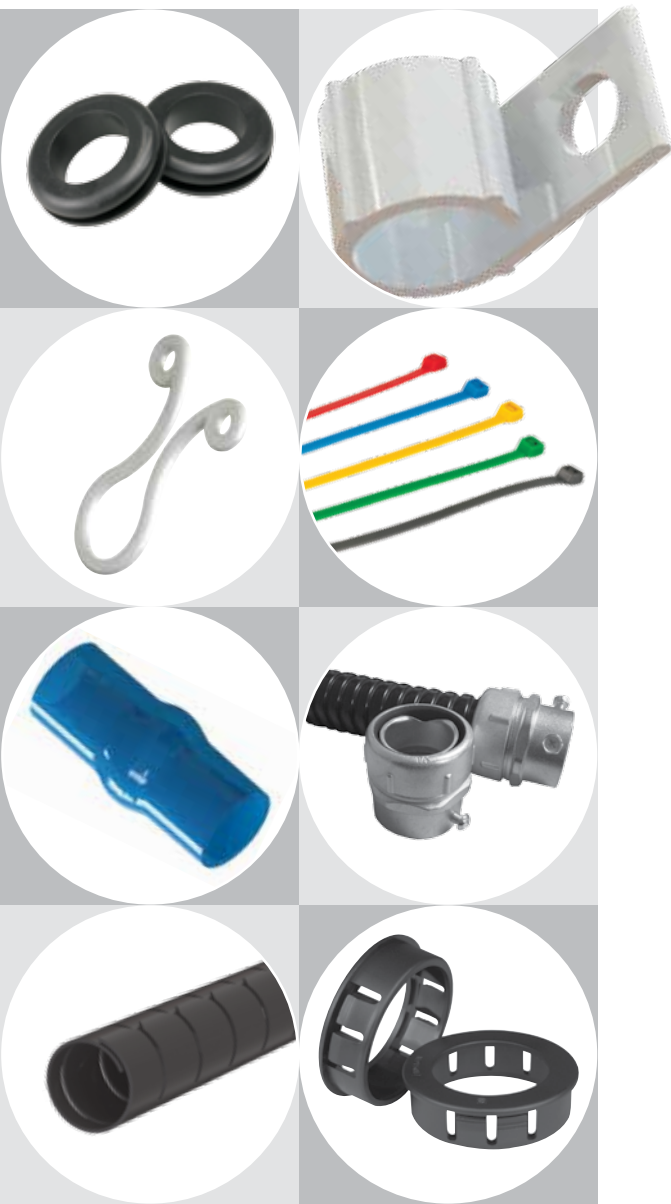




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# SOLUTIONS FOR FIBER, WIRE & CABLE MANAGEMENT



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# ESSENTRA COMPONENTS

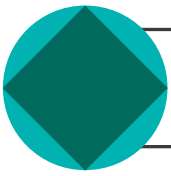
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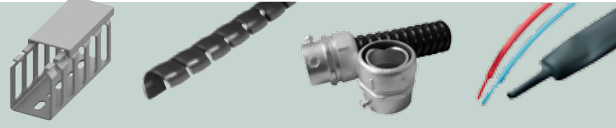
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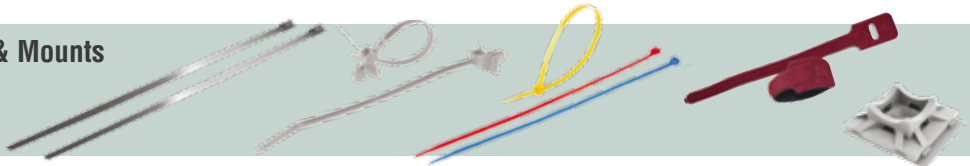
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# CABLE CLAMPS

## SPN / SPNW

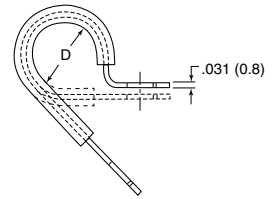
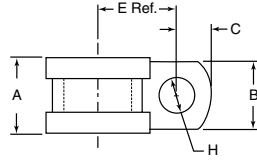
### Steel Clamp with Rubber Cushion

**Specifications:**

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

**Features:**

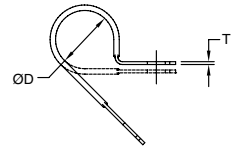
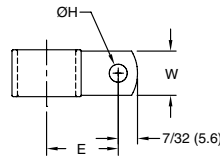
- Provides electrical insulation and vibration absorption
- Ideal for long-life applications



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

## NE

### Aluminum Clamp with Vinyl Coating



**Specifications:**

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

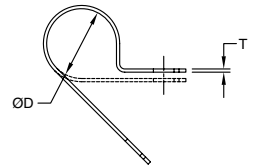
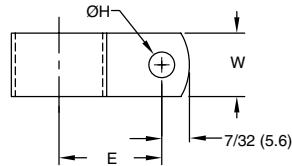
**Features:**

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

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

## AL

### Aluminum Clamp



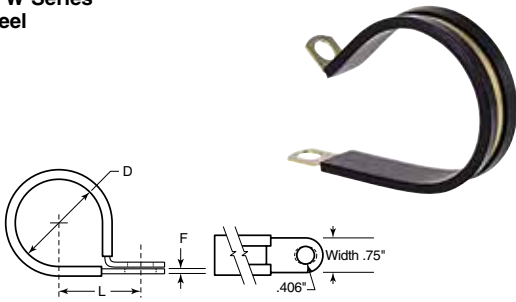
**Specifications:**

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

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



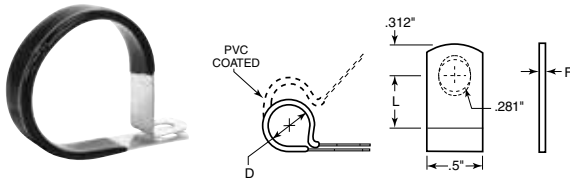
**Loop Clamps  
SPW Series  
Steel**



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

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

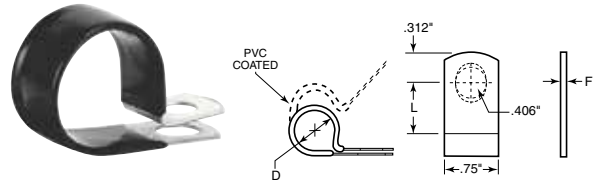
**Loop Clamps  
SVN Series  
Steel**



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

| Item No. | Size | D     | L    | F    | Pack Qty. |
|----------|------|-------|------|------|-----------|
| ZS-474   | ⅜    | .187  | .500 | .032 | 1         |
| ZS-476   | ¼    | .250  | .531 | .032 | 1         |
| ZS-478   | ⅜    | .312  | .562 | .032 | 1         |
| ZS-480   | ⅝    | .375  | .593 | .032 | 1         |
| ZS-482   | ½    | .500  | .656 | .048 | 1         |
| ZS-484   | ⅝    | .562  | .687 | .048 | 1         |
| ZS-486   | ¾    | .625  | .718 | .048 | 1         |
| ZS-488   | ¾    | .750  | .781 | .048 | 1         |
| ZS-490   | 7/8  | .875  | .843 | .048 | 1         |
| ZS-492   | 1    | 1.000 | .906 | .048 | 1         |
| ZS-494   | 1½   | 1.125 | .968 | .048 | 1         |

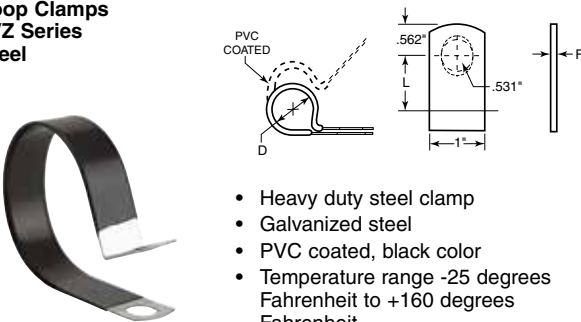
**Loop Clamps  
SVW Series  
Steel**



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

| Item No. | Size   | D     | L     | F    | Pack Qty. |
|----------|--------|-------|-------|------|-----------|
| ZS-496   | ¼      | .250  | .656  | .032 | 1         |
| ZS-498   | ⅜      | .375  | .718  | .032 | 1         |
| ZS-500   | ½      | .500  | .781  | .048 | 1         |
| ZS-502   | ⅝      | .562  | .812  | .048 | 1         |
| ZS-504   | ¾      | .625  | .843  | .048 | 1         |
| ZS-506   | ¾      | .750  | .906  | .048 | 1         |
| ZS-508   | 13/16  | .812  | .937  | .048 | 1         |
| ZS-510   | 7/8    | .875  | .968  | .048 | 1         |
| ZS-512   | 15/16  | .937  | 1.000 | .048 | 1         |
| ZS-514   | 1      | 1.000 | 1.031 | .048 | 1         |
| ZS-516   | 1 1/16 | 1.050 | 1.062 | .048 | 1         |
| ZS-518   | 1 1/8  | 1.125 | 1.092 | .048 | 1         |

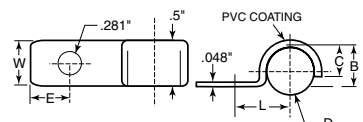
**Loop Clamps  
LVZ Series  
Steel**



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

| Item No. | Size   | D     | L     | F    | Pack Qty. |
|----------|--------|-------|-------|------|-----------|
| ZS-520   | 1 1/8  | 1.130 | 1.218 | .048 | 1         |
| ZS-522   | 1 1/16 | 1.190 | 1.250 | .048 | 1         |
| ZS-524   | 1 1/4  | 1.250 | 1.281 | .048 | 1         |
| ZS-526   | 1 3/16 | 1.310 | 1.312 | .048 | 1         |
| ZS-528   | 1 1/2  | 1.500 | 1.406 | .048 | 1         |
| ZS-530   | 1 5/16 | 1.560 | 1.437 | .048 | 1         |
| ZS-532   | 1 3/4  | 1.750 | 1.531 | .048 | 1         |
| ZS-534   | 1 7/16 | 1.810 | 1.562 | .048 | 1         |
| ZS-536   | 2      | 2.000 | 1.687 | .048 | 1         |
| ZS-538   | 2 1/16 | 2.060 | 1.718 | .048 | 1         |
| ZS-540   | 2 1/4  | 2.250 | 1.812 | .048 | 1         |
| ZS-542   | 2 1/2  | 2.500 | 1.937 | .048 | 1         |
| ZS-544   | 2 5/8  | 2.630 | 2.000 | .048 | 1         |
| ZS-546   | 2 3/4  | 2.750 | 2.062 | .048 | 1         |
| ZS-548   | 2 7/8  | 2.880 | 2.125 | .048 | 1         |
| ZS-550   | 3 1/16 | 3.560 | 2.437 | .048 | 1         |

**Loop Clamps  
HVN Series  
Steel**



| Item No. | Size | D    | L    | E    | B    | C    | W | Pack Qty. |
|----------|------|------|------|------|------|------|---|-----------|
| ZS-552   | ¼    | .250 | .500 | .250 | .250 | .188 | ½ | 1         |
| ZS-554   | ⅜    | .312 | .531 | .312 | .312 | .218 | ⅝ | 1         |
| ZS-556   | ½    | .375 | .562 | .312 | .375 | .281 | ¾ | 1         |
| ZS-558   | ⅝    | .500 | .687 | .312 | .500 | .343 | ⅞ | 1         |
| ZS-560   | ¾    | .562 | .750 | .312 | .562 | .437 | 1 | 1         |
| ZS-562   | ¾    | .625 | .812 | .312 | .625 | .406 | ⅞ | 1         |
| ZS-564   | ¾    | .750 | .875 | .312 | .750 | .468 | 1 | 1         |

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

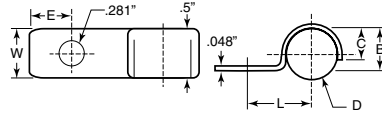


# HOSE & PIPE CLAMPS

## Loop Clamps HSN Series



- Stainless steel 1/2" wide
- Type 301 or 304



| Item No. | Size | D     | L     | E    | B     | C    | W   | Pack Qty. |
|----------|------|-------|-------|------|-------|------|-----|-----------|
| ZS-566   | 1/4  | .250  | .500  | .250 | .250  | .188 | 1/2 | 1         |
| ZS-568   | 5/16 | .312  | .531  | .312 | .312  | .218 | 5/8 | 1         |
| ZS-570   | 3/8  | .375  | .562  | .312 | .375  | .281 | 3/4 | 1         |
| ZS-572   | 1/2  | .500  | .687  | .312 | .500  | .343 | 3/4 | 1         |
| ZS-574   | 5/8  | .625  | .750  | .312 | .625  | .437 | 3/4 | 1         |
| ZS-576   | 3/4  | .750  | .875  | .312 | .750  | .468 | 3/4 | 1         |
| ZS-578   | 1    | 1.000 | 1.125 | .312 | 1.000 | .500 | 3/4 | 1         |

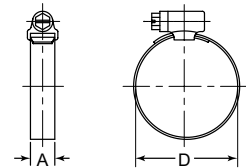
## MHC Series Mini Worm Gear Hose Clamps

### Specifications:

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

### Features:

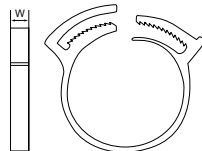
- To be used on small hose applications
- Low profile housing and thin band make them easier to install or remove in confined areas



| Item No. | SAE Size | Diameter Range D |          | A (In) | Pack Qty. | Bulk Pack Qty. |
|----------|----------|------------------|----------|--------|-----------|----------------|
|          |          | Min (In)         | Max (In) |        |           |                |
| MHC04A   | 4        | 0.250            | 0.625    | 0.312  | 1         | 100            |
| MHC05A   | 5        | 0.250            | 0.687    | 0.312  | 1         | 100            |
| MHC06A   | 6        | 0.312            | 0.875    | 0.312  | 1         | 100            |
| MHC08A   | 8        | 0.375            | 1.000    | 0.312  | 1         | 100            |
| MHC10A   | 10       | 0.375            | 1.062    | 0.312  | 1         | 100            |
| MHC12A   | 12       | 0.500            | 1.250    | 0.312  | 1         | 50             |
| MHC16A   | 16       | 0.500            | 1.500    | 0.312  | 1         | 50             |
| MHC20A   | 20       | 0.750            | 1.750    | 0.312  | 1         | 50             |

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

## THC & SHC Series Quick Assemble Hose Clamps



### Specifications:

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

### Features:

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

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

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



**WHC**  
**Wire Harness Clamp**

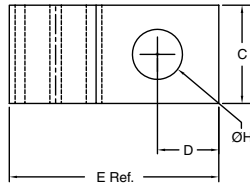


**Specifications:**

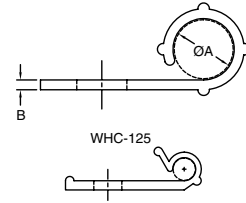
- Material: UL94 V-2 Nylon 6/6
- Color: See Table

**Features:**

- Cables can be removed for wiring changes or replacements



WHC-250 to WHC-1500



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

**EXWHC**  
**Wire Harness Clamp**

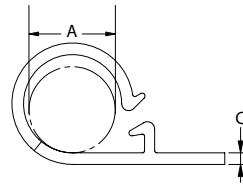
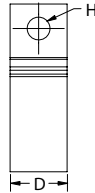


**Specifications:**

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

**Features:**

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



| Item No.      | A Holding Ø |      | H Mounting Hole Ø |     | 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           |

**BHLWHC**  
**Blind Hole Mounted Clamp**

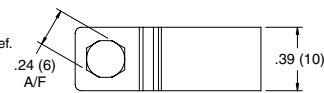
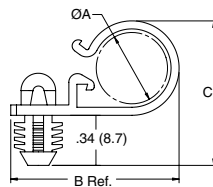


**Specifications:**

- 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 & reusable for easy wire bundling



| Item No.      | A Max Bundle Ø |      | Mounting Hole Ø |     | B     |      | C     |      | 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**  
**Stud Mount Wire Harness Clip**

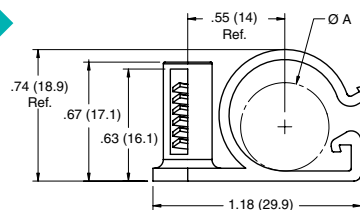


**Specifications:**

- 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

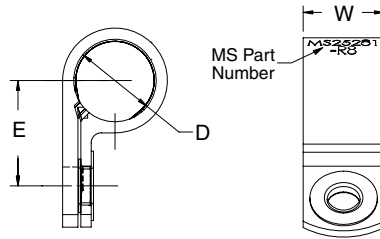


| Item No.     | A Holding Ø |      | Mounting Method                             | Bulk Pack Qty. |
|--------------|-------------|------|---|----------------|
|              | In          | mm   |   |                |
| SMWHC-500-01 | 0.5         | 12.7 | Push onto a #8, #10, M4 or M5 Screw or Stud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



# CABLE CLAMPS

## NM - MS25281 Heavy Duty Support Clamp



**Specifications:**

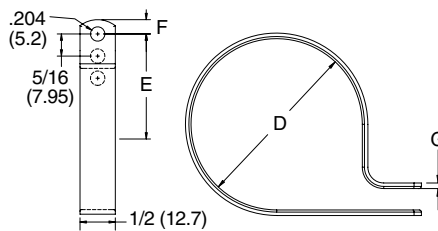
- Material: UL94 V-2 Heat Stabilized Nylon, conforms to MIL-M-20693/ASTM D-4066
- Eyelet: Aluminum, anodized in accordance with MIL-A-8625
- Color: Natural

**Features:**

- Complies with MS-25281
- Strong & durable part design built for heavy duty cable applications
- NM-R series has a rib running around the inside of the clamp to grip bundle; NM-F series has no rib inside clamp
- NM-R eyelet is crimped to the top leg; the NM-F eyelet's legs protrude all the way through the bottom hole

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

## NB-3 Adjustable Cable Clamp



**Specifications:**

- Material: See Table
- Color: See Table

**Features:**

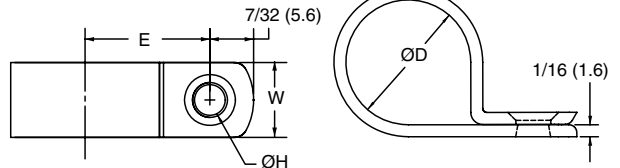
- Adjustable design allows you to bundle multiple diameters of wires & cables while securing in place
- Clamp down and screw clamp to chassis to secure

| Item No.           |                    |          | Bundle Ø D  |      |             | 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    |     |     |
| Natural            | Black              | Natural  | In          | mm   | In          | mm     | In           | mm   | In    | mm   | In    |                | mm    |     |     |
| N-20B              | N-20B-BK           | N-20B-19 | 1           | 25.4 | 1-1/8       | 28.6   | 1.2          | 30.2 | 0.906 | 23.0 | 0.219 | 5.6            | 0.063 | 1.6 | 500 |
| N-24B              | N-24B-BK           | N-24B-19 | 1-1/4       | 31.8 | 1-3/8       | 34.9   | 1-15/32      | 37.3 | 1.031 | 26.2 | 0.219 | 5.6            | 0.063 | 1.6 | 500 |
| N-32B              | N-32B-BK           | N-32B-19 | 1-3/4       | 44.5 | 1-7/8       | 47.6   | 2            | 50.8 | 1.453 | 36.9 | 0.203 | 5.2            | 0.065 | 1.7 | 500 |





**N / NB  
Cable Clamp**



**Specifications:**

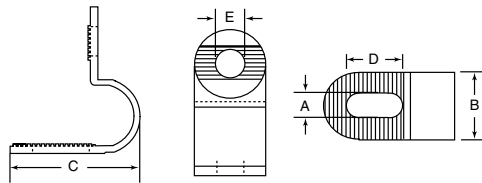
- Material: Nylon 6/6
- Color: Refer to chart

**Features:**

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

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

**CCLA  
Adjustable “P” Clamps**



**Specifications:**

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

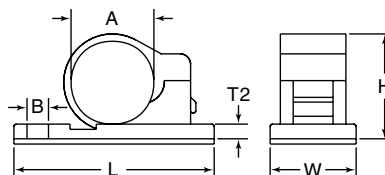
**Features:**

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



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

**CCA  
Self Adhesive Cable Clamps**



**Specifications:**

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

**Features:**

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

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





# CABLE CLAMPS

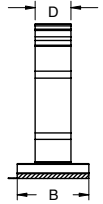
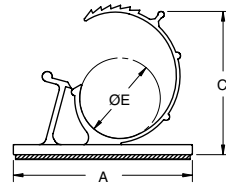
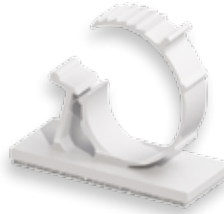
## AKKL / CCAA Adhesive Mount Adjustable Clamp

**Specifications:**

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

**Features:**

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



| Item No.       |                | Approval | Color   | E Bundle Ø Range Ref. |             | A     |      | B     |      | C Ref. |      | D     |      | Bulk Pack Qty. |
|----------------|----------------|----------|---------|-----------------------|-------------|-------|------|-------|------|--------|------|-------|------|----------------|
| UL94 V-2       | UL94 V-0       |          |         | In                    | mm          | In    | mm   | In    | mm   | In     | mm   | In    | mm   |                |
| AKKL-2140A-RT  | AKKL-2140A-19  | UL       | Natural | 0.215 - 0.258         | 5.5 - 6.5   | 0.850 | 21.6 | 0.650 | 16.5 | 0.708  | 18   | 0.390 | 10   | 100            |
| AKKL-3140A-RT  | AKKL-3140A-19  | UL       | Natural | 0.312 - 0.406         | 7.9 - 10.3  | 1.000 | 25.4 | 0.750 | 19.1 | 0.866  | 22   | 0.400 | 10.2 | 100            |
| CCAA001A       | —              | —        | Black   | 0.312 - 0.406         | 7.9 - 10.3  | 1.000 | 25.4 | 0.750 | 19.1 | 0.874  | 22.4 | 0.400 | 10.2 | 100            |
| CCAA002A       | —              | —        | Black   | 0.394 - 0.492         | 10.1 - 12.5 | 1.250 | 31.8 | 0.750 | 19.1 | 1.095  | 27.8 | 0.400 | 10.2 | 100            |
| AKKL-4756A-RT  | AKKL-4756A-19  | UL       | Natural | 0.469 - 0.562         | 11.9 - 14.3 | 1.250 | 31.8 | 0.750 | 19.1 | 1.090  | 27.7 | 0.400 | 10.2 | 100            |
| CCAA003A       | —              | —        | Black   | 0.496 - 0.606         | 12.6 - 15.4 | 1.500 | 38.1 | 0.750 | 19.1 | 1.250  | 31.8 | 0.500 | 12.7 | 100            |
| AKKL-5775A-RT  | AKKL-5775A-19  | UL       | Natural | 0.578 - 0.750         | 14.7 - 19.1 | 1.500 | 38.1 | 0.750 | 19.1 | 1.250  | 31.8 | 0.500 | 12.7 | 100            |
| CCAA004A       | —              | —        | Black   | 0.650 - 0.791         | 15.5 - 20.1 | 2.000 | 50.8 | 1.000 | 25.4 | 1.750  | 44.5 | 0.500 | 12.7 | 100            |
| AKKL-8710A-RT  | AKKL-8710A-19  | UL       | Natural | 0.875 - 1.000         | 22.2 - 25.4 | 2.000 | 50.8 | 1.000 | 25.4 | 1.750  | 44.5 | 0.500 | 12.7 | 100            |
| CCAA005A       | —              | —        | Black   | 0.875 - 1.000         | 22.2 - 25.4 | 2.000 | 50.8 | 1.000 | 25.4 | 1.750  | 44.5 | 0.500 | 12.7 | 100            |
| AKKL-10112A-RT | AKKL-10112A-19 | —        | Natural | 1.000 - 1.250         | 25.4 - 31.7 | 2.500 | 63.5 | 1.000 | 25.4 | 2.000  | 50.8 | 0.500 | 12.7 | 100            |

## AKKSL Side Lock Adhesive Mount Adjustable Clamp

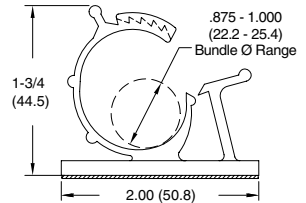
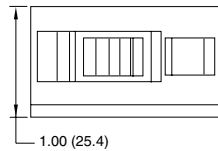
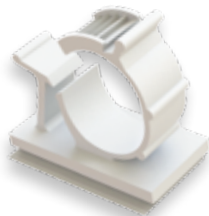


**Specifications:**

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

**Features:**

- Side locks on top of clamp prevent clip from sliding open
- Ratcheting clip holds bundle securely in place



| Item No.       | Approval | Bulk Pack Qty. |
|----------------|----------|----------------|
| AKKSL-8710A-RT | UL       | 100            |

## PAKKL 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

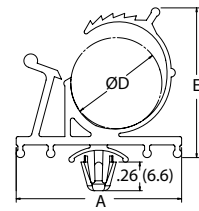
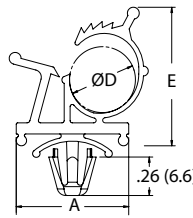


Figure 1

Figure 2



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

## PKKL Plug In Locking Clamp

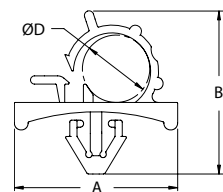
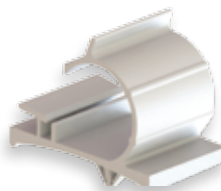


**Specifications:**

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

**Features:**

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



| Item No. | A     |      | B     |      | Holding Ø D |      | Mounting Hole Ø |     | Panel Thickness |           | Depth  |      | Bulk Pack Qty. |
|----------|-------|------|-------|------|-------------|------|-----------------|-----|-----------------|-----------|--------|------|----------------|
|          | In    | mm   | In    | mm   | In          | mm   | In              | mm  | In              | mm        | In     | mm   |                |
| PKKL-3   | 1.020 | 25.9 | 0.921 | 23.4 | 0.374       | 9.5  | 0.256           | 6.5 | 0.031 - 0.062   | 0.8 - 1.6 | 0.670  | 17.0 | 200            |
| PKKL-3S  | 0.830 | 21.1 | 0.828 | 21.0 | 0.307       | 7.8  | 0.256           | 6.5 | 0.031 - 0.062   | 0.8 - 1.6 | 0.750  | 19.1 | 200            |
| PKKL-4   | 1.190 | 30.3 | 1.260 | 32.0 | 0.532       | 13.5 | 0.256           | 6.5 | 0.031 - 0.062   | 0.8 - 1.6 | 10.760 | 19.4 | 100            |



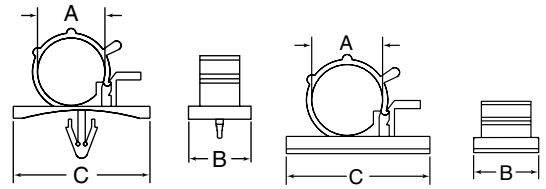
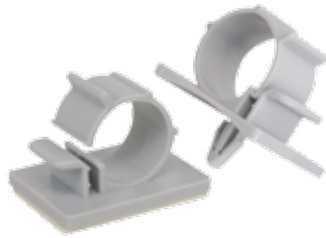
**CCP / CCA**  
**Push Mount & Adhesive Clamp**

Specifications:

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

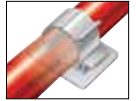
Features:

- 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



CCP Push Mount

CCA Adhesive



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

**WAC**  
**Webbed Adjustable Clip**

Specifications:

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

Features:

- Locks securely and easily. Reopens for routing changes
- Adjustable, ratcheting clip holds bundle securely in place
- Spring in the top of the clamp adds additional tension to grip the bundle
- Finger grip eases installation
- Cupped base adds stability to the mounting and covers the hole completely

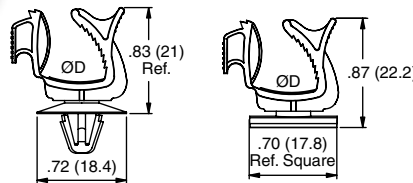


Figure 1

Figure 2



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

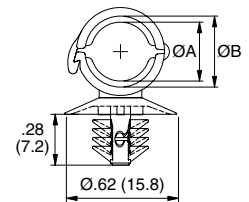
**HLCC**  
**Hinged Locking Clamp**

Specifications:

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

Features:

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

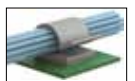
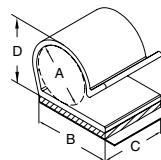
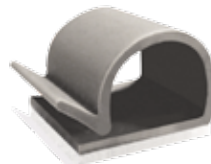


| Item No. | Recommended Corrugated Tube Size |     |      |     | Mounting Hole Ø |           | Panel Thickness |           | A Ref. |     | B Ref. |      | Bulk Pack Qty. |
|----------|----------------------------------|-----|------|-----|-----------------|-----------|-----------------|-----------|--------|-----|--------|------|----------------|
|          | I.D.                             |     | O.D. |     | In              | mm        | In              | mm        | In     | mm  | In     | mm   |                |
|          | In                               | mm  | In   | mm  |                 |           |                 |           |        |     |        |      |                |
| HLCC-1BK | .20                              | 5.0 | .28  | 7.1 | .26 - .28       | 6.5 - 7.0 | .03 - .12       | .08 - 3.0 | .23    | 5.8 | .28    | 7.2  | 1000           |
| HLCC-2BK | .27                              | 6.9 | .39  | 9.9 | .26 - .28       | 6.5 - 7.0 | .03 - .12       | .08 - 3.0 | .33    | 8.3 | .39    | 10.0 | 1000           |

**KKR**  
**Adhesive Mount Clamp**

Specifications:

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



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



**CABLE CLAMPS**

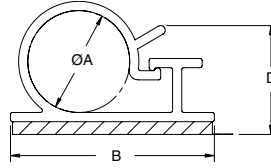
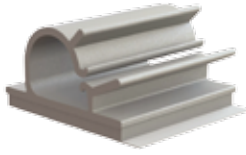
**KKL Adhesive Mount Locking Clamp**

Specifications:

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

Features:

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



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

**KKD / KKDL Adhesive Mount Clamp**

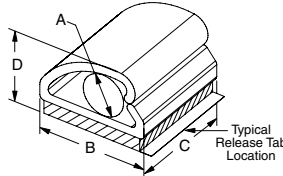


Figure 1

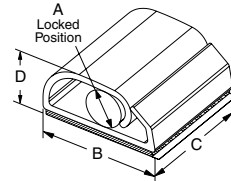


Figure 2



Specifications:

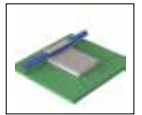
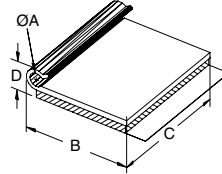
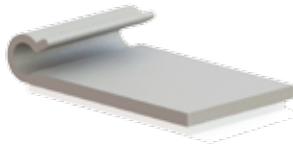
- Material: UL94 V-0 PVC
- Color: Grey

Features:

- To hold wires, cords or cables in place

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

**KKJ Adhesive Mount Clamp**

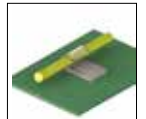
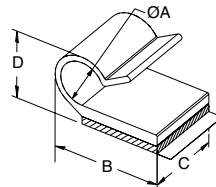


Specifications:

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

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

**MKKJ Mini Adhesive Mount Clamp**



Specifications:

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

Features:

- Clear color hides clamp

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

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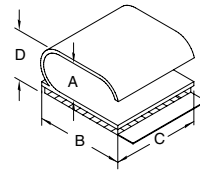
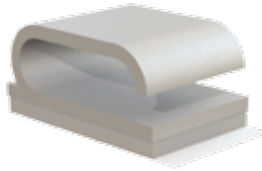
**KKF Adhesive Mount Clamp**

Specifications:

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

Features:

- Can hold 3 wire leads, such as air conditioning leads



| Item No.    | Holding Capacity A |       | B    |     | C     |      | Max Capacity D |      | Bulk Pack Qty. |     |     |
|-------------|--------------------|-------|------|-----|-------|------|----------------|------|----------------|-----|-----|
|             | In                 | mm    | In   | mm  | In    | mm   | In             | mm   |                |     |     |
| KKF-10X4-RT | 0.562              | 0.230 | 14.3 | 5.2 | 0.750 | 19.1 | 0.750          | 19.1 | 0.359          | 9.1 | 100 |

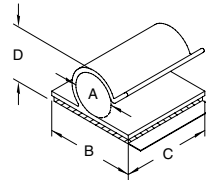
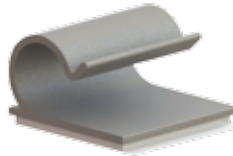
**KKC Adhesive Mount Clamp**

Specifications:

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

Features:

- For clamping cable or tubing securely



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

**UC / HUC Adhesive Mount U Clamp**

Specifications:

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

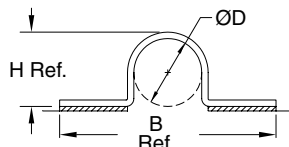


Figure 1

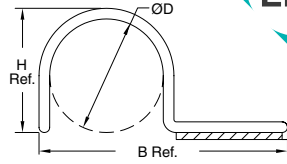


Figure 2



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

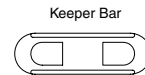
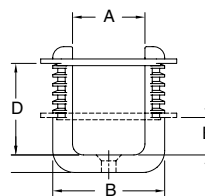
**D Two-Piece Locking Clamp**

Specifications:

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

Features:

- Mounts with a #8 or M4 flat-head machine screw
- Adjustable holding capacity
- Keeper bar is removable for changes or repairs

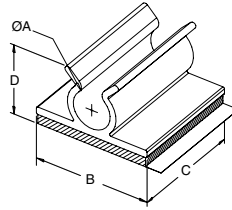


| Item No. | A Ref. |      | B Ref. |      | D Ref. |      | E Ref. |      | Bulk Pack Qty. |
|----------|--------|------|--------|------|--------|------|--------|------|----------------|
|          | In     | mm   | In     | mm   | In     | mm   | In     | mm   |                |
| D-1      | 0.990  | 25.1 | 1.530  | 38.9 | 1.250  | 31.8 | 0.500  | 12.7 | 100            |
| D-1.5    | 1.457  | 37.0 | 2.175  | 55.3 | 1.650  | 41.9 | 0.660  | 16.8 | 100            |



# CABLE CLIPS & CLAMPS

## KKU Adhesive Mount Clamp



**Specifications:**

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

**Features:**

- To hold wires, cords, or cables in place

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

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

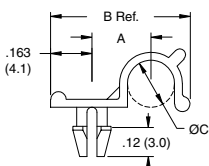


Figure 1

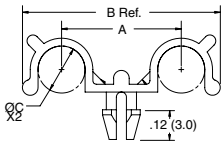


Figure 2

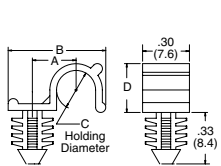


Figure 3

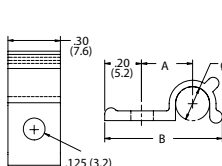


Figure 4

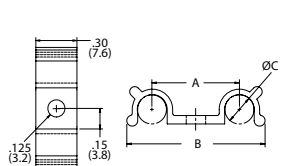
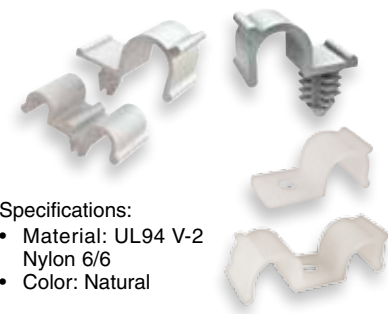


Figure 5



**Specifications:**

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

**Features:**

- For clamping cable or tubing securely

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

## SRC Split Routing Clamp



**Specifications:**

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

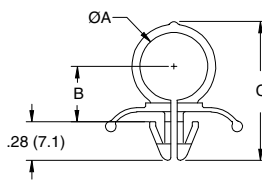


Figure 1

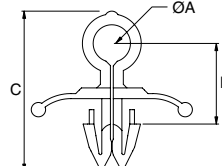


Figure 2



**Features:**

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

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

## SRCC Strain Relief Clamp



**Specifications:**

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

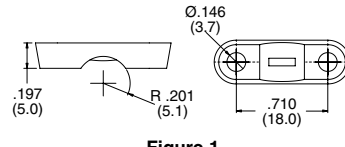


Figure 1

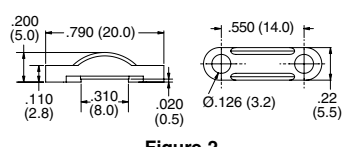


Figure 2



**Features:**

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

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



**WCK / MWCK  
Adhesive Mount Clips**

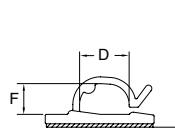


Figure 1

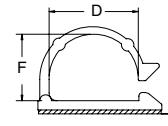
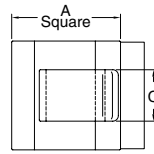
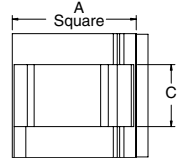


Figure 2



Specifications:

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

Features:

- To hold wires, cords, or cables in place

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

**WCA  
Adhesive Mount Clips**

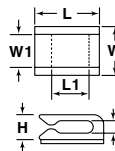


Figure 1

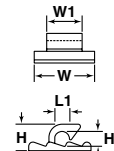


Figure 2

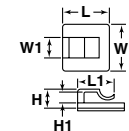


Figure 3

Specifications:

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

Features:

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

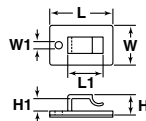


Figure 4

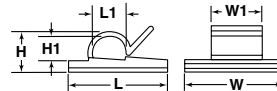


Figure 5

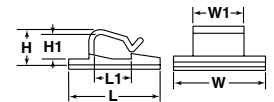


Figure 6

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

**RWS / RWSB  
Round Clamp**

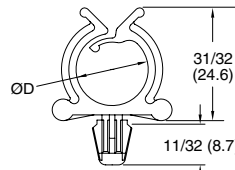


Figure 1

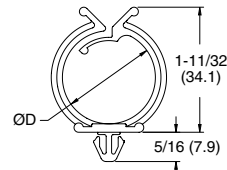


Figure 2

Specifications:

- Material: Nylon 6/6
- Color: Natural

Features:

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

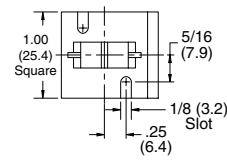


Figure 3



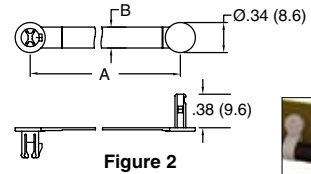
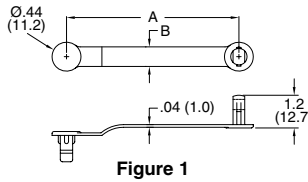
| Item No.       | UL94 V-2  | UL94 V-0 | Mounting Method | Approval | Figure | Mounting Hole |     | Panel Thickness |           | Holding Ø D |      | Depth |      | Color   | Bulk Pack Qty. |
|----------------|-----------|----------|-----------------|----------|--------|---------------|-----|-----------------|-----------|-------------|------|-------|------|---------|----------------|
|                |           |          |                 |          |        | in            | mm  | in              | mm        | in          | mm   | in    | mm   |         |                |
| RWS-10-01      | RWS-10-19 | —        | Snap-In         |          | 1      | Ø.250         | 6.4 | .030 - .060     | 0.8 - 1.5 | 0.625       | 15.9 | 0.297 | 17.5 | Natural | 1000           |
| RWS-10-01BK    | —         | —        | Snap-In         |          | 1      | Ø.250         | 6.4 | .030 - .060     | 0.8 - 1.5 | 0.625       | 15.9 | 0.297 | 17.5 | Black   | 1000           |
| RWS-16-01      | RWS-16-19 | —        | Snap-In         |          | 2      | .250 Square   | 6.4 | .058 - .064     | 1.5 - 1.6 | 1.000       | 25.4 | 0.297 | 17.5 | Natural | 1000           |
| RWS-16-01BK    | —         | —        | Snap-In         |          | 2      | .250 Square   | 6.4 | .058 - .064     | 1.5 - 1.6 | 1.000       | 25.4 | 0.297 | 17.5 | Black   | 1000           |
| RWSB-10-01A-RT | —         | —        | Adhesive        | —        | 3      | —             | —   | —               | —         | 0.625       | 15.9 | 1.000 | 25.4 | Natural | 1000           |
| RWSB-16-01A-RT | —         | —        | Adhesive        | —        | 3      | —             | —   | —               | —         | 1.000       | 25.4 | 1.000 | 25.4 | Natural | 1000           |
| RWSB-10-01     | —         | —        | Screw           | —        | 3      | —             | —   | —               | —         | 0.625       | 15.9 | 1.000 | 25.4 | Natural | 1000           |
| RWSB-16-01     | —         | —        | Screw           | —        | 3      | —             | —   | —               | —         | 1.000       | 25.4 | 1.000 | 25.4 | Natural | 1000           |



# FIBER, WIRE & CABLE MANAGEMENT

## CABLE CLIPS & CLAMPS

### CH / RSC Snap In Cable Hanger



#### Specifications:

- Material: See table
- Color: See table

#### Features:

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

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

### V Screw Mount Component Clip

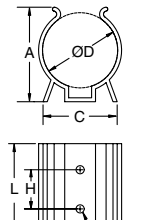
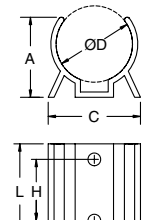
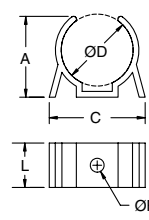
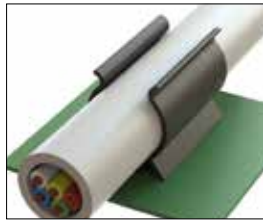


Figure 1

Figure 2

Figure 3

#### Specifications:

- Material: UL94 V-0 PVC Color: Black

#### Features:

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

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

### VM Screw Mount Component Clip

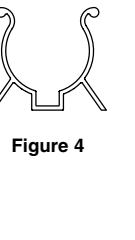
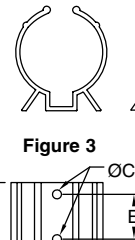
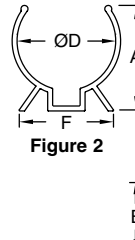
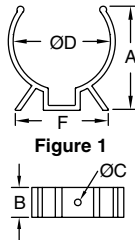


Figure 1

Figure 2

Figure 3

Figure 4

#### Specifications:

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

#### Features:

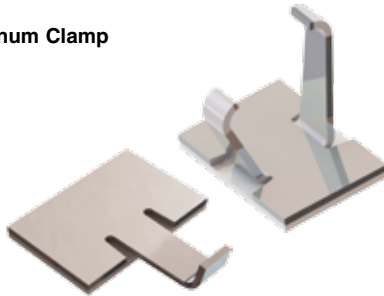
- Smooth edges protect components from wear and abrasion
- Legs prevent shifting and tipping
- Mounts securely with screws or rivets

| Item No. | D Holding Ø |      | 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            |





**ASK / RAK**  
Adhesive Mount Aluminum Clamp



Specifications:

- Material: Aluminum, Bright Finish

Features:

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

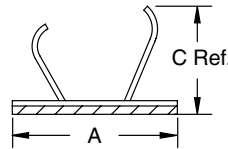


Figure 1

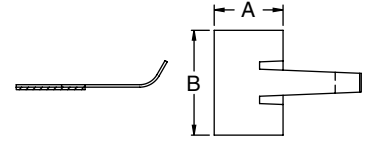


Figure 2

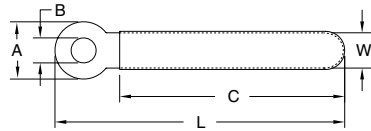
| Item No. | Figure | A     |      | B Base Depth |      | Max Bundle Ø |     | Bulk Pack Qty. |
|----------|--------|-------|------|--------------|------|--------------|-----|----------------|
|          |        | In    | mm   | In           | mm   | In           | mm  |                |
| ASK-3  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

**VCC**  
Vinyl Coated Adjustable Steel Clamp



Specifications:

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

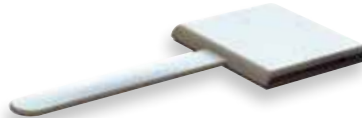


Features:

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

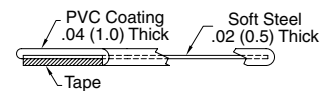
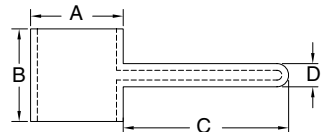
| Item No.   | Bundle Ø |      | C Ref. |       | L Ref. |       | W Ref. |     | A     |     | B Ø   |     | Pack Qty. | Bulk Pack Qty. |
|------------|----------|------|--------|-------|--------|-------|--------|-----|-------|-----|-------|-----|-----------|----------------|
|            | In       | mm   | In     | mm    | In     | mm    | In     | mm  | In    | mm  | In    | mm  |           |                |
| VCC-83028  | 0.220    | 5.7  | 0.710  | 18.0  | 1.100  | 28.0  | 0.120  | 3.0 | 0.315 | 8.0 | 0.118 | 3.0 | 1         | 1000           |
| VCC-83535  | 0.310    | 7.9  | 0.980  | 25.0  | 1.340  | 35.0  | 0.200  | 5.0 | 0.315 | 8.0 | 0.138 | 3.5 | 1         | 1000           |
| VCC-83540  | 0.370    | 9.5  | 1.180  | 30.0  | 1.570  | 40.0  | 0.120  | 3.0 | 0.315 | 8.0 | 0.138 | 3.5 | 1         | 1000           |
| VCC-63048  | 0.500    | 12.7 | 1.570  | 40.0  | 1.890  | 48.0  | 0.080  | 2.0 | 0.236 | 6.0 | 0.118 | 3.0 | 1         | 1000           |
| VCC-84554  | 0.520    | 13.3 | 1.650  | 42.0  | 2.130  | 54.0  | 0.190  | 4.8 | 0.315 | 8.0 | 0.177 | 4.5 | 1         | 1000           |
| VCC-63254  | 0.570    | 14.6 | 1.810  | 46.0  | 2.130  | 54.0  | 0.140  | 3.6 | 0.236 | 6.0 | 0.126 | 3.2 | 1         | 1000           |
| VCC-83664  | 0.660    | 16.9 | 2.090  | 53.0  | 2.520  | 64.0  | 0.200  | 5.0 | 0.315 | 8.0 | 0.161 | 4.1 | 1         | 1000           |
| VCC-84576  | 0.810    | 20.7 | 2.560  | 65.0  | 2.990  | 76.0  | 0.180  | 4.5 | 0.315 | 8.0 | 0.177 | 4.5 | 1         | 1000           |
| VCC-84584  | 0.900    | 22.9 | 2.830  | 72.0  | 3.310  | 84.0  | 0.180  | 4.5 | 0.315 | 8.0 | 0.177 | 4.5 | 1         | 1000           |
| VCC-845126 | 1.400    | 35.6 | 4.410  | 112.0 | 4.960  | 126.0 | 0.240  | 6.0 | 0.315 | 8.0 | 0.177 | 4.5 | 1         | 100            |

**PCC**  
Adhesive Mount Vinyl Coated Adjustable Steel Clamp



Specifications:

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



Features:

- Protects and insulates wires or components
- Flexible arm holds flat, round, or oddly shaped components
- Arm may be opened or closed repeatedly and reshaped for varying holding diameters

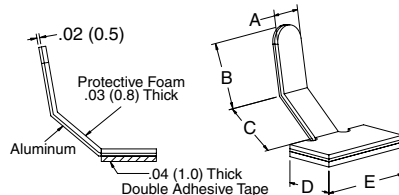
| Item No. | A Ref. |      | B     |      | C Ref. |      | D Ref. |     | Bulk Pack Qty. |
|----------|--------|------|-------|------|--------|------|--------|-----|----------------|
|          | In     | mm   | In    | mm   | In     | mm   | In     | mm  |                |
| PCC-5    | 0.310  | 8.0  | 0.310 | 8.0  | 0.590  | 15.0 | 0.080  | 2.1 | 1000           |
| PCC-9    | 0.550  | 14.0 | 0.550 | 14.0 | 0.980  | 25.0 | 0.140  | 3.5 | 500            |
| PCC-12   | 0.750  | 19.0 | 0.750 | 19.0 | 1.580  | 40.0 | 0.160  | 4.0 | 500            |

**PFC**  
Adhesive Mount Foam Coated Adjustable Steel Clamp



Specifications:

- Material: Foam Coated Aluminum
- Color: Grey Coated



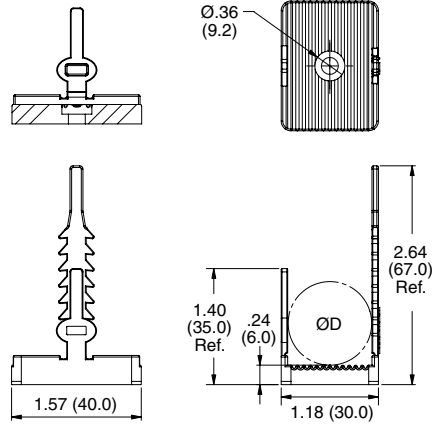
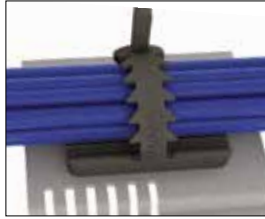
Features:

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

| Item No. | A Ref. |     | 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 | 0.380 | 9.7  | 0.750 | 19.1 | 1000           |
| PFC-50M  | 0.205  | 5.2 | 0.573  | 14.6 | 0.55   | 14.1 | 0.550 | 14.1 | 0.980 | 25.0 | 1000           |



**UMB**  
**Universal Rubber Clamp**



**Specifications:**

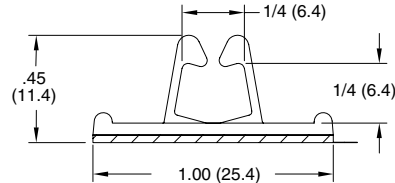
- Material: Neoprene Rubber, 50 Shore A
- Color: Black

**Features:**

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

| Item No.  | Mounting Method | D Approx. Max Cable Bundle Ø |      | Pack Qty. | Bulk Pack Qty. |
|-----------|-----------------|------------------------------|------|-----------|----------------|
|           |                 | In                           | mm   |           |                |
| UMB-1     | #10 or M5 Screw | .79                          | 20.0 | 1         | 200            |
| UMB-1A-RT | Adhesive        | .79                          | 20.0 | 1         | 200            |

**WCB**  
**Cord Clip on Adhesive Base**



**Specifications:**

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

**Features:**

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

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

**SCCA / SCCB**  
**Standoff Cable Clip**

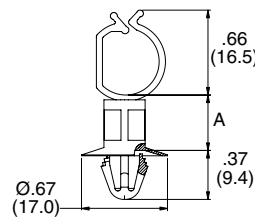


Figure 1

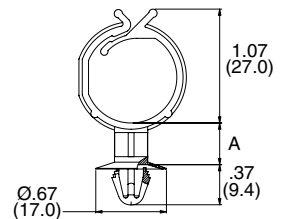


Figure 2

**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    | A  |       | Max Bundle Ø |       | Bulk Pack Qty. |      |
|-----------|-----------|----|-------|--------------|-------|----------------|------|
|           |           | In | mm    | In           | mm    |                |      |
| UL94 V-2  | UL94 V-0  |    |       |              |       |                |      |
| SCCA-1-01 | SCCA-1-19 | 1  | 0.160 | 4.0          | 0.870 | 22.0           | 1000 |
| SCCA-2-01 | SCCA-2-19 | 1  | 0.240 | 6.0          | 0.870 | 22.0           | 1000 |
| SCCA-3-01 | SCCA-3-19 | 1  | 0.320 | 8.0          | 0.870 | 22.0           | 1000 |
| SCCA-4-01 | SCCA-4-19 | 1  | 0.390 | 10.0         | 0.870 | 22.0           | 1000 |
| SCCA-5-01 | SCCA-5-19 | 1  | 0.470 | 12.0         | 0.870 | 22.0           | 1000 |
| SCCB-1-01 | SCCB-1-19 | 2  | 0.160 | 4.0          | 0.430 | 11.0           | 1000 |
| SCCB-2-01 | SCCB-2-19 | 2  | 0.240 | 6.0          | 0.430 | 11.0           | 1000 |
| SCCB-3-01 | SCCB-3-19 | 2  | 0.320 | 8.0          | 0.430 | 11.0           | 1000 |
| SCCB-4-01 | SCCB-4-19 | 2  | 0.390 | 10.0         | 0.430 | 11.0           | 1000 |
| SCCB-5-01 | SCCB-5-19 | 2  | 0.470 | 12.0         | 0.430 | 11.0           | 1000 |
| SCCB-6-01 | SCCB-6-19 | 2  | 1.180 | 30.0         | 0.430 | 11.0           | 1000 |



**SLCS / SLCSE  
Standoff Locking Clip**

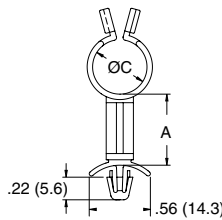


Figure 1

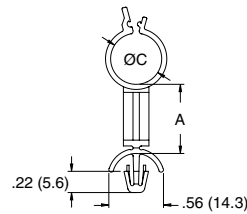


Figure 2



**Specifications:**

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

**Features:**

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

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

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

**SHK / SHKE / SHKBS  
Standoff Cable Clip**

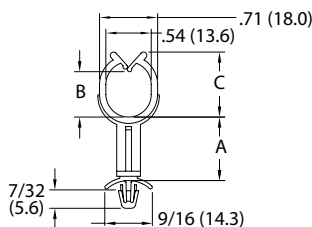


Figure 1

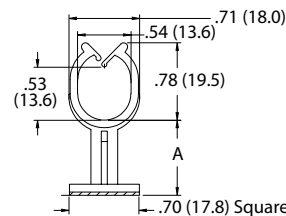


Figure 2

**Specifications:**

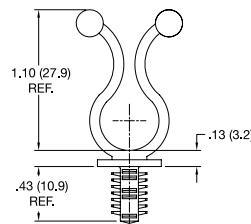
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Gathers and routes wire harnesses
- Standoff design provides spacing between the wire harnesses and the chassis

| Item No.       | Approval | Figure | A     |      | B Ref.       |      | C Ref. |      | Mounting Hole Ø |     | Panel Thickness |           | Bulk Pack Qty. |
|----------------|----------|--------|-------|------|--------------|------|--------|------|-----------------|-----|-----------------|-----------|----------------|
|                |          |        | In    | mm   | In           | mm   | In     | mm   | In              | mm  | In              | mm        |                |
| SHK-6-01       |          | 1      | 0.375 | 9.5  | 0.540        | 13.6 | 0.770  | 19.5 | 0.187           | 4.8 | 0.031 - 0.78    | 0.8 - 2.0 | 1000           |
| SHK-8-01       |          | 1      | 0.500 | 12.7 | 0.540        | 13.6 | 0.770  | 19.5 | 0.187           | 4.8 | 0.031 - 0.78    | 0.8 - 2.0 | 1000           |
| SHKE-6-01      |          | 1      | 0.375 | 9.5  | 0.810        | 20.6 | 1.140  | 29.0 | 0.187           | 4.8 | 0.031 - 0.78    | 0.8 - 2.0 | 1000           |
| SHKE-8-01      |          | 1      | 0.500 | 12.7 | 0.810        | 20.6 | 1.140  | 29.0 | 0.187           | 4.8 | 0.031 - 0.78    | 0.8 - 2.0 | 1000           |
| SHKBS-4-01A-RT |          | 2      | 0.250 | 6.4  | See Figure 2 |      |        |      | Not Applicable  |     |                 |           | 1000           |
| SHKBS-8-01A-RT |          | 2      | 0.500 | 12.7 | See Figure 2 |      |        |      | Not Applicable  |     |                 |           | 1000           |

**STL-8  
Standoff Twist Lock**



**Specifications:**

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

**Features:**

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

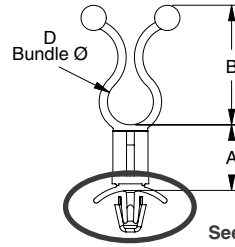
| Item No.       | Bundle Ø      |             | Hole Ø |     | Min Board Thickness |     | Bulk Pack Qty. |
|----------------|---------------|-------------|--------|-----|---------------------|-----|----------------|
|                | In            | mm          | In     | mm  | In                  | 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**  
Standoff Twist Lock



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

See Individual Styles for Mounting Details

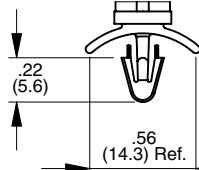
**STL Basic Style**

Specifications:

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

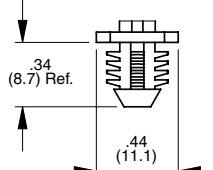
Features:

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



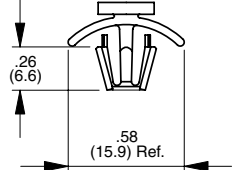
Hole Ø: .156 (4)  
Panel Thickness:  
.031-.078 (0.8-2)

**STL-1**



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

**STL-3**

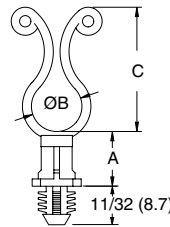


Hole Ø: .236 (6)  
Panel Thickness:  
.031-.078 (0.8-2)

**STL-6**

| Item No.     | Approval | D Bundle Ø |      | A Spacer Length |      | B Ref. |      | Bulk Pack Qty. |      |      |
|--------------|----------|------------|------|-----------------|------|--------|------|----------------|------|------|
|              |          | In         | mm   | In              | mm   | In     | mm   |                |      |      |
| STL-250-3-01 | UL       | .200       | .300 | 5.1             | 7.6  | 0.187  | 4.8  | 0.750          | 19.1 | 1000 |
| STL-250-8-01 | UL       | .200       | .300 | 5.1             | 7.6  | 0.500  | 12.7 | 0.750          | 19.1 | 1000 |
| STL-350-3-01 | UL       | .300       | .400 | 7.6             | 10.2 | 0.187  | 4.8  | 0.910          | 23.1 | 1000 |
| STL-350-8-01 | UL       | .300       | .400 | 7.6             | 10.2 | 0.500  | 12.7 | 0.910          | 23.1 | 1000 |
| STL-450-3-01 | UL       | .400       | .500 | 10.2            | 12.7 | 0.187  | 4.8  | 1.090          | 27.7 | 1000 |
| STL-450-8-01 | UL       | .400       | .500 | 10.2            | 12.7 | 0.500  | 12.7 | 1.090          | 27.7 | 1000 |
| STL-600-3-01 | UL       | .500       | .600 | 12.7            | 15.2 | 0.187  | 4.8  | 1.280          | 32.5 | 1000 |
| STL-600-8-01 | UL       | .500       | .600 | 12.7            | 15.2 | 0.500  | 12.7 | 1.280          | 32.5 | 1000 |
| STL-750-3-01 | UL       | .700       | .800 | 17.8            | 20.3 | 0.187  | 4.8  | 1.450          | 36.8 | 1000 |
| STL-750-8-01 | UL       | .700       | .800 | 17.8            | 20.3 | 0.500  | 12.7 | 1.450          | 36.8 | 1000 |

**BHKL**  
Fir-Tree Curly Lock



Specifications:

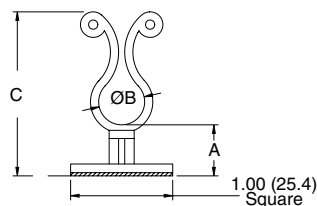
- Material: UL94 V-2 Nylon 6/6
- Color: Natural
- To press fit in a .312 (7.9) Ø hole in a .250 (6.4) minimum panel thickness

Features:

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

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

**KLBS**  
Adhesive Mount Standoff Curly Lock



Specifications:

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

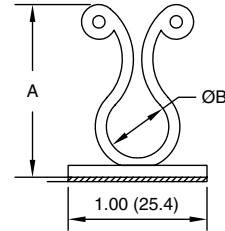
Features:

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

| Item No.       | Approval | A     |      | Bundle Ø B    |            | C Ref. |      | Bulk Pack Qty. |
|----------------|----------|-------|------|---------------|------------|--------|------|----------------|
|                |          | In    | mm   | In            | mm         | In     | mm   |                |
| KLBS-350-401A  | 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**  
Adhesive Mount Curly Lock



Specifications:

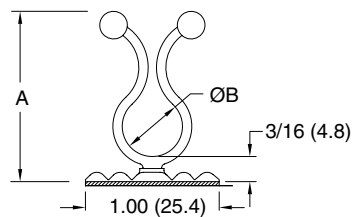
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Cables are locked in place with a fingertip twist
- Cables are easily removable with another fingertip twist
- Quick mounting adhesive base does not require through-hole

| Item No.    | Approval | B Holding Ø |             | A Ref. |      | Base Depth |      | Bulk Pack Qty. |
|-------------|----------|-------------|-------------|--------|------|------------|------|----------------|
|             |          | In          | mm          | In     | mm   | In         | mm   |                |
| KLB-350A-RT |          | .300 - .400 | 7.6 - 10.2  | 1.070  | 27.2 | 0.510      | 13.0 | 1000           |
| KLB-450A-RT |          | .400 - .500 | 10.2 - 12.7 | 1.230  | 31.2 | 0.510      | 13.0 | 1000           |
| KLB-750A-RT |          | .700 - .800 | 17.8 - 20.3 | 1.580  | 40.1 | 0.510      | 13.0 | 1000           |

**TLFB**  
Twist Lock on Flexible Adhesive Base



Specifications:

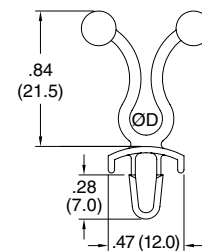
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

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

| Item No.      | Approval | Bundle Ø B    |             | 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 | Mounting Hole Ø |     | Bundle Ø D  |           | Panel Thickness |           | Bulk Pack Qty. |
|------------|----------|-----------------|-----|-------------|-----------|-----------------|-----------|----------------|
|            |          | In              | mm  | In          | mm        | In              | mm        |                |
| TLJ-200-01 |          | 0.187           | 4.8 | 0.500-0.600 | 12.7-15.2 | 0.031 - 0.078   | 0.8 - 2.0 | 1000           |

**SKL / SKLO**  
Side Entry and 45° Curly Lock

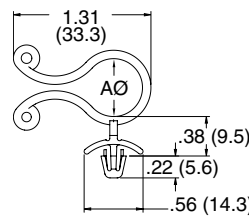


Figure 1

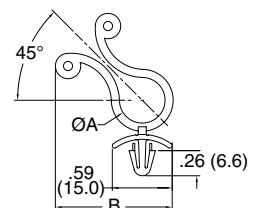


Figure 2

Specifications:

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

Features:

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

| Item No.    | Approval | Figure | Bundle Ø A    |             | 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 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

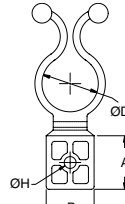


Figure 1

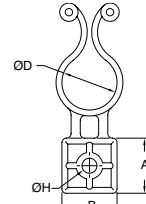


Figure 2



| Item No.      | Approval | Holding Ø D   |             | H     |     | 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               | 0.750 | 19.0 | 0.670 | 17.0 | 1      | 1000           |
| TLH-500-01    | —        | 0.450 - 0.550 | 11.4 - 14.0 | 0.170 | 4.2 | #8 or M4               | 0.560 | 14.2 | 0.550 | 14.0 | 1      | 1000           |
| TLHE-1-750-01 | —        | 0.700 - 0.800 | 17.8 - 20.3 | 0.204 | 5.2 | #10 or M5              | 0.750 | 19.0 | 0.670 | 17.0 | 1      | 1000           |
| KLH-750-01    |          | 0.700 - 0.800 | 17.8 - 20.3 | 0.204 | 5.2 | #10 or M5              | 0.750 | 19.0 | 0.750 | 19.0 | 2      | 1000           |

## WTLH Webbed Hinged Twist Lock

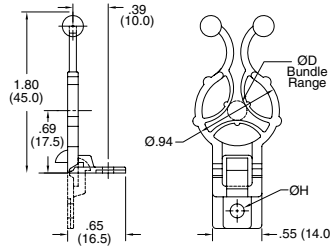


Specifications:

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

Features:

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



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

## TLHS Webbed Hinged Twist Lock

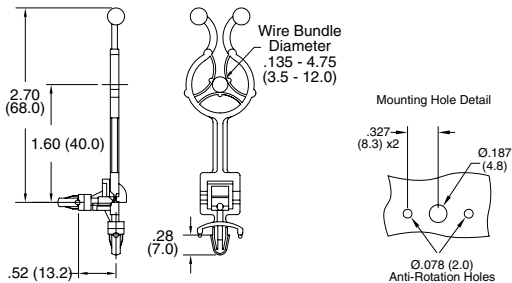


Specifications:

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

Features:

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



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

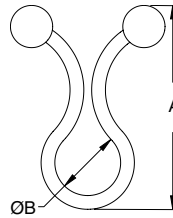
# PLASTIC FASTENERS

View them all at [www.essentracomponents.com](http://www.essentracomponents.com)





**TL / TT  
Twist Lock**



**Specifications:**

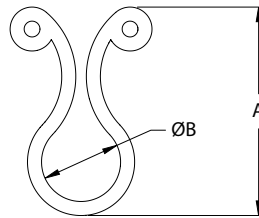
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

- Ends twist into place with very little effort
- Releasable and reusable for easy wire bundling
- Smooth ball shaped ends won't cut into wire or cable insulation

| Item No.       | Approval | Bundle Ø B    |             | A Ref. |      | Bulk Pack Qty. |
|----------------|----------|---------------|-------------|--------|------|----------------|
|                |          | In            | mm          | In     | mm   |                |
| <b>TT001A</b>  | —        | 0.150 - .190  | 3.8 - 4.8   | 0.850  | 21.6 | 100            |
| <b>TL-250</b>  |          | 0.200 - 0.300 | 5.1 - 7.6   | 0.900  | 22.9 | 1000           |
| <b>TL-350</b>  |          | 0.300 - 0.400 | 7.6 - 10.2  | 1.030  | 26.1 | 1000           |
| <b>TL-450</b>  |          | 0.400 - 0.500 | 10.2 - 12.7 | 1.200  | 30.5 | 1000           |
| <b>TL-600</b>  |          | 0.550 - 0.650 | 14.0 - 16.5 | 1.330  | 33.7 | 1000           |
| <b>TL-750</b>  |          | 0.700 - 0.800 | 17.8 - 20.3 | 1.550  | 39.4 | 1000           |
| <b>TL-950</b>  |          | Max 1.000     | 25.4        | 1.700  | 43.4 | 1000           |
| <b>TL-1125</b> |          | Max 1.187     | 30.2        | 2.190  | 55.6 | 1000           |
| <b>TL-1375</b> |          | Max 1.437     | 36.5        | 2.680  | 68.1 | 1000           |
| <b>TL-1500</b> |          | Max 1.562     | 39.7        | 2.930  | 74.4 | 1000           |
| <b>TL-1750</b> |          | Max 1.812     | 46.0        | 3.450  | 87.6 | 1000           |

**KL  
Curly Lock**



**Specifications:**

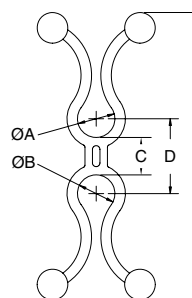
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

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

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

**DTL  
Dual Twist Lock**



**Specifications:**

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

**Features:**

- Routes and separates two bundles
- Six bundle diameter ranges; from .20" - .80"
- Three spacer lengths; 1/4", 3/4" and 1-1/4"
- Cables are locked in place with a fingertip twist

| Item No.             | A and B Bundle Ø |           | C     |      | D Ref. |      | E Ref. |       | Bulk Pack Qty. |
|----------------------|------------------|-----------|-------|------|--------|------|--------|-------|----------------|
|                      | In               | mm        | In    | mm   | In     | mm   | In     | mm    |                |
| <b>DTL2525-4-01</b>  | .200-.300        | 5.1-7.6   | 0.250 | 6.4  | 0.500  | 12.7 | 1.920  | 48.8  | 500            |
| <b>DTL2525-12-01</b> | .200-.300        | 5.1-7.6   | 0.750 | 19.1 | 1.000  | 25.4 | 2.420  | 61.5  | 500            |
| <b>DTL2525-20-01</b> | .200-.300        | 5.1-7.6   | 1.250 | 31.8 | 1.500  | 38.1 | 2.920  | 74.2  | 500            |
| <b>DTL3535-4-01</b>  | .300-.400        | 7.6-10.2  | 0.250 | 6.4  | 0.600  | 15.2 | 2.180  | 55.4  | 500            |
| <b>DTL3535-12-01</b> | .300-.400        | 7.6-10.2  | 0.750 | 19.1 | 1.100  | 27.9 | 2.680  | 68.1  | 500            |
| <b>DTL3535-20-01</b> | .300-.400        | 7.6-10.2  | 1.250 | 31.8 | 1.600  | 40.6 | 3.180  | 80.8  | 500            |
| <b>DTL4545-4-01</b>  | .400-.500        | 10.2-12.7 | 0.250 | 6.4  | 0.600  | 15.2 | 2.180  | 55.4  | 500            |
| <b>DTL4545-12-01</b> | .400-.500        | 10.2-12.7 | 0.750 | 19.1 | 1.100  | 27.9 | 2.680  | 68.1  | 500            |
| <b>DTL4545-20-01</b> | .400-.500        | 10.2-12.7 | 1.250 | 31.8 | 1.600  | 40.6 | 3.180  | 80.8  | 500            |
| <b>DTL5555-4-01</b>  | .500-.600        | 12.7-15.2 | 0.250 | 6.4  | 0.600  | 15.2 | 2.180  | 55.4  | 500            |
| <b>DTL5555-12-01</b> | .500-.600        | 12.7-15.2 | 0.750 | 19.1 | 1.100  | 27.9 | 2.680  | 68.1  | 500            |
| <b>DTL5555-20-01</b> | .500-.600        | 12.7-15.2 | 1.250 | 31.8 | 1.600  | 40.6 | 3.180  | 80.8  | 500            |
| <b>DTL6565-4-01</b>  | .600-.700        | 15.2-17.8 | 0.250 | 6.4  | 0.600  | 15.2 | 2.180  | 55.4  | 500            |
| <b>DTL6565-12-01</b> | .600-.700        | 15.2-17.8 | 0.750 | 19.1 | 1.100  | 27.9 | 2.680  | 68.1  | 500            |
| <b>DTL6565-20-01</b> | .600-.700        | 15.2-17.8 | 1.250 | 31.8 | 1.600  | 40.6 | 3.180  | 80.8  | 500            |
| <b>DTL7575-4-01</b>  | .700-.800        | 17.8-20.3 | 0.250 | 6.4  | 1.000  | 25.4 | 3.100  | 78.7  | 500            |
| <b>DTL7575-12-01</b> | .700-.800        | 17.8-20.3 | 0.750 | 19.1 | 1.500  | 38.1 | 3.600  | 91.4  | 500            |
| <b>DTL7575-20-01</b> | .700-.800        | 17.8-20.3 | 1.250 | 31.8 | 2.000  | 50.8 | 4.100  | 104.1 | 500            |



**CABLE CLIPS & CLAMPS**

**HCS Hinged Cable Saddle**



Specifications:

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

Features:

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

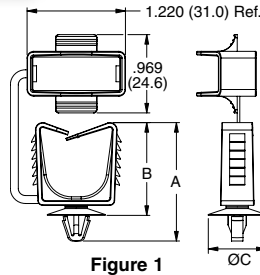


Figure 1

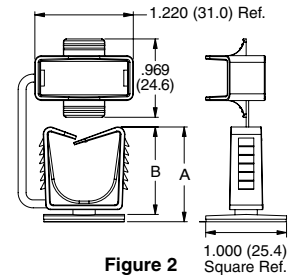


Figure 2

| Item No.     | Figure | A Ref. |      | B Max |      | C     |      | Mounting Method    |                | Panel Thickness |           | Cable Bundle Ø |            | Bulk Pack Qty. |
|--------------|--------|--------|------|-------|------|-------|------|--------------------|----------------|-----------------|-----------|----------------|------------|----------------|
|              |        | In     | mm   | In    | mm   | In    | mm   | In                 | mm             | In              | mm        | In             | mm         |                |
| HCS1-01      | 1      | 0.338  | 34.0 | 1.141 | 29.0 | 0.629 | 16   | 0.157 - 0.189 Hole | 4.0 - 4.8 Hole | 0.016 - 0.063   | 0.4 - 1.6 | 0.118 - 0.629  | 3.0 - 16.0 | 250            |
| HCS2-01      | 1      | 1.448  | 36.8 | 1.129 | 28.7 | 0.716 | 18.2 | 0.236 - 0.267 Hole | 6.0 - 6.8 Hole | 0.024 - 0.098   | 0.6 - 2.5 | 0.118 - 0.629  | 3.0 - 16.0 | 250            |
| HCS3-01A4-RT | 2      | 1.160  | 29.5 | 1.082 | 27.5 | —     | —    | Adhesive           |                | —               | —         | 0.118 - 0.629  | 3.0 - 16.0 | 1000           |

**WCC Webbed Centering Clip**



Specifications:

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

Features:

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

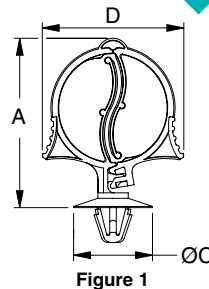


Figure 1

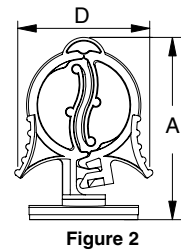
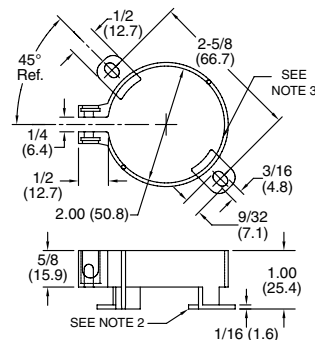


Figure 2



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

**SCH / SCHS Standoff Capacitor Holder**



Specifications:

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

Notes:

Optional:

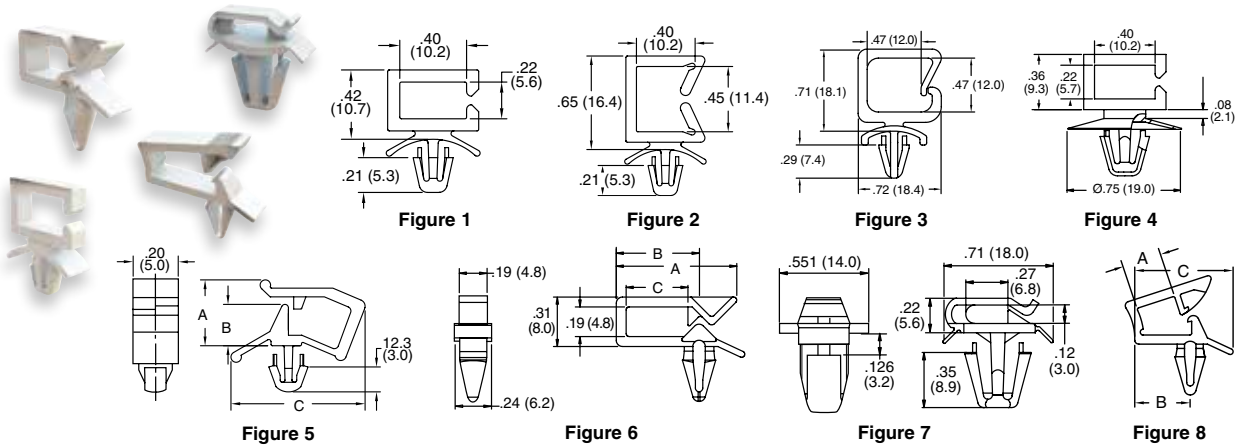
1. Clamping hardware; Screw (S6B) Stainless Steel, Zinc Plating; Quick Nut (QN-6) Spring Steel C1050, Coating: Black Phosphate
2. Spacer to elevate capacitor 3/32 (2.4) from chassis
3. Anti-rotation rib (3 locations)

| Item No. | Description                      | Bulk Pack Qty. |
|----------|----------------------------------|----------------|
| SCHS-2   | w/spacer, w/o hardware (Note 1)  | 100            |
| SCH-2    | w/o spacer, w/o hardware         | 100            |
| SCHS-2-H | w/spacer, w/ clamping hardware   | 100            |
| SCH-2-H  | w/o spacer, w/ clamping hardware | 100            |





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



Specifications:

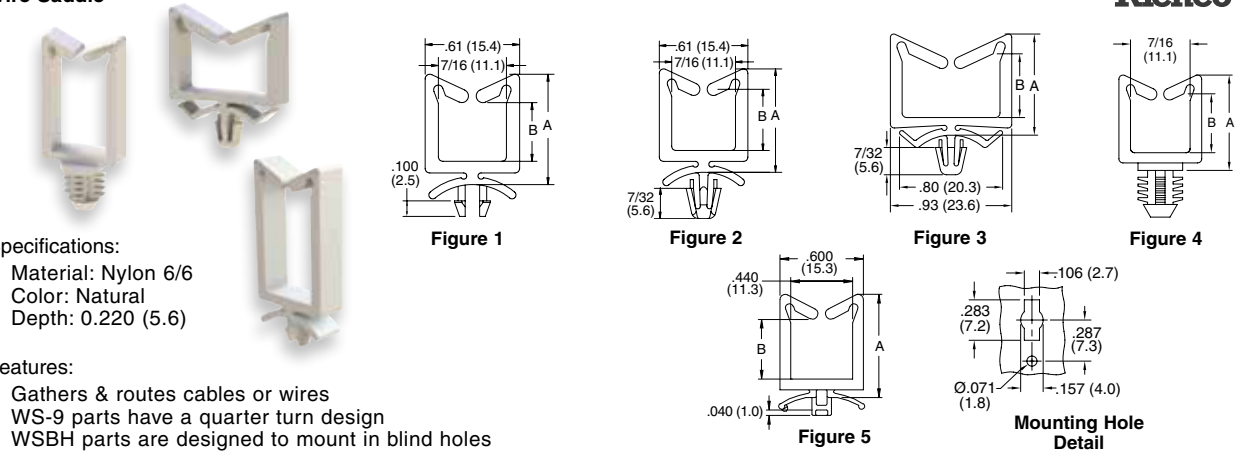
- Material: Nylon 6/6
- Color: Natural

Features:

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

| Item No.     |              | Approval | Figure | A Ref. |      | B     |      | C Ref. |      | Mounting Hole Ø |     | 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  | —            | RU       | 5      | 0.190  | 4.8  | 0.090 | 2.4  | 0.500  | 12.7 | 0.138           | 3.5 | 0.020 - 0.063   | 0.5 - 1.6 | 1000           |
| WS-SE1-2-01  | —            | RU       | 5      | 0.260  | 6.7  | 0.160 | 4.2  | 0.590  | 15.1 | 0.138           | 3.5 | 0.020 - 0.063   | 0.5 - 1.6 | 1000           |
| WS-SE1-3-01  | —            | RU       | 5      | 0.340  | 8.5  | 0.230 | 5.7  | 0.810  | 20.3 | 0.138           | 3.5 | 0.020 - 0.063   | 0.5 - 1.6 | 1000           |
| WS-SE2-1-01  | —            | RU       | 6      | 0.650  | 16.6 | 0.410 | 10.5 | 0.280  | 7.1  | 0.187           | 4.8 | 0.020 - 0.063   | 0.5 - 1.6 | 1000           |
| WS-SE2-2-01  | —            | RU       | 6      | 0.770  | 19.5 | 0.530 | 13.4 | 0.390  | 10.0 | 0.187           | 4.8 | 0.020 - 0.063   | 0.5 - 1.6 | 1000           |
| WS-SE3-1-01  | —            | RU       | 7      |        |      |       |      |        |      | 0.314           | 8.0 | 0.062 - 0.102   | 1.6 - 2.6 | 1000           |
| LWS-SE2-1-01 | —            | RU       | 8      | 0.270  | 6.9  | 0.380 | 9.7  | 0.670  | 17.0 | 0.187           | 4.8 | 0.020 - 0.063   | 0.5 - 1.6 | 1000           |
| LWS-SE2-2-01 | —            | RU       | 8      | 0.400  | 10.2 | 0.530 | 13.5 | 0.820  | 20.8 | 0.187           | 4.8 | 0.020 - 0.063   | 0.5 - 1.6 | 1000           |

**WS / WWS / WSBH**  
Wire Saddle



Specifications:

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

Features:

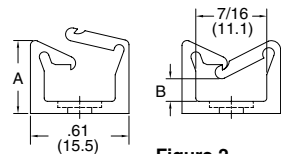
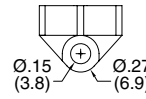
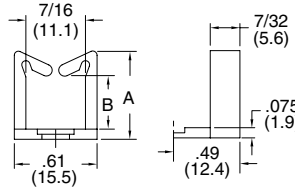
- Gathers & routes cables or wires
- WS-9 parts have a quarter turn design
- WSBH parts are designed to mount in blind holes

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



# WIRE SADDLES

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



Specifications:

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

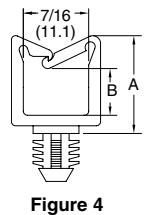
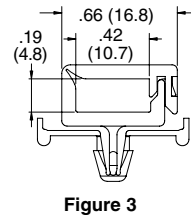
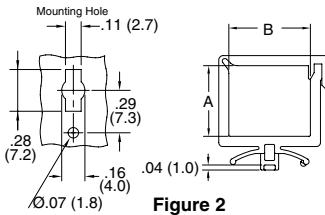
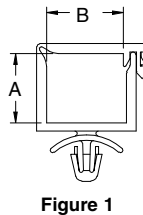
Features:

- Designed to mount easily on chassis with plastic SR rivet (see table) or a #6 screw
- Allows mounting to a wide range of panel thicknesses; up to 0.219" thick

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

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

## LWS / WSLT Locking Wire/Cable Saddle

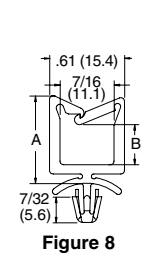
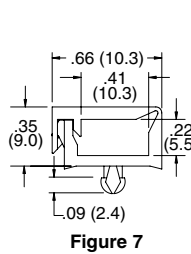
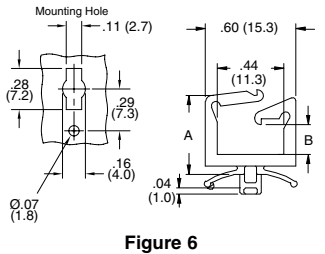
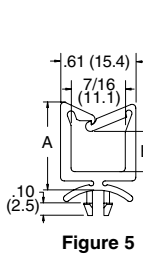


Specifications:

- Material: Nylon 6/6
- Color: Natural

Features:

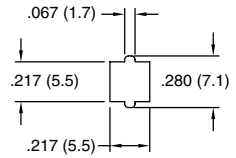
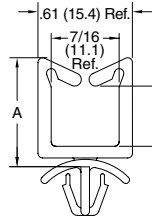
- Cables are locked in place yet easily removable
- WSLT-9 & LWS-9 include a quarter-turn base
- WSLTRA has a releasable arrow-head for easy removal



| Item No.        | UL94 V-2        | UL94 V-0 | Approval | Figure | A     |      |       |      | Mounting Hole Ø          |     | Panel Thickness |            | Bulk Pack Qty. |
|-----------------|-----------------|----------|----------|--------|-------|------|-------|------|--------------------------|-----|-----------------|------------|----------------|
|                 |                 |          |          |        | In    | mm   | In    | mm   | In                       | mm  | In              | mm         |                |
| WSLT-3.5-2-1-01 | WSLT-3.5-2-1-19 | —        | —        | 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    | —        | —        | 1      | 0.140 | 3.4  | 0.530 | 13.5 | 0.187                    | 4.8 | 0.031 - 0.078   | 0.8 - 1.98 | 1000           |
| WSLT-9-02-1-01  | —               | —        | —        | 2      | 0.140 | 3.6  | 0.530 | 13.5 | See Mounting Hole Detail | —   | 0.031 - 0.063   | 0.8 - 1.6  | 1000           |
| WSLT-01A-01     | WSLT-01A-19     | —        | —        | 1      | 0.190 | 4.8  | 0.420 | 10.7 | 0.187                    | 4.8 | 0.031 - 0.078   | 0.8 - 1.98 | 1000           |
| WSLT-9-01A-01   | —               | —        | —        | 2      | 0.190 | 4.8  | 0.420 | 10.7 | See Mounting Hole Detail | —   | 0.031 - 0.063   | 0.8 - 1.6  | 1000           |
| WSLT-01-2-01    | WSLT-01-2-19    | —        | —        | 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     | —        | —        | 1      | 0.390 | 10.0 | 0.640 | 16.3 | 0.187                    | 4.8 | 0.031 - 0.078   | 0.8 - 1.98 | 1000           |
| WSLT-9-02A-1-01 | —               | —        | —        | 2      | 0.390 | 10.0 | 0.640 | 16.3 | See Mounting Hole Detail | —   | 0.031 - 0.063   | 0.8 - 1.6  | 1000           |
| LWS-9-1-01      | —               | —        | —        | 6      | 0.510 | 13.0 | 0.150 | 3.8  | See Mounting Hole Detail | —   | 0.031 - 0.063   | 0.8 - 1.6  | 1000           |
| LWS-1-01        | LWS-1-19        | —        | —        | 4      | 0.520 | 13.2 | 0.140 | 3.6  | 0.187                    | 4.8 | 0.062           | 1.6        | 1000           |
| LWSBH-1-01      | —               | —        | —        | 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      | —        | —        | 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    | —        | —        | 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    | —        | —        | 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        | —        | —        | 4      | 0.710 | 18.0 | 0.330 | 8.4  | 0.187                    | 4.8 | 0.062           | 1.6        | 1000           |
| LWSBH-2-01      | —               | —        | —        | 5      | 0.710 | 18.0 | 0.330 | 8.4  | 0.312                    | 7.9 | 0.250           | 6.4        | 1000           |
| LWS-9-2-01      | —               | —        | —        | 6      | 0.710 | 18.0 | 0.390 | 9.8  | See Mounting Hole Detail | —   | 0.031 - 0.063   | 0.8 - 1.6  | 1000           |
| LWS-A-2-01      | LWS-A-2-19      | —        | —        | 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    | —        | —        | 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    | —        | —        | 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        | —        | —        | 4      | 1.070 | 27.2 | 0.690 | 17.5 | 0.187                    | 4.8 | 0.062           | 1.6        | 1000           |
| LWSBH-3-01      | —               | —        | —        | 5      | 1.070 | 27.2 | 0.690 | 17.5 | 0.312                    | 7.9 | 0.250           | 6.4        | 1000           |
| LWS-9-3-01      | —               | —        | —        | 6      | 1.070 | 27.2 | 0.750 | 19.0 | See Mounting Hole Detail | —   | 0.031 - 0.063   | 0.8 - 1.6  | 1000           |
| LWS-A-3-01      | LWS-A-3-19      | —        | —        | 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    | —        | —        | 8      | 1.070 | 27.2 | 0.690 | 17.5 | 0.187                    | 4.8 | 0.125           | 3.2        | 1000           |
| LWS-4-01        | LWS-4-19        | —        | —        | 4      | 1.380 | 35.0 | 1.000 | 25.4 | 0.187                    | 4.8 | 0.062           | 1.6        | 1000           |
| LWSBH-4-01      | —               | —        | —        | 5      | 1.380 | 35.0 | 1.000 | 25.4 | 0.312                    | 7.9 | 0.250           | 6.4        | 1000           |
| LWS-9-4-01      | —               | —        | —        | 6      | 1.380 | 35.1 | 1.060 | 26.8 | See Mounting Hole Detail | —   | 0.031 - 0.063   | 0.8 - 1.6  | 1000           |
| WSLT-T-01A-19   | —               | —        | —        | 7      | —     | —    | —     | —    | 0.118                    | 3.0 | 0.065           | 1.7        | 1000           |
| LWS-A-4-01      | LWS-A-4-19      | —        | —        | 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    | —        | —        | 8      | 1.380 | 35.0 | 1.000 | 25.4 | 0.187                    | 4.8 | 0.125           | 3.2        | 1000           |



**WS-SH**  
Wire Saddle, Square Hole Mount



Mounting Hole

Specifications:

- Material: Nylon 6/6
- Color: Natural

Features:

- Mounts into a square hole to prevent rotation

| Item No.   |            | 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 |          | .031 - .078     | 0.8 - 2.0 | 0.510  | 13.0 | 0.190  | 4.8  | 0.219 | 5.6 | 1000           |
| WS-SH-2-01 | WS-SH-2-19 |          | .031 - .078     | 0.8 - 2.0 | 0.700  | 17.8 | 0.390  | 10.0 | 0.219 | 5.6 | 1000           |
| WS-SH-3-01 | WS-SH-3-19 |          | .031 - .078     | 0.8 - 2.0 | 1.060  | 26.9 | 0.750  | 19.1 | 0.219 | 5.6 | 1000           |
| WS-SH-4-01 | WS-SH-4-19 |          | .031 - .078     | 0.8 - 2.0 | 1.370  | 34.8 | 1.070  | 27.2 | 0.219 | 5.6 | 1000           |

**SMWSLT**  
Side Mount Wire Saddle

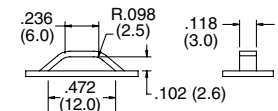
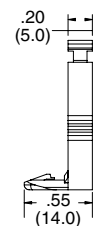
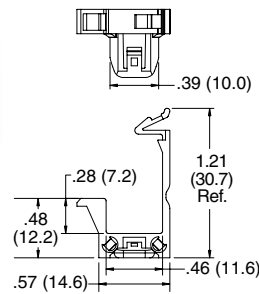


Specifications:

- 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           |

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

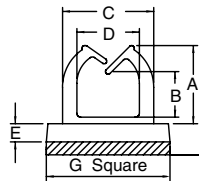


Figure 1

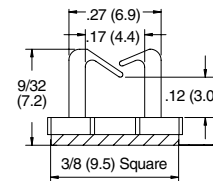


Figure 2

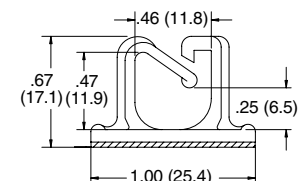


Figure 3

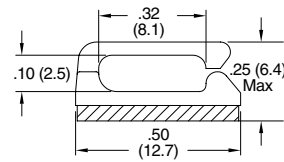


Figure 4

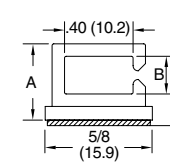


Figure 5

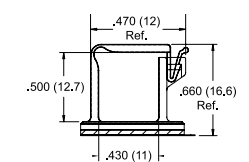


Figure 6

Specifications:

- Material: Nylon 6/6
- Color: Natural

Features:

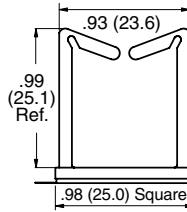
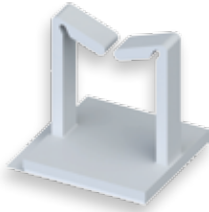
- Self adhesive wire saddle is designed to support lightweight wire bundles
- Small profile design is ideal for routing fiber

| Item No.        |                 | 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   |            |                |       |      |      |
| MWSEB-1-01A-RT  | MWSEB-1-19A-RT  |          | 1      | 0.160        | 4.0  | 0.050  | 1.3  | 0.280        | 7.0  | 0.190  | 4.8 | 0.060  | 1.6 | 0.370  | 9.5  | See Fig. 1 | 1000           |       |      |      |
| MWSEB-2-01A-RT  | MWSEB-2-19A-RT  |          | 1      | 0.240        | 6.0  | 0.130  | 3.3  | 0.280        | 7.0  | 0.190  | 4.8 | 0.060  | 1.6 | 0.370  | 9.5  | See Fig. 1 | 1000           |       |      |      |
| MWSEB-3-01A-RT  | MWSEB-3-19A-RT  |          | 1      | 0.290        | 7.3  | 0.120  | 3.0  | 0.350        | 9.0  | 0.260  | 6.6 | 0.080  | 2.0 | 0.500  | 12.7 | See Fig. 1 | 1000           |       |      |      |
| MWSEB-4-01A-RT  | MWSEB-4-19A-RT  |          | 1      | 0.360        | 9.2  | 0.190  | 4.8  | 0.430        | 10.8 | 0.320  | 8.0 | 0.080  | 2.0 | 0.500  | 12.7 | See Fig. 1 | 1000           |       |      |      |
| MWSEB-5-01A-RT  | MWSEB-5-19A-RT  |          | 1      | 0.440        | 11.2 | 0.230  | 5.8  | 0.470        | 11.9 | 0.360  | 9.1 | 0.080  | 2.0 | 0.500  | 12.7 | See Fig. 1 | 1000           |       |      |      |
| MWSEB-6-01A-RT  | MWSEB-6-19A-RT  |          | 1      | 0.510        | 13.0 | 0.330  | 8.4  | 0.470        | 12.0 | 0.360  | 9.2 | 0.080  | 2.0 | 0.500  | 12.7 | See Fig. 1 | 1000           |       |      |      |
| MWSB-1-01A-RT   | MWSB-1-19A-RT   |          | 2      | See Figure 2 |      |        |      |              |      |        |     |        |     |        |      |            | See Fig. 2     | 1000  |      |      |
| WSB-2-01A-RT    | —               |          | 3      | See Figure 3 |      |        |      |              |      |        |     |        |     |        |      |            | 0.480          | 12.1  | 1000 |      |
| MWSSEB-1-01A-RT | MWSSEB-1-19A-RT |          | 4      | See Figure 4 |      |        |      |              |      |        |     |        |     |        |      |            | 0.375          | 9.5   | 1000 |      |
| MWSSEBE-1-01A   | MWSSEBE-1-19A   |          | 4      | See Figure 4 |      |        |      |              |      |        |     |        |     |        |      |            | 0.500          | 12.7  | 1000 |      |
| WS-SE-B-1-01A   | —               |          | 5      | 0.450        | 11.4 | 0.220  | 5.6  | See Figure 5 |      |        |     |        |     |        |      |            |                | 0.375 | 9.5  | 1000 |
| WS-SE-B-2-01A   | —               |          | 5      | 0.675        | 17.1 | 0.450  | 11.4 | See Figure 5 |      |        |     |        |     |        |      |            |                | 0.375 | 9.5  | 1000 |
| WSLTB-03A-19A   | —               | —        | 6      | See Figure 6 |      |        |      |              |      |        |     |        |     |        |      |            | 0.750          | 19.0  | 1000 |      |



# WIRE SADDLES

## WWSB Wire Saddle on Adhesive Base



Specifications:

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

Features:

- No through-hole required
- Large capacity

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

## OFNS Optical Fiber Wire Saddle

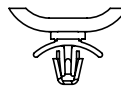
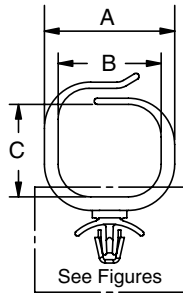


Figure 1  
Ø.187



Figure 2  
Ø.312



Figure 3  
.307 Square

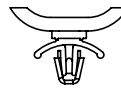


Figure 4  
Ø.250

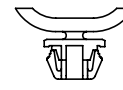


Figure 5  
.374 Square

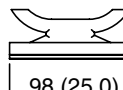


Figure 6



Specifications:

- Material: Nylon 6/6
- Color: Natural

Features:

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

| Item No.        |                 | Figure | A Ref. |      | B Ref. |      | C Ref. |      | Mounting Hole Ø |            | 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      | 1.060  | 26.8 | 0.830  | 21.2 | 0.750  | 19.0 | 0.187           | 4.8        | .031-.079       | 0.8-2.0  | 0.270 | 6.9 | 1000          |
| OFNS-13-312-01  | OFNS-13-312-19  | 2      | 1.060  | 26.8 | 0.830  | 21.2 | 0.750  | 19.0 | 0.312           | 7.9        | .031-.063       | 0.8-1.6  | 0.270 | 6.9 | 1000          |
| OFNS-13-250-01  | OFNS-13-250-19  | 4      | 1.060  | 26.8 | 0.830  | 21.2 | 0.750  | 19.0 | 0.250           | 6.4        | .031-.079       | 0.8-2.0  | 0.270 | 6.9 | 1000          |
| OFNS13-S9.5M-01 | OFNS13-S9.5M-19 | 5      | 1.060  | 26.8 | 0.830  | 21.2 | 0.750  | 19.0 | .374 Square     | 9.5 Square | .031-.079       | 0.8-2.0  | 0.270 | 6.9 | 1000          |
| OFNSB-13-01A-RT | OFNSB-13-19A-RT | 6      | 1.060  | 26.8 | 0.830  | 21.2 | 0.750  | 19.0 | Adhesive        | Adhesive   | Adhesive        | Adhesive | 0.270 | 6.9 | 500           |
| OFNS-16-187-01  | OFNS-16-187-19  | 1      | 1.350  | 34.3 | 1.130  | 28.7 | 0.990  | 25.1 | 0.187           | 4.8        | .031-.079       | 0.8-2.0  | 0.270 | 6.9 | 1000          |
| OFNS-16-312-01  | OFNS-16-312-19  | 2      | 1.350  | 34.3 | 1.130  | 28.7 | 0.990  | 25.1 | 0.312           | 7.9        | .031-.063       | 0.8-1.6  | 0.270 | 6.9 | 1000          |
| OFNS-16-S307-01 | OFNS-16-S307-19 | 3      | 1.350  | 34.3 | 1.130  | 28.7 | 0.990  | 25.1 | .307 Square     | 7.8 Square | .031-.079       | 0.8-2.0  | 0.270 | 6.9 | 1000          |
| OFNS16-S9.5M-01 | OFNS16-S9.5M-19 | 4      | 1.350  | 34.3 | 1.130  | 28.7 | 0.990  | 25.1 | .374 Square     | 9.5 Square | .031-.079       | 0.8-2.0  | 0.270 | 6.9 | 1000          |
| OFNSB-16-01A-RT | OFNSB-16-19A-RT | 6      | 1.350  | 34.3 | 1.130  | 28.7 | 0.990  | 25.1 | Adhesive        | Adhesive   | Adhesive        | Adhesive | 0.270 | 6.9 | 500           |
| OFNS28-S9.5M-01 | OFNS28-S9.5M-19 | 5      | 1.350  | 34.3 | 1.130  | 28.7 | 0.990  | 25.1 | .374 Square     | 9.5 Square | .031-.079       | 0.8-2.0  | 0.270 | 6.9 | 500           |

## MOFNSA / MOFNPS / MOFNBSB Mini Optical Fiber Wire Saddle

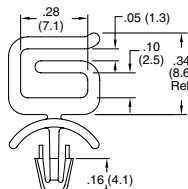
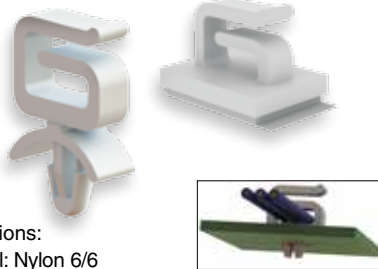


Figure 1

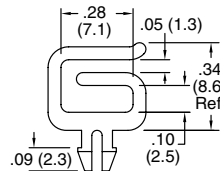
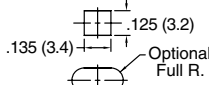


Figure 2



Mounting Hole

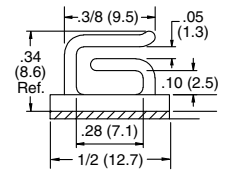


Figure 3

Specifications:

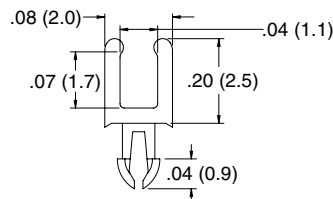
- Material: Nylon 6/6
- Color: Natural

Features:

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

| Item No.         |                  | Figure | Mounting Hole Ø |     | 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          |
| MOFNPS-2-01      | MOFNPS-2-19      | 2      | See Figure 2    |     | 0.063           | 1.6 | 0.125 | 3.2 | 1000          |
| MOFNBSB-2-01A-RT | MOFNBSB-2-19A-RT | 3      | Adhesive Mount  |     |                 |     | 0.375 | 9.5 | 1000          |

## PWS Pico Wire Saddle



Specifications:

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

Features:

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

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



**MWS**  
Micro Wire Saddle

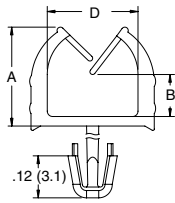
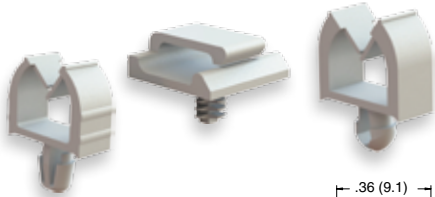


Figure 1

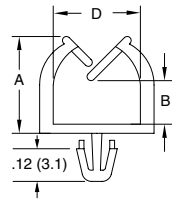


Figure 2

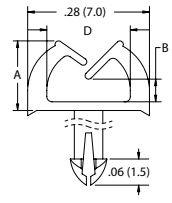


Figure 3

Specifications:

- Material: Nylon 6/6
- Color: Natural

Features:

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

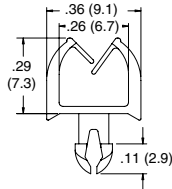


Figure 4

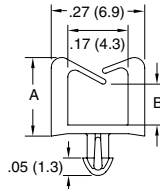


Figure 5

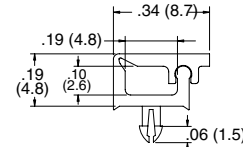


Figure 6

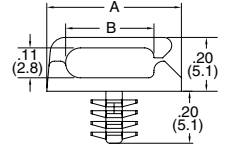


Figure 7

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

**MWSELF / SMWS**  
Standoff Micro Wire Saddle

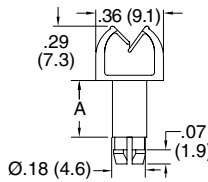
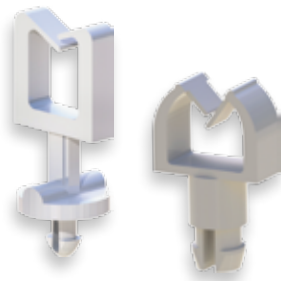


Figure 1

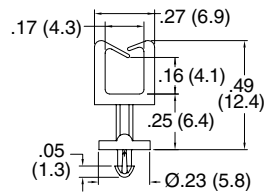


Figure 2



Specifications:

- Material: Nylon 6/6
- Color: Natural

Features:

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

| Item No.        |                 | Figure | A            |     | Mounting Hole Ø |     | Panel Thickness |     | Bulk Pack Qty. |
|-----------------|-----------------|--------|--------------|-----|-----------------|-----|-----------------|-----|----------------|
| UL94 V-2        | UL94 V-0        |        | In           | mm  | In              | mm  | In              | mm  |                |
| MWSELF-1-4.1-01 | MWSELF-1-4.1-19 | 1      | 0.160        | 4.1 | 0.150           | 3.8 | 0.063           | 1.6 | 1000           |
| MWSELF-1-7.7-01 | MWSELF-1-7.7-19 | 1      | 0.300        | 7.7 | 0.150           | 3.8 | 0.063           | 1.6 | 1000           |
| MWSELF-2-4.1-01 | MWSELF-2-4.1-19 | 1      | 0.160        | 4.1 | 0.150           | 3.8 | 0.079           | 2.0 | 1000           |
| MWSELF-2-7.7-01 | MWSELF-2-7.7-19 | 1      | 0.300        | 7.7 | 0.150           | 3.8 | 0.079           | 2.0 | 1000           |
| SMWS-1-01       | SMWS-1-19       | 2      | See Figure 2 |     | 0.070           | 1.8 | 0.062           | 1.6 | 1000           |
| SMWS1-1-01      | SMWS1-1-19      | 2      | See Figure 2 |     | 0.070           | 1.8 | 0.093           | 2.4 | 1000           |



# WIRE SADDLES & FLAT CABLE CLAMPS

## WSLTB / MWSLTB Wire Saddle Locking Top

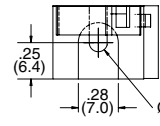
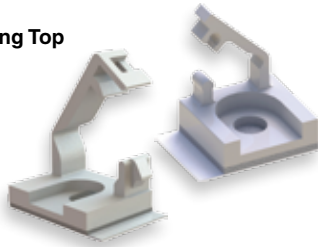


Figure 1

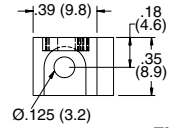


Figure 2



**Specifications:**

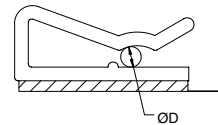
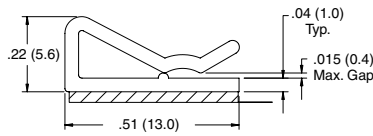
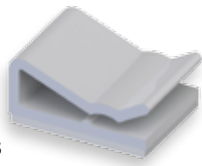
- Material: UL94 V-0 Nylon 6/6
- Color: Natural

**Features:**

- Gathers, routes and locks cables and wires

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

## SWC Single Wire Clip



**Specifications:**

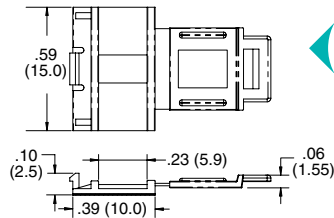
- Material: UL94 V-1 PPE/PS
- Color: White

**Features:**

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

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

## MCC Adhesive Mount Micro Cable Clamp



**Specifications:**

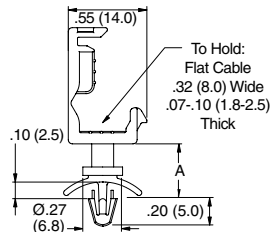
- Material: UL94 V-2 Nylon 6/6, Color: Black

**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  | 0.230           | 5.8 | 1000           |

## FCWSS Flat Cable Wire Saddle



**Specifications:**

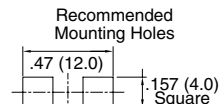
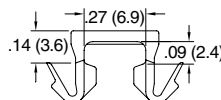
- Material: UL94 V-2 Nylon 6/6
- Color: Black

**Features:**

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

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

## FCCE Flat Cable Clamp



**Specifications:**

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

**Features:**

- Holds down ribbon cable
- Extremely low profile

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

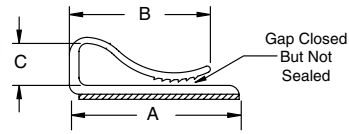
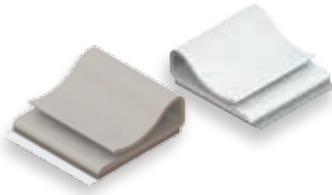
# FLAT CABLE CLAMPS



## CFCC Side Load Flat Cable Clamp

**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 | 0.490  | 12.5 | 0.180 | 4.6 | 1.000 | 25.4 | UL94 V-1 PPE/PS | White | 1000           |
| CFCC-4-05A-RT | 0.563 | 14.3 | 0.420  | 10.7 | 0.250 | 6.4 | 1.000 | 25.4 | UL94 V-1 PPE/PS | White | 1000           |
| CFCC-8-05A-RT | 1.062 | 27.0 | 0.880  | 22.4 | 0.250 | 6.4 | 1.000 | 25.4 | UL94 V-1 PPE/PS | White | 1000           |
| CFCC-8-04A-RT | 1.062 | 27.0 | 0.880  | 22.4 | 0.250 | 6.4 | 1.000 | 25.4 | UL94 V-0 PVC    | Grey  | 1000           |

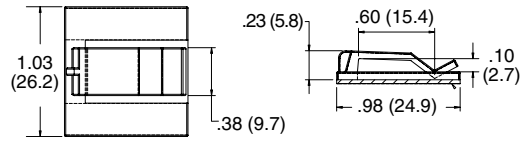
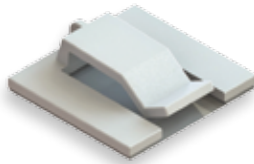
## CFCCS Split Flat Cable Clamp On Adhesive Base

**Specifications:**

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

**Features:**

- Tension arm securely holds down flat ribbon cable



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

## SFCC Split Flat Cable Clamp

**Specifications:**

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

**Features:**

- Two tension arms hold flat ribbon cable firmly in place
- Easily installed with screw or adhesive

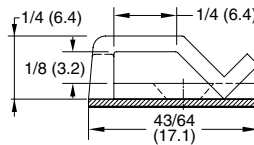


Figure 1

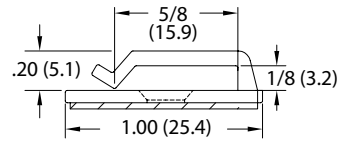


Figure 2



| Item No.      | 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           |

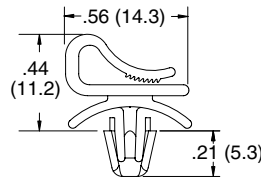
## CFCCA Flat Cable Clamp

**Specifications:**

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

**Features:**

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



| Item No.   | Mounting Hole |     | 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 | 0.560 x 0.630 | 14.3 x 15.9 | 1000           |

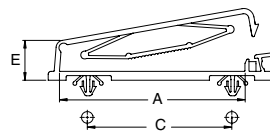
## TFCCA Flat Cable Clamp with Tension

**Specifications:**

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

**Features:**

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



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



# FLAT CABLE CLAMPS

## TFCM

### Flat Cable Clamp with Tension on Adhesive Base

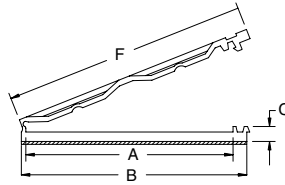


Specifications:

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

Features:

- Provides tension to flat ribbon cable to ensure stability
- Low profile where space is an issue
- Convenient releasable latch



| Item No. | A Ref. |      | B Ref. |      | C Ref. |     | F Ref. |      | Depth |      | Suitable Cable | Bulk Pack Qty. |
|----------|--------|------|--------|------|--------|-----|--------|------|-------|------|----------------|----------------|
|          | In     | mm   | In     | mm   | In     | mm  | In     | mm   | In    | mm   |                |                |
| TFCM-25S | 0.870  | 22.0 | 1.060  | 27.0 | 0.120  | 3.0 | 1.260  | 32.0 | 0.390 | 10.0 | 15 PIN         | 200            |
| TFCM-25  | 1.150  | 29.3 | 1.440  | 36.5 | 0.120  | 3.0 | 1.570  | 40.0 | 0.390 | 10.0 | 20 PIN         | 200            |
| TFCM-25M | 2.200  | 55.8 | 2.410  | 61.2 | 0.160  | 4.0 | 2.590  | 66.0 | 0.590 | 15.0 | 40 PIN         | 100            |

## TFCC

### Flat Cable Clamp with Tension on Adhesive Base

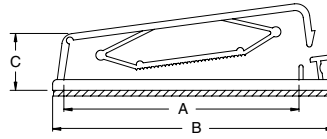
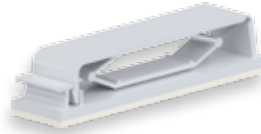


Specifications:

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

Features:

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



| Item No.   | Max # Of Conductors | A Ref. |      | B     |      | C     |      | Depth |      | Bulk Pack Qty. |
|------------|---------------------|--------|------|-------|------|-------|------|-------|------|----------------|
|            |                     | In     | mm   | In    | mm   | In    | mm   | In    | mm   |                |
| TFCC-30-01 | 30                  | 1.260  | 32.0 | 1.770 | 45.0 | 0.620 | 15.8 | 0.730 | 18.6 | 100            |
| TFCC-40-01 | 40                  | 2.130  | 54.0 | 2.640 | 67.0 | 0.620 | 15.8 | 0.620 | 15.8 | 100            |
| TFCC-50-01 | 50                  | 2.570  | 65.2 | 3.090 | 78.4 | 0.620 | 15.8 | 0.740 | 18.8 | 100            |

## FCCS

### Flat Cable Clamp

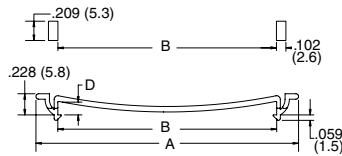


Specifications:

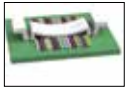
- Material: UL94 V-0 Nylon 6/6
- Color: Natural

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  |                |
| FCCS-1   | 1.060 | 27.0 | 0.590 | 15.0 | 0.130 | 3.4 | 0.280 | 7.0 | 500            |
| FCCS-2   | 1.650 | 42.0 | 1.180 | 30.0 | 0.150 | 3.7 | 0.280 | 7.0 | 500            |
| FCCS-3   | 1.850 | 47.0 | 1.380 | 35.0 | 0.150 | 3.7 | 0.280 | 7.0 | 500            |
| FCCS-4   | 2.240 | 57.0 | 1.770 | 45.0 | 0.150 | 3.7 | 0.280 | 7.0 | 500            |
| FCCS-5   | 2.830 | 72.0 | 2.360 | 60.0 | 0.150 | 3.7 | 0.280 | 7.0 | 500            |

## RDAFCC

### Flat Cable Clamp

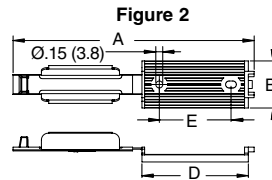
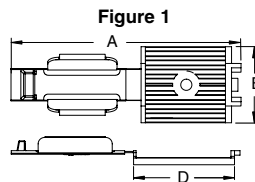
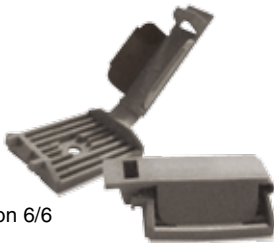


Specifications:

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

Features:

- Low profile design
- Releasable latch for adding or removing flat ribbon cable
- Large mounting base for high bonding strength and stability



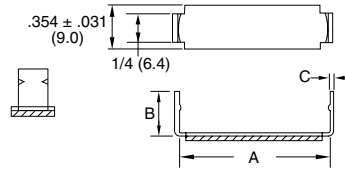
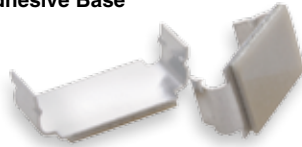
| Item No.   | Figure | Max Cable Width |      | Mounting Method  | A Ref. |       | B Ref. |      | D Ref. |      | E     |      | Bulk Pack Qty. |
|------------|--------|-----------------|------|------------------|--------|-------|--------|------|--------|------|-------|------|----------------|
|            |        | In              | mm   |                  | In     | mm    | In     | mm   | In     | mm   | In    | mm   |                |
| RDAFCC-25  | 1      | 1.000           | 25.4 | #6 or M3.5 Screw | 2.984  | 75.8  | 0.984  | 25.0 | 1.169  | 29.7 | —     | —    | 100            |
| RDAFCC-25A | 1      | 1.000           | 25.4 | Adhesive         | 2.984  | 75.8  | 0.984  | 25.0 | 1.169  | 29.7 | —     | —    | 100            |
| RDAFCC-50  | 2      | 2.000           | 50.8 | #6 or M3.5 Screw | 5.059  | 128.5 | 0.954  | 25.0 | 2.224  | 56.5 | 1.496 | 38.0 | 100            |
| RDAFCC-50A | 2      | 2.000           | 50.8 | Adhesive         | 5.059  | 128.5 | 0.984  | 25.0 | 2.224  | 56.5 | 1.496 | 38.0 | 100            |
| RDAFCC-82  | 2      | 3.000           | 76.2 | #6 or M3.5 Screw | 7.062  | 179.4 | 1.000  | 25.4 | 3.259  | 82.8 | 1.496 | 38.0 | 100            |
| RDAFCC-82A | 2      | 3.000           | 76.2 | Adhesive         | 7.062  | 179.4 | 1.000  | 25.4 | 3.259  | 82.8 | 1.496 | 38.0 | 100            |



**FLAT CABLE CLAMPS**



**AFCC**  
Aluminum Flat Cable Clamp on Adhesive Base



Specifications:

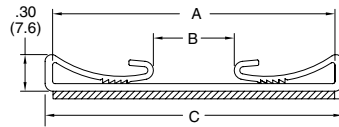
- Material: Aluminum
- Color: Bright Finish

Features:

- Aluminum arms secure flat ribbon cable
- Lightweight and durable
- Low profile for limited space applications

| Item No. | Cable Width A |      | B Ref. |      | C     |       | Depth |     | Bulk Pack Qty. |
|----------|---------------|------|--------|------|-------|-------|-------|-----|----------------|
|          | In            | mm   | In     | mm   | In    | mm    | In    | mm  |                |
| AFCC-08  | 0.500         | 12.7 | 0.250  | 6.4  | 0.020 | 0.500 | 0.350 | 9.0 | 250            |
| AFCC-12  | 0.750         | 19.1 | 0.250  | 6.4  | 0.020 | 0.500 | 0.350 | 9.0 | 250            |
| AFCC-16  | 1.000         | 25.4 | 0.312  | 7.9  | 0.020 | 0.500 | 0.350 | 9.0 | 250            |
| AFCC-20  | 1.250         | 31.8 | 0.375  | 9.5  | 0.020 | 0.500 | 0.350 | 9.0 | 250            |
| AFCC-21  | 1.312         | 33.3 | 0.385  | 9.8  | 0.020 | 0.500 | 0.350 | 9.0 | 250            |
| AFCC-24  | 1.500         | 38.1 | 0.437  | 11.1 | 0.020 | 0.500 | 0.350 | 9.0 | 250            |
| AFCC-28  | 1.750         | 44.5 | 0.500  | 12.7 | 0.030 | 0.800 | 0.350 | 9.0 | 250            |
| AFCC-32  | 2.000         | 50.8 | 0.562  | 14.3 | 0.030 | 0.800 | 0.350 | 9.0 | 250            |

**DFCC**  
Dual Flat Cable Clamp on Adhesive Base



Specifications:

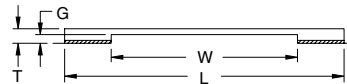
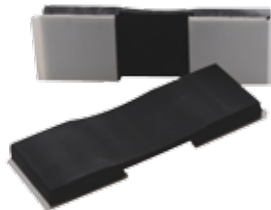
- Material: UL94 V-0 PVC
- Color: Black

Features:

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

| Item No.  | A     |      | B Ref. |      | C     |      | Depth |      | # of Conductors | Bulk Pack Qty. |
|-----------|-------|------|--------|------|-------|------|-------|------|-----------------|----------------|
|           | In    | mm   | In     | mm   | In    | mm   | In    | mm   |                 |                |
| DFCC-2-RT | 2.312 | 58.7 | 0.656  | 16.8 | 2.437 | 61.9 | 0.750 | 19.1 | 34-37-40        | 100            |
| DFCC-3-RT | 3.250 | 82.6 | 1.609  | 40.6 | 3.375 | 85.7 | 0.750 | 19.1 | 50-60-64        | 100            |

**FCC**  
Flat Cable Clamp on Adhesive Base



Specifications:

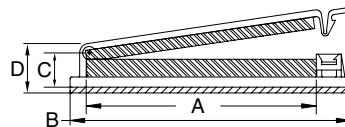
- Material: UL94 V-0 PVC
- Color: Black

Features:

- Clamp is secured with adhesive over flat ribbon cable
- Low profile for limited space applications

| Item No.    | L     |      | W     |      | T     |     | G     |     | Depth |      | Bulk Pack Qty. |
|-------------|-------|------|-------|------|-------|-----|-------|-----|-------|------|----------------|
|             | In    | mm   | In    | mm   | In    | mm  | In    | mm  | In    | mm   |                |
| FCC-4-3-RT  | 1.500 | 38.1 | 0.500 | 12.7 | 0.156 | 4.0 | 0.093 | 2.4 | 0.500 | 12.7 | 100            |
| FCC-8-3-RT  | 2.000 | 50.8 | 1.000 | 25.4 | 0.156 | 4.0 | 0.093 | 2.4 | 0.500 | 12.7 | 100            |
| FCC-16-3-RT | 3.000 | 76.2 | 2.000 | 50.6 | 0.156 | 4.0 | 0.093 | 2.4 | 0.500 | 12.7 | 100            |

**FCWSF**  
Cable Clamp with Silicone Foam Center



Specifications:

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

Features:

- UL94 V-0 silicone foam securely holds and protects fiber and cable
- Adhesive base for fast installation

| Item No.    | A     |      | B     |      | C Ref. |     | D Ref. |      | Depth | Cushion Thickness |       |           |       | Pack Qty. | Bulk Pack Qty. |     |
|-------------|-------|------|-------|------|--------|-----|--------|------|-------|-------------------|-------|-----------|-------|-----------|----------------|-----|
|             | In    | mm   | In    | mm   | In     | mm  | In     | mm   |       | Latch Side        |       | Base Side |       |           |                |     |
|             | In    | mm   | In    | mm   | In     | mm  | In     | mm   | In    | mm                | In    | mm        | In    | mm        |                |     |
| FCWSF-29-19 | 1.240 | 31.5 | 1.780 | 45.1 | 0.300  | 7.7 | 0.440  | 11.1 | 0.750 | 19.1              | 0.130 | 3.3       | 0.130 | 3.3       | 1              | 100 |
| FCWSF-30-19 | 1.240 | 31.5 | 1.790 | 45.5 | 0.350  | 9.0 | 0.520  | 13.1 | 0.750 | 19.1              | 0.130 | 3.3       | 0.190 | 4.8       | 1              | 100 |
| FCWSF-40-19 | 1.550 | 39.3 | 2.090 | 53.0 | 0.370  | 9.3 | 0.530  | 13.4 | 0.750 | 19.1              | 0.130 | 3.3       | 0.190 | 4.8       | 1              | 100 |
| FCWSF-50-19 | 2.490 | 63.2 | 3.040 | 77.2 | 0.360  | 9.1 | 0.520  | 13.2 | 0.750 | 19.1              | 0.130 | 3.3       | 0.190 | 4.8       | 1              | 100 |



# CABLE CLAMPS & CLIPS

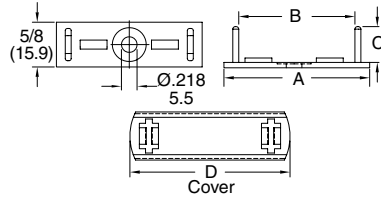
## FCRC Flat Cable Routing Clamp

**Specifications:**

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

**Features:**

- Two part design: Cable clamp base and tension-locking cover (sold separately)
- More than one cover can be mounted on base; for strain relief. Double back cable and secure with a second cover
- Base is secured either with a #10 or #12 screw or adhesive



| Base Item No.    |                | A Ref. |      | B Ref. |      | C     |      | Use Cover Item No. |       | D    |     | Bulk Pack Qty. |
|------------------|----------------|--------|------|--------|------|-------|------|--------------------|-------|------|-----|----------------|
| Without Adhesive | With Adhesive  | In     | mm   | In     | mm   | In    | mm   | In                 | mm    | In   | mm  |                |
| FCRC-13B-4       | FCRC-13B-4A-RT | 2.040  | 51.7 | 1.620  | 41.2 | 0.500 | 12.7 | FCRC-13C           | 2.240 | 56.8 | 100 |                |
| FCRC-19B-4       | FCRC-19B-4A-RT | 2.720  | 69.1 | 2.310  | 58.7 | 0.500 | 12.7 | FCRC-19C           | 2.920 | 74.2 | 100 |                |
| FCRC-21B-4       | FCRC-21B-4A-RT | 2.980  | 75.7 | 2.550  | 64.8 | 0.500 | 12.7 | FCRC-21C           | 3.170 | 80.5 | 100 |                |
| FCRC-26B-4       | FCRC-26B-4A-RT | 3.660  | 93.0 | 3.240  | 82.3 | 0.500 | 12.7 | FCRC-26C           | 3.860 | 98.0 | 100 |                |
| FCRC-13B-6       | FCRC-13B-6A-RT | 2.040  | 51.7 | 1.620  | 41.2 | 0.750 | 19.1 | FCRC-13C           | 2.240 | 56.8 | 100 |                |
| FCRC-19B-6       | FCRC-19B-6A-RT | 2.720  | 69.1 | 2.310  | 58.7 | 0.750 | 19.1 | FCRC-19C           | 2.920 | 74.2 | 100 |                |
| FCRC-21B-6       | FCRC-21B-6A-RT | 2.980  | 75.7 | 2.550  | 64.8 | 0.750 | 19.1 | FCRC-21C           | 3.170 | 80.5 | 100 |                |
| FCRC-26B-6       | FCRC-26B-6A-RT | 3.660  | 93.0 | 3.240  | 82.3 | 0.750 | 19.1 | FCRC-26C           | 3.860 | 98.0 | 100 |                |

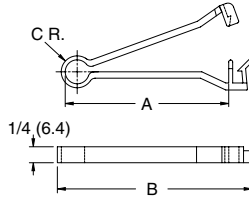
## FCLC / FCLCS Flat Cable Loop Clip

**Specifications:**

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

**Features:**

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



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

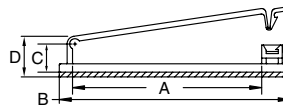
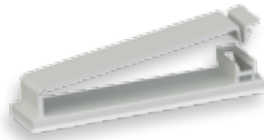
## FCW Cable Clamp on Adhesive Base

**Specifications:**

- Material: Nylon 6/6
- Color: Natural

**Features:**

- Allows for quick positive clamping of flat cable up to 50 conductors wide
- Adhesive base for quick installation
- Latch allows cables to be added and removed



| Item No.   |            | Max # of Conductors | Depth |      | A     |      | B     |      | C Ref. |      | D Ref. |      | Bulk Pack Qty. |
|------------|------------|---------------------|-------|------|-------|------|-------|------|--------|------|--------|------|----------------|
| UL94 V-2   | UL94 V-0   |                     | In    | mm   | In    | mm   | In    | mm   | In     | mm   | In     | mm   |                |
| FCW-29-01  | FCW-29-19  | 30                  | 0.740 | 18.9 | 1.240 | 31.5 | 1.780 | 45.1 | 0.300  | 7.7  | 0.440  | 11.1 | 100            |
| FCW-30-01  | FCW-30-19  | 30                  | 0.750 | 19.1 | 1.240 | 31.5 | 1.790 | 45.5 | 0.350  | 9.0  | 0.520  | 13.1 | 100            |
| FCW-40-01  | FCW-40-19  | 40                  | 0.750 | 19.1 | 1.550 | 39.3 | 2.090 | 53.0 | 0.370  | 9.3  | 0.530  | 13.4 | 100            |
| FCW-50-01  | FCW-50-19  | 50                  | 0.750 | 19.1 | 2.490 | 63.2 | 3.040 | 77.2 | 0.360  | 9.1  | 0.520  | 13.2 | 100            |
| FCW-50H-01 | FCW-50H-19 | 50                  | 0.740 | 18.9 | 2.540 | 64.6 | 3.080 | 78.2 | 0.590  | 15.1 | 0.750  | 19.0 | 100            |

## FCCA / FCCB Arrowhead Mounted Cable Clamp

**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

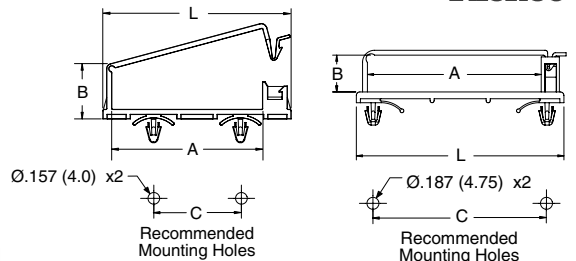


Figure 1

Figure 2

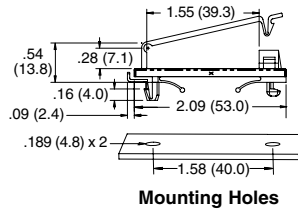
| Item No.    | Figure | L     |      | A     |      | B     |      | C     | Panel Thickness |               | Depth     |       | Bulk Pack Qty. |     |
|-------------|--------|-------|------|-------|------|-------|------|-------|-----------------|---------------|-----------|-------|----------------|-----|
|             |        | In    | mm   | In    | mm   | In    | mm   |       | In              | mm            | In        | mm    |                |     |
| FCCA-30A-01 | 1      | 2.560 | 65.0 | 2.100 | 52.0 | 0.750 | 19.1 | 1.180 | 30.0            | 0.030 - 0.079 | 0.8 - 2.0 | 0.390 | 10.0           | 100 |
| FCCA-40A-01 | 1      | 2.640 | 67.0 | 5.100 | 53.4 | 0.640 | 16.4 | 1.580 | 40.0            | 0.030 - 0.079 | 0.8 - 2.0 | 0.390 | 10.0           | 100 |
| FCCB-1      | 2      | 3.030 | 77.0 | 2.540 | 64.5 | 0.280 | 7.2  | 2.540 | 64.5            | 0.031 - 0.078 | 0.8 - 2.0 | 0.790 | 20.0           | 100 |
| FCCB-2      | 2      | 3.030 | 77.0 | 2.540 | 64.5 | 0.540 | 13.7 | 2.540 | 64.5            | 0.031 - 0.078 | 0.8 - 2.0 | 0.790 | 20.0           | 100 |



**FCSE**  
**Slide Entry Cable Clamp**

Specifications:

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



Features:

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

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

**HFCC**  
**Hinged Cable Clamp**

Specifications:

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

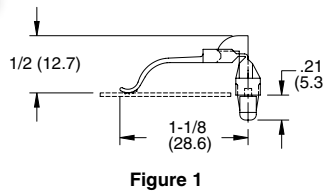


Figure 1

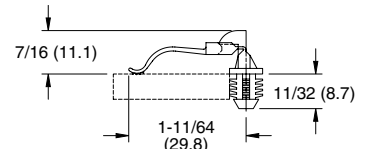


Figure 2



Features:

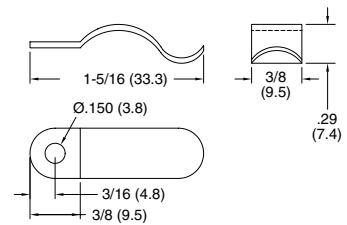
- Easy loading of flat cables
- Hinged design allows cables to be oriented prior to closure
- Once arm is hinged it locks in place
- Arrowhead design for thinner panels
- Fir-tree mount is primarily for particle board

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

**TC**  
**Spring Clip**

Specifications:

- Material: See Chart
- Color: See Chart



Features:

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

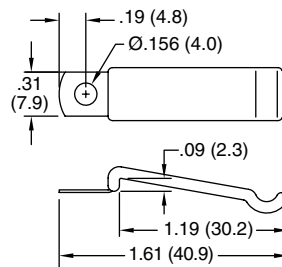
| Part Number  | Holding Ø Max. |     | Mounting Method | Material           | Color   | Bulk Pack Qty. |
|--------------|----------------|-----|-----------------|--------------------|---------|----------------|
|              | In             | mm  |                 |                    |         |                |
| TC-30-1      | 0.370          | 9.4 | #6 (M3/M3.5)    | UL94 HB Acetal     | Natural | 1000           |
| TC-30-1BK    | 0.370          | 9.4 | #6 (M3/M3.5)    | UL94 HB Acetal     | Black   | 1000           |
| TC-30-1-01   | 0.370          | 9.4 | #6 (M3/M3.5)    | UL94 V-2 Nylon 6/6 | Natural | 1000           |
| TC-30-1-01BK | 0.370          | 9.4 | #6 (M3/M3.5)    | UL94 V-2 Nylon 6/6 | Black   | 1000           |



**STCV**  
**Vinyl Coated Steel Spring Clip**

Specifications:

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



Features:

- Vinyl coating protects and insulates product
- Holds down round cable, ribbon cable and tubing
- Mounts with a #6 (m3) screw or rivet
- Flexible enough that the cable can be removed without removing the clip

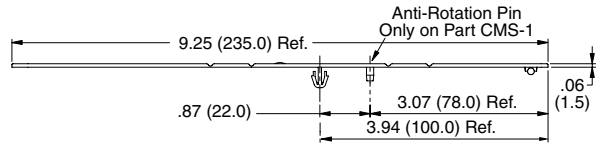
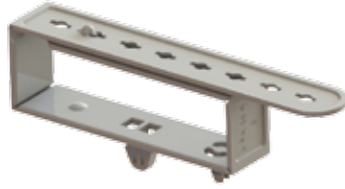
| Item No. | Mounting Screw | Pack Qty. | Bulk Pack Qty. |
|----------|----------------|-----------|----------------|
| STCV-1   | #6 (M3)        | 1         | 1000           |





# CABLE STRAPS

## CMS Cable Management Strap



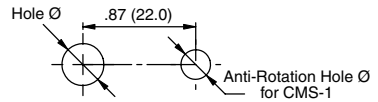
**Specifications:**

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

**Features:**

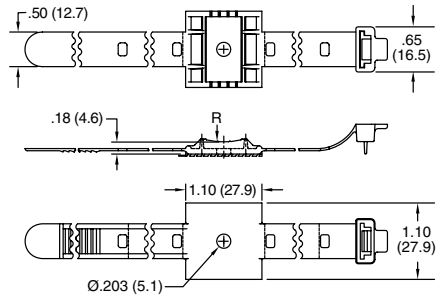
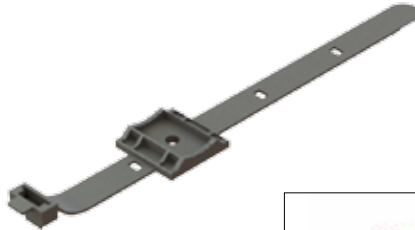
- Part is provided flat. It is folded up to bundle cables
- Strap is adjustable
- Optional anti-rotation pin prevents the strap from turning in the hole

**Recommended Mounting Holes For CMS-1**



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

## UMS Universal Mounting Strap



**Specifications:**

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

**Features:**

- Mounts with adhesive or a #6 or M4 screw
- Buckle design allows gripping down on cable bundles
- Adjustable to handle multiple bundle sizes

| Item No.       |             | Min Loop Tensile Strength |    | Max Bundle Ø |      | R Radius |      | Bulk Pack Qty. |
|----------------|-------------|---------------------------|----|--------------|------|----------|------|----------------|
| Adhesive Mount | Screw Mount | Lbs                       | Kg | In           | mm   | In       | mm   |                |
| UMS-16-45A-RT  | UMS-16-45   | 50                        | 23 | 1.000        | 25.4 | 0.500    | 12.7 | 100            |
| UMS-24-45A-RT  | UMS-24-45   | 50                        | 23 | 1.500        | 38.1 | 0.750    | 19.1 | 100            |
| UMS-32-45A-RT  | UMS-32-45   | 50                        | 23 | 2.000        | 50.8 | 1.000    | 25.4 | 100            |

## UCG Universal Cable Grip

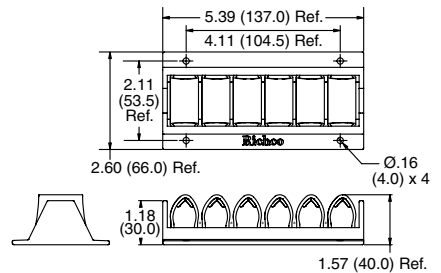


**Specifications:**

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

**Features:**

- Pressure grips accommodate up to 7 cable bundles
- Cable grips are easily removed from the frame to accommodate larger cable bundles
- Cables are pushed into the product by hand and are easily removed



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



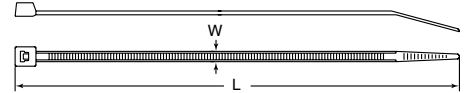
CABLE TIES



**CT / WITA**  
Nylon Locking Cable Tie

Specifications:

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



Features:

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

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



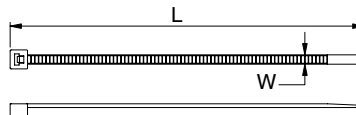
## CABLE TIES

### CTWR / WITA Weather Resistant Locking Cable Tie



**Specifications:**

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



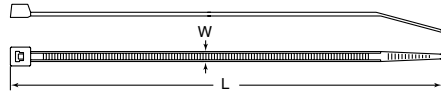
**Features:**

- Designed for outdoor applications

| Item No.        | Approval | L Ref. |       | W Ref. |     | Max Bundle Ø |       | Tensile Strength |     | Classification | Bulk Pack Qty. |
|-----------------|----------|--------|-------|--------|-----|--------------|-------|------------------|-----|----------------|----------------|
|                 |          | In     | mm    | In     | mm  | In           | mm    | Lbs              | N   |                |                |
| CTWR001A        | RU       | 3.000  | 75.0  | 0.095  | 2.4 | 0.710        | 18.0  | 18               | 80  | Miniature      | 100            |
| CTWR002A        | RU       | 3.750  | 96.0  | 0.098  | 2.4 | 0.910        | 23.0  | 18               | 80  | Miniature      | 100            |
| WITA-18SF-UVB-M | —        | 3.850  | 97.8  | 0.100  | 2.5 | 0.870        | 22.0  | 18               | 80  | Miniature      | 1000           |
| CTWR003A        | RU       | 4.000  | 100.0 | 0.098  | 2.4 | 0.980        | 25.0  | 18               | 80  | Miniature      | 100            |
| WITA-18R-UVB-M  | —        | 4.720  | 120.0 | 0.100  | 2.5 | 1.060        | 26.9  | 18               | 80  | Miniature      | 1000           |
| CTWR004A        | RU       | 4.750  | 120.0 | 0.098  | 2.5 | 1.180        | 30.0  | 18               | 80  | Miniature      | 100            |
| CTWR005A        | RU       | 5.500  | 142.0 | 0.098  | 2.5 | 1.380        | 35.0  | 18               | 80  | Miniature      | 100            |
| WITA-18L-UVB-M  | —        | 5.900  | 150.0 | 0.100  | 2.5 | 1.460        | 37.1  | 18               | 80  | Miniature      | 1000           |
| CTWR006A        | RU       | 6.500  | 165.0 | 0.098  | 2.5 | 1.730        | 44.0  | 18               | 80  | Miniature      | 100            |
| WITA-18V-UVB-M  | —        | 7.870  | 200.0 | 0.100  | 2.5 | 2.130        | 54.1  | 18               | 80  | Miniature      | 1000           |
| CTWR007A        | RU       | 8.000  | 203.0 | 0.098  | 2.5 | 2.170        | 55.0  | 18               | 80  | Miniature      | 100            |
| WITA-18X-UVB-M  | —        | 15.750 | 400.0 | 0.100  | 2.5 | 4.560        | 116.0 | 18               | 80  | Miniature      | 1000           |
| CTWR008A        | RU       | 4.750  | 120.0 | 0.126  | 3.2 | 1.180        | 30.0  | 40               | 178 | Intermediate   | 100            |
| CTWR009A        | RU       | 5.500  | 142.0 | 0.126  | 3.2 | 1.380        | 35.0  | 40               | 178 | Intermediate   | 100            |
| WITA-40R-UVB-C  | —        | 5.910  | 150.0 | 0.140  | 3.6 | 1.480        | 37.6  | 40               | 178 | Intermediate   | 100            |
| WITA-40L-UVB-M  | —        | 7.870  | 200.0 | 0.140  | 3.6 | 2.050        | 52.0  | 40               | 178 | Intermediate   | 1000           |
| CTWR010A        | RU       | 8.000  | 203.0 | 0.126  | 3.2 | 2.170        | 55.0  | 40               | 178 | Intermediate   | 100            |
| WITA-40XL-UVB-M | —        | 8.070  | 205.0 | 0.140  | 3.6 | 2.100        | 53.3  | 40               | 178 | Intermediate   | 1000           |
| CTWR011A        | RU       | 6.000  | 150.0 | 0.142  | 3.6 | 1.540        | 39.0  | 40               | 178 | Intermediate   | 100            |
| CTWR012A        | RU       | 8.000  | 203.0 | 0.142  | 3.6 | 2.170        | 55.0  | 40               | 178 | Intermediate   | 100            |
| CTWR013A        | RU       | 10.000 | 250.0 | 0.142  | 3.6 | 2.910        | 74.0  | 40               | 178 | Intermediate   | 100            |
| CTWR014A        | RU       | 10.500 | 265.0 | 0.142  | 3.6 | 3.070        | 78.0  | 40               | 178 | Intermediate   | 100            |
| CTWR015A        | RU       | 11.500 | 292.0 | 0.142  | 3.6 | 3.350        | 85.0  | 40               | 178 | Intermediate   | 100            |
| WITA-40VL-UVB-M | —        | 11.810 | 300.0 | 0.140  | 3.6 | 3.270        | 83.0  | 40               | 178 | Intermediate   | 1000           |
| CTWR016A        | RU       | 13.000 | 330.0 | 0.142  | 3.6 | 3.780        | 96.0  | 40               | 178 | Intermediate   | 100            |
| CTWR017A        | RU       | 14.500 | 368.0 | 0.142  | 3.6 | 4.020        | 102.0 | 40               | 178 | Intermediate   | 100            |
| CTWR018A        | RU       | 7.000  | 180.0 | 0.142  | 3.6 | 1.930        | 49.0  | 40               | 178 | Intermediate   | 100            |
| WITA-50S-UVB-M  | —        | 6.300  | 160.0 | 0.180  | 4.6 | 1.520        | 38.7  | 50               | 222 | Standard       | 1000           |
| WITA-50R-UVB-M  | —        | 7.900  | 200.7 | 0.180  | 4.6 | 1.950        | 49.5  | 50               | 222 | Standard       | 1000           |
| CTWR019A        | RU       | 8.000  | 203.0 | 0.181  | 4.6 | 2.170        | 55.0  | 50               | 222 | Standard       | 100            |
| CTWR020A        | RU       | 4.750  | 120.0 | 0.189  | 4.8 | 1.180        | 30.0  | 50               | 222 | Standard       | 100            |
| CTWR021A        | RU       | 6.500  | 160.0 | 0.189  | 4.8 | 1.650        | 42.0  | 50               | 222 | Standard       | 100            |
| CTWR022A        | RU       | 7.500  | 190.0 | 0.189  | 4.8 | 2.050        | 52.0  | 50               | 222 | Standard       | 100            |
| CTWR023A        | RU       | 10.000 | 250.0 | 0.189  | 4.8 | 2.910        | 74.0  | 50               | 222 | Standard       | 100            |
| CTWR024A        | RU       | 11.000 | 280.0 | 0.189  | 4.8 | 3.190        | 81.0  | 50               | 222 | Standard       | 100            |
| WITA-50RL-UVB-M | —        | 11.020 | 280.0 | 0.190  | 4.8 | 3.030        | 77.0  | 50               | 222 | Standard       | 1000           |
| CTWR025A        | —        | 11.875 | 300.0 | 0.189  | 4.8 | 3.350        | 85.0  | 50               | 222 | Standard       | 100            |
| CTWR026A        | RU       | 12.250 | 310.0 | 0.189  | 4.8 | 3.500        | 89.0  | 50               | 222 | Standard       | 100            |
| CTWR027A        | RU       | 14.500 | 368.0 | 0.189  | 4.8 | 4.020        | 102.0 | 50               | 222 | Standard       | 100            |
| CTWR028A        | RU       | 15.187 | 385.0 | 0.189  | 4.8 | 4.570        | 116.0 | 50               | 222 | Standard       | 100            |
| WITA-50L-UVB-M  | —        | 15.750 | 391.2 | 0.180  | 4.6 | 4.520        | 114.8 | 50               | 222 | Standard       | 1000           |
| CTWR029A        | RU       | 17.000 | 432.0 | 0.189  | 4.8 | 4.920        | 125.0 | 50               | 222 | Standard       | 100            |
| CTWR030A        | RU       | 17.750 | 450.0 | 0.189  | 4.8 | 5.120        | 130.0 | 50               | 222 | Standard       | 100            |
| CTWR031A        | RU       | 19.687 | 500.0 | 0.189  | 4.8 | 5.910        | 150.0 | 50               | 222 | Standard       | 100            |
| CTWR033A        | —        | 21.687 | 550.0 | 0.189  | 4.8 | 6.540        | 166.0 | 50               | 222 | Standard       | 100            |
| WITA-50XL-UVB-C | —        | 25.000 | 635.0 | 0.190  | 4.8 | 7.480        | 190.0 | 50               | 222 | Standard       | 100            |
| CTWR063A        | —        | 36.000 | 914.0 | 0.189  | 4.8 | 10.630       | 270.0 | 50               | 222 | Standard       | 100            |
| CTWR064A        | —        | 4.750  | 120.0 | 0.299  | 7.6 | 1.180        | 30.0  | 120              | 534 | Heavy Duty     | 100            |
| CTWR065A        | —        | 6.000  | 150.0 | 0.299  | 7.6 | 1.540        | 39.0  | 120              | 534 | Heavy Duty     | 100            |
| CTWR066A        | RU       | 8.000  | 203.0 | 0.299  | 7.6 | 2.170        | 55.0  | 120              | 534 | Heavy Duty     | 100            |
| WITA-120S-UVB-D | —        | 8.600  | 218.0 | 0.300  | 7.6 | 2.010        | 51.0  | 120              | 534 | Heavy Duty     | 500            |
| CTWR067A        | RU       | 9.437  | 240.0 | 0.299  | 7.6 | 2.600        | 66.0  | 120              | 534 | Heavy Duty     | 100            |
| CTWR068A        | RU       | 11.000 | 280.0 | 0.299  | 7.6 | 3.070        | 78.0  | 120              | 534 | Heavy Duty     | 100            |
| CTWR069A        | RU       | 11.875 | 300.0 | 0.299  | 7.6 | 3.500        | 88.0  | 120              | 534 | Heavy Duty     | 100            |
| CTWR070A        | RU       | 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        | RU       | 15.000 | 380.0 | 0.299  | 7.6 | 4.330        | 110.0 | 120              | 534 | Heavy Duty     | 100            |
| WITA-120R-UVB-D | —        | 15.750 | 400.0 | 0.310  | 7.8 | 4.450        | 113.0 | 120              | 534 | Heavy Duty     | 500            |
| WITA-120L-UVB-D | —        | 21.650 | 550.0 | 0.310  | 7.8 | 6.380        | 162.0 | 120              | 534 | Heavy Duty     | 500            |
| CTWR073A        | RU       | 17.750 | 450.0 | 0.315  | 8.0 | 5.250        | 133.0 | 175              | 778 | Heavy Duty     | 100            |
| CTWR074A        | RU       | 21.875 | 550.0 | 0.315  | 8.0 | 6.500        | 166.0 | 175              | 778 | Heavy Duty     | 100            |
| WITA-175R-UVB-L | —        | 24.000 | 610.0 | 0.350  | 9.0 | 7.020        | 178.0 | 175              | 778 | Heavy Duty     | 50             |
| CTWR075A        | RU       | 24.000 | 610.0 | 0.354  | 9.0 | 7.280        | 185.0 | 175              | 778 | Heavy Duty     | 100            |
| CTWR076A        | RU       | 27.000 | 680.0 | 0.354  | 9.0 | 8.270        | 210.0 | 175              | 778 | Heavy Duty     | 100            |
| CTWR077A        | RU       | 28.000 | 705.0 | 0.354  | 9.0 | 8.660        | 220.0 | 175              | 778 | Heavy Duty     | 100            |
| CTWR078A        | RU       | 30.000 | 762.0 | 0.354  | 9.0 | 9.290        | 236.0 | 175              | 778 | Heavy Duty     | 100            |
| CTWR079A        | RU       | 32.000 | 812.0 | 0.354  | 9.0 | 9.690        | 246.0 | 175              | 778 | Heavy Duty     | 100            |
| CTWR080A        | RU       | 36.000 | 914.0 | 0.354  | 9.0 | 10.630       | 270.0 | 175              | 778 | Heavy Duty     | 100            |
| WITA-175L-UVB-Q | —        | 36.000 | 914.0 | 0.350  | 9.0 | 10.910       | 277.0 | 175              | 778 | Heavy Duty     | 25             |
| CTWR081A        | RU       | 46.000 | 1168  | 0.354  | 9.0 | 14.170       | 360.0 | 175              | 778 | Heavy Duty     | 100            |
| CTWR082A        | RU       | 48.000 | 1219  | 0.354  | 9.0 | 15.000       | 380.0 | 175              | 778 | Heavy Duty     | 100            |
| CTWR084A        | —        | 59.000 | 1500  | 0.354  | 9.0 | 18.270       | 464.0 | 175              | 778 | Heavy Duty     | 100            |



**CTHD**  
Extra Heavy Duty Cable Tie



Specifications:

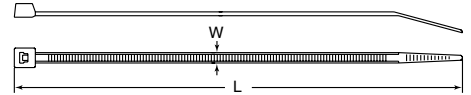
- Material: UL94 V-2 Nylon 6/6
- Color: See Table
- Service Temperature: -40°F to 185°F (-40°C to 85°C)

Features:

- High tensile strength for demanding applications

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

**CT**  
Colored Locking Cable Tie

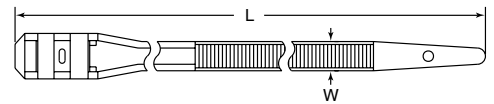


Specifications:

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

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

**CTDL**  
Double Locking Cable Tie



Specifications:

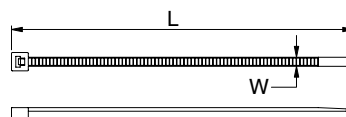
- Material: UL 94 V-2 Nylon 6/6
- Color: Black

Features:

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

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

**WITA-V0**  
UL94 V-0 Locking Cable Tie



Specifications:

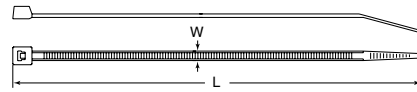
- Material: UL94 V-0 Nylon 6/6
- Color: Natural

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



# CABLE TIES & INSTALLATION TOOLS

## CTHS / WITA-HS Heat Stabilized Cable Tie



**Specifications:**

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

**Features:**

- Suitable for higher temperature applications

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

## CTG Cable Tie Installation Tools



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6

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

## CTR / WIT-RT Standard Releasable Cable Tie

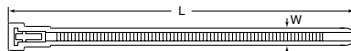


Figure 1

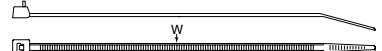


Figure 2

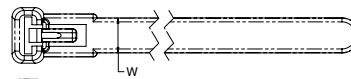


Figure 3

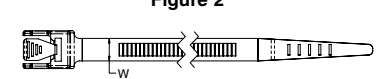


Figure 4

**Specifications:**

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

**Features:**

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

| Item No.      | Approval | Figure | L Ref. |       | W Ref. |      | Max Bundle Ø |       | Tensile Strength |      | Bulk Pack Qty. |
|---------------|----------|--------|--------|-------|--------|------|--------------|-------|------------------|------|----------------|
|               |          |        | In     | mm    | In     | mm   | In           | mm    | Lbs              | N    |                |
| WIT-RT-1-M    | —        | 3      | 8.093  | 206.0 | 0.300  | 7.6  | 1.875        | 48.0  | 30               | 133  | 1000           |
| CTR006A       | —        | 2      | 4.000  | 100.0 | 0.142  | 3.6  | 1.000        | 25.0  | 40               | 178  | 100            |
| WIT-RT-0550-M | —        | 4      | 5.500  | 139.7 | 0.210  | 5.3  | 1.250        | 31.8  | 40               | 178  | 1000           |
| WIT-RT-0800-M | —        | 4      | 8.000  | 203.2 | 0.210  | 5.3  | 2.000        | 50.8  | 40               | 178  | 1000           |
| WIT-RT-1050-M | —        | 4      | 10.500 | 266.7 | 0.210  | 5.3  | 2.500        | 63.5  | 40               | 178  | 1000           |
| WIT-50SR-M    | CTR001A  | 1      | 5.000  | 125.0 | 0.299  | 7.6  | 1.180        | 30.0  | 50               | 222  | 100            |
| WIT-50SR-M    | —        | 2      | 6.000  | 152.4 | 0.190  | 4.8  | 1.500        | 38.1  | 50               | 222  | 1000           |
| WIT-50RR-M    | CTR002A  | 1      | 6.000  | 150.0 | 0.299  | 7.6  | 1.380        | 35.0  | 50               | 222  | 1000           |
| WIT-50RR-M    | —        | 2      | 8.000  | 203.2 | 0.190  | 4.8  | 2.000        | 50.8  | 50               | 222  | 1000           |
| CTR009A       | CTR003A  | 1      | 8.000  | 200.0 | 0.299  | 7.6  | 2.000        | 50.0  | 50               | 222  | 100            |
| WIT-50LR-M    | —        | 2      | 10.000 | 250.0 | 0.189  | 4.8  | 2.910        | 74.0  | 50               | 222  | 100            |
| WIT-50LR-M    | —        | 2      | 11.656 | 295.9 | 0.190  | 4.8  | 3.000        | 76.2  | 50               | 222  | 1000           |
| WIT-50LR-M    | —        | 2      | 11.656 | 295.9 | 0.190  | 4.8  | 3.000        | 76.2  | 50               | 222  | 1000           |
| CTR011A       | CTR005A  | 1      | 11.875 | 300.0 | 0.299  | 7.6  | 3.150        | 80.0  | 50               | 222  | 100            |
| WIT-RT-1525-Q | —        | 2      | 14.562 | 370.0 | 0.189  | 4.8  | 4.020        | 102.0 | 50               | 222  | 100            |
| WIT-RT-2150-Q | —        | 4      | 15.250 | 387.4 | 0.520  | 13.2 | 4.000        | 101.6 | 250              | 1113 | 25             |
| WIT-RT-2150-Q | —        | 4      | 21.500 | 546.1 | 0.520  | 13.2 | 6.000        | 152.4 | 250              | 1113 | 25             |
| WIT-RT-2775-Q | —        | 4      | 27.750 | 704.9 | 0.520  | 13.2 | 8.000        | 203.2 | 250              | 1113 | 25             |





**MT**  
**UL Approved Stainless Steel Cable Tie**



**Specifications:**

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

**Features:**

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

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

**CTSS**  
**Stainless Steel Locking Tie**



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



**Specifications:**

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

See page 55 for Stainless Steel Cable Tie Holders.



**Features:**

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

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

**CTCS**  
**PVC Coated Stainless Steel Cable Tie**



**Specifications:**

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

**Features:**

- Coated version offers edge protection and prevents corrosion between metals

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

**CTLS / CTLC**  
**Stainless Steel Ladder Tie**

**Specifications:**

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



**Features:**

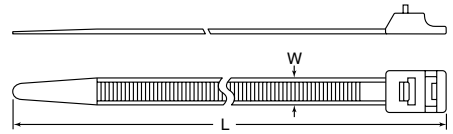
- Self locking design is easy to install
- Coated version offers protection between different metals
- Tensile strength up to 454 lbs

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



**SPECIALTY CABLE TIES**

**CTRL**  
Lashing Cable Tie



Specifications:

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

Features:

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

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

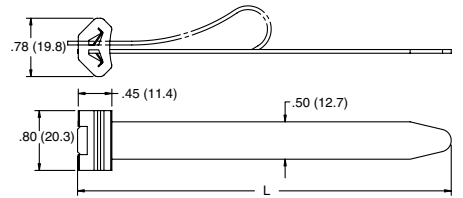
**HDSB**  
Heavy Duty Strap and Buckle

Specifications:

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

Features:

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



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

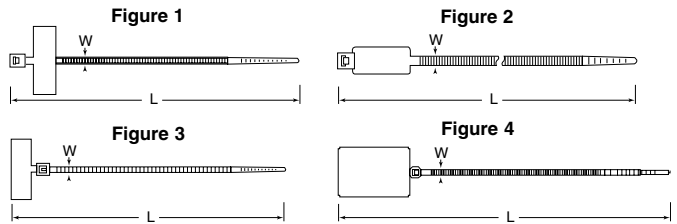
**CTM / WITA-F Series**  
Identification Marker Tie

Specifications:

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

Features:

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



| Item No.      | Approval | Figure | L Ref. |       | W Ref. |     | Max Bundle Ø |      | Tensile Strength |     | Marker Pad  |             | Bulk Pack Qty. |
|---------------|----------|--------|--------|-------|--------|-----|--------------|------|------------------|-----|-------------|-------------|----------------|
|               |          |        | In     | mm    | In     | mm  | In           | mm   | Lbs              | N   | In          | mm          |                |
| CTM100A       | RU       | 1      | 4.000  | 100.0 | 0.098  | 2.5 | 1.000        | 25.0 | 18               | 80  | 1.00 x 0.32 | 25.0 x 8.0  | 100            |
| WITA-F2-18R-M | —        | 3      | 4.330  | 110.0 | 0.100  | 2.5 | 0.980        | 25.0 | 18               | 80  | 1.00 X 0.31 | 25.0 X 7.9  | 1000           |
| CTM200A       | RU       | 3      | 4.375  | 110.0 | 0.098  | 2.5 | 1.000        | 25.0 | 18               | 80  | 1.00 x 0.32 | 25.0 x 8.0  | 100            |
| CTM400A       | RU       | 4      | 5.125  | 130.0 | 0.098  | 2.5 | 1.000        | 25.0 | 18               | 80  | 1.10 x 0.78 | 28.0 x 20.0 | 100            |
| CTM150A       | RU       | 1      | 7.875  | 200.0 | 0.098  | 2.5 | 2.000        | 50.0 | 18               | 80  | 1.18 x 0.60 | 30.0 x 15.0 | 100            |
| CTM300A       | RU       | 2      | 7.875  | 200.0 | 0.181  | 4.6 | 2.000        | 50.0 | 50               | 222 | 1.10 x 0.51 | 28.0 x 13.0 | 100            |
| CTM350A       | RU       | 2      | 10.625 | 270.0 | 0.181  | 4.6 | 3.000        | 75.0 | 50               | 222 | 1.10 x 0.51 | 28.0 x 13.0 | 100            |

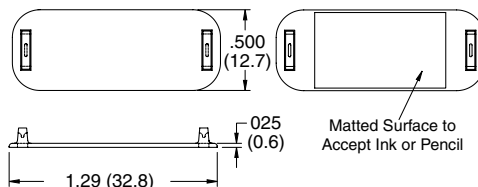
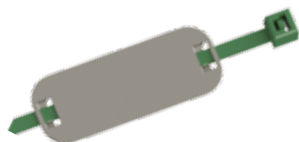
**WIT-MK-1**  
Marker Tag for Cable Ties

Specifications:

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

Features:

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



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

# DOUBLE HEADED & BEADED CABLE TIES



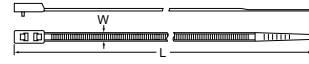
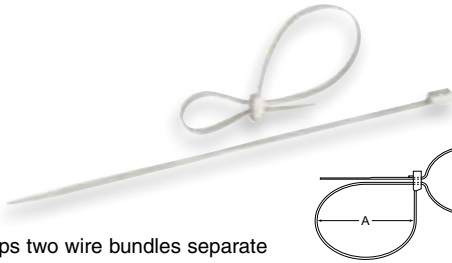
## CTDH / WITA-DH Double Headed Cable Tie

Specifications:

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

Features:

- Double head design keeps two wire bundles separate



| Item No.      |                     | 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           |

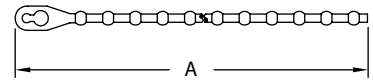
## BT Beaded Cable Tie

Specifications:

- Material: See Table
- Color: See Table

Features:

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



| Item No.                  |                              |                            |                             |                            | A Ref. Length |       | Max Bundle Ø 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                 | 2.500         | 63.5  | 0.563                                   | 14.3 | 1000           |
| BT-4-10-RD                | BT-4-10-YL                   | BT-4-10-BL                 | BT-4-10-BK                  | BT-4-01-NT                 | 4.000         | 101.6 | 1.000                                   | 25.4 | 1000           |
| BT-5-10-RD                | BT-5-10-YL                   | BT-5-10-BL                 | BT-5-10-BK                  | BT-5-01-NT                 | 5.000         | 127   | 1.250                                   | 31.8 | 1000           |
| BT-6-10-RD                | BT-6-10-YL                   | BT-6-10-BL                 | BT-6-10-BK                  | BT-6-01-NT                 | 6.000         | 152.4 | 1.750                                   | 44.5 | 1000           |
| BT-8-10-RD                | BT-8-10-YL                   | BT-8-10-BL                 | BT-8-10-BK                  | BT-8-01-NT                 | 8.750         | 222.3 | 2.375                                   | 60.3 | 1000           |
| BT-10-10-RD               | BT-10-10-YL                  | BT-10-10-BL                | BT-10-10-BK                 | BT-10-01-NT                | 10.750        | 273.1 | 3.125                                   | 85.7 | 1000           |
| BT-12-10-RD               | BT-12-10-YL                  | BT-12-10-BL                | BT-12-10-BK                 | BT-12-01-NT                | 12.750        | 323.9 | 3.625                                   | 92.1 | 1000           |

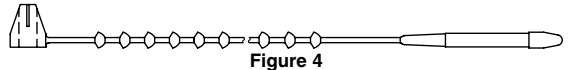
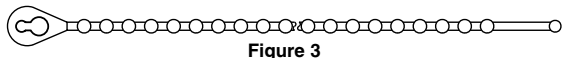
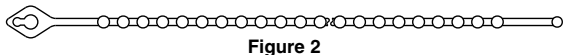
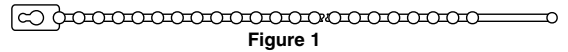
## CTKT / LBT Ball & Locking Beaded Cable Tie

Specifications:

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

Features:

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



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

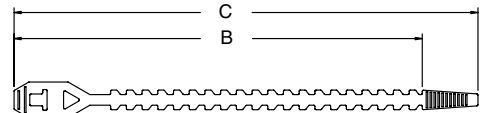
## HT Hanking Cable Tie

Specifications:

- Material: Polyethylene
- Color: Natural

Features:

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



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





# SCREW MOUNT & SPECIALTY CABLE TIES

## CWCT Wire Collect Cable Tie

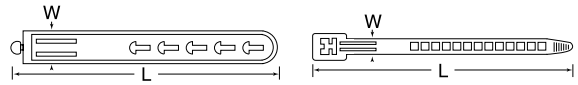


Figure 1

Figure 2

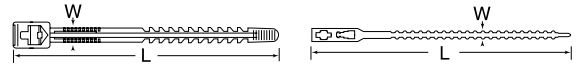


Figure 3

Figure 4

Specifications:

- Material: Polyethylene
- Color: See Table

Features:

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

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



## CTMT Screw Mount Cable Tie

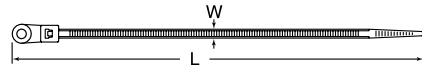


Figure 1

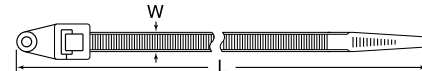


Figure 2

Specifications:

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

Features:

- Mountable with single screw or bolt

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

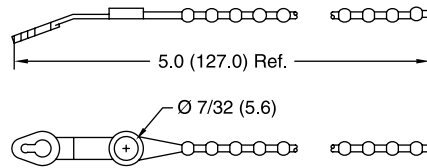


## ST Screw Mount Beaded Cable Tie



Specifications:

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



Features:

- Tie is easily releasable
- PP material is very flexible

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

## PT Push In Beaded Cable Tie

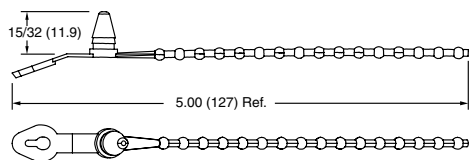


Specifications:

- Material: See table
- Color: See table

Features:

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



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



**CTPM / WIT-A / WITBH**  
**Push Mount Cable Tie**

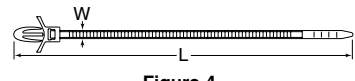


Figure 4

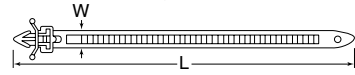


Figure 5

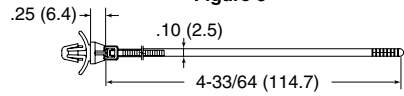


Figure 6

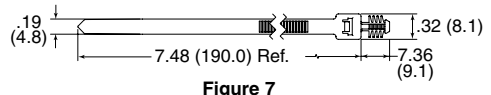


Figure 7

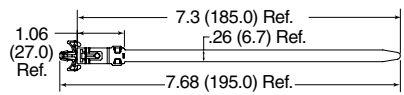


Figure 8



**Specifications:**

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

**Features:**

- Easily snaps into pre-drilled holes
- Can be mounted to installation before final assembly
- Combines a cable tie, mount and fastener in a single part
- Figures 2 and 8 are removable from the top of the board



Figure 1



Figure 2

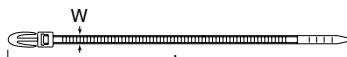


Figure 3

| Item No.        | Approval | Figure | L Ref.       |              | W Ref.       |              | Max Bundle Ø |      | Tensile Strength |     | Mounting Hole Ø |           | Panel Thickness |           | Bulk Pack Qty. |
|-----------------|----------|--------|--------------|--------------|--------------|--------------|--------------|------|------------------|-----|-----------------|-----------|-----------------|-----------|----------------|
|                 |          |        | In           | mm           | In           | mm           | In           | mm   | Lbs              | N   | In              | mm        | In              | mm        |                |
| CTPM001A        | RU       | 1      | 6.125        | 155.0        | 0.138        | 3.5          | 1.570        | 40.0 | 40               | 178 | 0.187           | 4.7       | 0.118           | 2.9       | 100            |
| CTPM003A        | —        | 1      | 5.125        | 130.0        | 0.189        | 4.8          | 1.180        | 30.0 | 50               | 222 | 0.187           | 4.7       | 0.118           | 2.9       | 100            |
| WIT-50RLA-1     | —        | 1      | 5.320        | 135.0        | 0.190        | 4.8          | 1.000        | 25.4 | 50               | 222 | 0.250           | 6.4       | 0.125           | 3.18      | 1000           |
| WIT-50RLA-2     | —        | 1      | 6.690        | 170.0        | 0.190        | 4.8          | 1.500        | 38.1 | 50               | 222 | 0.250           | 6.4       | 0.125           | 3.18      | 1000           |
| WIT-50RLA-3     | —        | 1      | 7.870        | 200.0        | 0.190        | 4.8          | 1.750        | 44.5 | 50               | 222 | 0.250           | 6.4       | 0.125           | 3.18      | 1000           |
| CTPM004A        | —        | 1      | 8.000        | 203.0        | 0.189        | 4.8          | 2.000        | 50.8 | 50               | 222 | 0.187           | 4.7       | 0.118           | 2.9       | 100            |
| CTPM002A        | —        | 1      | 8.000        | 203.0        | 0.189        | 4.8          | 2.000        | 50.8 | 50               | 222 | 0.250           | 6.4       | 0.118           | 2.9       | 100            |
| WIT-50RLA-M     | RU       | 1      | 8.870        | 225.4        | 0.190        | 4.8          | 2.000        | 50.8 | 50               | 222 | 0.187           | 4.7       | 0.093           | 2.36      | 1000           |
| WIT-30RAR1-2    | —        | 2      | 5.125        | 130          | 0.14         | 3.6          | 1.000        | 25.4 | 30               | 135 | 0.189           | 4.8       | 0.079 - 0.094   | 2.0 - 2.4 | 100            |
| CTPM005A        | —        | 2      | 5.125        | 130.0        | 0.138        | 3.5          | 1.180        | 30.0 | 40               | 178 | 0.187           | 4.7       | 0.094           | 2.3       | 100            |
| CTPM006A        | —        | 2      | 8.000        | 200.0        | 0.138        | 3.5          | 2.000        | 50.8 | 40               | 178 | 0.187           | 4.7       | 0.094           | 2.3       | 100            |
| WIT-30LAR1-2    | —        | 2      | 6.125        | 155.5        | 0.14         | 3.6          | 1.25         | 31.8 | 30               | 135 | 0.189           | 4.8       | 0.079 - 0.094   | 2.0 - 2.4 | 100            |
| CTPM007A        | —        | 3      | 5.125        | 130.0        | 0.189        | 4.8          | 1.180        | 30.0 | 50               | 222 | 0.250           | 6.4       | 0.098           | 2.4       | 100            |
| CTPM008A        | —        | 3      | 8.000        | 200.0        | 0.189        | 4.8          | 2.000        | 50.8 | 50               | 222 | 0.250           | 6.4       | 0.130           | 3.3       | 100            |
| CTPM009A        | —        | 4      | 4.750        | 112.0        | 0.098        | 2.5          | 1.000        | 25.4 | 18               | 80  | 0.187           | 4.7       | 0.120           | 3         | 100            |
| CTPM010A        | —        | 4      | 6.125        | 155.0        | 0.138        | 3.5          | 1.420        | 36.0 | 40               | 178 | 0.187           | 4.7       | 0.118           | 2.9       | 100            |
| CTPM011A        | RU       | 4      | 5.125        | 130.0        | 0.189        | 4.8          | 1.180        | 30.0 | 50               | 222 | 0.234           | 5.9       | 0.110           | 2.8       | 100            |
| CTPM012A        | RU       | 4      | 8.000        | 200.0        | 0.189        | 4.8          | 2.000        | 50.8 | 50               | 222 | 0.234           | 5.9       | 0.110           | 2.8       | 100            |
| WIT-18RA-01     | —        | 5      | 4.290        | 109.0        | 0.100        | 2.5          | 0.830        | 21.0 | 18               | 80  | 0.190           | 4.8       | 0.060           | 1.6       | 1000           |
| CTPM101A        | —        | 5      | 6.000        | 152.0        | 0.315        | 8.0          | 1.460        | 37.0 | 90               | 400 | 0.218           | 5.5       | 0.078           | 1.9       | 100            |
| WIT-50SA-01     | —        | 5      | 5.240        | 133.0        | 0.190        | 4.8          | 0.910        | 23.0 | 50               | 222 | 0.250           | 6.4       | 0.060           | 1.6       | 1000           |
| WIT-50SA-1-01   | —        | 5      | 5.240        | 133.0        | 0.190        | 4.8          | 0.910        | 23.0 | 50               | 222 | 0.250 - 0.270   | 6.4 - 6.8 | 0.030 - 0.080   | 0.8 - 2.0 | 1000           |
| WIT-50SRA-01    | —        | 5      | 6.810        | 173.0        | 0.190        | 4.8          | 1.420        | 36.0 | 50               | 222 | 0.250           | 6.4       | 0.060           | 1.6       | 1000           |
| WIT-50SRA-1-01  | —        | 5      | 6.810        | 173.0        | 0.190        | 4.8          | 1.420        | 36.0 | 50               | 222 | 0.250 - 0.270   | 6.4 - 6.8 | 0.030 - 0.080   | 0.8 - 2.0 | 1000           |
| WIT-50RA-01     | —        | 5      | 7.800        | 198.0        | 0.190        | 4.8          | 1.690        | 43.0 | 50               | 222 | 0.250           | 6.4       | 0.060           | 1.6       | 500            |
| WIT-50RA-1-01   | —        | 5      | 7.800        | 198.0        | 0.190        | 4.8          | 1.690        | 43.0 | 50               | 222 | 0.250 - 0.270   | 6.4 - 6.8 | 0.030 - 0.080   | 0.8 - 2.0 | 500            |
| WIT-18R1A-4-01  | RU       | 6      | 4.760        | 121.1        | 0.100        | 2.5          | 0.750        | 19.1 | 18               | 80  | 0.156           | 4.0       | 0.031 - 0.078   | 0.8 - 2.0 | 1000           |
| WIT-18RA-4-01-M | RU       | 6      | 4.760        | 121.1        | 0.100        | 2.5          | 0.750        | 19.1 | 18               | 80  | 0.187           | 4.8       | 0.031 - 0.078   | 0.8 - 2.0 | 1000           |
| WIT-18R2A-4-01  | RU       | 6      | 4.760        | 121.1        | 0.100        | 2.5          | 0.750        | 19.1 | 18               | 80  | 0.187           | 4.8       | 0.062 - 0.140   | 1.6 - 3.6 | 1000           |
| WITBH-50R       | —        | 7      | See Figure 7 | See Figure 7 | See Figure 7 | See Figure 7 | 1.750        | 44.5 | 50               | 228 | 0.25            | 6.4       | 0.250           | 6.4       | 100            |
| WITBH-50R-HS    | —        | 7      | See Figure 7 | See Figure 7 | See Figure 7 | See Figure 7 | 1.750        | 44.5 | 50               | 228 | 0.25            | 6.4       | 0.250           | 6.4       | 100            |
| WIT-40LAR       | —        | 8      | See Figure 8 | See Figure 8 | See Figure 8 | See Figure 8 | 1.970        | 50   | 40               | 178 | 0.187           | 4.8       | 0.020 - 0.091   | 0.5 - 2.3 | 100            |

**WIT-30RRA / TOAH**  
**Releasable Arrowhead Cable Tie**



**Specifications:**

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

**Features:**

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

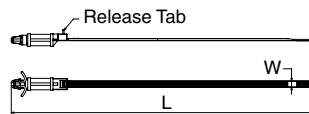


Figure 1

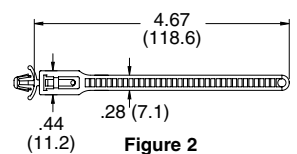


Figure 2

| Item No.        | Approval | Figure | L Ref. |       | W Ref. |     | Max Bundle Ø |      | Tensile Strength |     | Mounting Hole Ø |     | Panel Thickness |           | Spacer Length |      | Bulk Pack Qty. |
|-----------------|----------|--------|--------|-------|--------|-----|--------------|------|------------------|-----|-----------------|-----|-----------------|-----------|---------------|------|----------------|
|                 |          |        | In     | mm    | In     | mm  | In           | mm   | Lbs              | N   | In              | mm  | In              | mm        | In            | mm   |                |
| WIT-30RRA-4-M   | RU       | 1      | 6.300  | 160.3 | 0.140  | 3.6 | 1.250        | 31.8 | 30               | 135 | 0.187           | 4.8 | 0.030 - 0.078   | 0.8 - 2.0 | 0.280         | 7.1  | 1000           |
| WIT-30RRA-8-M   | RU       | 1      | 6.600  | 166.7 | 0.140  | 3.6 | 1.250        | 31.8 | 30               | 135 | 0.187           | 4.8 | 0.030 - 0.078   | 0.8 - 2.0 | 0.530         | 13.5 | 1000           |
| WIT-30RRA-12-M  | RU       | 1      | 6.800  | 173.0 | 0.140  | 3.6 | 1.250        | 31.8 | 30               | 135 | 0.187           | 4.8 | 0.030 - 0.078   | 0.8 - 2.0 | 0.780         | 19.8 | 1000           |
| WIT-30RRA-16-M  | RU       | 1      | 7.100  | 179.4 | 0.140  | 3.6 | 1.250        | 31.8 | 30               | 135 | 0.187           | 4.8 | 0.030 - 0.078   | 0.8 - 2.0 | 1.000         | 25.4 | 1000           |
| WIT-30RRAA-4-M  | —        | 1      | 6.400  | 161.6 | 0.140  | 3.6 | 1.250        | 31.8 | 30               | 135 | 0.250           | 6.4 | 0.030 - 0.078   | 0.8 - 2.0 | 0.280         | 7.1  | 1000           |
| WIT-30RRAA-8-M  | —        | 1      | 6.600  | 168.0 | 0.140  | 3.6 | 1.250        | 31.8 | 30               | 135 | 0.250           | 6.4 | 0.030 - 0.078   | 0.8 - 2.0 | 0.530         | 13.5 | 1000           |
| WIT-30RRAA-12-M | —        | 1      | 6.900  | 174.3 | 0.140  | 3.6 | 1.250        | 31.8 | 30               | 135 | 0.250           | 6.4 | 0.030 - 0.078   | 0.8 - 2.0 | 0.780         | 19.8 | 1000           |
| WIT-30RRAA-16-M | —        | 1      | 7.100  | 180.7 | 0.140  | 3.6 | 1.250        | 31.8 | 30               | 135 | 0.250           | 6.4 | 0.030 - 0.078   | 0.8 - 2.0 | 1.000         | 25.4 | 1000           |
| TOAH-18-01      | —        | 2      | 4.670  | 118.6 | 0.280  | 7.1 | 1.125        | 28.5 | 40               | 178 | 0.250           | 6.4 | 0.062           | 1.6       | —             | —    | 1000           |



**CABLE TIES & STRAPS**

**TOBS**  
Adhesive/Screw Mount Tie

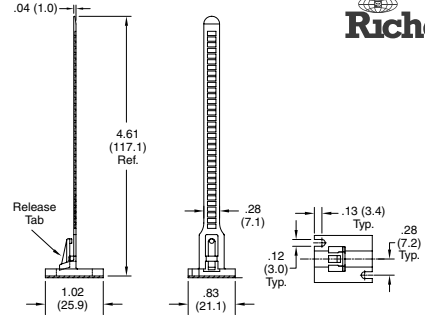


Specifications:

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

Features:

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



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

**ES**  
Rubber Strap with Locking Button



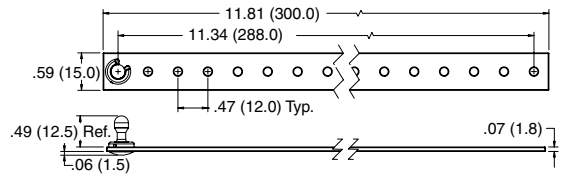
Specifications:

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

**RNS / LB**  
Nylon Strap with Locking Button

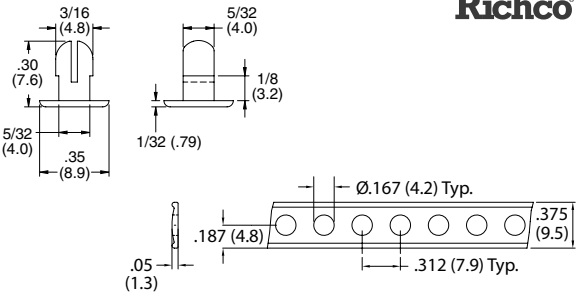


Specifications:

- Material: Nylon 6/6
- Color: Black

Features:

- 100 foot long strap can be cut to desired length
- Once bundle is wrapped, the strap is secured with mounting button, LB-5



| Item No. | Description    | Material  | Material UL Rating | Bulk Pack Qty. |
|----------|----------------|-----------|--------------------|----------------|
| RNS-167  | Strap          | Nylon 6/6 | UL94 HB            | 100 ft.        |
| LB-5     | Locking Button | Nylon 6/6 | UL94 V-2           | 100            |

**RKS**  
Hook and Loop Strap

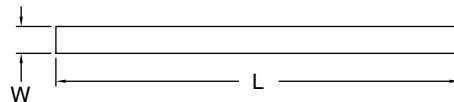


Specifications:

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

Features:

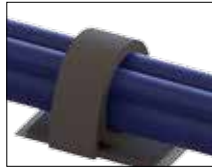
- Heavy duty hook and loop
- Features VELCRO® brand hook and loop material
- User can cut to desired length
- Excellent in reusable applications



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



**RKWB / RKWFA  
Hook & 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 .75"

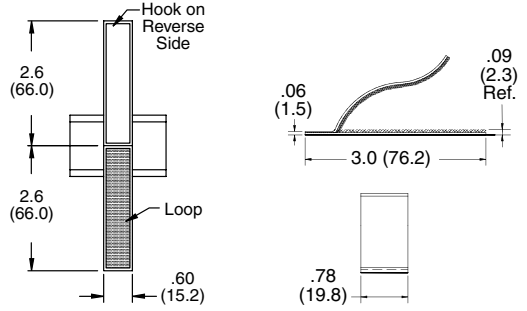


Figure 1

Figure 2

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

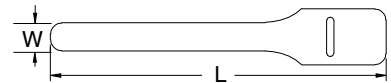
**CTHL / RKW  
Hook & Loop Cable Tie**

Specifications:

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

Features:

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



See page 55 for Hook & Loop Cable Tie Holders.

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

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

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



# HOOK & LOOP CABLE TIES & CINCH STRAPS

## RKWPR

### Plenum Rated Hook and Loop Cable Tie



**Specifications:**

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



**Features:**

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

| Item No.    | Screw Mount | L      |       | W     |      | A     |      | Bulk Pack Qty. |
|-------------|-------------|--------|-------|-------|------|-------|------|----------------|
|             |             | In     | mm    | In    | mm   | In    | mm   |                |
| RKWPR-6-6   | No          | 6.000  | 152.4 | 1.000 | 25.4 | 0.500 | 12.7 | 10             |
| RKWPR-8-6   | No          | 6.000  | 152.4 | .750  | 19.1 | 0.380 | 9.5  | 10             |
| RKWPR-8-8   | Yes         | 8.000  | 203.2 | 1.000 | 25.4 | 0.500 | 12.7 | 10             |
| RKWPR-8-9   | Yes         | 9.000  | 228.6 | 1.000 | 25.4 | 0.500 | 12.7 | 10             |
| RKWPR-8-11  | No          | 11.000 | 279.4 | 1.000 | 25.4 | 0.500 | 12.7 | 10             |
| RKWPR-8-12  | Yes         | 12.000 | 304.8 | 1.000 | 25.4 | 0.500 | 12.7 | 10             |
| RKWPR-8-13  | Yes         | 13.000 | 330.2 | 1.000 | 25.4 | 0.500 | 12.7 | 10             |
| RKWPR-12-9  | Yes         | 9.000  | 228.6 | 1.500 | 38.1 | 0.750 | 19.1 | 10             |
| RKWPR-12-13 | Yes         | 13.000 | 330.2 | 1.500 | 38.1 | 0.750 | 19.1 | 10             |

## RKWID

### Hook and Loop Marker Tie



**Specifications:**

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



**Features:**

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

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

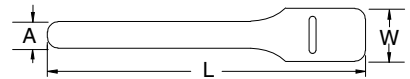
## RKWE

### Economy Hook and Loop Cable Tie



**Specifications:**

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



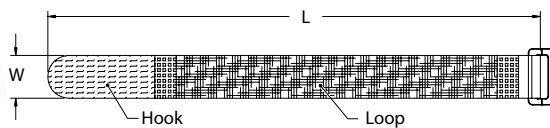
**Features:**

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

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

## RKWDM

### Hook and Loop Cinch Strap with Metal Buckle



**Specifications:**

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

**Features:**

- Metal buckle for heavy duty industrial applications

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





**RKWD**  
**Hook & Loop Cinch Strap**

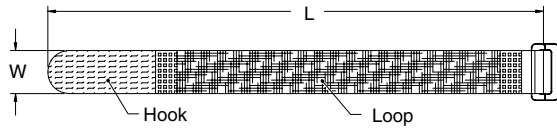


**Specifications:**

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

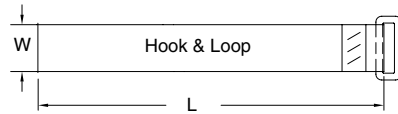
**Features:**

- Heavy duty hook and loop
- Buckle on the tie acts as a pulley providing leverage to pull the strap as tightly as needed
- The strap section goes through the buckle, the remainder of the material gets pulled around the buckle and can then be attached to the same side of the material
- The non-metallic buckle is safe to use around electrical and magnetic applications



| Item No.      |               | L Length |     | W     |      | Approximate Bundle Ø with Hook Fully Engaged |     | Bulk Pack Qty. |
|---------------|---------------|----------|-----|-------|------|--|-----|----------------|
| Black         | Orange        | In       | mm  | In    | mm   | In   | mm  |                |
| RKWD-12-12-BK | —             | 12.000   | 305 | 0.750 | 19.1 | 2.875  | 73  | 10             |
| RKWD-12-18-BK | —             | 18.000   | 457 | 0.750 | 19.1 | 4.750  | 121 | 10             |
| RKWD-16-9-BK  | RKWD-16-9-OR  | 9.000    | 229 | 1.000 | 25.4 | 1.875  | 48  | 10             |
| RKWD-16-12-BK | RKWD-16-12-OR | 12.000   | 305 | 1.000 | 25.4 | 2.875  | 73  | 10             |
| RKWD-16-15-BK | RKWD-16-15-OR | 15.000   | 381 | 1.000 | 25.4 | 3.750  | 95  | 10             |
| RKWD-16-20-BK | RKWD-16-20-OR | 20.000   | 508 | 1.000 | 25.4 | 5.500  | 140 | 10             |
| RKWD-16-24-BK | RKWD-16-24-OR | 24.000   | 609 | 1.000 | 25.4 | 6.625  | 168 | 10             |

**RKWDA**  
**Extra Long / Cut to Length Cinch Strap**



**Specifications:**

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

**Features:**

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

| Item No.       | L      |        | W     |      | Bundle Ø with Hook Fully Engaged |       | Bulk Pack Qty. |
|----------------|--------|--------|-------|------|----------------------------------|-------|----------------|
|                | In     | mm     | In    | mm   | In                               | mm    |                |
| RKWDA-16-20BK  | 20.000 | 508.0  | 1.000 | 25.4 | 5.500                            | 140.0 | 10             |
| RKWDA-16-24BK  | 24.000 | 609.0  | 1.000 | 25.4 | 6.325                            | 168.0 | 10             |
| RKWDA-16-36-BK | 36.000 | 914.0  | 1.000 | 25.4 | 10.500                           | 267.0 | 10             |
| RKWDA-16-48-BK | 48.000 | 1219.0 | 1.000 | 25.4 | 14.375                           | 365.0 | 10             |
| RKWDA-32-20-BK | 20.000 | 508.0  | 2.000 | 50.8 | 5.500                            | 140.0 | 10             |
| RKWDA-32-24-BK | 24.000 | 610.0  | 2.000 | 50.8 | 6.628                            | 169.0 | 10             |
| RKWDA-32-36-BK | 36.000 | 914.0  | 2.000 | 50.8 | 10.500                           | 267.0 | 10             |
| RKWDA-32-48-BK | 48.000 | 1219.0 | 2.000 | 50.8 | 14.375                           | 365.0 | 10             |

**RKWDG / RKWDE**  
**Hook & Loop Cinch Strap with Grommet**

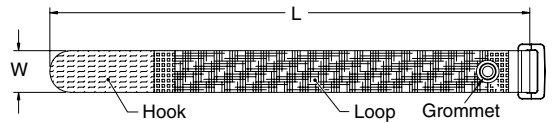


Figure 1

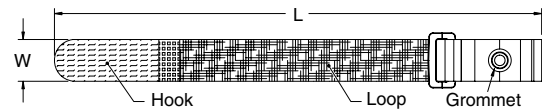


Figure 2

**Specifications:**

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

**Features:**

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

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



## HOOK & LOOP ROLLS

### RKWR Hook & Loop Roll

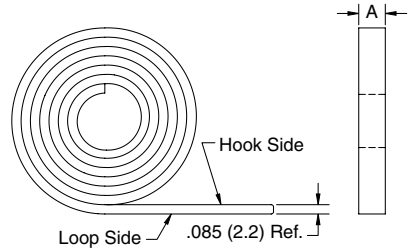


**Specifications:**

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

**Features:**

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



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

### RKWR E Economy Hook & Loop Roll

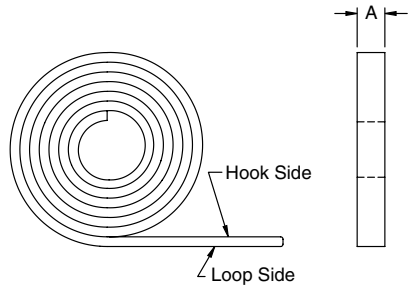


**Specifications:**

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

**Features:**

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



| Item No.    | A     |      | Roll Length |
|-------------|-------|------|-------------|
|             | In    | mm   |             |
| RKWRE-3L-BK | 0.500 | 12.7 | 25 Yards    |
| RKWRE-1L-BK | 0.750 | 19.1 | 25 Yards    |

### RKWRPR Plenum Rated Hook & Loop Roll

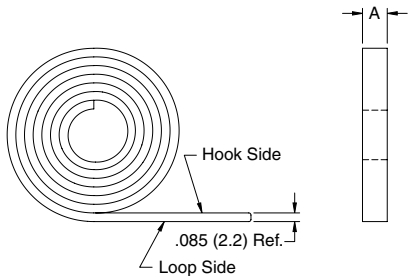


**Specifications:**

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

**Features:**

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



| Item No.  | A     |      | Roll Length |
|-----------|-------|------|-------------|
|           | In    | mm   |             |
| RKWRPR-3  | 0.500 | 12.7 | 5 Yards     |
| RKWRPR-1  | 0.750 | 19.1 | 5 Yards     |
| RKWRPR-2  | 1.000 | 25.4 | 5 Yards     |
| RKWRPR-3L | 0.500 | 12.7 | 25 Yards    |
| RKWRPR-1L | 0.750 | 19.1 | 25 Yards    |
| RKWRPR-2L | 1.000 | 25.4 | 25 Yards    |



# HOSE PROTECTION

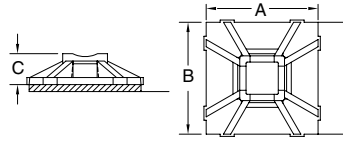
Wrap it. Cover it. Shield it. Secure it.

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**MFTH**  
Mini Cable Tie Mount with Adhesive Base



Specifications:

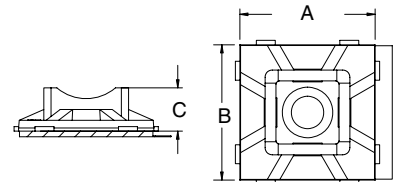
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

- Cable ties can be inserted from all four sides
- Acrylic adhesive is a general purpose adhesive and gains strength with dwell time
- Rubber adhesive develops its strength extremely fast

| Item No.        |                 | Used with 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 | 0.140 | 3.5 |
| MFTH-2-01A1-M   | MFTH-2-01A1-C   | 18 lbs               |          | Rubber   | 0.500 | 12.7 | 0.500 | 12.7 | 0.140 | 3.5 |

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



Specifications:

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

Features:

- Cable ties can be inserted from all four sides
- May be secured with screws or adhesive
- Rubber adhesive develops its strength extremely fast
- Acrylic adhesive is a general purpose adhesive and gains strength with dwell time

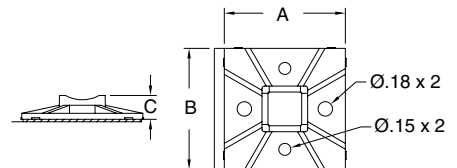
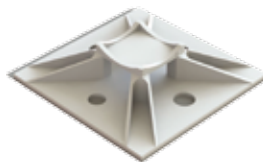
3/4" x 3/4"

| Item No. Natural |              | Item No. Black  |                 | Used with Cable Ties | Approval | Adhesive    | Recommended Mounting Screw | A                     |       | B    |       | C    |       |     |
|------------------|--------------|-----------------|-----------------|----------------------|----------|-------------|----------------------------|-----------------------|-------|------|-------|------|-------|-----|
| 1000 / Bag       | 100 / Bag    | 1000 / Bag      | 100 / Bag       |                      |          |             |                            | In                    | mm    | In   | mm    | In   | mm    |     |
| FTH-5A-RT-M      | FTH-5A-RT-C  | FTH-5A-RT-UVB-M | FTH-5A-RT-UVB-C |                      |          | 18 & 40 lbs | Acrylic                    | #6 and M3.5 Flat Head | 0.750 | 19.1 | 0.750 | 19.1 | 0.240 | 6.1 |
| FTH-5A1-RT-M     | FTH-5A1-RT-C | —               | —               |                      |          | 18 & 40 lbs | Rubber                     | #6 and M3.5 Flat Head | 0.750 | 19.1 | 0.750 | 19.1 | 0.240 | 6.1 |
| FTH-5-01-M       | FTH-5-01-C   | FTH-5-UVB-M     | FTH-5-UVB-C     |                      |          | 18 & 40 lbs | Screw Mount                | #6 and M3.5 Flat Head | 0.750 | 19.1 | 0.750 | 19.1 | 0.240 | 6.1 |

1" x 1"

| Item No. Natural |              | Item No. Black  |                 | Used with Cable Ties | Approval | Adhesive    | Recommended Mounting Screw | A     |      | B     |      | C     |     |
|------------------|--------------|-----------------|-----------------|----------------------|----------|-------------|----------------------------|-------|------|-------|------|-------|-----|
| 1000 / Bag       | 100 / Bag    | 1000 / Bag      | 100 / Bag       |                      |          |             |                            | In    | mm   | In    | mm   | In    | mm  |
| FTH-7A-RT-M      | FTH-7A-RT-C  | FTH-7A-RT-UVB-M | FTH-7A-RT-UVB-C | 50 lbs               |          | Acrylic     | #8 and M4 Flat Head        | 1.000 | 25.4 | 1.000 | 25.4 | 0.280 | 7.1 |
| FTH-7A1-RT-M     | FTH-7A1-RT-C | —               | —               | 50 lbs               |          | Rubber      | #8 and M4 Flat Head        | 1.000 | 25.4 | 1.000 | 25.4 | 0.280 | 7.1 |
| FTH-7-01-M       | FTH-7-01-C   | FTH-7-UVB-M     | FTH-7-UVB-C     | 50 lbs               |          | Screw Mount | #8 and M4 Flat Head        | 1.000 | 25.4 | 1.000 | 25.4 | 0.280 | 7.1 |

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



Specifications:

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

Features:

- Cable ties can be inserted from all four sides
- May be secured with screws or adhesive
- Acrylic adhesive is a general purpose adhesive and gains strength with dwell time
- Low profile for tight spaces

1-1/2" x 1-1/2"

| Item No.    |             | 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 | 0.300 | 7.6 |

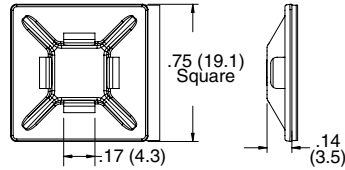
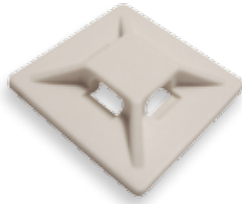
2" x 2"

| 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 | 2.000 | 50.8 | 0.300 | 7.6 |



# CABLE TIE MOUNTS

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



**Specifications:**

- Material: UL94 HB ABS
- Color: White

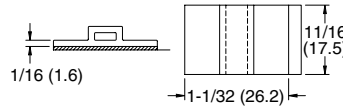
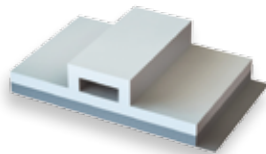
**Features:**

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

3/4" x 3/4"

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

## FTH-2 Cable Tie Mount on Adhesive Base



**Specifications:**

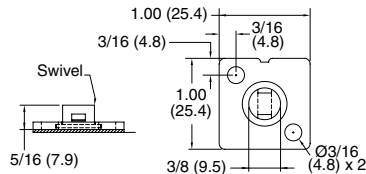
- Material: UL94 V-1 PPE/PS
- Color: White

**Features:**

- Easily applied

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

## FTH-4 Cable Tie Mount with Swivel



**Specifications:**

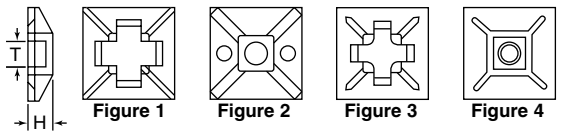
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

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

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

## TMA Cable Tie Mount

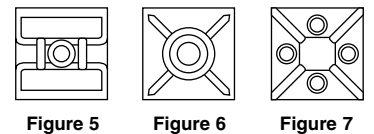


**Specifications:**

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

**Features:**

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

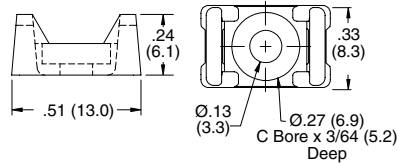


| Item No. | Figure | Length |       | Width |       | Height |      | Mounting Hole Ø |      | Mounting Directions | Slot Width T |       | Use With Cable Tie Classification | Bulk Pack Qty. |
|----------|--------|--------|-------|-------|-------|--------|------|-----------------|------|---------------------|--------------|-------|------------------------------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

# CABLE TIE MOUNTS



## FTH-28RS Rivet / Screw Mount Cable Tie Mount



**Specifications:**

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

**Features:**

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

| Mounting Rivets for FTH-28RS |           |  | Use Rivet Item No. |
|------------------------------|-----------|--|--------------------|
| Panel Thickness              |           |  |                    |
| 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 with Cable Ties | Recommended Mounting Screw        | Pack Qty. |
|-------------|----------------------|-----------------------------------|-----------|
| FTH-28RS-01 | 18 & 40 lbs          | #4, M3 Screw, SR-30XX (See Table) | 1000      |

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

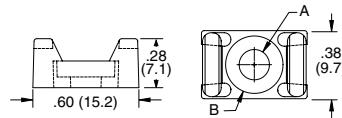


Figure 1

**Specifications:**

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

**Features:**

- Mounts with screw or snap rivet (see rivet table)
- Cradle design provides stability for the bundle

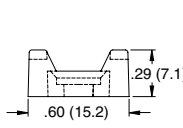


Figure 2

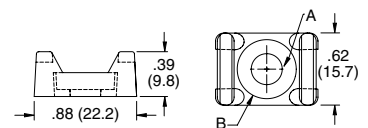


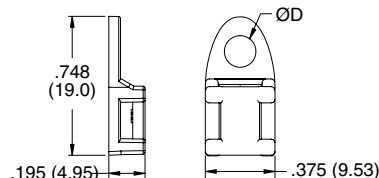
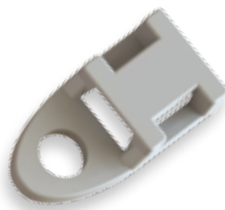
Figure 3

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

| Mounting Rivets for Figure 1 |           |                       |
|------------------------------|-----------|-----------------------|
| Panel Thickness              |           | 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 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 thru 50 lbs       | #8 or M4           | 1000           |
| FTH-35-01 | 0.200    | 5.1 | 18 thru 50 lbs       | #10 or M5          | 1000           |



# CABLE TIE MOUNTS

## TMS Screw In Saddle Mount

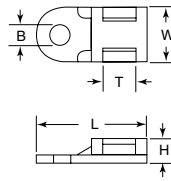


Figure 1

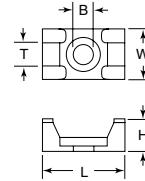


Figure 2

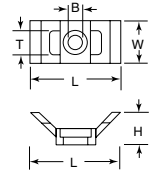


Figure 3

Specifications:

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

Features:

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



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

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

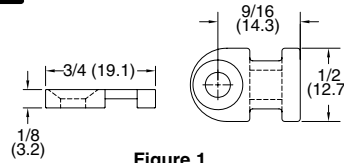
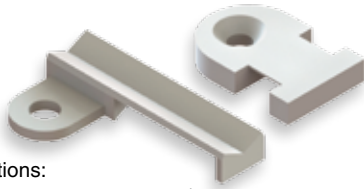


Figure 1

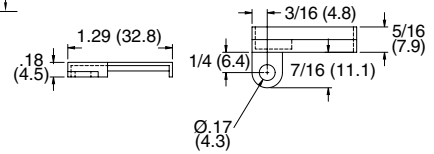


Figure 2



Specifications:

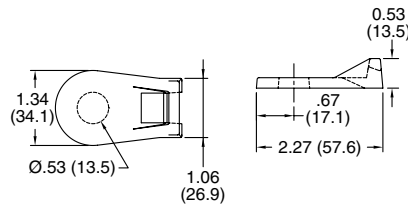
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

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

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

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



Specifications:

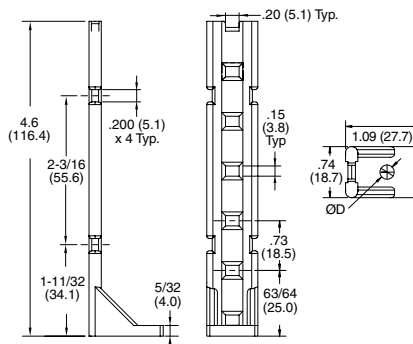
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:

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

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

## FTH-24 Screw Mount Wire Harness Cable Tie Mount



Specifications:

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

Features:

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

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



**FTH**  
Snap In Cable Tie Mounts

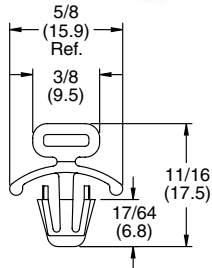
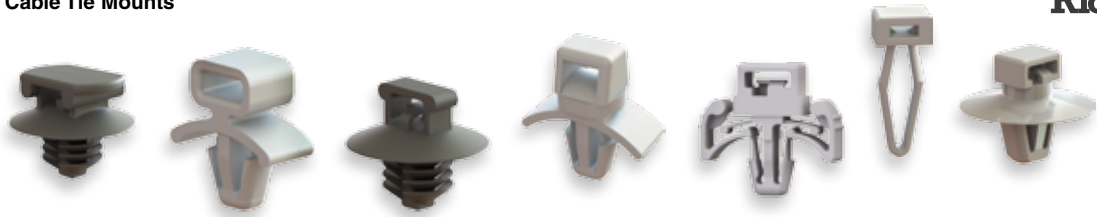


Figure 1

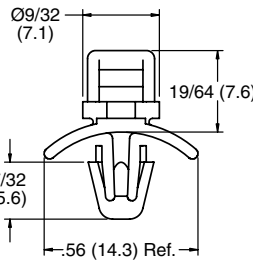


Figure 2

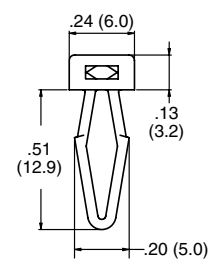


Figure 3

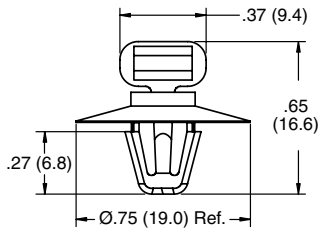


Figure 4

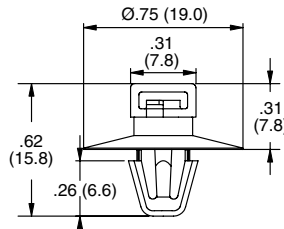


Figure 5

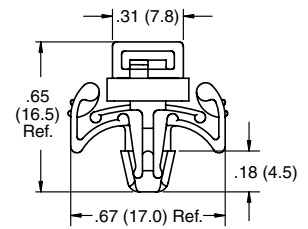


Figure 6

Specifications:

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

Features:

- Requires no adhesive or other mounting hardware
- Can be used in applications where back of panel is not accessible
- Figures 5,6,8, and 9 have pressure-hold feature that holds cable tie inside the tie holder
- Figures 4,5,8, and 9 have a cupped base that provides stability and also covers the mounting hole

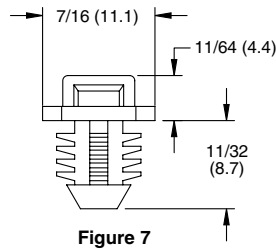


Figure 7

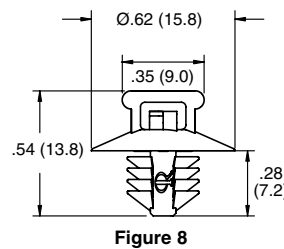


Figure 8

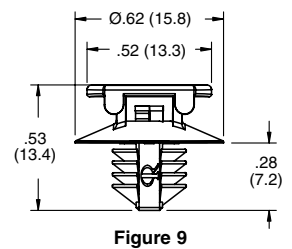
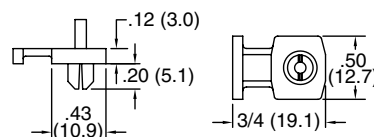


Figure 9

| Item No.    |             | Approval | Figure | Mounting Hole Ø |           | Panel Thickness |           | Used with Cable Ties | Bulk Pack Qty. |
|-------------|-------------|----------|--------|-----------------|-----------|-----------------|-----------|----------------------|----------------|
| Natural     | Black       |          |        | In              | mm        | In              | mm        |                      |                |
| FTH-6-01-M  | —           | NA       | 1      | 0.250           | 6.4       | 0.047 - 0.109   | 1.2 - 2.8 | 18 - 50 lbs          | 1000           |
| FTH-6-01-C  | —           | NA       | 1      | 0.250           | 6.4       | 0.047 - 0.109   | 1.2 - 2.8 | 18 - 50 lbs          | 100            |
| FTH-3-01-M  | —           | NA       | 2      | 0.187           | 4.8       | 0.031 - 0.078   | 0.8 - 2.0 | 18 - 50 lbs          | 1000           |
| FTH-3-01-C  | —           | NA       | 2      | 0.187           | 4.8       | 0.031 - 0.078   | 0.8 - 2.0 | 18 - 50 lbs          | 100            |
| FTH-39-1-01 | —           | —        | 3      | 0.126           | 3.2       | 0.039 - 0.177   | 1.0 - 4.5 | 18 lbs               | 1000           |
| FTH-29-01   | —           | —        | 4      | 0.250           | 6.4       | 0.062           | 1.6       | 18 - 50 lbs          | 1000           |
| FTH-33-01   | —           | —        | 5      | 0.250           | 6.4       | 0.062           | 1.6       | 40 - 50 lbs          | 1000           |
| FTH-41-01   | —           | —        | 6      | 0.187           | 4.8       | 0.020 - 0.090   | 0.5 - 2.3 | 18 - 50 lbs          | 1000           |
| FTH-15-01-M | —           | NA       | 7      | 0.312           | 7.8       | 0.250           | 6.4       | 18 - 40 lbs          | 1000           |
| FTH-15-01-C | —           | —        | 7      | 0.312           | 7.8       | 0.250           | 6.4       | 18 - 40 lbs          | 100            |
| —           | FTH-36-01BK | —        | 8      | 0.260 - 0.280   | 6.5 - 7.0 | 0.030 - 0.120   | 0.8 - 3.0 | 40 - 50 lbs          | 1000           |
| —           | FTH-37-01BK | —        | 9      | 0.260 - 0.280   | 6.5 - 7.0 | 0.030 - 0.120   | 0.8 - 3.0 | 40 - 50 lbs          | 1000           |

**FTH-22**  
Rivet Mount Cable Tie Mount

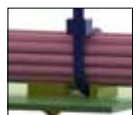


Specifications:

- 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.  | Mounting Hole Ø |     | 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 Reverse Mount Cable Tie Mount

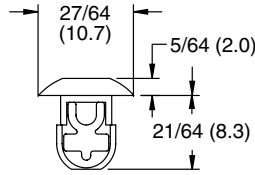


**Specifications:**

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

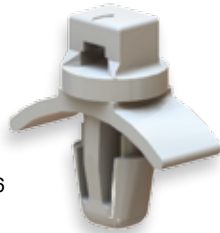
**Features:**

- Snap locks into place from outside of the chassis
- Low profile on the inside of the chassis
- Both sides of the panel must be accessible



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

## FTH-30 Cable Tie Mount with Cable Tie Head

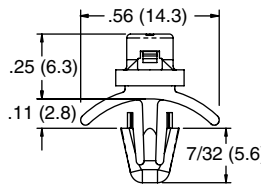


**Specifications:**

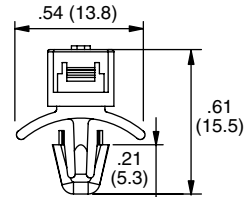
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**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

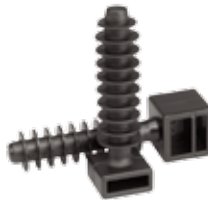


FTH-30-1-01



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

## WPM Masonry Mount Cable Tie Mount



**Specifications:**

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

**Features:**

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

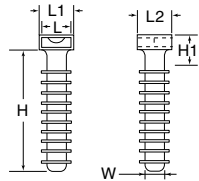


Figure 1

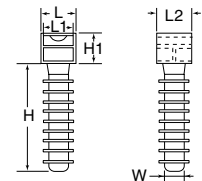


Figure 2

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

## FTH-31 Edge Mount Cable Tie Mount

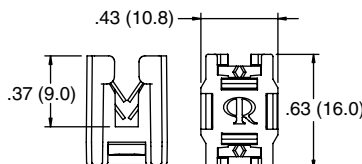


**Specifications:**

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

**Features:**

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

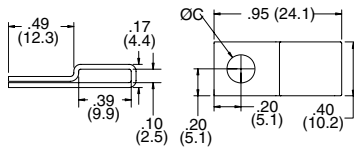


| Item No.  | Panel Thickness |           | Accepts Cable Ties with Tensile Lbs | Bulk Pack Qty. |
|-----------|-----------------|-----------|-------------------------------------|----------------|
|           | In              | mm        |                                     |                |
| FTH-31-01 | 0.030 - 0.120   | 0.8 - 3.0 | 40 thru 50                          | 1000           |





**MTH1**  
Stainless Steel Tie Holder



Specifications:

- Material: 304 Stainless Steel

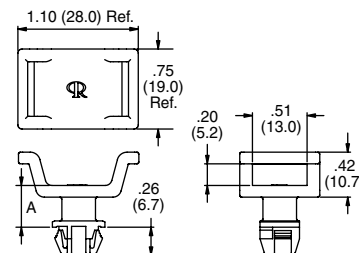
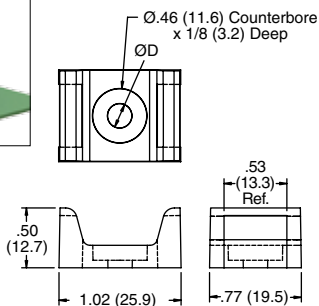
See page 39 for Stainless Steel Cable Ties.

Features:

- Low profile design
- Mounts with a screw or rivet

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

**FTH-27**  
Hook & Loop Cable Tie Mount



Specifications:

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

Features:

- Mounts 1/2" RKW Hook and Loop Ties

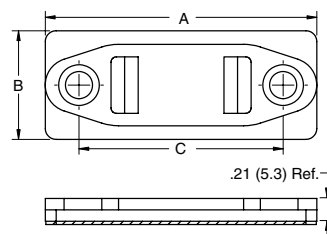
Figure 1

Figure 2

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

| Item No.      | Color   | Accepts Hook & 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**  
Hook & Loop Cable Tie Mount



Specifications:

- Material: Polyethylene
- Color: Black

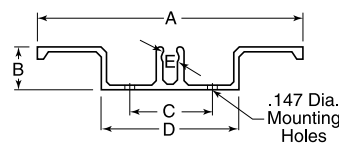
See pages 45 and 46 for Hook & Loop Cable Ties.

Features:

- Mounts with adhesive or screws

| Item No.   | Accepts Hook & 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            |

**COR**  
Cord Wrap



Specifications:

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

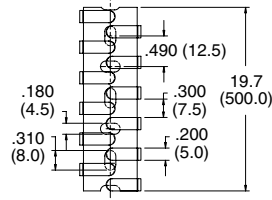
Features:

- Keeps cords neat and from being pulled

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



**RX**  
Flexible Duct



Specifications:

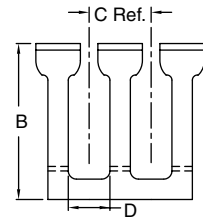
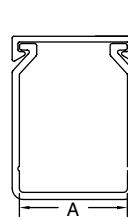
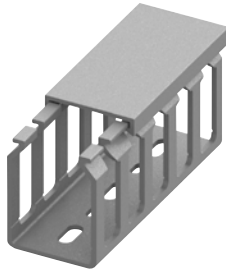
- Material: UL94 V-2 Polypropylene
- Color: Grey

Features:

- Flexible ribs allow the cables to be easily pushed and pulled into and out of channel
- Flexible base makes routing cables from the back and sides of control panels to components mounted on panel doors easy

| Item No.    |                | External A x A |             | Internal A x A |        | Length |       | Pack Qty. | Bulk Pack Qty. |
|-------------|----------------|----------------|-------------|----------------|--------|--------|-------|-----------|----------------|
| Screw Mount | Adhesive Mount | In             | mm          | In             | mm     | In     | mm    |           |                |
| RX1313-0    | RX1313-4       | 0.492 x 0.492  | 12.5 x 12.5 | 0.171          | 110.0  | 19.700 | 500.0 | 1         | 112            |
| RX1616-0    | RX1616-4       | 0.630 x 0.630  | 16.0 x 16.0 | 0.287          | 185.0  | 19.700 | 500.0 | 1         | 84             |
| RX2020-0    | RX2020-4       | 0.787 x 0.787  | 20.0 x 20.0 | 0.496          | 320.0  | 19.700 | 500.0 | 1         | 112            |
| RX2525-0    | RX2525-4       | 0.984 x 0.984  | 25.0 x 25.0 | 0.775          | 500.0  | 19.700 | 500.0 | 1         | 70             |
| RX3030-0    | RX3030-4       | 1.181 x 1.181  | 30.0 x 30.0 | 1.116          | 720.0  | 19.700 | 500.0 | 1         | 50             |
| RX4040-0    | RX4040-4       | 1.575 x 1.575  | 40.0 x 40.0 | 2.046          | 1320.0 | 19.700 | 500.0 | 1         | 50             |
| RX5050-0    | RX5050-4       | 1.969 x 1.969  | 50.0 x 50.0 | 3.162          | 2040.0 | 19.700 | 500.0 | 1         | 32             |

**SRWD**  
Slotted Wire Duct

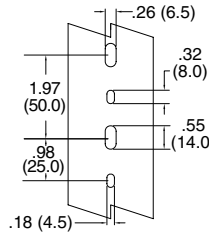


Specifications:

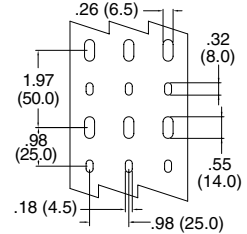
- Material: PVC
- Color: Grey

Features:

- Lid is supplied with the base
- Fingers are scored for easy break off
- Used for general purpose control panel wiring and to route and protect wiring in communication closets
- Holds breakout wires while providing flexibility for adding or removing wires
- Sold in 6-1/2 foot lengths



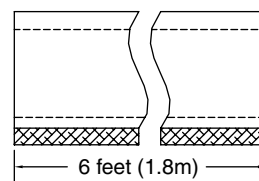
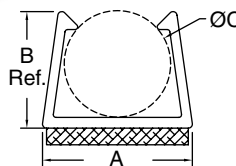
Mounting Style 1



Mounting Style 2

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

**SCD**  
Single Cable Duct



Specifications:

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

Features:

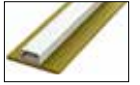
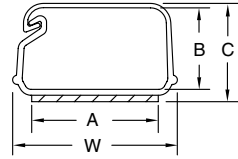
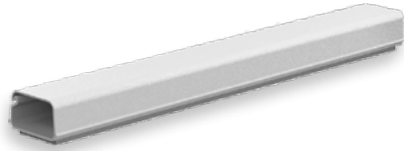
- Designed to route single coax or computer cable
- Supplied in 6 foot lengths
- Adhesive base for easy mounting



| Item No. | C Holding Ø   |           | A     |     | B Ref. |     | Cable Recommendations   | Length |     | Pack Qty. | Bulk Pack Qty. |
|----------|---------------|-----------|-------|-----|--------|-----|-------------------------|--------|-----|-----------|----------------|
|          | In            | mm        | In    | mm  | In     | mm  |                         | ft     | m   |           |                |
| SCD-1521 | 0.156 - 0.218 | 4.0 - 5.5 | 0.300 | 7.6 | 0.250  | 6.4 | RG58                    | 6      | 1.8 | 6 ft      | 60 ft          |
| SCD-2228 | 0.218 - 0.280 | 5.5 - 7.1 | 0.360 | 9.1 | 0.290  | 6.6 | RG59, RG62, RG6, 9 Line | 6      | 1.8 | 6 ft      | 60 ft          |



**SRL**  
**Locking Duct on Adhesive Base**



**Specifications:**

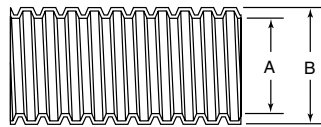
- Material: UL94 V-0 PVC
- Color: White

**Features:**

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

| Item No.     | A     |      | B     |      | W     |      | C Ref. |      | Length |     | Pack Qty. | Bulk Pack Qty. |
|--------------|-------|------|-------|------|-------|------|--------|------|--------|-----|-----------|----------------|
|              | In    | mm   | In    | mm   | In    | mm   | In     | mm   | ft     | m   |           |                |
| SRL1-3-WH6A  | 0.625 | 15.9 | 0.400 | 10.2 | 0.810 | 20.7 | 0.490  | 12.3 | 6      | 1.8 | 6 ft      | 72 ft          |
| SRL1-5-WH6A  | 0.750 | 19.1 | 0.580 | 14.7 | 0.990 | 25.1 | 0.670  | 8.5  | 6      | 1.8 | 6 ft      | 72 ft          |
| SRL1-10-WH6A | 1.125 | 28.6 | 0.820 | 20.8 | 1.520 | 38.3 | 0.950  | 24.1 | 6      | 1.8 | 6 ft      | 72 ft          |

**CF**  
**PVC Coated Metal Conduit**



**Specifications:**

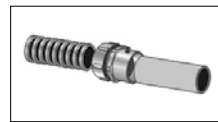
- Material: PVC Coated Metal
- Color: Black

**Features:**

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

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

**MCF**  
**PVC Coated Metal Conduit**



**Specifications:**

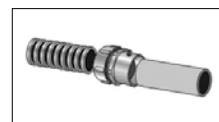
- Material: Zinc Alloy
- Connection Type: Set screw EMT Pipe

**Features:**

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

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

**MCF**  
**Fittings for PVC Pipe to Metal Conduit**



**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

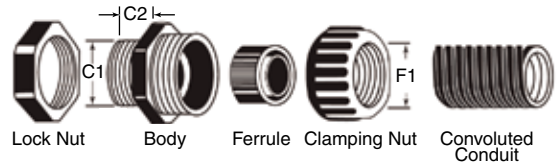
| Item No. | PVC Pipe Sizes | Used With Metal Conduit | Mounting Hole |       | Bulk Pack Qty. |
|----------|----------------|-------------------------|---------------|-------|----------------|
|          |                |                         | In            | mm    |                |
| MCF106A  | 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              |



# FIBER, WIRE & CABLE MANAGEMENT

## FLEXIBLE CONDUIT & FITTINGS

### NPT, PG & Metric Threads Metal Conduit Fittings



#### Specifications:

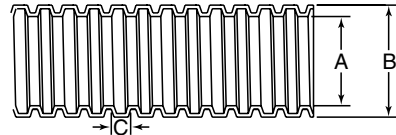
- Material: UL94 V-2 Nylon 6/6
- Color: Black
- Temp Range: -40°F to 221°F (-40°C to 105°C)

#### Features:

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

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

### CF Unsplit Polyethylene Conduit



#### Specifications:

- Material: HDPE
- Color: Grey
- Temp Range: -40°F to 200°F (-40°C to 93°C)

#### Features:

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

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

### FCA Flexible Conduit Adapters



Conduit to Conduit

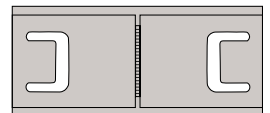


Conduit to PVC Pipe



#### Conduit to Conduit Connector

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



#### Specifications:

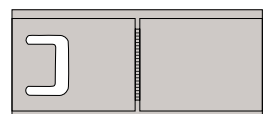
- Material: UL94 HB ABS
- Color: Grey

#### Features:

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

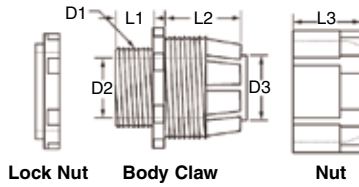
#### Conduit to PVC Pipe

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





**FCA200**  
**Flexible Conduit Fittings**



**Specifications:**

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

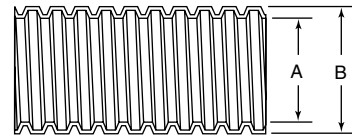
**Features:**

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



| Item No. | Mounting Hole D1 |      | Used With Plastic Conduit | D2    |      | D3    |      | L1    |      | L2    |      | L3    |      | Bulk Pack Qty. |
|----------|------------------|------|---------------------------|-------|------|-------|------|-------|------|-------|------|-------|------|----------------|
|          | In               | mm   |                           | In    | mm   | In    | mm   | In    | mm   | In    | mm   | In    | mm   |                |
| FCA200A  | 0.567            | 14.4 | CF001A                    | 0.248 | 6.3  | 0.295 | 7.5  | 0.382 | 9.7  | 0.728 | 18.5 | 0.626 | 15.9 | 50             |
| FCA202A  | 0.626            | 15.9 | CF003A                    | 0.433 | 11   | 0.425 | 10.8 | 0.394 | 10   | 0.705 | 17.9 | 0.618 | 15.7 | 50             |
| FCA204A  | 0.630            | 16   | CF004A                    | 0.437 | 11.1 | 0.524 | 13.3 | 0.382 | 9.7  | 0.732 | 18.6 | 0.626 | 15.9 | 50             |
| FCA206A  | 0.756            | 19.2 | CF005A                    | 0.591 | 15   | 0.579 | 14.7 | 0.394 | 10   | 0.697 | 17.7 | 0.630 | 16   | 50             |
| FCA208A  | 0.787            | 20   | CF006A                    | 0.606 | 15.4 | 0.677 | 17.2 | 0.386 | 9.8  | 0.693 | 17.6 | 0.642 | 16.3 | 50             |
| FCA210A  | 0.984            | 25   | CF008A                    | 0.744 | 18.9 | 0.780 | 19.8 | 0.449 | 11.4 | 0.929 | 23.6 | 0.811 | 20.6 | 50             |
| FCA212A  | 1.228            | 31.2 | CF009A                    | 1.024 | 26   | 0.957 | 24.3 | 0.472 | 12   | 0.898 | 22.8 | 0.811 | 20.6 | 25             |
| FCA214A  | 1.260            | 32   | CF010A                    | 1.055 | 26.8 | 1.126 | 28.6 | 0.445 | 11.3 | 0.917 | 23.3 | 0.815 | 20.7 | 25             |
| FCA216A  | 1.476            | 37.5 | CF011A                    | 1.240 | 31.5 | 1.244 | 31.6 | 0.445 | 11.3 | 0.929 | 23.6 | 0.815 | 20.7 | 25             |
| FCA218A  | 1.575            | 40   | CF012A                    | 1.287 | 32.7 | 1.370 | 34.8 | 0.453 | 11.5 | 0.917 | 23.3 | 0.819 | 20.8 | 25             |
| FCA220A  | 1.732            | 44   | CF013A                    | 1.476 | 37.5 | 1.594 | 40.5 | 0.496 | 12.6 | 0.878 | 22.3 | 0.815 | 20.7 | 10             |
| FCA222A  | 1.732            | 44   | CF014A                    | 1.476 | 37.5 | 1.555 | 39.5 | 0.496 | 12.6 | 0.850 | 21.6 | 0.815 | 20.7 | 10             |

**CF**  
**Unsplit Nylon Conduit**



**Specifications:**

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

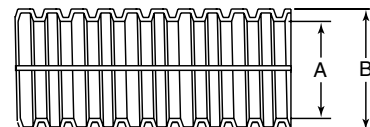
**Features:**

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

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

\* No grey stripe

**CS**  
**Split Polypropylene Conduit**



**Specifications:**

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

**Features:**

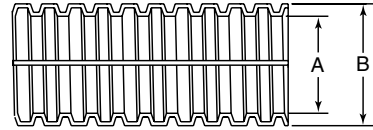
- Split design for easy installation and removal of wiring
- Wire and cable protection for electrical harnesses
- Flexible body allows for corner/elbow wiring
- Can be used to protect hydraulic hoses

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



**FLEXIBLE CONDUIT, FITTINGS & WRAPS**

**CS (Nylon)  
Split Nylon Conduit**



**Specifications:**

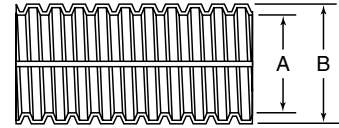
- Material: UL94 HB Nylon
- Color: Black with Gray Stripe
- Temp Range: -40°F to 300°F (-40°C to 149°C)

**Features:**

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

| Item No. | Nominal Ø<br>In | A Min |       | A Max |       | B Min |       | B Max |       | Wall Thickness |      | Roll Length |       | Pack Qty. |
|----------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|----------------|------|-------------|-------|-----------|
|          |                 | In    | mm    | In    | mm    | In    | mm    | In    | mm    | In             | mm   | Ft          | m     |           |
| CS1020A  | 3/8             | 0.341 | 8.66  | 0.380 | 9.65  | 0.497 | 12.62 | 0.526 | 13.36 | 0.040          | 1.02 | 1900        | 579.1 | 1         |
| CS1040A  | 7/16            | 0.399 | 10.13 | 0.437 | 11.10 | 0.573 | 14.55 | 0.597 | 15.16 | 0.050          | 1.27 | 1500        | 457.2 | 1         |
| CS1060A  | 1/2             | 0.473 | 12.01 | 0.516 | 13.11 | 0.664 | 16.87 | 0.700 | 17.78 | 0.050          | 1.27 | 1100        | 335.3 | 1         |
| CS1080A  | 5/8             | 0.603 | 15.32 | 0.639 | 16.23 | 0.805 | 20.45 | 0.837 | 21.26 | 0.050          | 1.27 | 800         | 243.8 | 1         |
| CS1090A  | 3/4             | 0.707 | 17.96 | 0.759 | 19.28 | 0.950 | 24.13 | 0.989 | 25.12 | 0.050          | 1.27 | 550         | 164.6 | 1         |
| CS1140A  | 1               | 1.020 | 25.91 | 1.069 | 27.16 | 1.251 | 31.78 | 1.304 | 33.13 | 0.006          | 1.52 | 300         | 91.4  | 1         |

**CSEZ  
EZ Dispenser Split Nylon Conduit**



**Specifications:**

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

**Features:**

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

| Item No.  | Nominal Ø<br>In | A Min |       | A Max |       | B Min |       | B Max |       | Wall Thickness |      | Roll Length |       | Pack Qty. |
|-----------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|----------------|------|-------------|-------|-----------|
|           |                 | In    | mm    | In    | mm    | In    | mm    | In    | mm    | In             | mm   | Ft          | m     |           |
| CSEZ1010A | 1/4             | 0.256 | 6.50  | 0.276 | 7.01  | 0.373 | 9.47  | 0.398 | 10.11 | .040           | 1.02 | 100         | 30.48 | 1         |
| CSEZ1030A | 3/8             | 0.368 | 9.35  | 0.398 | 10.11 | 0.494 | 12.56 | 0.525 | 13.32 | .050           | 1.27 | 100         | 30.48 | 1         |
| CSEZ1060A | 1/2             | 0.473 | 12.01 | 0.516 | 13.11 | 0.664 | 16.87 | 0.700 | 17.78 | .050           | 1.27 | 100         | 30.48 | 1         |
| CSEZ1080A | 5/8             | 0.603 | 15.32 | 0.639 | 16.23 | 0.805 | 20.45 | 0.837 | 21.26 | .050           | 1.27 | 100         | 30.48 | 1         |
| CSEZ1090A | 3/4             | 0.707 | 17.96 | 0.759 | 19.28 | 0.950 | 24.13 | 0.989 | 25.12 | .050           | 1.27 | 100         | 30.48 | 1         |
| CSEZ1140A | 1               | 1.020 | 25.91 | 1.069 | 27.16 | 1.251 | 31.78 | 1.304 | 33.13 | .060           | 1.52 | 50          | 15.24 | 1         |

**SHR  
Slit Harness Wrap**

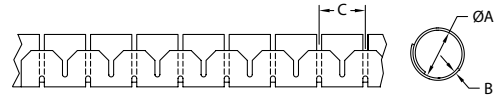


**Specifications:**

- Material: See Chart
- Color: Black

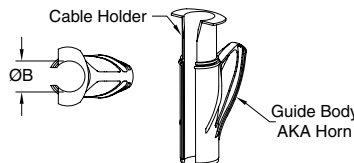
**Features:**

- Protects wires from wear
- Easy to install



| Item No.    | Nylon 6    | LDPE       | Approval | Max Bundle Range |      | A     |      | B     |     | C     |      | Roll Length |     | Installation Tool | Pack Qty. |
|-------------|------------|------------|----------|------------------|------|-------|------|-------|-----|-------|------|-------------|-----|-------------------|-----------|
|             |            |            |          | In               | mm   | In    | mm   | In    | mm  | In    | mm   | Ft          | m   |                   |           |
| SHR-05-6V0B | SHR-05-6NB | SHR-05-PPB |          | 0.240            | 6.0  | 0.200 | 5.0  | 0.032 | 0.8 | 0.390 | 10.0 | 328         | 100 | CAT-05-PP-BL      | 1         |
| SHR-08-6V0B | SHR-08-6NB | SHR-08-PPB |          | 0.390            | 10.0 | 0.310 | 8.0  | 0.032 | 0.8 | 0.390 | 10.0 | 328         | 100 | CAT-08-PP         | 1         |
| SHR-15-6V0B | SHR-15-6NB | SHR-15-PPB |          | 0.630            | 16.0 | 0.590 | 15.0 | 0.032 | 0.8 | 0.550 | 14.0 | 164         | 50  | CAT-15-PP         | 1         |
| SHR-20-6V0B | SHR-20-6NB | SHR-20-PPB |          | 0.900            | 23.0 | 0.790 | 20.0 | 0.035 | 0.9 | 0.670 | 17.0 | 98          | 30  | CAT-20-PP         | 1         |
| SHR-25-6V0B | SHR-25-6NB | SHR-25-PPB |          | 0.980            | 25.0 | 0.980 | 25.0 | 0.039 | 1.0 | 0.790 | 20.0 | 66          | 20  | CAT-25-PP         | 1         |
| SHR-32-6V0B | SHR-32-6NB | SHR-32-PPB |          | 1.250            | 32.0 | 1.250 | 32.0 | 0.050 | 1.3 | 0.980 | 24.9 | 49          | 15  | CAT-32-PP         | 1         |

**CAT  
Installation Tool for SHR**



**Features:**

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

| Item No.     | Max Bundle Ø B |      | To Be Used With | Pack Qty. |
|--------------|----------------|------|-----------------|-----------|
|              | In             | mm   |                 |           |
| CAT-05-PP-BL | 0.240          | 6.0  | SHR-05          | 1         |
| CAT-08-PP    | 0.370          | 9.5  | SHR-08          | 1         |
| CAT-15-PP    | 0.630          | 16.0 | SHR-15          | 1         |
| CAT-20-PP    | 0.790          | 20.0 | SHR-20          | 1         |
| CAT-25-PP    | 0.960          | 24.5 | SHR-25          | 1         |
| CAT-32-PP    | 1.220          | 31.0 | SHR-32          | 1         |



**SHR-C**  
**SHR Clip**

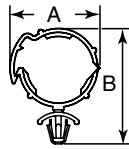
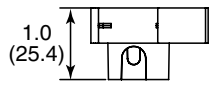


Figure 1

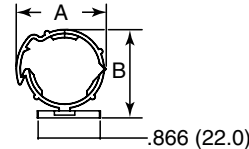


Figure 2

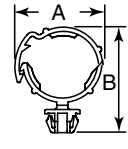


Figure 3

Specifications:

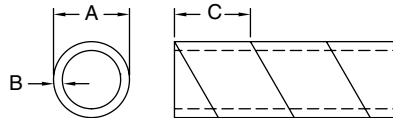
- Material: UL94 V-2 Nylon 6/6
- Color: Black

Features:

- Adjustable clips to hold both the SHR-20 and SHR-25 slit harness wrap (see previous page)
- Internal ribs grip the wrap securely
- Releasable latch allows for easy maintenance
- Four mounting options:  
snap into round hole, snap into square hole (prevents rotation), #8 screw mount, adhesive mount

| Item No. | Holding Ø               | Mounting Method | Figure   | A Ref |      | B Ref |      | Bulk Pack Qty. |
|----------|-------------------------|-----------------|--|-------|------|-------|------|----------------|
|          |                         |                 |  | In    | mm   | In    | mm   |                |
| SHR-C1   | To hold SHR-20 & SHR-25 | 1               | Snaps into a .252 In (6.4 mm) Hole in a .031-.079 In, (0.8-2.0 mm) Panel       | 1.140 | 29.0 | 1.670 | 42.5 | 500            |
| SHR-C2   | To hold SHR-20 & SHR-25 | 2               | #8 or M4 Screw   | 1.180 | 30.0 | 1.280 | 32.5 | 500            |
| SHR-C3   | To hold SHR-20 & SHR-25 | 2               | Adhesive   | 1.180 | 30.0 | 1.280 | 32.5 | 500            |
| SHR-C4   | To hold SHR-20 & SHR-25 | 3               | Snaps into a .370 In (9.5 mm) Square Hole in a .031-.079 In (0.8-2.0 mm) Panel | 1.180 | 30.0 | 1.630 | 40.5 | 500            |

**HR**  
**Spiral Wrap**



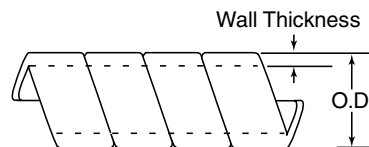
Specifications:

- Material: See Table
- Color: See Table

| Item No.      | Bundle Range |            |    | Approval      | A Ref.      |       | B    |       | C Ref. |       | Roll Length |     |       |
|---------------|--------------|------------|----|---------------|-------------|-------|------|-------|--------|-------|-------------|-----|-------|
|               | Natural      | Black LDPE |    |               | In          | mm    | In   | mm    | In     | mm    | Ft          | m   |       |
| UL94 HB Nylon | Polyethylene |            |    |               | 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| —             | 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 |
| —             | 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 |
| —             | 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 |
| —             | 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 |
| —             | 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 |
| —             | —            | HR4U1/4    | UL | 0.187 - 0.750 | 4.8 - 19.1  | 0.250 | 6.4  | 0.050 | 1.3    | 0.300 | 7.6         | 100 | 30.48 |
| —             | —            | 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 |
| —             | —            | 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 |

**SGXL**

**UV Resistant Spiral Wrap**



Specifications:

- Material: UV Resistant Polyethylene
- Color: Black

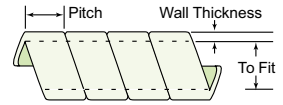
Features:

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

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



**SGX Series**  
**TECTORGUARD™ Heavy & Medium Duty Hose Guards**



**Specifications:**

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

**Features:**

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

**Heavy Duty - Heavy Abrasion**

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

**Medium Duty - Flexible with Medium Abrasion**

| Item No. | To Fit |       | Wall Thickness |       | Pitch |       | Color | Roll Length |   |
|----------|--------|-------|----------------|-------|-------|-------|-------|-------------|---|
|          | In     | In    | In             | mm    | In    | mm    |       | Ft          | m |
| SGX16MA  | 0.492  | 0.045 | 1.14           | 0.490 | 12.45 | Black | 100   | 30.48       |   |
| SGX20MA  | 0.668  | 0.052 | 1.32           | 0.610 | 15.49 | Black | 100   | 30.48       |   |
| SGX25MA  | 0.750  | 0.062 | 1.57           | 0.800 | 20.32 | Black | 100   | 30.48       |   |
| SGX32MA  | 1.014  | 0.071 | 1.80           | 1.040 | 26.42 | Black | 100   | 30.48       |   |
| SGX39MA  | 1.250  | 0.080 | 2.03           | 1.350 | 34.29 | Black | 100   | 30.48       |   |
| SGX50MA  | 1.600  | 0.090 | 2.28           | 1.530 | 38.66 | Black | 50    | 15.24       |   |
| SGX75MA  | 2.457  | 0.125 | 3.17           | 1.610 | 40.89 | Black | 50    | 15.24       |   |
| SGX90MA  | 3.064  | 0.131 | 3.32           | 1.970 | 50.04 | Black | 35    | 10.66       |   |

**SGX FRAS Series**  
**SPIRALGUARD™ Flame Retardant Antistatic Series**

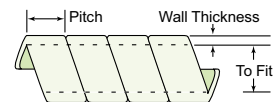
**Specifications:**

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



**Features:**

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



**Approvals and Certifications:**

- Tested and approved in accordance with the former British Coal specification 182:1986, satisfying the requirements of the non-metallics scheme for use underground
- Tested and approved by Mine Safety Laboratory, Department of Mineral Resources NSW to AS2660 FRAS Compliance – 1991 International Standard: ISO6805
- Patented product US628657B1

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



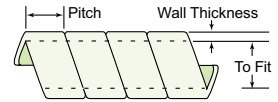


**TFG Series**  
Lightweight & Flexible



Specifications:

- Material: Cellulose Acetate
- Color: Black



Features:

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

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

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

**THP Series**  
Point of Contact Protectors

- Specifications:  
Material: PVC  
Color: Refer to Chart

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



ALLIANCE

| Item No. | Color  |        |        | Length In | Pack Qty. | Bulk Pack Qty. |
|----------|--------|--------|--------|-----------|-----------|----------------|
|          | Black  | Orange | Yellow |           |           |                |
| THPSD4B  | -      | -      | -      | 4         | 1         | 50             |
| THP4B    | THP4A  | THP4C  |        | 4         | 1         | 50             |
| THP6B    | THP6A  | THP6C  |        | 6         | 1         | 50             |
| THP8B    | THP8A  | THP8C  |        | 8         | 1         | 50             |
| THP10B   | THP10A | THP10C |        | 10        | 1         | 10             |
| THP12B   | THP12A | THP12C |        | 12        | 1         | 10             |

Each THP Assembly Requires 3 Ties

- Specifications:  
• Material: UL Approved 94V-2 Nylon 6/6  
• Color: Refer to Chart  
• Service Temperature: -40°F to 185°F (-40°C to 85°C)

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



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

| Item No. | Length |     | Width |     | Max Bundle Dia. |    | Minimum Tensile Strength |     | Classification | Bulk Pack Qty. |
|----------|--------|-----|-------|-----|-----------------|----|--------------------------|-----|----------------|----------------|
|          | In     | mm  | In    | mm  | In              | mm | Lbs                      | kgs |                |                |
| CT025A   | 11-7/8 | 300 | 0.189 | 4.8 | 3.350           | 85 | 50                       | 222 | Standard       | 100            |

**TQS Series**  
Quick Assemble Hose Sleeves



- Specifications:  
• Material: Nylon with a Urethane Coating on one Side  
• Color: Black

Features:

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

| Item No. | Bundle O.D. |        | Flat Width |        | Roll Length |       |
|----------|-------------|--------|------------|--------|-------------|-------|
|          | In          | mm     | In         | mm     | Ft          | m     |
| TQS2A    | 2           | 50.80  | 7.750      | 196.85 | 150         | 45.72 |
| TQS3A    | 3           | 76.20  | 10.900     | 276.86 | 150         | 45.72 |
| TQS4A    | 4           | 101.60 | 14.000     | 355.60 | 150         | 45.72 |
| TQS5A    | 5           | 127.00 | 17.250     | 438.15 | 150         | 45.72 |

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



# HOSE PROTECTION

## Quick Assemble Cable or Hose Sleeve

**Specifications:**

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

**Features:**

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



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

## TSL Series Mining Safety Approved Sleeve



**Specifications:**

- Material: Polyamide 6 Yarn
- Color: Black

**Features:**

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

**Approvals and Certifications:**

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

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

## Hook and Loop Braided Cable or Hose Wrap

**Specifications:**

- Material: Polyester and Polyolefin
- Color: Black

**Features:**

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



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

## Hose & Cable Protection Sleeve

**Specifications:**

- Material: Polyester
- Color: Black

**Features:**

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



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



## FPS Series Fire Protection Sleeve

**Specifications:**

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

**Features:**

- Excellent elasticity great for protecting or bundling hoses, tubes, and cables in hostile environments
- Insulation properties provide close quartered personnel with protection against burns from hot hoses and reduce heat energy loss
- Withstands intense radiant heat and flame:
  - Continuous exposure up to 500°F(260°C)
  - 15-20 min. up to 2000°F(1090°C), 15-30 sec. up to 3000°F(1650°C)
- Immediately sheds splash; withstands repeated exposures to molten steel, molten aluminum and molten glass up to 3000°F(1650°C)



| Item No.  | I.D.   | Roll Length Ft |
|-----------|--------|----------------|
| FPS1/4A   | 1/4"   | 50             |
| FPS5/16A  | 5/16"  | 50             |
| FPS3/8A   | 3/8"   | 50             |
| FPS1/2A   | 1/2"   | 50             |
| FPS5/8A   | 5/8"   | 50             |
| FPS3/4A   | 3/4"   | 50             |
| FPS7/8A   | 7/8"   | 50             |
| FPS1A     | 1"     | 50             |
| FPS1-1/4A | 1-1/4" | 50             |
| FPS1-1/2A | 1-1/2" | 50             |
| FPS2A     | 2"     | 50             |
| FPS2-1/2A | 2-1/2" | 50             |
| FPS3A     | 3"     | 50             |
| FPS3-1/2A | 3-1/2" | 50             |
| FPS4A     | 4"     | 50             |



**MTS Series  
Self-Bonding Silicone Tape**

Specifications:

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

Features:

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

**Thermal Protection Sleeve**

Specifications:

- Material: Nomex™ Fiber
- Color: Natural

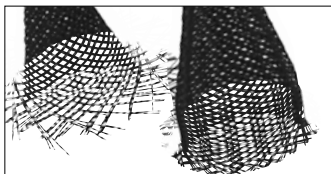
Features:

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



| Item No. | Nominal Size |    | Expansion Range |       | Roll Length |       |
|----------|--------------|----|-----------------|-------|-------------|-------|
|          | In           | mm | In              | mm    | Ft          | m     |
| 900335   | 0.118        | 3  | 0.039           | 0.157 | 100         | 30.48 |
| 900336   | 0.236        | 6  | 0.196           | 0.314 | 100         | 30.48 |
| 900337   | 0.314        | 8  | 0.236           | 0.393 | 100         | 30.48 |
| 900338   | 0.393        | 10 | 0.275           | 0.511 | 100         | 30.48 |
| 900339   | 0.472        | 12 | 0.314           | 0.629 | 100         | 30.48 |
| 900340   | 0.591        | 15 | 0.393           | 0.787 | 100         | 30.48 |
| 900341   | 0.787        | 20 | 0.551           | 1.023 | 100         | 30.48 |
| 900342   | 0.984        | 25 | 0.708           | 1.299 | 100         | 30.48 |
| 900343   | 1.181        | 30 | 0.787           | 1.535 | 100         | 30.48 |
| 900344   | 1.574        | 40 | 1.181           | 2.047 | 100         | 30.48 |
| 900345   | 1.968        | 50 | 1.574           | 2.559 | 100         | 30.48 |

**Scissor Cut Sleeve**



Specifications:

- Material: Polyester
- Color: Black

Features:

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

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



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

**Textile Heatshrink Sleeve**

Specifications:

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

Features:

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



| Item No. | Nominal Size |    | As Supplied I.D. |    | After Recovery I.D. |      | Roll Length |       |
|----------|--------------|----|------------------|----|---------------------|------|-------------|-------|
|          | In           | mm | In               | mm | In                  | mm   | Ft          | m     |
| 900317   | 0.375        | 10 | 0.393            | 10 | 0.196               | 5.0  | 100         | 30.49 |
| 900318   | 0.500        | 12 | 0.472            | 12 | 0.236               | 6.0  | 100         | 30.49 |
| 900319   | 0.750        | 20 | 0.787            | 20 | 0.393               | 10.0 | 100         | 30.49 |
| 900320   | 1.000        | 25 | 0.984            | 25 | 0.492               | 12.5 | 100         | 30.49 |
| 900321   | 1.250        | 30 | 1.181            | 30 | 0.59                | 15.0 | 100         | 30.49 |
| 900322   | 1.338        | 34 | 1.338            | 34 | 0.669               | 17.0 | 100         | 30.49 |
| 900323   | 1.500        | 40 | 1.574            | 40 | 0.787               | 20.0 | 100         | 30.49 |
| 900324   | 2.000        | 50 | 1.968            | 50 | 0.984               | 25.0 | 100         | 30.49 |
| 900325   | 2.375        | 60 | 2.362            | 60 | 1.181               | 30.0 | 100         | 30.49 |
| 900326   | 2.750        | 70 | 2.755            | 70 | 1.377               | 35.0 | 100         | 30.49 |
| 900327   | 3.125        | 80 | 3.149            | 80 | 1.574               | 40.0 | 100         | 30.49 |

**Expandable Sleeve**



Specifications:

- Material: Polyester
- Color: Black

Features:

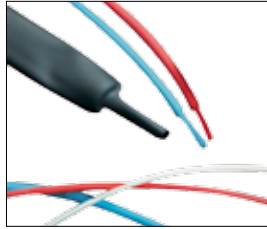
- The open weave construction allows for easy installation reducing assembly cost
- Cut and abrasion resistant with high thermal properties
- Flame-retardant, chemical resistant, and halogen free
- Used on wire harnessing applications where durability and low cost are essential
- Typically used with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

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



# HEAT SHRINK TUBING

## HST 2:1 Heat Shrink Tubing



**Specifications:**

- Material: Crosslinked Polyolefin
- Color: See Chart
- Operating Temp: -67°F to 257°F (-55°C to 125°C)
- Min. shrink temp: 158°F (70°C)
- Min. full recovery temp: 212°F (100°C)
- Shrink ratio: 2:1

**Features:**

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

### EZ Dispenser Mini Roll



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

### Standard Roll



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

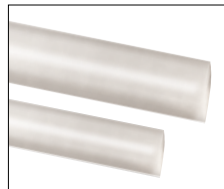
## HST CLEAR 2:1 Clear Heat Shrink Tubing

**Specifications:**

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

**Features:**

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



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

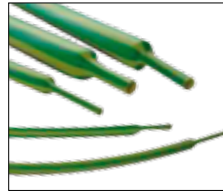


**HST YG**

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

Specifications:

- Material: Crosslinked Polyolefin
- Color: Yellow and Green Striped
- Operating Temp: -67°F to 275°F (-55°C to 135°C)
- Min. shrink temp: 158°F (70°C)
- Min. full recovery temp: 212°F (100°C)



Features:

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

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

**HST 3:1**

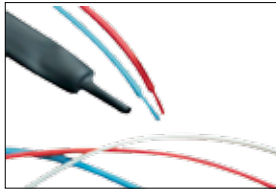
**3:1 Heat Shrink Tubing**

Specifications:

- Material: Crosslinked Polyolefin
- Color: See Chart
- Operating Temp: -67°F to 257°F (-55°C to 125°C)
- Min. shrink temp: 158°F (70°C)
- Min. full recovery temp: 212°F (100°C)

Features:

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



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

**HST ADHESIVE**

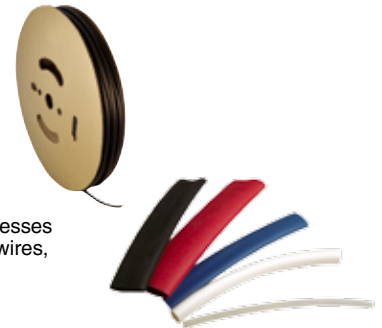
**3:1 Adhesive Lined Heat Shrink Tubing**

Specifications:

- Material: Crosslinked Adhesive Lined Polyolefin
- Color: See Table
- Operating Temp: -67°F to 257°F (-55°C to 125°C)
- Min. shrink temp: 176°F (80°C)
- Min. full recovery temp: 230°F (110°C)
- Shrink ratio: 3:1

Features:

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



Standard Roll

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

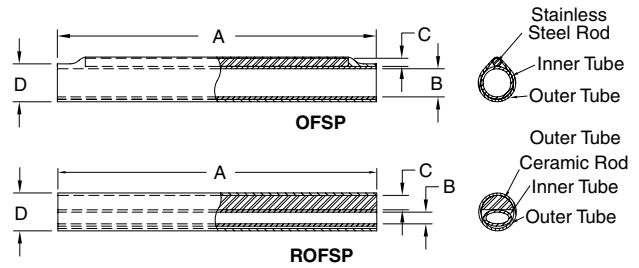
Pre-Cut 4 Foot (1.22m) Lengths

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



# FIBER SPLICE ACCESSORIES

## OFSP Optical Fiber Splice Protector



**Specifications:**

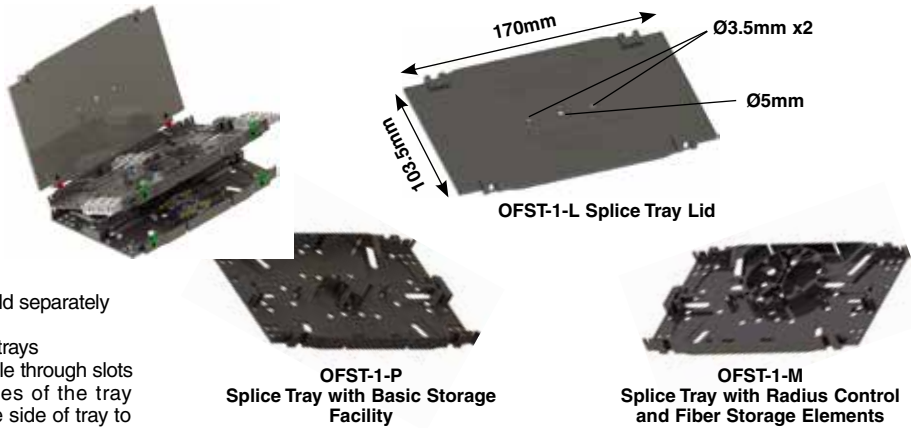
- Material: Outer Tube: Heat Shrink 3:1 Ratio Polyolefin  
Inner Tube: PE Copolymer Adhesive
- Color: Clear
- ROD:OFSP-SS; ROFSP- Ceramic

**Features:**

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

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

## OFST Fiber Splice Tray System



**Specifications:**

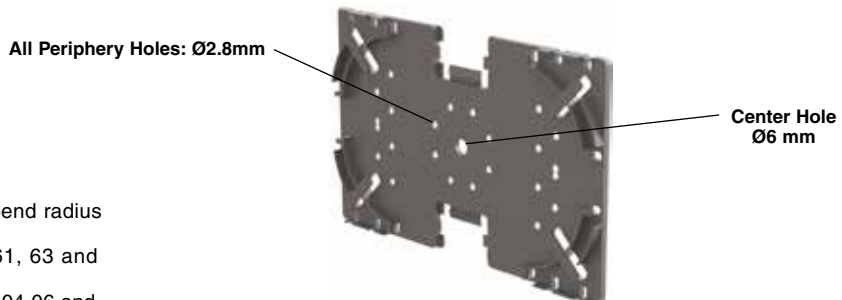
- Color: See Chart

**Features:**

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

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

## EFA04-25-001 Splice Tray



**Specifications:**

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

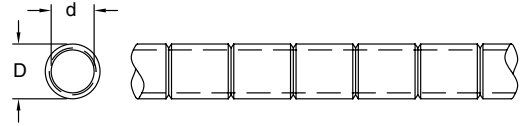
**Features:**

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

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



**OFBLT**  
**Optical Fiber Bend Limiting Tubing**



**Specifications:**

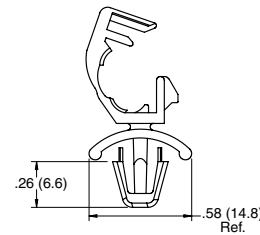
- Material: See Chart
- Color: See Chart

**Features:**

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

| Item No. | White Polypropylene    | Black UL94 V-0 PBT     | Style     | D     |      | d     |     | Bulk Pack Qty. |
|----------|------------------------|------------------------|-----------|-------|------|-------|-----|----------------|
|          |                        |                        |           | In    | mm   | In    | mm  |                |
|          | <b>OFBLT-3.1-05-PP</b> | <b>OFBLT-31-05V0</b>   | Standard  | 0.199 | 5.05 | 0.122 | 3.1 | 100 Meters     |
|          | <b>OFBLT-42-635PP</b>  | <b>OFBLT-42-635V0</b>  | Standard  | 0.250 | 6.35 | 0.165 | 4.1 | 100 Meters     |
|          | <b>OFBLTP-42-635PP</b> | <b>OFBLTP-42-635V0</b> | Pull-Cord | 0.250 | 6.35 | 0.165 | 4.1 | 100 Meters     |

**OFBLT-C**  
**OFBLT Tubing Clip**



**Specifications:**

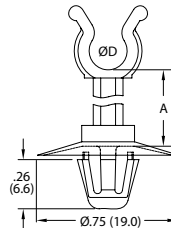
- Material: See Chart
- Color: Natural

**Features:**

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

| Item No. | UL94 V-2 Nylon 6/6   | UL94 V-0 Nylon 6/6   | Max Bundle Ø |     | Mounting Hole Ø |     | Panel Thickness |           | Bulk Pack Qty. |
|----------|----------------------|----------------------|--------------|-----|-----------------|-----|-----------------|-----------|----------------|
|          |                      |                      | In           | mm  | In              | mm  | In              | mm        |                |
|          | <b>OFBLT-C1-5-01</b> | <b>OFBLT-C1-5-19</b> | 0.170        | 4.3 | 0.250           | 6.4 | 0.031 - 0.078   | 0.8 - 2.0 | 1000           |

**TPCE**  
**Tube Clip**



**Specifications:**

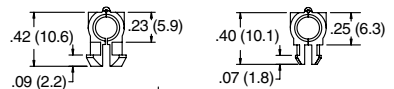
- Material: See Chart
- Color: Natural

**Features:**

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

| Item No. | UL94 V-2 Nylon 6/6     | UL94 V-0 Nylon 6/6     | A     |      | D Max Bundle Ø |     | Mounting Hole Ø |     | Panel Thickness |           | Bulk Pack Qty. |
|----------|------------------------|------------------------|-------|------|----------------|-----|-----------------|-----|-----------------|-----------|----------------|
|          |                        |                        | In    | mm   | In             | mm  | In              | mm  | In              | mm        |                |
|          | <b>TPCE5-51-4M-01</b>  | <b>TPCE5-51-4M-19</b>  | 0.157 | 4.0  | 0.200          | 5.1 | 0.256           | 6.5 | 0.031 - 0.063   | 0.8 - 1.6 | 1000           |
|          | <b>TPCE5-51-6M-01</b>  | <b>TPCE5-51-6M-19</b>  | 0.236 | 6.0  | 0.200          | 5.1 | 0.256           | 6.5 | 0.031 - 0.063   | 0.8 - 1.6 | 1000           |
|          | <b>TPCE5-51-8M-01</b>  | <b>TPCE5-51-8M-19</b>  | 0.315 | 8.0  | 0.200          | 5.1 | 0.256           | 6.5 | 0.031 - 0.063   | 0.8 - 1.6 | 1000           |
|          | <b>TPCE5-51-10M-01</b> | <b>TPCE5-51-10M-19</b> | 0.394 | 10.0 | 0.200          | 5.1 | 0.256           | 6.5 | 0.031 - 0.063   | 0.8 - 1.6 | 1000           |

**OFTGSP**  
**OFBLT Tubing Saddle**



**Figure 1**

**Figure 2**



**Specifications:**

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

**Features:**

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

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

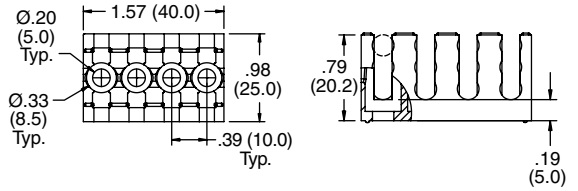


# FIBER BEND LIMITING TUBING & SPLICE HOLDERS

## OFSMB - OFBLT Slotted Multi Bracket

Specifications:

- Material: UL94 V-0 Glass-Filled Nylon
- Color: Black



Features:

- For use with 5mm OFBLT Tubing
- Mounts with #10 (M5) screws
- Optical Fiber Slotted Multi-Brackets are for use at distribution points where orderly fiber management, protection and strain relief is required
- An additional security feature allows fitting of a cable tie around OFSMBs which prevents removal of any retained tubes
- OFBLT retention: >70N
- Holds a maximum of 12 tubes

| Item No.       | Bulk Pack Qty. |
|----------------|----------------|
| OFSMB-4-05GFBK | 10             |

## OFSH-T Splice Holder

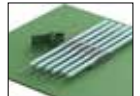
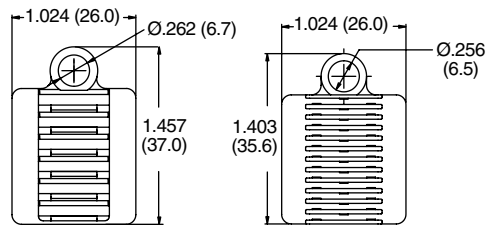
Specifications:

- Material: See Chart
- Color: Black



Features:

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

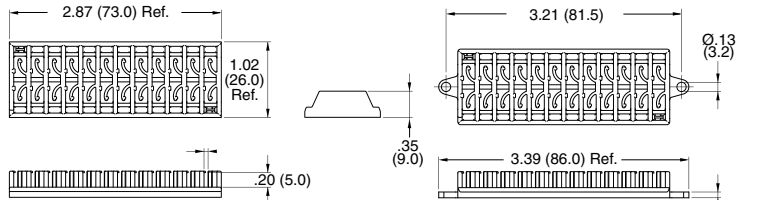


| Item No.        | Figure | Material               | Ø Component   |           | No. of Slots | Bulk Pack Qty. |
|-----------------|--------|------------------------|---------------|-----------|--------------|----------------|
|                 |        |                        | In            | mm        |              |                |
| 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 Splice Holder

Specifications:

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



Features:

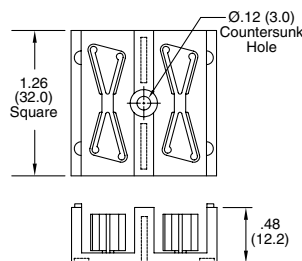
- Holds up to 24 components/splice protectors
- Flexible wings grip components up to .06 (1.6) in diameter
- Low profile to save space
- Two styles: one for mounting with an adhesive pad and one for mounting with a #4 or M3 screw
- Each slot holds up to two components

| 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 Splice Holder

Specifications:

- Material: See Chart
- Color: Natural



Features:

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

| Item No.           |                    | 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**  
Fiber Holder

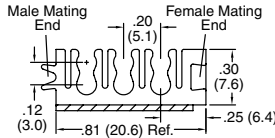


Figure 1

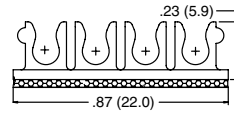


Figure 2

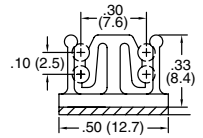


Figure 3

Specifications:

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

Features:

- Quickly mounted with adhesive base
- OFEB has side brackets that connect with each other to provide for additional cables



| Item No.         | Figure | Cable Ø |     | 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           |
| OFHB2-4-A1-RT-19 | 3      | 0.079   | 2.0 | 2            | 4             | 0.375 | 9.5 | 1000           |

**OFB-BH / OFB3P**  
Fiber Holder

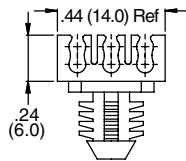
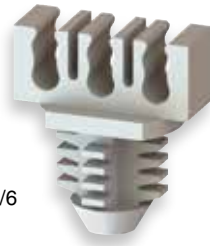


Figure 1

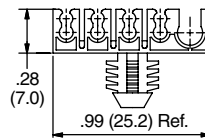


Figure 2

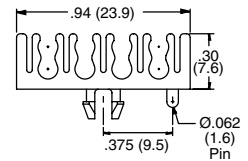


Figure 3

Specifications:

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

Features:

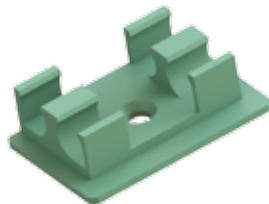
- Holds multiple cable fibers



Recommended Mounting Holes

| Item No.    | Figure | Hole Ø |     | Panel Thickness |     | Cable Ø              |              | No. of Slots | No. of Cables | Depth |     | Bulk Pack Qty. |
|-------------|--------|--------|-----|-----------------|-----|----------------------|--------------|--------------|---------------|-------|-----|----------------|
|             |        | 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 - 0.086, 1 - 0.158 | 8-2.2, 1-4.0 | 5            | 9             | 0.236 | 6.0 | 1000           |
| OFB3P-4-19  | 3      | 0.187  | 4.7 | 0.064           | 1.6 | 0.118                | 3.0          | 4            | 8             | 0.200 | 5.1 | 1000           |

**EFA04-6X**  
Fiber Clip

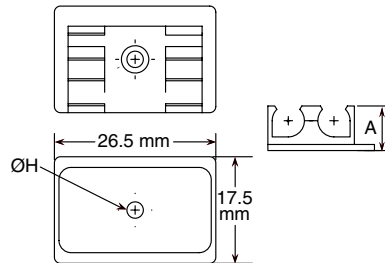


Specifications:

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

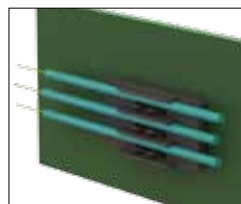
Features:

- Holds 2 components parallel
- Available to hold 3 different diameters; 4.5mm, 5.5mm, 6mm
- Designed for use in the Splice Tray EFA04-25-001
- Can be mounted by screw, rivet, or with adhesive pad
- EFA04-61-001 has anti-rotation pins to securely mount with screw or rivet



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

**EFA04-02**  
Fiber Clip

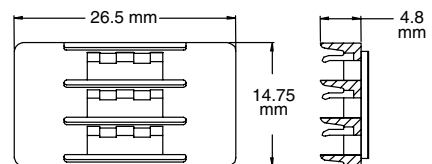


Specifications:

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

Features:

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



| Item No.     | Cable Ø |     | 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

EFA  
Fiber Clip

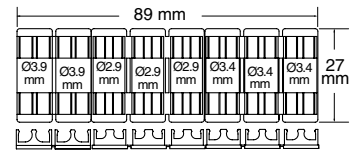
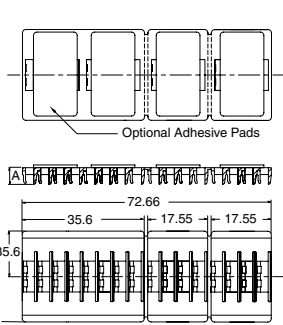
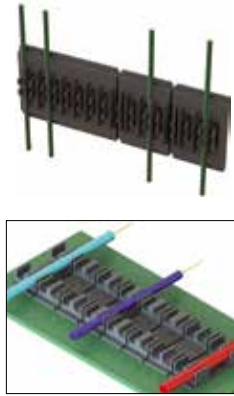


Figure 2

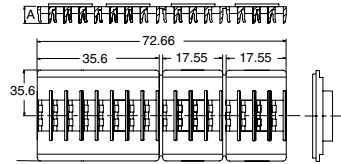


Figure 1

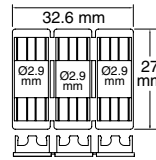


Figure 3

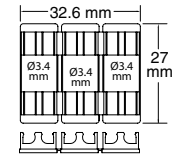


Figure 4

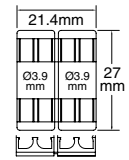


Figure 5

Specifications:

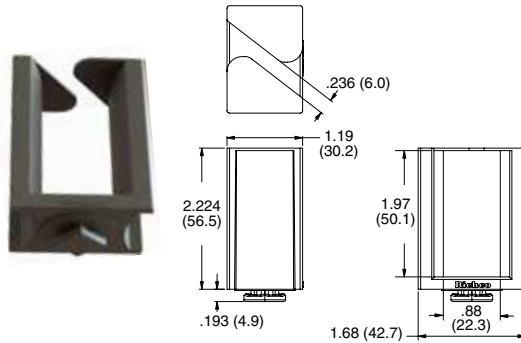
- Material: UL94 V-0 Nylon 6
- Color: See Chart

Features:

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

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

OFRB  
Fiber Rack Bracket



Specifications:

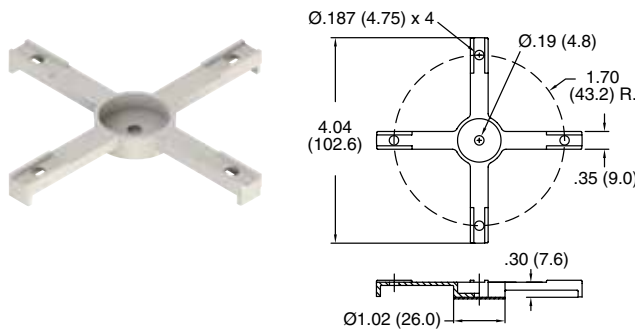
- Material: UL94 V-0 Nylon 6/6
- Color: Black

Features:

- Mounts into a standard 19" rack with a quarter turn
- Removable with a quarter turn
- No stress is applied to the fiber upon entry

| Item No. | Square Mounting Hole |             | Panel Thickness |           | Bulk Pack Qty. |
|----------|----------------------|-------------|-----------------|-----------|----------------|
|          | In                   | mm          | In              | mm        |                |
| OFRB-1BK | 0.465 x 0.465        | 11.8 x 11.8 | 0.063 - 0.079   | 1.6 - 2.0 | 100            |
| OFRB-2BK | 0.374 x 0.374        | 9.5 x 9.5   | 0.063 - 0.079   | 1.6 - 2.0 | 100            |

OFSB  
Fiber Support Base



Specifications:

- Material: See Chart
- Color: Natural

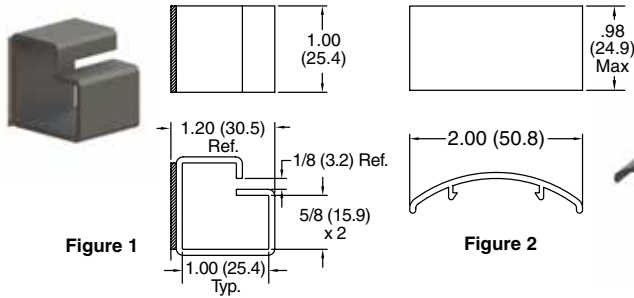
Features:

- Constructs a path for spooling fiber optic cables
- Designed for use in fiber optic patch panel applications
- Center hole is for mounting the base with a #8 screw or SR-5XXX rivet
- Any Essentra wire routing device that is designed to snap into a .187 hole and a .062" panel can be mounted to this base. Popular options are OFNS, STL, WS and LWS series

| Item No.           |                    | 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 of SR-5XXX Rivet | 100            |



**OFCC / OFCG  
Fiber Coiling Clip**

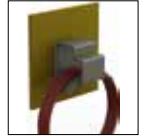


**Specifications:**

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

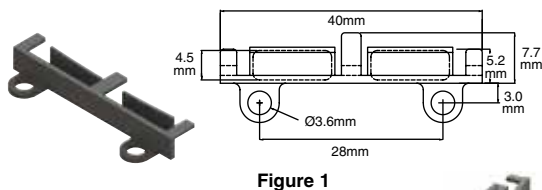
**Features:**

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



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

**EFA04  
Fiber Guide**

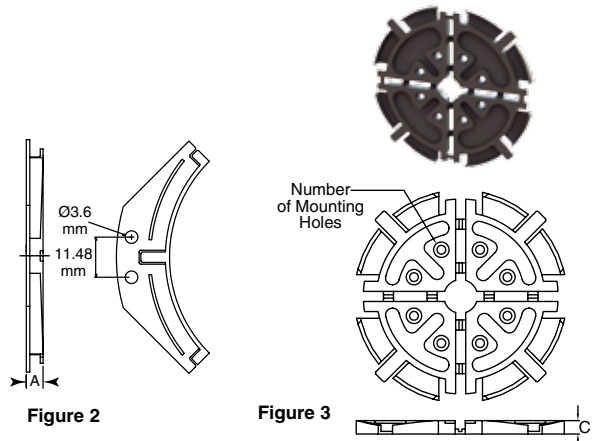


**Specifications:**

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

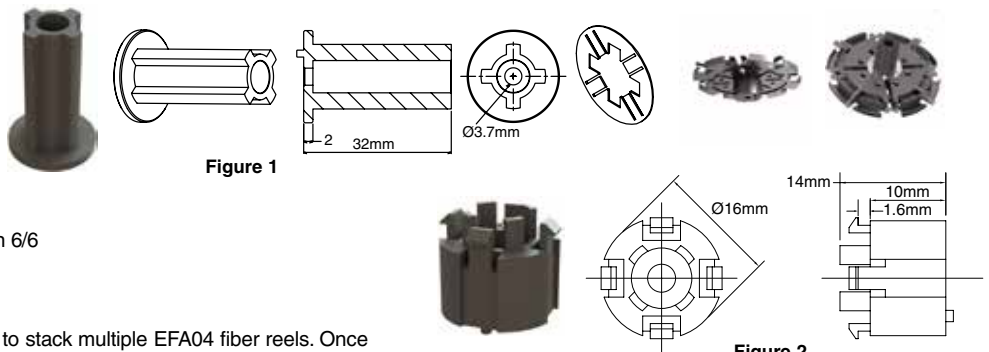
**Features:**

- Provide fiber storage as well as bend control
- Various mounting options are available
- The fiber reel screw mount holes are Ø2.8mm with a 90° countersink of Ø4.6mm. Holes are spaced evenly on a 30mm diameter
- Reel can be stacked or mounted above board using accessories below



| Item No.     |                            |                             |        | Height                                    |       | 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               | EFA04-34-R06                | 2      | 40 mm Radius Corner Guide                 | 0.472 | 12.0                  | 2                 | 100                            |
| EFA04-34-007 | EFA04-34-P07               | EFA04-34-R07                | 2      | 30-37 mm Radius Ribbon Fiber Corner Guide | 0.216 | 5.5                   | 2                 | 100                            |
| EFA04-04-001 | EFA04-04-ASS               | —                           | 3      | 25 mm Radius Fiber Reel                   | 0.157 | 4.0                   | 8                 | 2.5 m of 900 Micron Fiber 100  |
| EFA04-21-001 | EFA04-21-ASS               | —                           | 3      | 25 mm Radius Fiber Reel                   | 0.250 | 6.4                   | 8                 | 4.5 m of 900 Micron Fiber 100  |
| EFA04-10-001 | EFA04-10-ASS               | —                           | 3      | 30 mm Radius Fiber Reel                   | 0.153 | 3.9                   | 8                 | 3.0 m of 900 Micron Fiber 100  |
| EFA04-14-001 | EFA04-14-ASS               | —                           | 3      | 30 mm Radius Fiber Reel                   | 0.488 | 12.4                  | 8                 | 9.0 m of 900 Micron Fiber 100  |
| EFA04-76-001 | EFA04-76-ASS               | —                           | 3      | 35 mm Radius Fiber Reel                   | 0.315 | 8.0                   | 8                 | 15.0 m of 900 Micron Fiber 100 |
| EFA04-23-001 | EFA04-23-ASS               | —                           | 3      | 40 mm Radius Fiber Reel                   | 0.250 | 6.4                   | 4                 | 7.0 m of 900 Micron Fiber 100  |

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



**Specifications:**

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

**Features:**

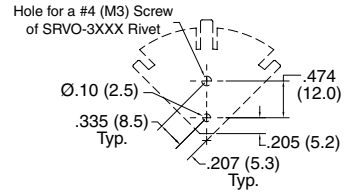
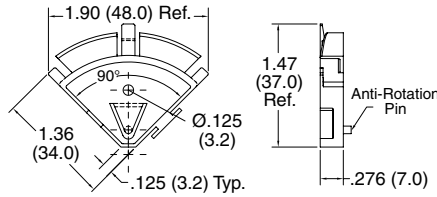
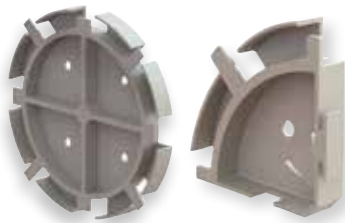
- EFA04-53-ASS is used to stack multiple EFA04 fiber reels. Once the desired number of reels are stacked, they are retained with an included spring clip
- EFA04-27-ASS is used to space the EFA04 fiber reel off the PC Board. Top of the standoff snaps into holes in the fiber reel
- Mounted from the bottom of the board with included rivet

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



**FIBER GUIDES & STORAGE**

**OFS**  
90° Fiber Segment, 30mm Radius



**Recommended Mounting Holes**

**Specifications:**

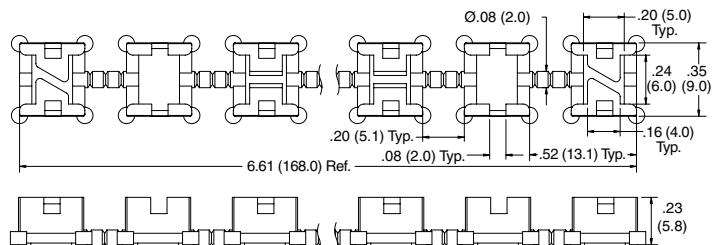
- Material: UL94 V-0 Nylon 6/6
- Color: Natural

**Features:**

- Provides a 90° bend control radius
- Assemble two pieces for bend control around a 180° turn
- Assemble four pieces for excess fiber spooling at 30mm radius
- In a four-piece assembled mode, stores approximately 60m of 900 micron fiber
- Mounts with a #4 (M3) screw or SRVO-30XX snap rivet

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

**OFFG / OFFGSP**  
Flexible Fiber Guide System



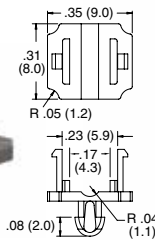
**Figure 1**

**Specifications:**

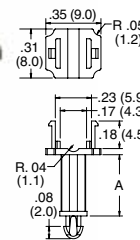
- Material: UL94 V-0 Nylon 6/6
- Color: Black

**Features:**

- Fully modular, flexible system giving complete fiber management and protection
- Unique spine allows the guide to be oriented in all planes
- For use with 250 and 900 micron fiber
- Fiber can enter and exit at any point, without risk of fiber snagging or kinking
- Angled and straight lugs located along the guide prevent the fiber from springing out
- 25mm maximum bend radius when flexed
- Guide can be cut to various lengths at flexible link sections
- Two types of support posts; OFFGSP-F for mounting flush to the panel, and OFFGSP-R that raises the guide 5, 10 or 16mm
- Guide snaps easily into the support posts



**Figure 2**

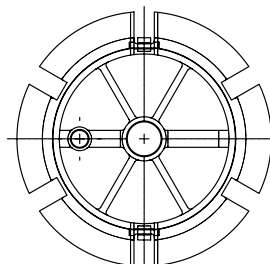


**Figure 3**



| Item No.        | Figure | Description              | Mounting Hole Ø |     | 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            |
| OFFGSP-R-10-BK  | 3      | Fiber Guide Spacer       | 0.098           | 2.5 | 0.063           | 1.6 | 0.390 | 10.0 | 100            |
| OFFGSP-R-16-BK  | 3      | Fiber Guide Spacer       | 0.098           | 2.5 | 0.063           | 1.6 | 0.630 | 16.0 | 100            |

**EFA04-67-ASS**  
Two Piece Fiber Winding



**Specifications:**

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

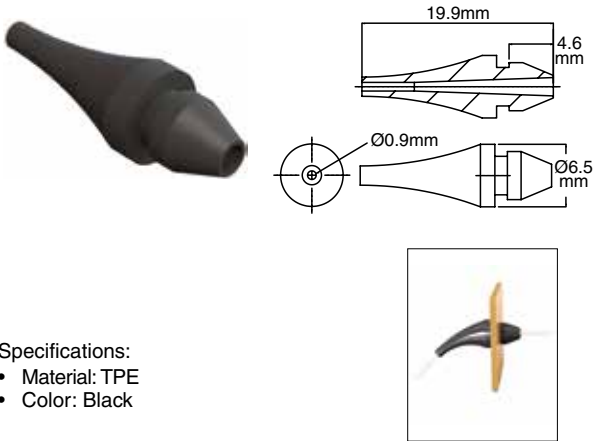
**Features:**

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

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



**EFA70-07**  
900 Micron Strain Relief Boot

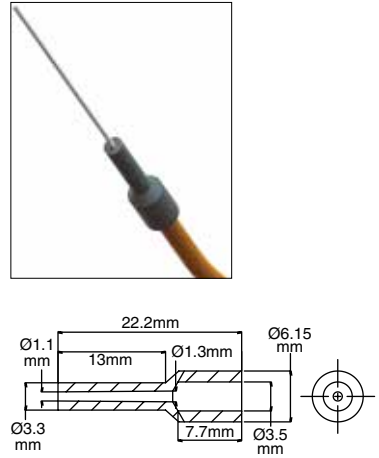


- Specifications:
- Material: TPE
  - Color: Black

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

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

**EFA70-01**  
900 Micron Transition Boot



- Specifications:
- Material: TPE
  - Color: Black

- Features:
- Transitions a 3mm jacketed fiber to a 900 micron fiber
  - Limits the bend of the fiber, preventing signal loss

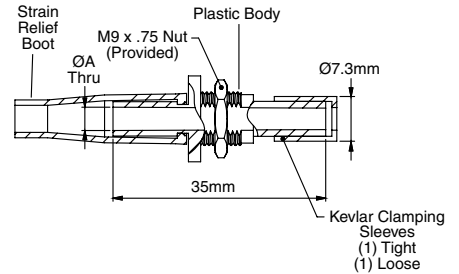
| Item No.     | Bulk Pack Qty. |
|--------------|----------------|
| EFA70-01-001 | 500            |

**EFA52**  
Quick Panel Mount  
Strain Relief Gland Kit



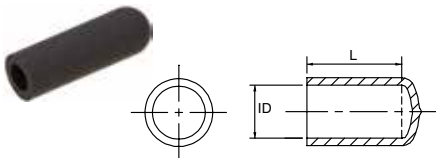
- Specifications:
- Material: UL94 V-0 Nylon 6
  - Color: Black

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



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

**EFA02-43**  
Connector Adapter Dust Cap



- Specifications:
- Material: PVC
  - Color: Black

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

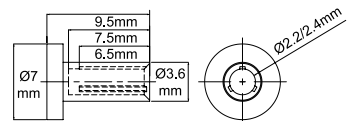
| Item No.     | Contents                       | L     |      | ID    |     | Bulk Pack Qty. |
|--------------|--------------------------------|-------|------|-------|-----|----------------|
|              |                                | In    | mm   | In    | mm  |                |
| EFA02-43-001 | SMA Connector Adapter Dust Cap | 0.500 | 12.7 | 0.120 | 3.0 | 500            |
| EFA02-43-002 | ST Connector Adapter Dust Cap  | 0.500 | 12.7 | 0.280 | 7.1 | 500            |
| EFA02-43-003 | FC Connector Adapter Dust Cap  | 0.310 | 8.0  | 0.280 | 7.1 | 500            |

**EFA02-52-001**  
Ø2.5mm Ferrule Dust Cap



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

- Features:
- Provides environmental protection for 2.5mm ferrules

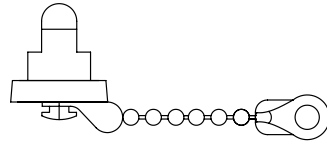


| Item No.     | Bulk Pack Qty. |
|--------------|----------------|
| EFA02-52-001 | 500            |



# DUST CAPS

## EFA02 Connector Dust Caps



**Specifications:**

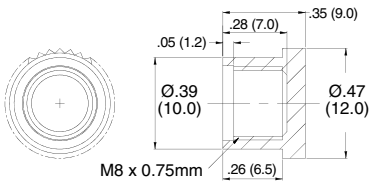
- Material: See Table
- Color: See Table

**Features:**

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

| Item No.     | Material  | Bulk Pack Qty. |
|--------------|---|----------------|
|              | <b>Stainless Steel Cap &amp; Chain</b>                    |                |
| 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 | —   | 250            |
| EFA02-14-ASS | —   | 250            |
|              | <b>Black TPE Cap &amp; Optional Stainless Steel Chain</b> |                |
|              | SC Adapter Dust Cap                                       | 250            |
|              | EFA02-14-001 Dust Cap with Chain                          | 250            |

## EFA02-03 FC Connector Port Dust Cap



**Specifications:**

- Material: HDPE
- Color: See Table

**Features:**

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

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

## EFA02 Connector Port Dust Cap and Lanyard



**Specifications:**

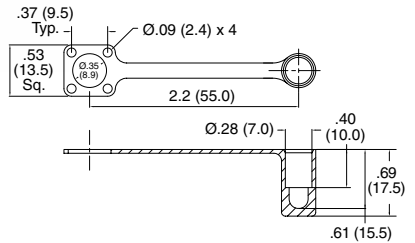
- Material: PVC
- Color: Black

**Features:**

- Provides environmental protection to various connectors
- Molded-on lanyard is attached to the connector to prevent loss of cover

| Item No.     | Contents                   | A     |      | B     |      | C     |      | D     |      | Bulk Pack Qty. |
|--------------|----------------------------|-------|------|-------|------|-------|------|-------|------|----------------|
|              |                            | In    | mm   | In    | mm   | In    | mm   | In    | mm   |                |
| EFA02-08-ASS | Biconic Connector Dust Cap | 0.930 | 23.5 | 0.870 | 22.0 | 0.510 | 13.0 | 0.410 | 10.4 | 250            |
| EFA02-11-ASS | ST Connector Dust Cap      | 0.730 | 18.5 | 0.670 | 17.0 | 0.470 | 12.0 | 0.340 | 8.7  | 250            |
| EFA02-13-ASS | FC Connector Dust Cap      | 0.730 | 18.5 | 0.670 | 17.0 | 0.600 | 15.3 | 0.470 | 12.0 | 250            |

## EFA02-35 ST Connector Port Dust Cap and Lanyard



**Specifications:**

- Material: TPE
- Color: Black

**Features:**

- Provides environmental protection of ST connector ports
- Molded-on lanyard prevents the loss of the cap

| Item No.     | Bulk Pack Qty. |
|--------------|----------------|
| EFA02-35-001 | 250            |



**CP  
Connector Plugs**

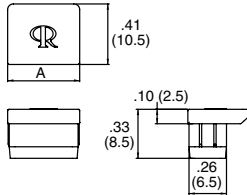


Figure 1

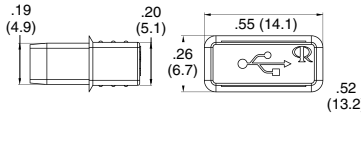


Figure 2

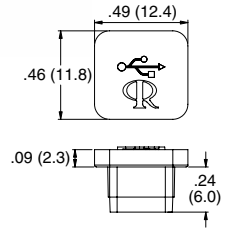


Figure 3

**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)

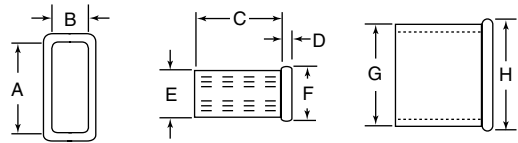
| Item No. | Figure | Connector Port | A     |      | Bulk Pack Qty. |
|----------|--------|----------------|-------|------|----------------|
|          |        |                | In    | mm   |                |
| CP-RJ11  | 1      | RJ11           | 0.410 | 10.5 | 1000           |
| CP-RJ45  | 1  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

**USB**

**USB Connector Caps**

**Specifications:**

- Material: Polyethylene
- Color: Natural



**Features:**

- Protective dust cover

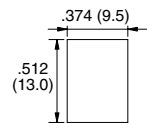
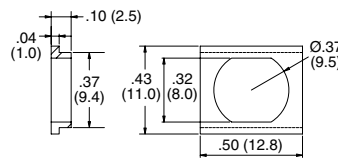
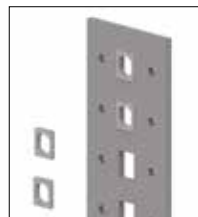
| Item No. | A     |      | B     |     | C     |      | D     |     | E     |     | F     |     | G     |      | H     |      | Bulk Pack Qty. |
|----------|-------|------|-------|-----|-------|------|-------|-----|-------|-----|-------|-----|-------|------|-------|------|----------------|
|          | 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            |

**OFCA**

**SC to ST Connector Cutout Adapter**

**Specifications:**

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



Recommended Mounting Hole

**Features:**

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

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

**BPE**

**Connector Port Plugs**

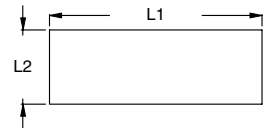
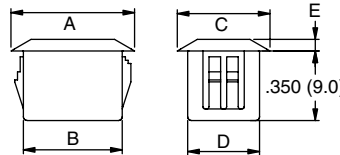


Figure 1

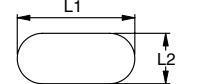


Figure 2

Recommended Mounting Holes

**Specifications:**

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

**Features:**

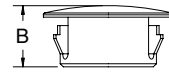
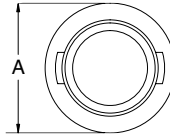
- Aesthetically pleasing, blanking off redundant connector parts
- Quick and easy installation; simply press fit in the designated hole
- ST series covers Double-D, D or round holes

| Item No.      | Color | Mounting Hole Figure | L1          |           | 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  | Ø.470 | Ø12  | Ø.360 | Ø9.2 | Ø.470 | Ø12  | 0.300 | 7.7  | 0.059 | 1.5 | 1000           |



PLUGS

PGM / PLH  
Standard Locking Hole Plug



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

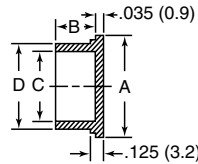
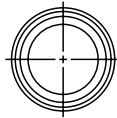
Specifications:

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

Features:

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

FC CAP  
Circular Connector Cap



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

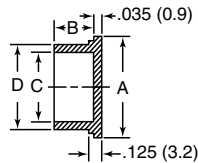
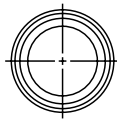
Specifications:

- Material: Low-Density Polyethylene
- Color: Red

Features:

- Designed for easy assembly and removal either with automated equipment or by hand
- Typically used to protect electrical connectors per Mil Spec 90376

FC PLUG  
Circular Connector Plug



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

Specifications:

- Material: Low-Density Polyethylene
- Color: Yellow

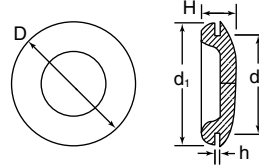
Features:

- Designed for easy assembly and removal either with automated equipment or by hand
- Typically used to protect electrical connectors per Mil Spec 90376





**BLANKING PLUG**  
**PVC Hole Plug**



**Specifications:**

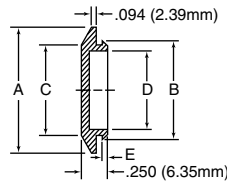
- Materials: PVC or TPR
- Color: Black

**Features:**

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

| Item No. | Panel Hole d2 |       | Panel Thickness h |       | OD D |       | Depth H |       | d1    |       | Pack Qty. | Bulk Pack Qty |       |
|----------|---------------|-------|-------------------|-------|------|-------|---------|-------|-------|-------|-----------|---------------|-------|
|          | PVC           | TPR   | In                | mm    | In   | mm    | In      | mm    | In    | mm    |           |               |       |
| 10860B   | 15150B        | 0.187 | 4.70              | 0.063 | 1.60 | 0.366 | 9.30    | 0.181 | 4.60  | 0.366 | 9.30      | 1             | 10000 |
| 10825B   | 15151B        | 0.250 | 6.40              | 0.063 | 1.60 | 0.374 | 9.50    | 0.197 | 5.00  | 0.374 | 9.50      | 1             | 10000 |
| 10832B   | —             | 0.313 | 8.00              | 0.031 | 0.80 | 0.571 | 14.50   | 0.157 | 4.00  | 0.417 | 10.60     | 1             | 10000 |
| 10233B   | —             | 0.313 | 8.00              | 0.063 | 1.60 | 0.571 | 14.50   | 0.177 | 4.50  | 0.417 | 10.60     | 1             | 10000 |
| 10488B   | —             | 0.354 | 9.00              | 0.063 | 1.60 | 0.591 | 15.00   | 0.260 | 6.60  | 0.488 | 12.40     | 1             | 10000 |
| 10912B   | 15155B        | 0.438 | 11.10             | 0.063 | 1.60 | 0.697 | 17.70   | 0.244 | 6.20  | 0.504 | 12.80     | 1             | 10000 |
| 10768B   | —             | 0.453 | 11.50             | 0.063 | 1.60 | 0.669 | 17.00   | 0.276 | 7.00  | 0.610 | 15.50     | 1             | 5000  |
| 15511B   | —             | 0.469 | 11.90             | 0.047 | 1.20 | 0.689 | 17.50   | 0.280 | 7.10  | 0.626 | 15.90     | 1             | 10000 |
| 10502B   | 15157B        | 0.500 | 12.70             | 0.063 | 1.60 | 0.736 | 18.70   | 0.220 | 5.60  | 0.610 | 15.50     | 1             | 5000  |
| 11321B   | 15158B        | 0.587 | 14.90             | 0.051 | 1.30 | 0.787 | 20.00   | 0.276 | 7.00  | 0.748 | 18.40     | 1             | 10000 |
| 10213B   | 15159B        | 0.610 | 15.50             | 0.063 | 1.60 | 0.866 | 22.00   | 0.295 | 7.50  | 0.748 | 19.00     | 1             | 5000  |
| 40043B   | —             | 0.625 | 15.90             | 0.063 | 1.60 | 0.748 | 19.00   | 0.280 | 7.10  | 0.748 | 19.00     | 1             | 10000 |
| 12914B   | —             | 0.642 | 16.30             | 0.051 | 1.30 | 0.787 | 20.00   | 0.276 | 7.00  | 0.728 | 18.50     | 1             | 5000  |
| 10678B   | 15160B        | 0.750 | 19.00             | 0.063 | 1.60 | 0.984 | 25.00   | 0.256 | 6.50  | 0.846 | 21.50     | 1             | 5000  |
| 14099A   | 15161B        | 0.781 | 20.00             | 0.063 | 1.60 | 0.984 | 25.00   | 0.256 | 6.50  | 0.846 | 21.50     | 1             | 5000  |
| 11152B   | 15162B        | 0.866 | 22.00             | 0.094 | 2.40 | 1.122 | 28.50   | 0.323 | 8.20  | 1.047 | 26.60     | 1             | 3000  |
| 10902B   | —             | 0.875 | 22.50             | 0.063 | 1.60 | 1.122 | 28.50   | 0.295 | 7.50  | 1.063 | 27.00     | 1             | 3000  |
| 11027B   | 15164B        | 0.968 | 24.50             | 0.094 | 2.40 | 1.181 | 30.00   | 0.343 | 8.70  | 1.083 | 27.50     | 1             | 2000  |
| 11323B   | —             | 0.984 | 25.00             | 0.031 | 0.80 | 1.516 | 38.50   | 0.181 | 4.60  | 1.122 | 28.50     | 1             | 3000  |
| 10705B   | 15166B        | 1.000 | 25.40             | 0.063 | 1.60 | 1.260 | 32.00   | 0.354 | 9.00  | 1.114 | 28.30     | 1             | 3000  |
| 11148B   | 15165B        | 1.000 | 25.40             | 0.094 | 2.40 | 1.260 | 32.00   | 0.354 | 9.00  | 1.114 | 28.30     | 1             | 3000  |
| 11239B   | —             | 1.250 | 31.50             | 0.031 | 0.80 | 1.504 | 38.20   | 0.276 | 7.00  | 1.240 | 31.50     | 1             | 2000  |
| 11059B   | 15168B        | 1.250 | 31.50             | 0.063 | 1.60 | 1.504 | 38.20   | 0.295 | 7.50  | 1.394 | 35.40     | 1             | 2000  |
| 11281B   | 15170B        | 1.260 | 32.00             | 0.122 | 3.10 | 1.504 | 38.20   | 0.354 | 9.00  | 1.394 | 35.40     | 1             | 2000  |
| 10877B   | 15171B        | 1.500 | 38.20             | 0.063 | 1.60 | 1.720 | 43.70   | 0.323 | 8.20  | 1.693 | 43.00     | 1             | 1500  |
| 10320B   | 15172B        | 2.031 | 51.50             | 0.063 | 1.60 | 2.264 | 57.50   | 0.488 | 12.40 | 2.071 | 52.60     | 1             | 500   |

**S**  
**Sheet Metal Plug**



**Specifications:**

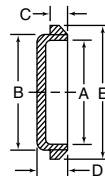
- Material: Low-Density Polyethylene
- Color: Black

**Features:**

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

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

**SR**  
**Recessed Sheet Metal Plug**



**Specifications:**

- Material: Low-Density Polyethylene
- Color: Black

**Features:**

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

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



**PLUGS & GROMMETS**

**LTP  
IP67 Liquid Tight Plug**



Specifications:

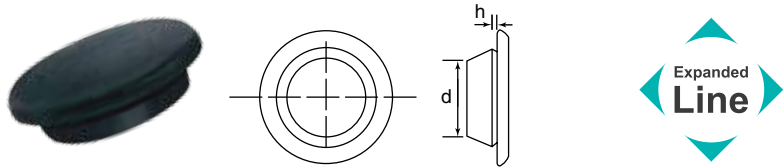
- Material: UL94 V-0 Silicone
- Color: Black

Features:

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

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

**BP  
Flexible Hole Plug**



Specifications:

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

Features:

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

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

**GRD / DG / DGB  
Diaphragm Grommet**



Specifications:

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

Features:

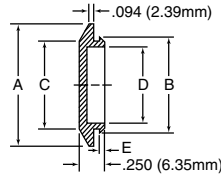
- Use as a blanking plugs to conceal access holes until wire are installed
- To install wires, pierce the central membrane film and insert wire
- Design allows for multiple ranges of wires to pass thru
- PVC material is non-staining; resistant to ozone, acids, and sunlight; with excellent aging qualities

| Item No.      | Style | Mounting Hole Ø A |      | Panel Thickness |     | C Ref. |      | OD    |      | E     |      | Pack Qty. | Bulk Pack Qty. |
|---------------|-------|-------------------|------|-----------------|-----|--------|------|-------|------|-------|------|-----------|----------------|
|               |       | In                | mm   | In              | mm  | In     | mm   | In    | mm   | In    | mm   |           |                |
| GRD2025031PA  | 2     | 0.250             | 6.4  | 0.030           | 0.8 | 0.160  | 4.1  | 0.370 | 9.4  | 0.140 | 3.6  | 1         | 10000          |
| DGB-2.5       | 2     | 0.250             | 6.4  | 0.030           | 0.8 | 0.160  | 4.1  | 0.370 | 9.4  | 0.140 | 3.6  | 1         | 1000           |
| DGB-4         | 2     | 0.390             | 9.9  | 0.060           | 1.5 | 0.250  | 6.4  | 0.500 | 12.7 | 0.260 | 6.6  | 1         | 1000           |
| GRD2039061PA  | 2     | 0.390             | 9.9  | 0.060           | 1.5 | 0.250  | 6.4  | 0.500 | 12.7 | 0.260 | 6.6  | 1         | 10000          |
| DGB-6         | 2     | 0.430             | 11.0 | 0.060           | 1.5 | 0.310  | 8.0  | 0.690 | 17.5 | 0.310 | 8.0  | 1         | 1000           |
| GRD2043061PA  | 2     | 0.430             | 11.0 | 0.060           | 1.5 | 0.310  | 8.0  | 0.690 | 17.5 | 0.310 | 8.0  | 1         | 5000           |
| DGB-5         | 2     | 0.490             | 12.5 | 0.060           | 1.5 | 0.370  | 9.5  | 0.620 | 15.7 | 0.250 | 6.4  | 1         | 1000           |
| GRD2050061PA  | 2     | 0.490             | 12.5 | 0.060           | 1.5 | 0.370  | 9.5  | 0.620 | 15.7 | 0.250 | 6.4  | 1         | 10000          |
| GRD1062061PA  | 1     | 0.630             | 16.0 | 0.060           | 1.5 | 0.750  | 19.0 | 0.430 | 11.0 | 0.230 | 5.8  | 1         | 10000          |
| DG-19426      | 1     | 0.630             | 16.0 | 0.060           | 1.5 | 0.750  | 19.0 | 0.430 | 11.0 | 0.230 | 5.8  | 1         | 1000           |
| GRD2062061PA  | 2     | 0.630             | 16.0 | 0.060           | 1.6 | 0.750  | 19.0 | 0.438 | 11.0 | 0.310 | 8.0  | 1         | 5000           |
| DGB-7         | 2     | 0.630             | 16.0 | 0.060           | 1.5 | 0.430  | 11.0 | 0.750 | 19.0 | 0.310 | 8.0  | 1         | 1000           |
| DG-19427      | 1     | 0.630             | 16.0 | 0.090           | 2.4 | 0.870  | 22.0 | 0.490 | 12.5 | 0.320 | 8.0  | 1         | 1000           |
| GRD1062091PA  | 1     | 0.630             | 16.0 | 0.094           | 2.4 | 0.875  | 22.2 | 0.500 | 12.7 | 0.320 | 8.0  | 1         | 5000           |
| GRD2075061PA  | 2     | 0.750             | 19.0 | 0.060           | 1.5 | 1.000  | 25.4 | 0.630 | 15.9 | 0.281 | 7.1  | 1         | 4000           |
| DGB-11        | 2     | 0.750             | 19.0 | 0.060           | 1.5 | 0.630  | 16.0 | 1.000 | 25.5 | 0.280 | 7.0  | 1         | 1000           |
| GRD1075071PA  | 1     | 0.750             | 19.0 | 0.080           | 2.0 | 1.000  | 25.4 | 0.630 | 15.9 | 0.320 | 8.0  | 1         | 5000           |
| DG-15512      | 1     | 0.750             | 19.0 | 0.080           | 2.0 | 1.000  | 25.4 | 0.630 | 15.9 | 0.320 | 8.0  | 1         | 1000           |
| GRD1075091PA  | 1     | 0.750             | 19.0 | 0.090           | 2.4 | 1.000  | 25.4 | 0.563 | 14.3 | 0.344 | 8.7  | 1         | 5000           |
| DG-10134      | 1     | 0.750             | 19.0 | 0.090           | 2.4 | 1.000  | 25.4 | 0.610 | 15.5 | 0.350 | 8.8  | 1         | 1000           |
| DG-19429      | 1     | 0.750             | 19.0 | 0.120           | 3.2 | 1.000  | 25.4 | 0.563 | 14.3 | 0.375 | 9.5  | 1         | 1000           |
| GRD1075121PA  | 1     | 0.750             | 19.0 | 0.120           | 3.2 | 1.000  | 25.4 | 0.563 | 14.3 | 0.375 | 9.5  | 1         | 2500           |
| DG-10187      | 1     | 0.790             | 20.0 | 0.060           | 1.5 | 1.000  | 25.4 | 0.610 | 15.5 | 0.320 | 8.0  | 1         | 1000           |
| DGB-10        | 2     | 0.870             | 22.0 | 0.060           | 1.5 | 0.720  | 18.4 | 1.000 | 25.5 | 0.310 | 8.0  | 1         | 1000           |
| GRD2087061PA  | 2     | 0.875             | 22.0 | 0.060           | 1.6 | 1.000  | 25.4 | 0.750 | 19.0 | 0.310 | 8.0  | 1         | 4000           |
| DGB-13        | 2     | 1.000             | 25.4 | 0.060           | 1.5 | 0.810  | 20.5 | 1.180 | 30.0 | 0.310 | 8.0  | 1         | 1000           |
| GRD2100061PA  | 2     | 1.000             | 25.4 | 0.060           | 1.5 | 0.810  | 20.5 | 1.180 | 30.0 | 0.310 | 8.0  | 1         | 2000           |
| DG-10806      | 1     | 1.000             | 25.5 | 0.090           | 2.4 | 1.440  | 36.5 | 0.750 | 19.0 | 0.330 | 8.4  | 1         | 1000           |
| GRD1100091PA  | 1     | 1.000             | 25.5 | 0.090           | 2.4 | 1.440  | 36.5 | 0.750 | 19.0 | 0.330 | 8.4  | 1         | 2000           |
| GRD1125091PA  | 1     | 1.260             | 32.0 | 0.090           | 2.4 | 1.540  | 39.0 | 0.980 | 25.0 | 0.320 | 8.0  | 1         | 1000           |
| DG-19430      | 1     | 1.260             | 32.0 | 0.090           | 2.4 | 1.540  | 39.0 | 0.980 | 25.0 | 0.320 | 8.0  | 1         | 1000           |
| GRD1125151PA  | 1     | 1.260             | 32.0 | 0.156           | 4.0 | 1.540  | 39.0 | 0.980 | 25.0 | 0.375 | 9.5  | 1         | 1000           |
| GRD21625375PA | 2     | 1.625             | 42.0 | 0.090           | 2.4 | 1.000  | 25.4 | 1.500 | 38.1 | 0.400 | 10.1 | 1         | 1000           |



**S Series**  
Sheet Metal Plugs

ALLIANCE



Specifications:

- Material: Low-Density Polyethylene
- Color: Black

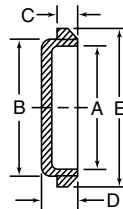
Features:

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

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

**SR Series**  
Recessed Sheet Metal Plugs

ALLIANCE



Specifications:

- Material: Low-Density Polyethylene
- Color: Black

Features:

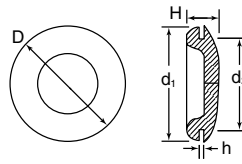
- Economical snap-in plug that provides an attractive finish and a secure fit for entry holes in sheet metal

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



# SHEET METAL PLUGS

## Blanking Plug Series PVC Hole Plugs



**Specifications:**

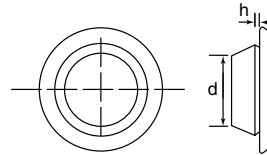
- Materials: PVC or TPR
- Color: Black

**Features:**

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

| Item No. |        | Panel Hole Size d2 |       | Panel Thickness h |      | D= O.D. |       | Depth H |       | d1    |       | Pack Qty. | Bulk Pack Qty. |
|----------|--------|--------------------|-------|-------------------|------|---------|-------|---------|-------|-------|-------|-----------|----------------|
| PVC      | TPR    | In                 | mm    | In                | mm   | In      | mm    | In      | mm    | In    | mm    |           |                |
| 10860B   | 15150B | 0.187              | 4.70  | 0.063             | 1.60 | 0.366   | 9.30  | 0.181   | 4.60  | 0.366 | 9.30  | 1         | 10000          |
| 10825B   | 15151B | 0.250              | 6.40  | 0.063             | 1.60 | 0.374   | 9.50  | 0.197   | 5.00  | 0.374 | 9.50  | 1         | 10000          |
| 10832B   | —      | 0.313              | 8.00  | 0.031             | 0.80 | 0.571   | 14.50 | 0.157   | 4.00  | 0.417 | 10.60 | 1         | 10000          |
| 10233B   | —      | 0.313              | 8.00  | 0.063             | 1.60 | 0.571   | 14.50 | 0.177   | 4.50  | 0.417 | 10.60 | 1         | 10000          |
| 10488B   | —      | 0.354              | 9.00  | 0.063             | 1.60 | 0.591   | 15.00 | 0.260   | 6.60  | 0.488 | 12.40 | 1         | 10000          |
| 10912B   | 15155B | 0.438              | 11.10 | 0.063             | 1.60 | 0.697   | 17.70 | 0.244   | 6.20  | 0.504 | 12.80 | 1         | 10000          |
| 10768B   | —      | 0.453              | 11.50 | 0.063             | 1.60 | 0.669   | 17.00 | 0.276   | 7.00  | 0.610 | 15.50 | 1         | 5000           |
| 15511B   | —      | 0.469              | 11.90 | 0.047             | 1.20 | 0.689   | 17.50 | 0.280   | 7.10  | 0.626 | 15.90 | 1         | 10000          |
| 10502B   | 15157B | 0.500              | 12.70 | 0.063             | 1.60 | 0.736   | 18.70 | 0.220   | 5.60  | 0.610 | 15.50 | 1         | 5000           |
| 11321B   | 15158B | 0.587              | 14.90 | 0.051             | 1.30 | 0.787   | 20.00 | 0.276   | 7.00  | 0.724 | 18.40 | 1         | 10000          |
| 10213B   | 15159B | 0.610              | 15.50 | 0.063             | 1.60 | 0.866   | 22.00 | 0.295   | 7.50  | 0.748 | 19.00 | 1         | 5000           |
| 40043B   | —      | 0.625              | 15.90 | 0.063             | 1.60 | 0.748   | 19.00 | 0.280   | 7.10  | 0.748 | 19.00 | 1         | 10000          |
| 12914B   | —      | 0.642              | 16.30 | 0.051             | 1.30 | 0.787   | 20.00 | 0.276   | 7.00  | 0.728 | 18.50 | 1         | 5000           |
| 10678B   | 15160B | 0.750              | 19.00 | 0.063             | 1.60 | 0.984   | 25.00 | 0.256   | 6.50  | 0.846 | 21.50 | 1         | 5000           |
| 10499A   | 15161B | 0.781              | 20.00 | 0.063             | 1.60 | 0.984   | 25.00 | 0.256   | 6.50  | 0.846 | 21.50 | 1         | 5000           |
| 11152B   | 15162B | 0.866              | 22.00 | 0.094             | 2.40 | 1.122   | 28.50 | 0.323   | 8.20  | 1.047 | 26.60 | 1         | 3000           |
| 10902B   | —      | 0.875              | 22.50 | 0.063             | 1.60 | 1.122   | 28.50 | 0.295   | 7.50  | 1.063 | 27.00 | 1         | 3000           |
| 11027B   | 15164B | 0.968              | 24.50 | 0.094             | 2.40 | 1.181   | 30.00 | 0.343   | 8.70  | 1.083 | 27.50 | 1         | 2000           |
| 11323B   | —      | 0.984              | 25.00 | 0.031             | 0.80 | 1.516   | 38.50 | 0.181   | 4.60  | 1.122 | 28.50 | 1         | 3000           |
| 10705B   | 15166B | 1.000              | 25.40 | 0.063             | 1.60 | 1.260   | 32.00 | 0.354   | 9.00  | 1.114 | 28.30 | 1         | 3000           |
| 11148B   | 15165B | 1.000              | 25.40 | 0.094             | 2.40 | 1.260   | 32.00 | 0.354   | 9.00  | 1.114 | 28.30 | 1         | 3000           |
| 11239B   | —      | 1.250              | 31.50 | 0.031             | 0.80 | 1.504   | 38.20 | 0.276   | 7.00  | 1.240 | 31.50 | 1         | 2000           |
| 11059B   | 15168B | 1.250              | 31.50 | 0.063             | 1.60 | 1.504   | 38.20 | 0.295   | 7.50  | 1.394 | 35.40 | 1         | 2000           |
| 11281B   | 15170B | 1.260              | 32.00 | 0.122             | 3.10 | 1.504   | 38.20 | 0.354   | 9.00  | 1.394 | 35.40 | 1         | 2000           |
| 10877B   | 15171B | 1.500              | 38.20 | 0.063             | 1.60 | 1.720   | 43.70 | 0.323   | 8.20  | 1.693 | 43.00 | 1         | 1500           |
| 10320B   | 15172B | 2.031              | 51.50 | 0.063             | 1.60 | 2.264   | 57.50 | 0.488   | 12.40 | 2.071 | 52.60 | 1         | 500            |

## Body Series TPR Hole Plugs



**Specifications:**

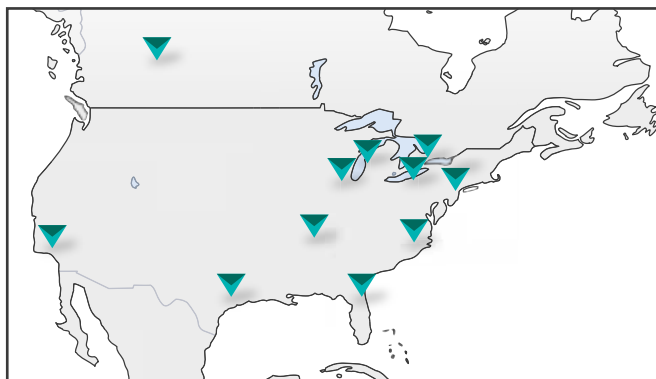
- Material: TPR (-100°F to 300°F)

**Features:**

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

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

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



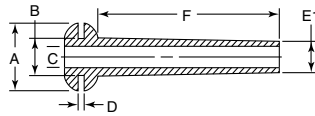
11 LOCATIONS TO SERVE YOU  
SAME DAY SHIPPING  
OVER 1 BILLION PARTS IN STOCK



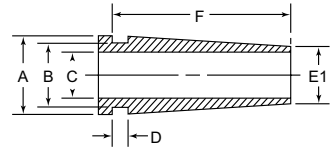
# GROMMETS & GROMMET SLEEVES



## GRS / RGS Grommet Sleeve



Style 1



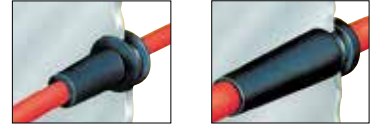
Style 2

**Specifications:**

- Material: PVC
- Color: Black

**Features:**

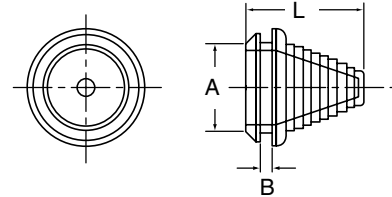
- Sleeve design provides additional support and protection for cables/wires passing thru panel
- PVC is non-staining; resistant to ozone, acids, and sunlight; with excellent aging qualities



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

## GRC

### Stepped Grommet



**Specifications:**

- Material: PVC
- Color: Black

**Features:**

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

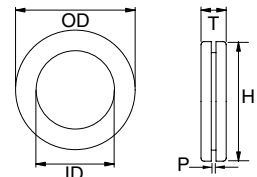
| Item No. | Panel Hole Size A |      | Panel Thickness B |     | Length L |      | Cable Range   |             | Pack Qty. | Bulk Pack Qty. |
|----------|-------------------|------|-------------------|-----|----------|------|---------------|-------------|-----------|----------------|
|          | In                | mm   | In                | mm  | In       | mm   | In            | mm          |           |                |
| 462039   | 0.500             | 12.7 | 0.120             | 3.0 | 1.270    | 32.5 | 0.200 - 0.350 | 5.0 - 9.0   | 1         | 1000           |
| 462040   | 0.830             | 21.0 | 0.120             | 3.0 | 1.080    | 27.5 | 0.200 - 0.670 | 5.0 - 17.0  | 1         | 1000           |
| 462041   | 1.020             | 26.0 | 0.120             | 3.0 | 1.160    | 29.5 | 0.390 - 0.870 | 10.0 - 22.0 | 1         | 1000           |

## HG

### TPE Flexible Hole Grommet

**Specifications:**

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



**Features:**

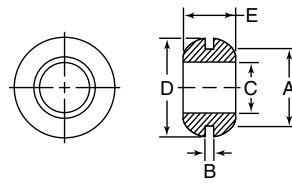
- Molded out of UL94-HB Material
- Suitable for outdoor use in accordance with UL 746C

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



# GROMMETS

## GRO PVC Hole Grommet



**Specifications:**

- Material: 55 Shore A PVC
- Color: Black

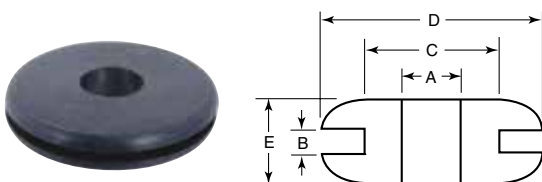
**Features:**

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



| Item No.   | Panel Hole Size A |      | Panel Thickness B |     | ID C  |      | OD D  |      | Overall Depth E |      | Shore A Rating | Pack Qty. | Bulk Pack Qty. |
|------------|-------------------|------|-------------------|-----|-------|------|-------|------|-----------------|------|----------------|-----------|----------------|
|            | In                | mm   | In                | mm  | In    | mm   | In    | mm   | In              | mm   |                |           |                |
| GRO018031A | 0.188             | 4.8  | 0.031             | 0.8 | 0.109 | 2.8  | 0.313 | 7.9  | 0.188           | 4.8  | 55             | 1         | 10000          |
| GRO018061A | 0.188             | 4.8  | 0.063             | 1.6 | 0.125 | 3.2  | 0.313 | 7.9  | 0.250           | 6.4  | 55             | 1         | 10000          |
| GRO023041A | 0.234             | 6.0  | 0.047             | 1.2 | 0.125 | 3.2  | 0.344 | 8.7  | 0.156           | 4.0  | 55             | 1         | 10000          |
| GRO025031A | 0.250             | 6.4  | 0.031             | 0.8 | 0.156 | 4.0  | 0.375 | 9.5  | 0.156           | 4.0  | 43             | 1         | 10000          |
| GRO025061A | 0.250             | 6.4  | 0.063             | 1.6 | 0.156 | 4.0  | 0.375 | 9.5  | 0.250           | 6.4  | 55             | 1         | 10000          |
| GRO025062A | 0.250             | 6.4  | 0.063             | 1.6 | 0.188 | 4.8  | 0.375 | 9.5  | 0.281           | 7.1  | 55             | 1         | 10000          |
| GRO025121A | 0.250             | 6.4  | 0.125             | 3.2 | 0.156 | 4.0  | 0.375 | 9.5  | 0.313           | 7.9  | 43             | 1         | 10000          |
| GRO028091A | 0.281             | 7.1  | 0.094             | 2.4 | 0.188 | 4.8  | 0.438 | 11.1 | 0.281           | 7.1  | 55             | 1         | 10000          |
| GRO031031A | 0.313             | 7.9  | 0.031             | 0.8 | 0.188 | 4.8  | 0.438 | 11.1 | 0.188           | 4.8  | 55             | 1         | 10000          |
| GRO031041A | 0.313             | 7.9  | 0.047             | 1.2 | 0.219 | 5.6  | 0.438 | 11.1 | 0.156           | 4.0  | 55             | 1         | 10000          |
| GRO031061A | 0.313             | 7.9  | 0.063             | 1.6 | 0.219 | 5.6  | 0.438 | 11.1 | 0.219           | 5.6  | 43             | 1         | 10000          |
| GRO031121A | 0.313             | 7.9  | 0.125             | 3.2 | 0.125 | 3.2  | 0.438 | 11.1 | 0.313           | 7.9  | 55             | 1         | 10000          |
| GRO037041A | 0.375             | 9.5  | 0.047             | 1.2 | 0.281 | 7.1  | 0.563 | 14.3 | 0.188           | 4.8  | 55             | 1         | 10000          |
| GRO037061A | 0.375             | 9.5  | 0.063             | 1.6 | 0.250 | 6.4  | 0.563 | 14.3 | 0.250           | 6.4  | 55             | 1         | 10000          |
| GRO037091A | 0.375             | 9.5  | 0.094             | 2.4 | 0.250 | 6.4  | 0.563 | 14.3 | 0.281           | 7.1  | 55             | 1         | 10000          |
| GRO040061A | 0.406             | 10.3 | 0.063             | 1.6 | 0.281 | 7.1  | 0.563 | 14.3 | 0.156           | 4.0  | 55             | 1         | 10000          |
| GRO043061A | 0.438             | 11.1 | 0.063             | 1.6 | 0.313 | 7.9  | 0.563 | 14.3 | 0.188           | 4.8  | 55             | 1         | 10000          |
| GRO046071A | 0.469             | 11.9 | 0.078             | 2.0 | 0.375 | 9.5  | 0.688 | 17.5 | 0.266           | 6.8  | 55             | 1         | 10000          |
| GRO050061A | 0.500             | 12.7 | 0.063             | 1.6 | 0.375 | 9.5  | 0.688 | 17.5 | 0.281           | 7.1  | 55             | 1         | 10000          |
| GRO050121A | 0.500             | 12.7 | 0.125             | 3.2 | 0.313 | 7.9  | 0.625 | 15.9 | 0.313           | 7.9  | 55             | 1         | 10000          |
| GRO050122A | 0.500             | 12.7 | 0.125             | 3.2 | 0.375 | 9.5  | 0.688 | 17.5 | 0.344           | 8.7  | 55             | 1         | 10000          |
| GRO056061A | 0.563             | 14.3 | 0.063             | 1.6 | 0.438 | 11.1 | 0.750 | 19.1 | 0.250           | 6.4  | 55             | 1         | 10000          |
| GRO062031A | 0.625             | 15.9 | 0.031             | 0.8 | 0.438 | 11.1 | 0.750 | 19.1 | 0.375           | 9.5  | 55             | 1         | 10000          |
| GRO062041A | 0.625             | 15.9 | 0.047             | 1.2 | 0.500 | 12.7 | 0.813 | 20.6 | 0.281           | 7.1  | 55             | 1         | 10000          |
| GRO068031A | 0.688             | 17.5 | 0.031             | 0.8 | 0.563 | 14.3 | 0.875 | 22.2 | 0.281           | 7.1  | 55             | 1         | 10000          |
| GRO068061A | 0.688             | 17.5 | 0.063             | 1.6 | 0.500 | 12.7 | 0.875 | 22.2 | 0.250           | 6.4  | 55             | 1         | 8000           |
| GRO068062A | 0.688             | 17.5 | 0.063             | 1.6 | 0.563 | 14.3 | 0.875 | 22.2 | 0.188           | 4.8  | 55             | 1         | 10000          |
| GRO068121A | 0.688             | 17.5 | 0.125             | 3.2 | 0.500 | 12.7 | 0.875 | 22.2 | 0.313           | 7.9  | 55             | 1         | 8000           |
| GRO075061A | 0.750             | 19.1 | 0.063             | 1.6 | 0.625 | 15.9 | 0.875 | 22.2 | 0.219           | 5.6  | 55             | 1         | 10000          |
| GRO075062A | 0.750             | 19.1 | 0.063             | 1.6 | 0.629 | 16.0 | 0.938 | 23.8 | 0.188           | 4.8  | 55             | 1         | 10000          |
| GRO081041A | 0.813             | 20.6 | 0.047             | 1.2 | 0.625 | 15.9 | 1.063 | 27.0 | 0.313           | 7.9  | 55             | 1         | 4000           |
| GRO087121A | 0.875             | 22.3 | 0.125             | 3.2 | 0.625 | 15.9 | 1.063 | 27.0 | 0.375           | 9.5  | 55             | 1         | 4000           |
| GRO100041A | 1.000             | 25.4 | 0.047             | 1.2 | 0.750 | 19.1 | 1.250 | 31.8 | 0.297           | 7.5  | 55             | 1         | 2000           |
| GRO100061A | 1.000             | 25.4 | 0.063             | 1.6 | 0.750 | 19.1 | 1.250 | 31.8 | 0.313           | 7.9  | 55             | 1         | 4000           |
| GRO100062A | 1.000             | 25.4 | 0.063             | 1.6 | 0.875 | 22.2 | 1.250 | 31.8 | 0.313           | 7.9  | 55             | 1         | 4000           |
| GRO100121A | 1.000             | 25.4 | 0.125             | 3.2 | 0.750 | 19.1 | 1.250 | 31.8 | 0.375           | 9.5  | 55             | 1         | 2000           |
| GRO125031A | 1.250             | 31.8 | 0.031             | 0.8 | 1.000 | 25.4 | 1.750 | 44.5 | 0.250           | 6.4  | 55             | 1         | 2000           |
| GRO125061A | 1.250             | 31.8 | 0.063             | 1.6 | 1.000 | 25.4 | 1.500 | 38.1 | 0.297           | 7.5  | 55             | 1         | 2000           |
| GRO125121A | 1.250             | 31.8 | 0.125             | 3.2 | 1.000 | 25.4 | 1.500 | 38.1 | 0.359           | 9.1  | 55             | 1         | 2000           |
| GRO150061A | 1.500             | 38.1 | 0.063             | 1.6 | 1.250 | 31.8 | 1.813 | 46.0 | 0.375           | 9.5  | 55             | 1         | 1000           |
| GRO150121A | 1.500             | 38.1 | 0.125             | 3.2 | 1.250 | 31.8 | 1.813 | 46.0 | 0.438           | 11.1 | 55             | 1         | 1000           |
| GRO175061A | 1.750             | 44.5 | 0.063             | 1.6 | 1.500 | 38.1 | 2.000 | 50.8 | 0.375           | 9.5  | 55             | 1         | 1000           |
| GRO175121A | 1.750             | 44.5 | 0.125             | 3.2 | 1.500 | 38.1 | 2.000 | 50.8 | 0.375           | 9.5  | 55             | 1         | 1000           |
| GRO200061A | 2.000             | 50.8 | 0.063             | 1.6 | 1.750 | 44.5 | 2.375 | 60.3 | 0.406           | 10.3 | 55             | 1         | 500            |
| GRO200121A | 2.000             | 50.8 | 0.125             | 3.2 | 1.750 | 44.5 | 2.375 | 60.3 | 0.469           | 11.9 | 55             | 1         | 500            |

## Rubber Grommet Assortments



Comes in gray metal box drawer.

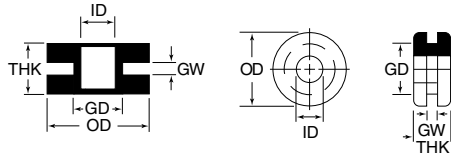
| Contents - KI-161 |      |      |       |        |        |      |      |      |        |       |      |
|-------------------|------|------|-------|--------|--------|------|------|------|--------|-------|------|
| Qty.              | Size |      |       |        |        | Qty. | Size |      |        |       |      |
|                   | A    | B    | C     | D      | E      |      | A    | B    | C      | D     | E    |
| 8                 | 1/2  | 3/32 | 25/32 | 1      | 1 1/32 | 8    | 3/4  | 1/16 | 15/16  | 1 1/8 | 1/4  |
| 8                 | 1/2  | 1/8  | 3/4   | 1      | 1/2    | 6    | 3/4  | 1/16 | 1 1/16 | 1 3/8 | 3/8  |
| 8                 | 1/2  | 1/4  | 13/16 | 1 1/16 | 1/2    | 8    | 3/4  | 1/16 | 1 1/4  | 1 5/8 | 1/4  |
| 8                 | 5/8  | 1/8  | 7/8   | 1 1/8  | 3/8    | 5    | 3/4  | 1/4  | 1 1/4  | 1 5/8 | 7/16 |
| 8                 | 5/8  | 1/16 | 7/8   | 1 1/8  | 5/16   |      |      |      |        |       |      |

| Contents - KI-160 |      |      |      |       |      |      |      |      |      |        |        |
|-------------------|------|------|------|-------|------|------|------|------|------|--------|--------|
| Qty.              | Size |      |      |       |      | Qty. | Size |      |      |        |        |
|                   | A    | B    | C    | D     | E    |      | A    | B    | C    | D      | E      |
| 15                | 1/8  | 3/32 | 3/8  | 1/2   | 5/16 | 10   | 5/16 | 1/16 | 9/16 | 13/16  | 5/16   |
| 25                | 5/32 | 1/16 | 1/4  | 5/8   | 3/16 | 8    | 5/16 | 1/16 | 3/4  | 1      | 5/16   |
| 15                | 5/32 | 3/32 | 1/4  | 7/16  | 3/8  | 15   | 5/16 | 1/8  | 9/16 | 13/16  | 3/8    |
| 20                | 3/16 | 1/16 | 5/16 | 1/2   | 1/4  | 10   | 5/16 | 1/4  | 9/16 | 15/16  | 1/2    |
| 25                | 3/16 | 3/32 | 3/32 | 7/16  | 7/32 | 15   | 3/8  | 1/16 | 1/2  | 5/8    | 3/32   |
| 15                | 3/16 | 1/4  | 5/16 | 7/16  | 3/8  | 10   | 3/8  | 1/16 | 5/8  | 7/8    | 1 1/32 |
| 15                | 1/4  | 1/16 | 3/8  | 1/2   | 3/16 | 8    | 3/8  | 1/16 | 1    | 1 1/4  | 1/4    |
| 15                | 1/4  | 1/16 | 7/16 | 5/8   | 3/16 | 8    | 3/8  | 1/4  | 5/8  | 7/8    | 1/2    |
| 10                | 1/4  | 1/16 | 1    | 1 1/4 | 1/4  | 15   | 7/16 | 1/16 | 9/16 | 3/4    | 1/4    |
| 15                | 5/16 | 1/16 | 7/16 | 9/16  | 3/16 | 10   | 1/2  | 3/32 | 3/4  | 3 1/32 | 3/32   |

| Item No. | Pieces | ID Sizes   | Pack Qty. | Item No. | Pieces | ID Sizes   | Pack Qty. |
|----------|--------|------------|-----------|----------|--------|------------|-----------|
| KI-160   | 279    | 1/8 to 1/2 | 1         | KI-161   | 67     | 1/2 to 3/4 | 1         |



**GR**  
Rubber Hole Grommets



**Specifications:**

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

**Features:**

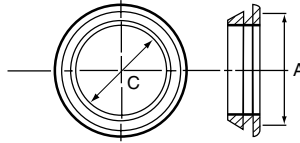
- Protects wires, cables, tubing, and hoses
- Installs instantly by simply snapping into hole
- Excellent adhesion, designed to fit standard sheet metal holes

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



# GROMMETS & BUSHINGS

## GRQ / QFG Quick Fit Flexible Grommet



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

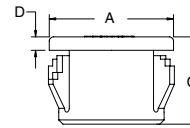
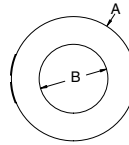
Specifications:

- Material: Elastomer
- Color: Black

Features:

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

## PGSB / BSI 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 | Mounting Hole Ø |      | Panel Thickness |           | OD A  |      | ID B  | Overall Height C |       | Head Height D |       | Bulk Pack Qty. |      |
|-----------|----------|-----------------|------|-----------------|-----------|-------|------|-------|------------------|-------|---------------|-------|----------------|------|
|           |          | In              | mm   | In              | mm        | In    | mm   |       | In               | mm    | In            | mm    |                |      |
| PGSB-0305 |          | 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    |          | 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    |          | 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    |          | 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    |          | 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    |          | 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 |          | 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    |          | 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    |          | 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    |          | 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    |          | 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   |          | 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   |          | 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   |          | 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 |          | 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   |          | 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   |          | 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   |          | 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   |          | 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   |          | 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   |          | 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   |          | 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 |          | 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   |          | 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   |          | 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 |          | 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   |          | 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   |          | 0.750           | 19.1 | 0.031 - 0.125   | 0.8 - 3.2 | 0.843 | 21.4 | 0.562 | 14.3             | 0.406 | 10.3          | 0.063 | 1.6            | 200  |
| PGSB-24   |          | 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   |          | 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 |          | 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   |          | 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   |          | 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   |          | 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   |          | 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   |          | 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   |          | 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   |          | 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   |          | 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   |          | 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 |          | 1.102           | 28.0 | 0.039 - 0.130   | 1.3       | 1.240 | 31.5 | 0.945 | 24.0             | 0.441 | 11.2          | 0.059 | 1.5            | 200  |
| PGSB-2530 |          | 1.181           | 30.0 | 0.039 - 0.122   | 1.3       | 1.319 | 33.5 | 0.984 | 25.0             | 0.453 | 11.5          | 0.071 | 1.8            | 100  |
| PGSB-35   |          | 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 |          | 1.347           | 34.2 | 0.039 - 0.126   | 1.3       | 1.496 | 38.0 | 1.031 | 26.2             | 0.453 | 11.5          | 0.059 | 1.5            | 100  |
| PGSB-36   |          | 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   |          | 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   |          | 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   |          | 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   |          | 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   |          | 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   |          | 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   |          | 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   |          | 3.000           | 76.2 | 0.250           | 6.4       | 3.160 | 80.3 | 2.470 | 62.7             | 0.720 | 18.2          | —     | —              | 350  |





**PGSA**  
Shallow Open Insulation Bushing

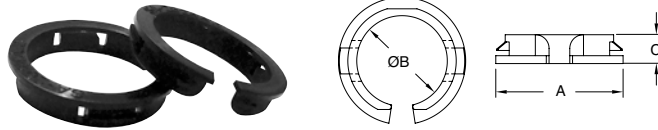


Specifications:

- 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 | Panel Thickness Range |       | OD A Ref. |     | ID B  |      | Overall Height C |      | Bulk Pack Qty. |     |      |
|-------------|----------|-----------------------|-------|-----------|-----|-------|------|------------------|------|----------------|-----|------|
|             |          | In                    | mm    | In        | mm  | In    | mm   | In               | mm   |                |     |      |
| PGSA-0407A  |          | 0.016                 | 0.039 | 0.4       | 1.0 | 0.410 | 10.4 | 0.190            | 4.8  | 0.200          | 5.0 | 1000 |
| PGSA-1013A  |          | 0.039                 | 0.059 | 1.0       | 1.5 | 0.640 | 16.2 | 0.360            | 9.2  | 0.210          | 5.3 | 500  |
| PGSA-1316A  |          | 0.039                 | 0.055 | 1.0       | 1.4 | 0.760 | 19.4 | 0.480            | 12.2 | 0.210          | 5.4 | 500  |
| PGSA-1519A  |          | 0.039                 | 0.059 | 1.0       | 1.5 | 0.890 | 22.7 | 0.560            | 14.3 | 0.220          | 5.7 | 500  |
| PGSA-1822A  |          | 0.031                 | 0.063 | 0.8       | 1.6 | 1.000 | 25.5 | 0.690            | 17.6 | 0.220          | 5.6 | 500  |
| PGSA-2024A1 |          | 0.031                 | 0.047 | 0.8       | 1.2 | 1.060 | 27.0 | 0.770            | 19.5 | 0.210          | 5.3 | 500  |
| PGSA-2024A  |          | 0.039                 | 0.063 | 1.0       | 1.6 | 1.060 | 27.0 | 0.770            | 19.5 | 0.210          | 5.3 | 500  |
| PGSA-2327A  |          | 0.016                 | 0.039 | 0.4       | 1.0 | 1.380 | 35.1 | 0.900            | 22.9 | 0.240          | 6.0 | 200  |
| PGSA-2529A  |          | 0.016                 | 0.043 | 0.4       | 1.1 | 1.380 | 35.1 | 0.970            | 24.5 | 0.280          | 7.0 | 200  |

**PGSB-A**  
Standard Open Insulation Bushing

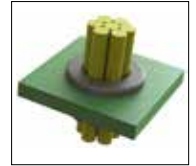
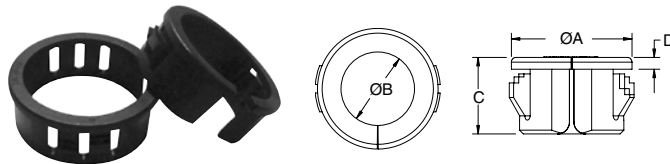


Specifications:

- 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**  
Armor Bushing

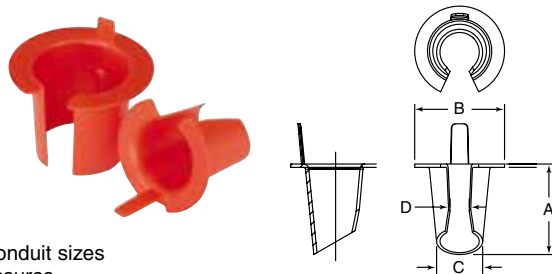


Specifications:

- Material: Polypropylene
- Color: Red

Features:

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

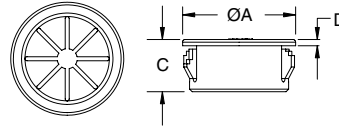


| Item No. | Approvals | Size | A     |       | B     |       | C     |       | D     |      | Cable Size                   | Trade Size In | Bulk Pack Qty. |
|----------|-----------|------|-------|-------|-------|-------|-------|-------|-------|------|------------------------------|---------------|----------------|
|          |           |      | 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           |



FIBER, WIRE & CABLE MANAGEMENT  
**GROMMETS & BUSHINGS**

**PGSD**  
**Universal Bushing**



**Specifications:**

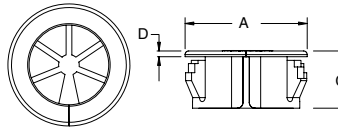
- Material: UL94 V-2 Nylon 6/6
- Color: Black

**Features:**

- Absorbs vibration and cushions and insulates bundles

| Item No. | Approval | Mounting Hole |      | 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   | UL       | 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   | UL       | 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   | UL       | 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   | UL       | 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   | UL       | 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   | UL       | 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   | UL       | 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   | UL       | 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   | UL       | 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  | UL       | 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  | UL       | 1.500         | 38.1 | 0.125               | 3.2 | 1.609 | 40.9 | 1.062  | 27.0 | 0.450            | 11.4 | 0.059         | 1.5 | 100            |

**PGSC**  
**Open Universal Bushing**



**Specifications:**

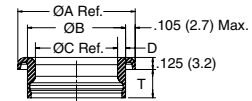
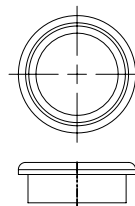
- Material: UL94V-2 Nylon 6/6
- Color: Black

**Features:**

- Easy to push in design locks into place at common panel thicknesses
- Open design allows bushing to be assembled into holes that already contain a bundle
- Adjust to accept various diameters and shapes

| Item No.   | Approval | Mounting Hole |             | 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**  
**NAS1368 Flip Grommet**



**Specifications:**

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

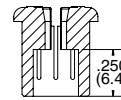
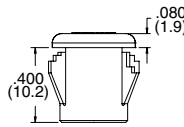
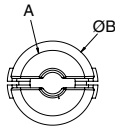
**Features:**

- Installed by inserting the "un-flipped" grommet into the hole. Forming dies (not supplied by Essentra) on each side of the hole are pressed together until the grommet "flips" over itself, creating a flange on both sides of the hole
- The dies can be attached to a toggle type clamp, a pneumatic tool, or a bolt and nut through the center
- Meets NAS 1368 Standard
- Protects wires, cable, and tubing passing through holes

| Item No. | NAS Part No. | Mounting Hole Ø |      | 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  
Snub Bushing**



Specifications:

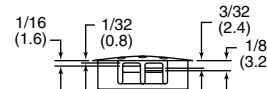
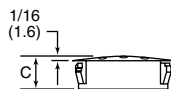
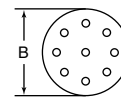
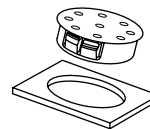
- Material: UL94V-2 Nylon 6/6
- Color: Black

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            |

**PLV  
Vented Locking Plug**



Specifications:

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

Features:

- Each part is designed to lock into multiple standard sheet metal thicknesses (1/64 to 1/8)
- Provides a clean and easy way to close optional wiring or production access holes
- Vents allow heat/emissions to escape

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

**GR67 / LTG  
IP67 Liquid Tight Grommet**



Specifications:

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

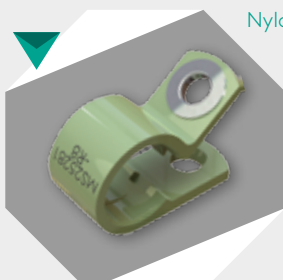
Features:

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

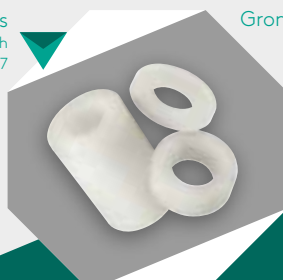
| Item No.    | Fits  | Panel Hole |      | Panel Thickness |           | Cable Size    |             | Pack Qty. | Bulk Pack Qty. |
|-------------|-------|------------|------|-----------------|-----------|---------------|-------------|-----------|----------------|
|             |       | In         | 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   | 1         | 1000           |
| GR67464121A | PG-7  | 0.492      | 12.5 | 0.020 - 0.079   | 0.5 - 2.0 | 0.138 - 0.197 | 3.5 - 5.0   | 1         | 1000           |
| GR6739897A  | PG-9  | 0.630      | 16.0 | 0.039 - 0.157   | 1.0 - 4.0 | 0.197 - 0.276 | 5.0 - 7.0   | 1         | 1000           |
| GR6734715A  | PG-11 | 0.748      | 19.0 | 0.039 - 0.157   | 1.0 - 4.0 | 0.276 - 0.394 | 7.0 - 10.0  | 1         | 1000           |
| GR6734716A  | PG-16 | 0.906      | 23.0 | 0.039 - 0.157   | 1.0 - 4.0 | 0.394 - 0.551 | 10.0 - 14.0 | 1         | 1000           |
| GR6743021A  | PG-21 | 1.142      | 29.0 | 0.039 - 0.157   | 1.0 - 4.0 | 0.551 - 0.787 | 14.0 - 20.0 | 1         | 1000           |
| GR67464122A | PG-29 | 1.496      | 38.0 | 0.039 - 0.157   | 1.0 - 4.0 | 0.787 - 1.024 | 20.0 - 26.0 | 1         | 250            |
| GR67464123A | PG-36 | 1.890      | 48.0 | 0.039 - 0.157   | 1.0 - 4.0 | 1.024 - 1.378 | 26.0 - 35.0 | 1         | 250            |
| GR67M16A    | M16   | 0.650      | 16.5 | 0.039 - 0.157   | 1.0 - 4.0 | 0.197 - 0.354 | 5.0 - 9.0   | 1         | 1000           |
| GR67M20A    | M20   | 0.807      | 20.5 | 0.039 - 0.157   | 1.0 - 4.0 | 0.276 - 0.512 | 7.0 - 13.0  | 1         | 1000           |
| GR67M25A    | M25   | 1.004      | 25.5 | 0.059 - 0.157   | 1.5 - 4.0 | 0.394 - 0.670 | 10.0 - 17.0 | 1         | 1000           |
| GR67M32A    | M32   | 1.280      | 32.5 | 0.039 - 0.157   | 1.0 - 4.0 | 0.551 - 0.787 | 14.0 - 20.0 | 1         | 500            |
| GR67M40A    | M40   | 1.594      | 40.5 | 0.059 - 0.157   | 1.5 - 4.0 | 0.750 - 1.024 | 19.0 - 26.0 | 1         | 250            |
| GR67M50A    | M50   | 1.988      | 50.5 | 0.039 - 0.157   | 1.0 - 4.0 | 1.024 - 1.338 | 26.0 - 34.0 | 1         | 250            |

ENGINEERED COMPONENT SOLUTIONS FOR  
**MILITARY AEROSPACE**

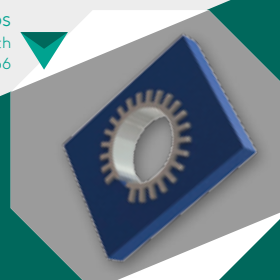
Heavy Duty Support Clamps  
complies with MS25281



Nylon Spacers  
complies with NSA5527



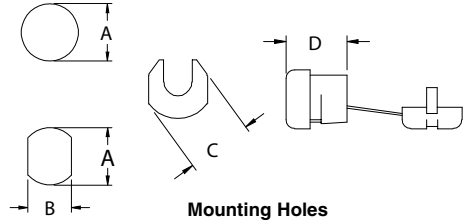
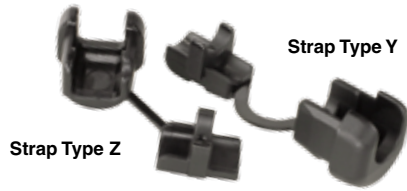
Grommet Strips  
complies with NASM21266





# STRAIN RELIEF BUSHINGS

SRB / BSR  
Strain Relief Bushing



**Specifications:**

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

**Features:**

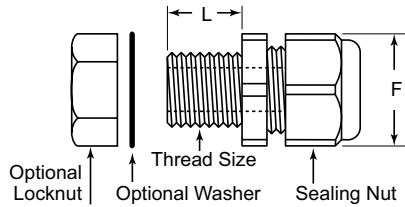
- Protects electronic products by absorbing the forces of pull, push and twist that may be exerted on a flexible power cord
- Securely protects cable at entry point
- To install: Position bushing on cable, press ends of bushing together with installation tool(SRPL-2) and push into hole
- Can be mounted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



| Item No. | Approval | Cross Section | Cable Type | Gauge (AWG) | Cable Size    |            | 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           |
| BSR001A  | 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           |
| BSR001A  | 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           |
| BSR001A  | 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           |
| BSR002A  | 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           |
| BSR002A  | 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           |
| BSR002A  | 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           |
| SRB-F-6  | 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           |
| SRB-F-6  | RU       | Flat          | SPT-1      | 18/2        | 0.120 - 0.220 | Y          | 0.500       | 13.1      | 0.390   | 9.9  | 0.100     | 2.5 | 0.406    | 10.3 | 0.492        | 12.5 | 1000           |
| SRB-F-6  | RU       | Flat          | SPT-1      | 18/2        | 0.120 - 0.220 | Y          | 0.516       | 12.7      | 0.390   | 9.9  | 0.100     | 2.5 | 0.406    | 10.3 | 0.492        | 12.5 | 1000           |
| SRB-F-6  | 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           |
| SRB-F-8  | 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           |
| SRB-F-9  | 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           |
| BSR003A  | 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           |
| BSR003A  | 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           |
| BSR003A  | 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           |
| BSR003A  | 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           |
| BSR003A  | RU       | Flat          | SPT-2      | 18/2        | 0.150 - 0.280 | Y          | 0.500       | 12.7      | 0.460   | 11.7 | 0.095     | 2.4 | 0.495    | 12.6 | 0.565        | 14.4 | 1000           |
| BSR004A  | 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           |
| BSR004A  | 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           |
| BSR004A  | 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           |
| BSR004A  | 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           |
| BSR004A  | 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           |
| BSR004A  | 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           |
| BSR005A  | 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           |
| BSR005A  | 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           |
| BSR005A  | RU       | Round         | SV         | 18/3        | 0.255         | Y          | 0.500       | 12.7      | 0.450   | 11.4 | 0.100     | 2.5 | 0.438    | 11.1 | 0.578        | 14.7 | 1000           |
| BSR005A  | RU       | Round         | SV         | 18/3        | 0.255         | Y          | 0.500-0.515 | 12.7-13.1 | 0.450   | 11.4 | 0.100     | 2.5 | 0.438    | 11.1 | 0.578        | 14.7 | 1000           |
| BSR005A  | RU       | Round         | HPD        | 16/2        | 0.290         | Y          | 0.500       | 12.7      | 0.450   | 11.4 | 0.100     | 2.5 | 0.438    | 11.1 | 0.578        | 14.7 | 1000           |
| BSR005A  | RU       | Round         | HPD        | 16/2        | 0.290         | Y          | 0.500-0.515 | 12.7-13.1 | 0.450   | 11.4 | 0.100     | 2.5 | 0.438    | 11.1 | 0.578        | 14.7 | 1000           |
| SRB-R-1  | RU       | Round         | SVI        | —           | 0.252         | Y          | 0.500       | 12.7      | 0.453   | 11.5 | 0.062     | 1.6 | 0.437    | 11.1 | 0.559        | 14.2 | 1000           |
| SRB-R-1  | 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           |
| SRB-R-2  | 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           |
| SRB-R-2  | 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            |
| BSR006A  | 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           |
| BSR006A  | 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           |
| BSR007A  | 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           |
| BSR007A  | 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           |
| BSR007A  | RU       | Round         | SJO        | 18/2        | 0.300         | Y          | 0.500       | 12.7      | 0.456   | 11.6 | 0.090     | 2.3 | 0.437    | 11.1 | 0.563        | 14.3 | 1000           |
| SRB-R-7  | 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            |
| BSR008A  | 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            |
| BSR008A  | 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            |
| BSR008A  | 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            |
| BSR008A  | 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            |
| BSR009A  | 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            |
| BSR009A  | 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            |
| BSR009A  | 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            |
| BSR009A  | 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            |
| BSR009A  | RU       | Round         | SJO        | 16/2        | 0.325 - 0.429 | Z          | 0.625       | 15.9      | 0.550   | 14.0 | 0.125     | 3.2 | 0.666    | 16.9 | 0.725        | 18.4 | 500            |
| BSR009A  | RU       | Round         | SJO        | 16/3        | 0.325 - 0.429 | Z          | 0.625       | 15.9      | 0.550   | 14.0 | 0.125     | 3.2 | 0.666    | 16.9 | 0.725        | 18.4 | 500            |
| BSR010A  | 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            |
| BSR010A  | RU       | Round         | SJ         | 16/2        | 0.325 - 0.359 | Z          | 0.875       | 22.2      | 0.770   | 19.6 | 0.125     | 3.2 | 0.750    | 19.1 | 0.922        | 23.4 | 250            |
| BSR010A  | 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            |
| BSR010A  | 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            |
| BSR010A  | 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            |
| BSR011A  | 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           |
| BSR011A  | 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           |
| BSR011A  | RU       | Round         | SJT        | 18/3        | 0.430         | Y          | 0.625       | 15.9      | 0.550   | 14.0 | 0.062     | 1.6 | 0.580    | 14.7 | 0.703        | 17.9 | 1000           |
| SRB-R-9  | 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            |
| SRB-R-9  | 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            |
| SRB-R-10 | 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            |



**CG**  
NPT Cable Glands



**Specifications:**

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

**Features:**

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



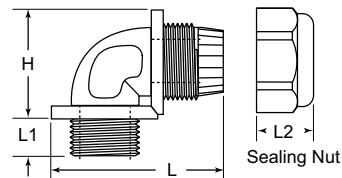
| Item No. |             | Thread Size | Mounting Hole |      | Mounting Thread |      | Flat Sealing Nut |      | Variable Clamping Range (Max/Min) |       |      | Pack Qty. | Bulk Pack Qty. |    |
|----------|-------------|-------------|---------------|------|-----------------|------|------------------|------|-----------------------------------|-------|------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

**Optional Parts**

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

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

**CGRA**  
90° NPT Cable Glands



**Specifications:**

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

**Features:**

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

**Optional Parts**

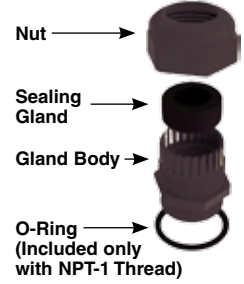
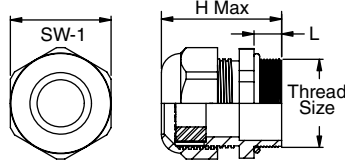
| LNPT - NPT Locknuts |            |           |                |
|---------------------|------------|-----------|----------------|
| Locknut Item No.    | NPT Thread | Pack Qty. | Bulk Pack Qty. |
| LNPT100B            | 3/8"       | 1         | 50             |
| LNPT200B            | 1/2"       |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

| Item No. | NPT Thread | Mounting Hole | Overall Length L |      | Mounting Thread L1 |      | Nut Length L2 |      | Overall Height H |      | Variable Clamping Range (Max/Min) |             |   | Pack Qty. | Bulk Pack Qty. |
|----------|------------|---------------|------------------|------|--------------------|------|---------------|------|------------------|------|-----------------------------------|-------------|---|-----------|----------------|
|          |            |               | In               | mm   | In                 | mm   | In            | mm   | In               | mm   | In                                | mm          |   |           |                |
| CGRA011A | 3/8"       | 0.687         | 1.909            | 48.5 | 0.461              | 11.7 | 0.657         | 16.7 | 1.181            | 30.0 | 0.197 - 0.354                     | 5.0 - 8.0   | 1 | 20        |                |
| CGRA015A | 1/2"       | 0.875         | 2.031            | 51.6 | 0.579              | 14.7 | 0.724         | 18.4 | 1.228            | 31.2 | 0.393 - 0.512                     | 10.0 - 13.0 | 1 | 20        |                |
| CGRA018A | 3/4"       | 1.0625        | 2.539            | 64.5 | 0.583              | 14.8 | 0.878         | 22.3 | 1.638            | 41.6 | 0.512 - 0.630                     | 13.0 - 16.0 | 1 | 20        |                |
| CGRA020A | 1-1/4"     | 1.687         | 3.346            | 85.0 | 0.740              | 18.8 | 1.220         | 31.0 | 2.087            | 53.0 | 0.866 - 1.412                     | 22.0 - 29.0 | 1 | 10        |                |



# CABLE GLANDS

## CG-NPT NPT Cable Gland



**Specifications:**

- Material: Body and Nut: UL94 V-2 Nylon 6  
Sealing Gland: CR / NBR  
O-Ring: NBR
- Color: Black
- Material: Optional CGLN Locking Nut:  
UL94 V-2 Glass Filled Nylon 6
- Color: Black

**Features:**

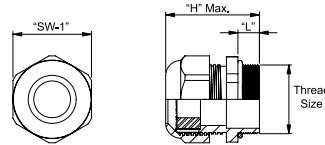
- Protection Class: IP68 - 5 Bar
- Designed for superior sealing; no O-ring is needed for smaller sizes to meet IP68 rating
- Operating temperature: -4°F - 212°F (-20°C -100°C)

| Item No.        | UL Approval | Cable Ø Range Min |      | Cable Ø Range Max |      | 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-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      | 1              | 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      | 1              | 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      | 1              | 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      | 1              | 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      | 1              | 100 |
| CG-NPT-3/4-1-BK | UL          | 0.236             | 9.0  | 0.630             | 16.0 | NPT-3/4       | 1.068 | 27.1 | 0.591 | 15.0 | 1.299 | 33.0       | 2.050 | 52.0      | 1              | 50  |
| CG-NPT-3/4-1-BK | 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      | 1              | 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      | 1              | 25  |
| CG-NPT-1-1-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      | 1              | 25  |

**Optional Parts**

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

## CGPG PG Cable Gland



**Specifications:**

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

**Features:**

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



| Item No. | Thread Size | Mounting Hole |       | Mounting Thread L |       | Flat Sealing Nut F |       | Variable Clamping Range (Max/Min) |       |       |      | Pack Qty. | Bulk Pack Qty. |    |
|----------|-------------|---------------|-------|-------------------|-------|--------------------|-------|-----------------------------------|-------|-------|------|-----------|----------------|----|
|          |             | In            | mm    | In                | mm    | In                 | mm    | In                                |       | mm    |      |           |                |    |
| CGPG150B | CGPG150G    | PG7           | 0.492 | 12.5              | 0.335 | 8.50               | 0.748 | 19                                | 0.307 | 0.177 | 7.80 | 4.50      | 1              | 50 |
| CGPG250B | CGPG250G    | PG9           | 0.598 | 15.2              | 0.354 | 9.00               | 0.748 | 19                                | 0.307 | 0.177 | 7.80 | 4.50      | 1              | 50 |
| CGPG350B | CGPG350G    | PG11          | 0.732 | 18.6              | 0.394 | 10.0               | 0.866 | 22                                | 0.394 | 0.236 | 10.0 | 6.00      | 1              | 50 |
| CGPG450B | CGPG450G    | PG13.5        | 0.803 | 20.4              | 0.394 | 10.0               | 0.945 | 24                                | 0.472 | 0.276 | 12.0 | 7.00      | 1              | 50 |
| CGPG550B | CGPG550G    | PG16          | 0.886 | 22.5              | 0.433 | 11.0               | 1.457 | 37                                | 0.551 | 0.354 | 14.0 | 9.00      | 1              | 50 |
| CGPG650B | CGPG650G    | PG21          | 1.114 | 28.3              | 0.492 | 12.5               | 1.299 | 33                                | 0.709 | 0.551 | 18.0 | 14.00     | 1              | 50 |
| CGPG750B | CGPG750G    | PG29          | 1.469 | 37.3              | 0.472 | 12.0               | 1.654 | 42                                | 0.984 | 0.709 | 25.0 | 18.0      | 1              | 10 |

**Optional Parts**

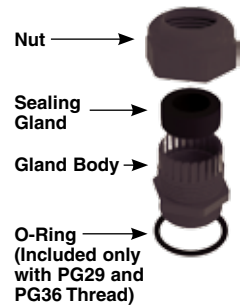
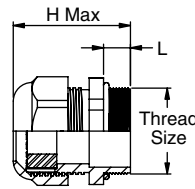
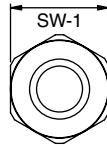
| LNPG – PG Locknuts  |             |               |       |             |    | Pack Qty. | Bulk Pack Qty. |
|---------------------|-------------|---------------|-------|-------------|----|-----------|----------------|
| Locknut Part Number |             | Flats Locknut |       | Thread Size | In |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

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

CABLE GLANDS



CG-PG  
PG Cable Gland



Specifications:

- Material: Body and Nut: UL94 V-2 Nylon 6  
Sealing Gland: CR / NBR  
O-Ring: NBR
- Color: Black
- Material: Optional CGLN Locking Nut:  
UL94 V-2 Glass Filled Nylon 6
- Color: Black
- Operating temperature: -4°F - 212°F (-20°C -100°C)

Optional Parts

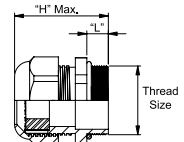
| Item No.       | Thread Size | Locking Nuts |      |           |     | Pack Qty. | Bulk Pack Qty. |
|----------------|-------------|--------------|------|-----------|-----|-----------|----------------|
|                |             | Across Flats |      | Thickness |     |           |                |
|                |             | 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             |

Features:

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

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

CGM  
Metric Cable Gland



Specifications:

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

Features:

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



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

Optional Parts

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

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



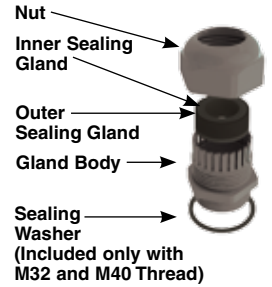
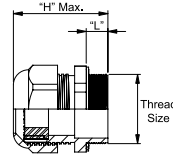
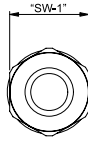
# CABLE GLANDS & PANEL HOLE PLUGS

## CG-M Cable Gland – Metric Thread



### Specifications:

- Material: Body and Nut: UL94 V-2 Nylon 6
- Sealing Gland: CR / NBR
- O-Ring: NBR
- Color: Black
- Material: Optional CGLN Locking Nut: UL94 V-2 Glass Filled Nylon 6
- Color: Black



### Features:

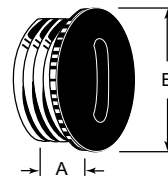
- Protection Class: IP68 - 5 Bar
- Designed for superior sealing; no Sealing Washer is needed for smaller sizes to meet IP68 rating
- Two Sealing Glands are included with all but the M12 thread. Remove the inner sealing gland for larger cable diameters

| Item No.    | UL Approval | Cable Ø Range Min |     | Cable Ø Range Max |      | Thread Size | Mounting Hole |      | L     |      | SW-1  |      | H Max Ref. |      | Pack Qty. | Bulk Pack Qty. |
|-------------|-------------|-------------------|-----|-------------------|------|-------------|---------------|------|-------|------|-------|------|------------|------|-----------|----------------|
|             |             | In                | mm  | In                | mm   |             | In            | mm   | In    | mm   | In    | mm   | In         | mm   |           |                |
| CG-M12-1-BK | 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 Parts

| Item No.    | Thread Size | Across Flats |      | Thickness |     | Pack Qty. | Bulk Pack Qty. |
|-------------|-------------|--------------|------|-----------|-----|-----------|----------------|
|             |             | In           | mm   | In        | mm  |           |                |
| CGLN-M12-BK | M12         | 0.339        | 17.0 | 0.197     | 5.0 | 1         | 100            |
| CGLN-M16-BK | M16         | 0.866        | 22.0 | 0.197     | 5.0 | 1         | 100            |
| CGLN-M20-BK | M20         | 1.063        | 27.0 | 0.236     | 6.0 | 1         | 100            |
| CGLN-M25-BK | M25         | 1.260        | 32.0 | 0.236     | 6.0 | 1         | 100            |
| CGLN-M32-BK | M32         | 1.614        | 41.0 | 0.276     | 7.0 | 1         | 100            |
| CGLN-M40-BK | M40         | 1.969        | 50.0 | 0.276     | 7.0 | 1         | 50             |

## TBP Metric & PG Threaded Blind Plug



### Specifications:

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

### Features:

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

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

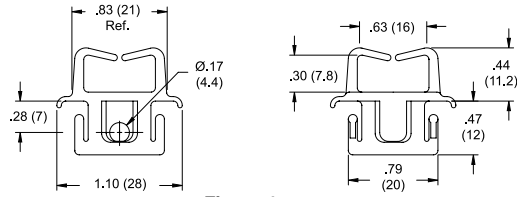
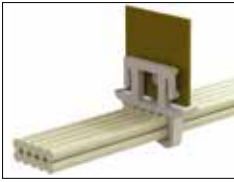
### Optional Parts

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

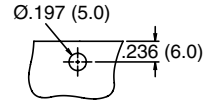




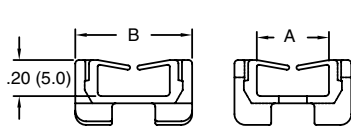
**EHWSE / EWSE / EWSJS**  
**Edge Wire Saddle**



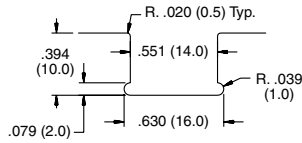
**Figure 1**



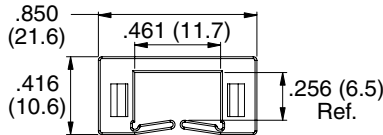
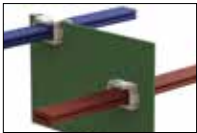
**Recommended Mounting Hole**



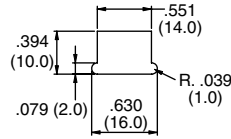
**Figure 2**



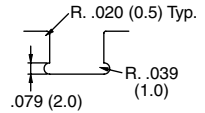
**Recommended Panel Cut-Out**



**Figure 3**



**Thru Hole Panel Cut-Out**



**Edge Hole Panel Cut-Out**

**Specifications:**

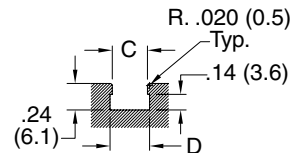
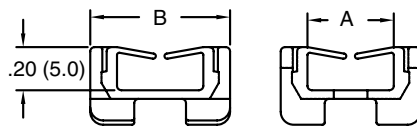
- Material: UL94 V-2 Nylon 6/6
- Color: See Table

**Features:**

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

| Item No.   | Figure | Approval | Color   | Panel Thickness |           | Depth |     | Bulk Pack Qty. |
|------------|--------|----------|---------|-----------------|-----------|-------|-----|----------------|
|            |        |          |         | In              | mm        | In    | mm  |                |
| EHWSE-1-01 | 1      |          | Natural | 0.039 - 0.079   | 1.0 - 2.0 | 0.240 | 6.2 | 1000           |
| EWSE-1-01  | 2      |          | Black   | 0.032 - 0.078   | 0.8 - 1.2 | 0.190 | 4.8 | 1000           |
| EWSE-2-01  | 2      |          | Natural | 0.047 - 0.063   | 1.2 - 1.6 | 0.190 | 4.8 | 1000           |
| EWSJS-3-01 | 2      |          | Grey    | 0.063 - 0.079   | 1.6 - 2.0 | 0.190 | 4.8 | 1000           |
| EWSJS-1-01 | 3      | —        | Natural | 0.032 - 0.078   | 0.8 - 2.0 | 0.260 | 6.6 | 1000           |

**EWSE**  
**Edge Wire Saddle**



**Recommended Panel Cut-Out**

**Specifications:**

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

**Features:**

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

| Item No.     | UL Approval | Panel Thickness |           | A     |      | B     |      | C     |      | D     |      | Depth |     | Bulk Pack Qty. |
|--------------|-------------|-----------------|-----------|-------|------|-------|------|-------|------|-------|------|-------|-----|----------------|
|              |             | In              | mm        | In    | mm   | In    | mm   | In    | mm   | In    | mm   | In    | mm  |                |
| EWSE-12.8-01 |             | 0.031 - 0.063   | 0.8 - 1.6 | 0.200 | 5.0  | 0.440 | 11.3 | 0.320 | 8.1  | 0.360 | 9.1  | 0.140 | 3.6 | 1000           |
| EWSE-8.1-01  |             | 0.031 - 0.063   | 0.8 - 1.6 | 0.390 | 10.0 | 0.640 | 16.2 | 0.500 | 12.8 | 0.540 | 13.8 | 0.140 | 3.6 | 1000           |



# EDGE WIRE SADDLES & GROMMET EDGING

## HEWSE Hinged Edge Wire Saddle

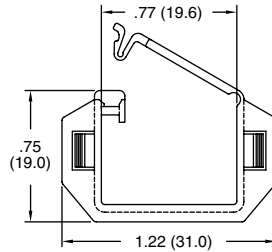


Figure 1

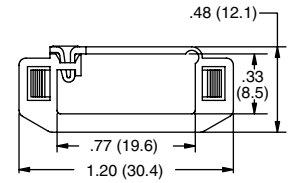


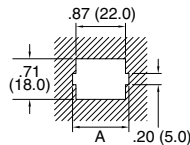
Figure 2

**Specifications:**

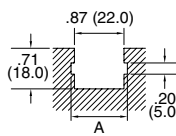
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

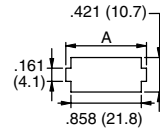
- Routes cables and protects them from sharp edges
- Installed in a mounting slot; edge or through-hole
- Hinged latch allows retrofitting into pre-existing applications



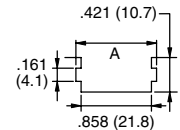
Thru Hole Panel Cut-Out



Edge Hole Panel Cut-Out



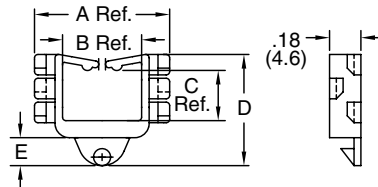
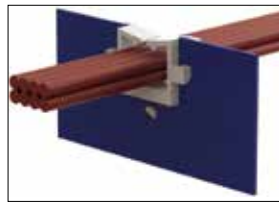
Thru Hole Panel Cut-Out



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 Edge Wire Saddle

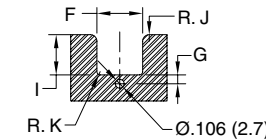


**Specifications:**

- 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



Recommended Panel Cut-Out

| Item No.    | Panel Thickness | A Ref. In | B Ref. In | C Ref. In | D In  | E In  | F In   | I In  | G In  | R. J In | R. K In | Bulk Pack Qty. |
|-------------|-----------------|-----------|-----------|-----------|-------|-------|--------|-------|-------|---------|---------|----------------|
| LEWSE-14-01 | 0.031-0.063     | 0.780     | 0.460     | 0.290     | 0.640 | 0.160 | 0.551  | 0.484 | 0.106 | 0.079   | 0.039   | 1000           |
| LEWSE-19-01 | 0.031-0.063     | 1.060     | 0.660     | 0.590     | 0.980 | 0.150 | 0.756  | 0.831 | 0.100 | 0.079   | 0.039   | 1000           |
| LEWSE-21-01 | 0.031-0.063     | 1.130     | 0.660     | 0.580     | 0.980 | 0.150 | 0.827  | 0.827 | 0.100 | 0.079   | 0.060   | 1000           |
| LEWSE-27-01 | 0.031-0.063     | 1.370     | 0.900     | 0.910     | 1.310 | 0.120 | 10.630 | 1.140 | 0.106 | 0.079   | 0.060   | 1000           |

## MCCG Metal Cushioned Grommet



**Specifications:**

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

**Features:**

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

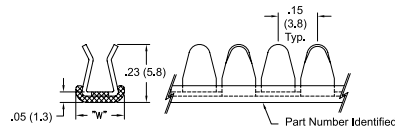


Figure 1

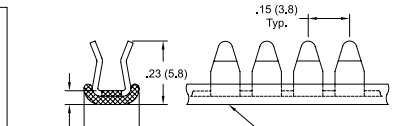
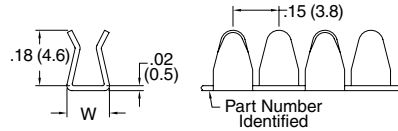
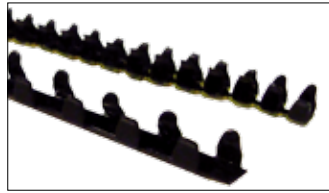


Figure 2

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



**MCG / MCGF  
Metal Grommet**



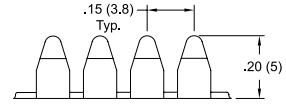
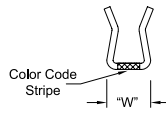
**Figure 1**

**Specifications:**

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

**Features:**

- Dielectric Strength: 1000 volts @ 60Hz
- Locks onto panel with finger pressure
- Sold in 100 foot reels that can be cut to length using metal shears Item No. MCGS-1



**Figure 2**



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

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

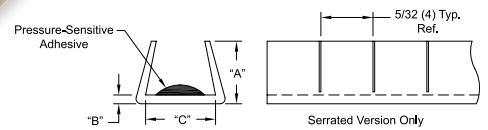


**Specifications:**

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

**Features:**

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



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

**NGS / PGS / SNGS / SPGS  
Continuous Grommet Edging**

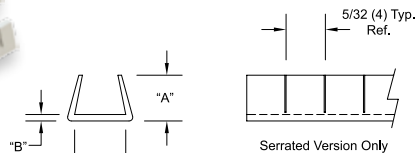
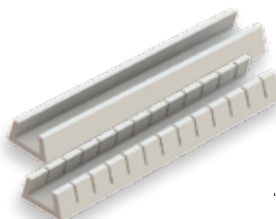


**Specifications:**

- Material: See Table
- Color: See Table

**Features:**

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

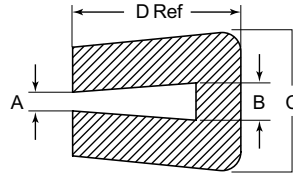
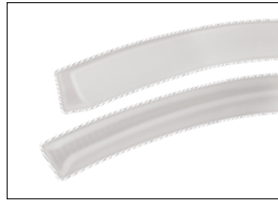


| Solid Profile Item No |          | Serrated Profile Item No. |           | Material      | Panel Thickness Range |           | A Ref. |     | B Ref. |     | C Ref. |     | Roll Length |
|-----------------------|----------|---------------------------|-----------|---------------|-----------------------|-----------|--------|-----|--------|-----|--------|-----|---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



# GROMMET EDGING

## GE Continuous Grommet Edging



**Specifications:**

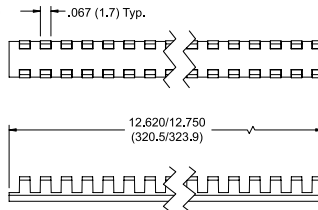
- Material: Polyethylene
- Color: Natural

**Features:**

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

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

## MGS MS21266 Grommet Strip



**Specifications:**

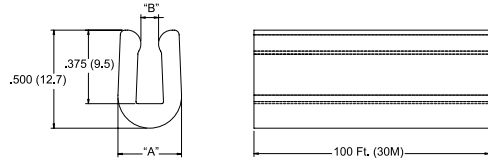
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

**Features:**

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

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

## RG Rubber Grommet Edging



**Specifications:**

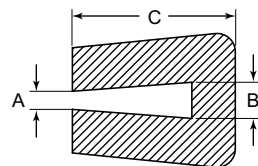
- Material: TPE
- Color: Black

**Features:**

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

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

## GRE PVC Grommet Edging



**Specifications:**

- Material: Soft PVC
- Color: Black

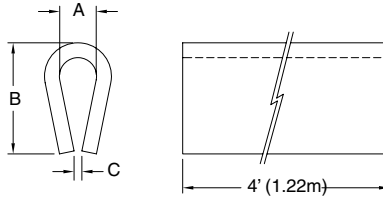
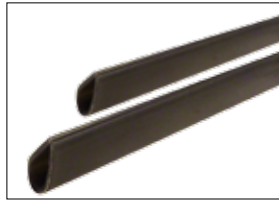
**Features:**

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

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



**DSC**  
Nylon Grommet Edging

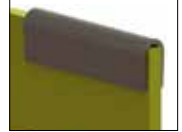


**Specifications:**

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

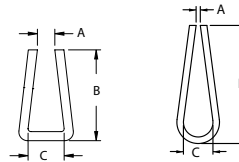
**Features:**

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



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

**CH**  
Polystyrene Channel



**Specifications:**

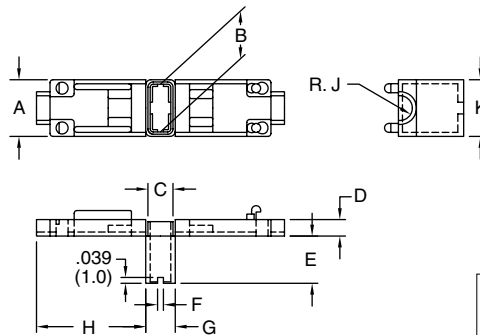
- Material: ULB94 HB Polystyrene
- Color: White

**Features:**

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

| Item No.     | Fits Panel Thickness |     | A Ref |     | B Ref |      | C Min. |     | Figure | Length |      | Bulk 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  | .25    | 6.4 | 1      | 4      | 1.22 | 100 Ft         |
| CH15X50-48   | 0.050                | 1.3 | 0.015 | 0.4 | 0.437 | 11.1 | .05    | 1.3 | 1      | 4      | 1.22 | 100 Ft         |
| CH20X141-48  | 0.140                | 3.6 | 0.020 | 0.5 | 0.562 | 14.3 | .14    | 3.6 | 2      | 4      | 1.22 | 100 Ft         |

**OS**  
Straight Terminal Insulator



**Specifications:**

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

**Features:**

- Insulating sleeve for straight type receptacles
- Installs easily by hand; slip the sleeve onto receptacle and snap shut with fingers
- For pre-assembled wire and receptacle

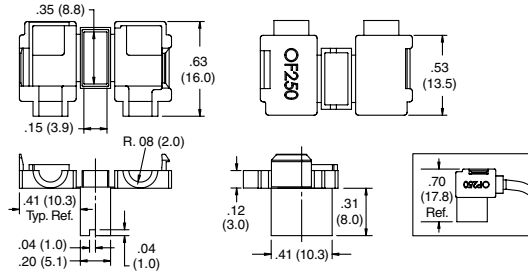


| Item No. | Approval | Terminal Type            | Wire Ø        | A             | B             | C             | D             | E             | F             | G             | H              | R. J           | K             | Bulk Pack Qty. |
|----------|----------|--------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|---------------|----------------|
| OS-187   | UL       | Straight Type 187 Series | 9/64<br>(3.6) | .346<br>(8.8) | .240<br>(6.1) | .106<br>(2.7) | .102<br>(2.6) | .268<br>(6.8) | .039<br>(1.0) | .154<br>(3.9) | .594<br>(15.1) | .071<br>(1.8)  | .295<br>(7.5) | 500            |
| OS-250   | UL       | Straight Type 250 Series | 5/32<br>(3.8) | .386<br>(9.8) | .311<br>(7.9) | .164<br>(3.4) | .110<br>(2.8) | .315<br>(8.0) | .039<br>(1.0) | .185<br>(4.7) | .728<br>(18.5) | .081<br>(2.05) | .358<br>(9.1) | 500            |



INSULATORS

OF  
Flag Terminal Insulator



Specifications:

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

Features:

- Insulating sleeve for flag type receptacles
- Installs easily by hand; slip the sleeve onto receptacle and snap shut with fingers
- For pre-assembled wire and receptacle

| Item No. | Approval | Terminal Type        | Wire Ø |     | Bulk Pack Qty. |
|----------|----------|----------------------|--------|-----|----------------|
|          |          |                      | In     | mm  |                |
| OF-250   |          | Flag Type 250 Series | 0.150  | 3.9 | 500            |

2XXXXX

Quick Fit Straight Terminal Insulator

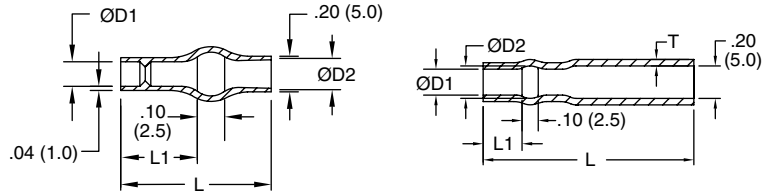


Figure 1

Figure 2

Specifications:

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

Features:

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

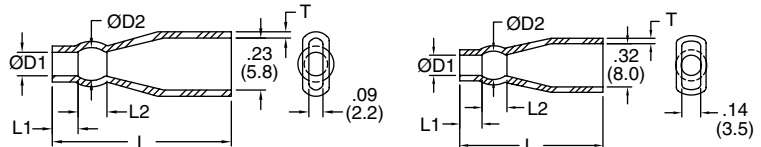


Figure 3

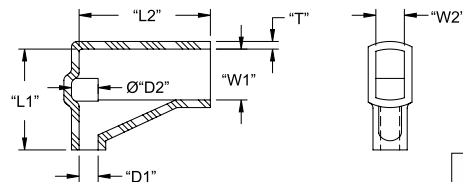
Figure 4



| Item No. | Approval | 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   |     |     |                |
| 224225   |          | 1      | 0.580-0.091   | 1.5-2.3 | 22-18      | 0.100 | 2.5 | 0.160 | 4.1 | 0.240 | 6.1 | —     | —   | 0.510 | 13.0 | —   | —   | 1000           |
| 224230   |          | 1      | 0.068-0.113   | 1.7-2.9 | 20-18      | 0.120 | 3.0 | 0.160 | 4.1 | 0.240 | 6.1 | —     | —   | 0.510 | 13.0 | —   | —   | 1000           |
| 215025   |          | 2      | 0.580-0.091   | 1.5-2.3 | 22-18      | 0.100 | 2.5 | 0.160 | 4.1 | 0.240 | 6.1 | —     | —   | 1.300 | 33.0 | .04 | 1.0 | 1000           |
| 215032   |          | 2      | 0.071-0.126   | 1.8-3.2 | 18-16      | 0.130 | 3.3 | 0.180 | 4.6 | 0.280 | 7.1 | —     | —   | 1.340 | 34.0 | .04 | 1.0 | 1000           |
| 235830   |          | 3      | 0.580-0.091   | 1.5-2.3 | 20-18      | 0.120 | 3.0 | 0.160 | 4.0 | 0.200 | 5.0 | 0.100 | 2.5 | 0.910 | 23.0 | .03 | .08 | 1000           |
| 235835   |          | 3      | 0.071-0.140   | 1.8-3.6 | 18-14      | 0.140 | 3.5 | 0.180 | 4.5 | 0.200 | 5.0 | 0.120 | 3.0 | 0.910 | 23.0 | .03 | .08 | 1000           |
| 238032   |          | 4      | 0.071-0.126   | 1.8-3.2 | 18-16      | 0.130 | 3.3 | 0.190 | 4.8 | 0.200 | 5.1 | 0.100 | 2.5 | 0.950 | 24.1 | .04 | 1.0 | 1000           |
| 238035   |          | 4      | 0.071-0.140   | 1.8-3.6 | 18-14      | 0.140 | 3.6 | 0.180 | 4.6 | 0.200 | 5.1 | 0.120 | 3.0 | 0.950 | 24.1 | .04 | 1.0 | 1000           |
| 238040   |          | 4      | 0.091-0.140   | 2.3-3.6 | 16-14      | 0.160 | 4.1 | 0.200 | 5.1 | 0.200 | 5.1 | 0.120 | 3.0 | 0.970 | 24.6 | .04 | 1.0 | 1000           |
| 238048   |          | 4      | 0.113-0.190   | 2.9-4.8 | 14-12      | 0.190 | 4.8 | 0.250 | 6.3 | 0.200 | 5.1 | 0.100 | 2.5 | 0.980 | 24.6 | .04 | 1.0 | 1000           |

248XXX

Quick Fit Flag Terminal Insulator



Specifications:

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

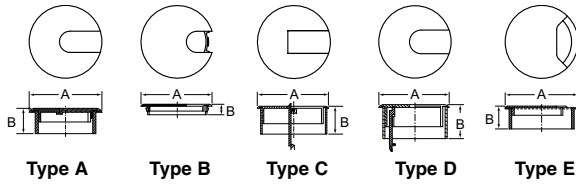
Features:

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

| Item No. | Approval | 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           |



**WMRG Series – Round Desk Grommets**



**Specifications:**

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

**Features:**

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

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

**WMUG Series – Round Umbrella Table Grommets**



**Specifications:**

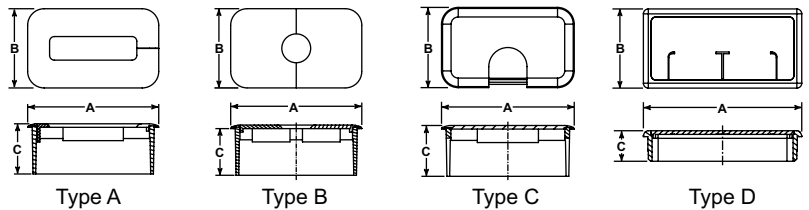
- Material: K-Resin
- Color: Clear

**Features:**

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

| Item No. | To Fit Hole Dia In | Type         | Pack Qty. | Bulk Pack Qty. |
|----------|--------------------|--------------|-----------|----------------|
| WMUG100C | 2.000              | Bushing/Ring | 1         | 900            |
| WMUG110D | fits into WMUG100C | Cover/Lid    | 1         | 900            |

**WMTG Series – Rectangular Table Grommets**



**Specifications:**

- Material: Refer to Chart
- Color: Black
- Surface Finish: Textured

**Features:**

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

| Item No. | Type | Style   | A Dimension In | B Dimension In | C Dimension In | To Fit Hole Dia In | Material      | Surface Finish | Pack Qty. | Bulk Pack Qty. |
|----------|------|---------|----------------|----------------|----------------|--------------------|---------------|----------------|-----------|----------------|
| WMTG100A | B    | 3-PIECE | 3.500          | 2.125          | 0.700          | 3.250 x 1.875      | ABS           | Textured       | 1         | 525            |
| WMTG110A | B    | 3-PIECE | 3.500          | 2.125          | 1.250          | 3.230 x 1.865      | ABS           | Textured       | 1         | 315            |
| WMTG120A | A    | 2-PIECE | 3.475          | 2.102          | 1.250          | 3.250 x 1.865      | ABS           | Textured       | 1         | 189            |
| WMTG150A | B    | 2-PIECE | 3.500          | 2.134          | 1.287          | 3.250 x 1.865      | ABS           | Textured       | 1         | 320            |
| WMTG170A | C    | 2-PIECE | 3.365          | 2.245          | 1.750          | 3.125 x 2.000      | ABS           | Textured       | 1         | 204            |
| WMTG180A | D    | 2-PIECE | 4.020          | 2.010          | 0.775          | 3.770 x 1.750      | Polypropylene | Textured       | 1         | 288            |

## **UL® File Number & UL® Yellow Cards**

Underwriter's Laboratories Inc. (UL®), plastics classification number is used to describe the performance of the material. Tests conducted by UL® may include the determination of material flammability (burning characteristics), ignition characteristics from various thermal and electrical sources, electrical tracking and other electrical characteristics, physical and mechanical characteristics, and analytical tests. In addition, the effect of long-term exposure to elevated temperature (air-oven aging), water, ultraviolet light, cold, etc. on property-retention may be evaluated.

For more information and to download the UL® Yellow Card for a product, please visit [www.ul.com](http://www.ul.com) and click on "Certifications."

## **UL® Flame Rating**

UL94 classifications V-0, V-1, V-2, and HB describe the flame retardant levels for a given resin. V-0 rated resins typically have the highest flame resistance followed by V-1, V-2, and HB.

For more information on UL® Flame Ratings and the Burn Test, please visit [www.ul.com](http://www.ul.com).

## **Common Material Abbreviations**

**ABS** = Acrylonitrile butadiene styrene  
**Acetal/POM** = Polyacetal  
**CPVC** = Chlorinated polyvinyl chloride  
**EPDM** = Ethylene-propylene-diene-monomer  
**HDPE** = High density polyethylene  
**HIPS** = High impact polystyrene  
**LCP** = Liquid crystal polymer  
**LDPE** = Low density polyethylene  
**Nitrile Rubber** = Acrylonitrile rubber  
**Nylon** = Polyamide (PA)  
**PBT** = Polybutylene terephthalate  
**PC** = Polycarbonate  
**PE** = Polyethylene  
**PEI** = Polyetherimide  
**PP** = Polypropylene  
**PPE/PS** = Polyphenylene ether/polystyrene alloy  
**PPE/SB** = Polyphenylene ether/styrene-butadiene alloy  
**PPS** = Polyphenylene sulfide  
**PS** = Polystyrene  
**PSU** = Polysulfone  
**PU** = Polyurethane  
**PVC** = Polyvinyl chloride  
**PVDF** = Polyvinylidene fluoride  
**SEBS** = Styrene-ethylene butylene-styrene block copolymer  
**SIR** = Silicone molding compound  
**TPE** = Thermoplastic elastomer  
**TPR** = Thermoplastic rubber

## **Adhesive Tape Usage Guidelines**

### **Loads & Product Usage Guidelines**

Long-term maximum product application loads generally should not exceed 0.25 psi. The surface area of contact is very critical for bond strength, so the amount of tape used should be maximized based on the application. In general, the tensile strength of the adhesive is higher than the peel or shear strength, so the product should be designed to be loaded in tension whenever possible.

### **Nylon & Adhesive Shelf Life**

If products are kept under the Ideal Storage Conditions, shelf life is 1 year from date of shipment.

### **Ideal Storage Conditions**

Stored in the original unopened bags at 73°F (23°C) and 50% relative humidity.

### **Temperature Considerations**

Ideal application temperature for most adhesives is 70° - 100°F (21° - 38°C). Lower application temperatures should be avoided as the adhesive will be too firm and may not 'wet out' sufficiently.

### **Application Guide**

**Surface Condition:** The bonding surfaces must be clean, uniform, dry and free of condensation. Do not use on fabric, coarse concrete, loose paint, or rough, loose surfaces.

**Surface Preparation:** For maximum performance, clean the mounting surfaces with a cleaning solvent such as a 50/50 mixture of isopropyl alcohol and water. Be sure to follow the solvent manufacturer's directions for use. Some surfaces may require a sealant or primer to achieve the desired bonding. Test the product on your actual application.

**Application Pressure:** Remove the release liner being very careful not to touch the adhesive surface and then quickly and firmly press the product into place. Firm pressure is needed to ensure full contact and to allow the adhesive to fully wet-out on the mating surfaces.

**Dwell Time:** The bond strength is affected by the substrate surface, application temperature and dwell time. At room temperature approximately half of the bond strength will be obtained within the first half hour with the majority of the strength achieved within 24 hours. Therefore, whenever possible wait 24 hours before applying load.

**Acrylic vs. Rubber Based Adhesives:** In general, rubber based adhesives offer higher initial tack whereas acrylic based adhesives maintain higher mechanical strength over time. One should evaluate the performance of the product on the actual end use application. Contact your local Essentra representative for additional physical property and chemical resistance data.





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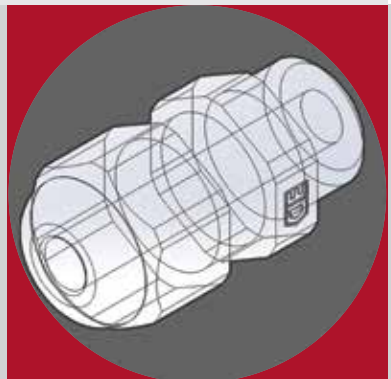
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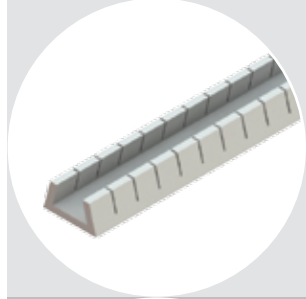
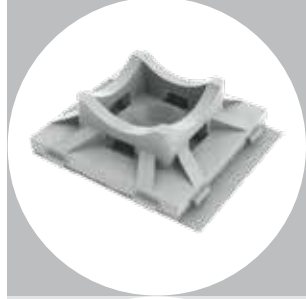
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