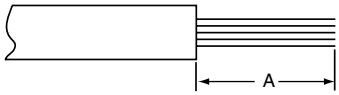
## Wire Stripping

1. Strip wire to required length. (See Figure at right). When using hot wire stripping, do not wipe melted insulation material on wire strands; with mechanical strippers do not cut or nick strands.
2. See Table 1 for proper finished outside wire dimensions.
3. Twist strands together to form a firm bundle.
4. Insert stripped wire into contact applying slight pressure until wire insulation butts against wire well. Check inspection hole to see that wire strands are visible. If there are strayed wire strands, entire wire end should be re-twisted. When wire is stripped and properly installed into contact, the next step is to crimp the wire inside the contact by using the proper crimping tool.

Stripping Dimensions




| Wire Size | A |
|---|---|
| 23 | .115 (2.92) |
| 20/20HD | .188 (4.77) |
| 16 | .188 (4.77) |
| 12 | .188 (4.77) |

Table 1

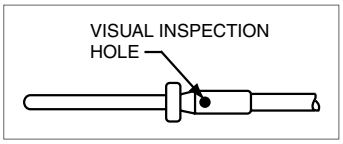
| Contact Size | Wire Dimension (inches)** | |
|---|---|---|
| | Min. | Max. |
| 10 | .135 | .162 |
| 12 | .097 | .142 |
| 16 | .065 | .109 |
| 20/20HD | .040 | .077 |
| 23 | .025 | .048 |

** Min. diameters to insure moisture proof assembly; max. diameters to permit use of metal removal tools.

## Crimping

See table on preceding page for more information on crimp contacts, contact tools, and crimp tensile strength

1. Insert stripped wire into contact crimp pot. Wire must be visible through inspection hole.
2. Using correct crimp tool and locator, cycle the tool once to be sure the indentors are open, insert contact and wire into locator. Squeeze tool handles firmly and completely to insure a proper crimp. The tool will not release unless the crimp indentors in the tool head have been fully actuated.
3. Release crimped contact and wire from tool. Be certain the wire is visible through inspection hole in contact.

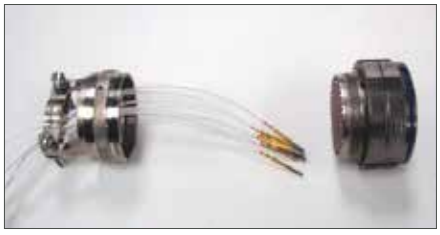




Examples of M22520 Series Crimping Tools:
Shown top: tool used for small size 23 contacts.
Shown bottom: tool used for size 20, 16 or 12 contacts and has a positioner that can be dialed for each contact size.

## Contact Insertion

1. First remove hardware from the plug and receptacle and slide the hardware over wires in proper sequence.



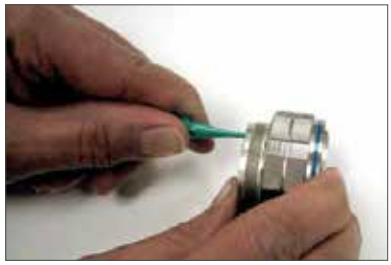
Note: All plastic tools are double-ended. The colored side is the insertion tool and the white side is the removal tool.

2. Use proper plastic or metal insertion tool for corresponding contact. (Consult Insertion Tool table on preceding page). Slide correct tool (with plastic tool use colored end) over wire insulation and slide forward until tool bottoms against rear contact shoulder.

Plastic tool with contact in proper position.

Metal tool with contact.

3. Next align the tool and contact up to the properly identified cavity at rear of connector plug. Use firm, even pressure; do not use excessive pressure. It is recommended to start at the center cavity. Contact must be aligned with grommet hole and not inserted at an angle. Push forward until contact is felt to snap into position within insert.

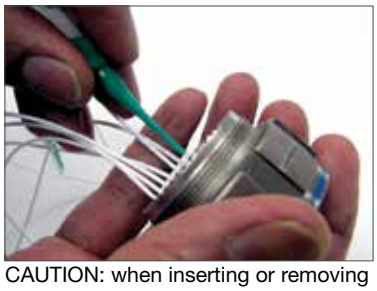


Continued on next page.

## Assembly Instructions

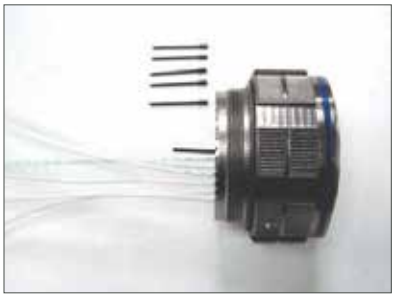
### CONTACT INSERTION, CONT.

4. Remove tool and pull back lightly on wire, making sure contact stays properly seated and isn't dragged back with the tool. Repeat operation with remainder of contacts to be inserted, beginning with the center cavity and working outward in alternating rows.



CAUTION: when inserting or removing contacts, do not spread or rotate tool tips.

5. After all contacts are inserted, fill any empty cavities with wire sealing plugs.



6. Reassemble plug or receptacle hardware slide forward and tighten using connector pliers. Connector holding tools are recommended while tightening back accessories. When using strain relief, center wires at bar clamp. Slide clamp grommet into position and tighten clamp bar screws. When tightening screws, pressure should be applied in the same direction that clamp is threaded to rear threads of connector. When not using clamp grommet, build up wire bundle with vinyl tape so clamp bar will maintain pressure on wires.

### CONTACT REMOVAL

1. Remove hardware from plug or receptacle and slide hardware back along wire bundle.

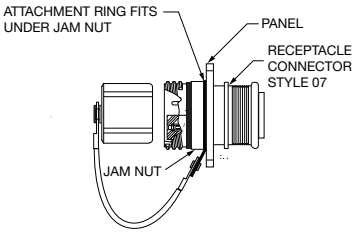
2. Use proper plastic or metal removal tool for corresponding contact. Slide correct size tool over wire insulation.

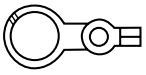
Use white end of plastic tool fo removal of contacts.

3. Insert plastic or metal removal tool into contact cavity until tool tips enter rear grommet and come to a positive stop. Hold tool tip firmly against positive stop on contact shoulder. Grip wire and simultaneously remove tool and contact. (On occasion, it may be necessary to remove tool, rotate 90° and reinsert.)

Removal of contacts with metal tool.

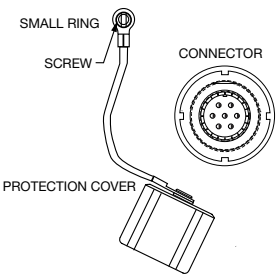
### CAP ATTACHMENT TO JAM NUT RECEPTACLE



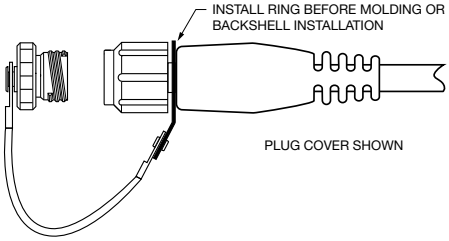
Solid Ring

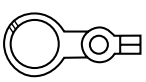
### CAP ATTACHMENT TO PANEL




Small Ring for Attaching Receptacle Covers to a Panel with a Screw

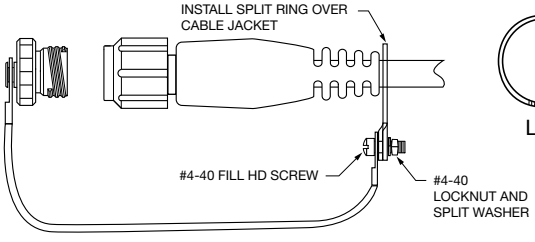
### CAP ATTACHMENT TO CABLE ASSEMBLY

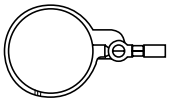


Solid Ring

### REMOVABLE CAP ATTACHMENT TO CABLE



Large Split Ring designed for attaching covers to cables

# 2M Series Contacts and Tools

## Grommet Sealing Plugs, Spanner Tool & Holding Tool

Micro38999

### Grommet Sealing Plugs

| Size | Color | Part Number | Military Part Number |
|---|---|---|---|
| #23 | Black | 2M809-155 | MS27488-22-2 |
| #20 | Red | 2M859-012 | MS27488-20-2 |
| #16 | Green | 2M859-013 | MS27488-16-2 |
| #12 | Orange | 2M859-014 | MS27488-12-2 |

### Spanner Tool for Tightening Series 2M Jam Nuts

| Shell Size | Holding Tool Part Number (Add P or R) | | | | |
|---|---|---|---|---|---|
| | Series 2M801 | Series 2M803 | Series 2M804 Style 07 | Series 2M804 Style 00 | Series 2M805 |
| 5 | 2M600-146-02 | 2M600-137-05 | 2M600-146-03 | 2M600-147-05 | |
| 6 | 2M600-146-03 | 2M600-137-06 | 2M600-146-04 | 2M600-147-06 | |
| 7 | 2M600-146-05 | 2M600-137-07 | 2M600-146-06 | 2M600-147-07 | |
| 8 | 2M600-146-05 | 2M600-137-08 | 2M600-146-06 | 2M600-147-07 | 2M600-154-08 |
| 9 | 2M600-146-06 | 2M600-137-09 | 2M600-146-07 | 2M600-147-09 | 2M600-154-09 |
| 10 | 2M600-146-07 | 2M600-137-10 | 2M600-146-08 | 2M600-147-10 | 2M600-154-09 |
| 11 | | | | | 2M600-154-11 |
| 12 | | 2M600-137-12 | 2M600-141-10 | 2M600-147-12 | 2M600-154-12 |
| 13 | 2M600-146-10 | | | | |
| 14 | | 2M600-137-14 | 2M600-141-12 | 2M600-147-14 | |
| 15 | | 2M600-137-15 | 2M600-141-13 | 2M600-147-15 | 2M600-154-15 |
| 16 | 2M600-146-13 | | | | |
| 17 | 2M600-146-14 | | | | |
| 18 | | | | | 2M600-154-18 |
| 19 | | | | | 2M600-154-19 |
| 21 | 2M600-146-17 | | | | |
| 23 | | | | | 2M600-154-23 |

### Connector Holding Tool for Tightening Backshells Accessories

| Shell Size | Holding Tool Part Number (Add P or R) | | | |
|---|---|---|---|---|
| | Series 2M801 • | Series 2M803* | Series 2M804 × | Series 2M805 • |
| 5 | 2M600MM005-05 | 2M600-140-5 | 2M600-141-5 | |
| 6 | 2M600MM005-06 | 2M600-140-6 | 2M600-141-6 | |
| 7 | 2M600MM005-07 | 2M600-140-7 | 2M600-141-7 | |
| 8 | 2M600MM005-08 | 2M600-140-8 | 2M600-141-8 | 2M600-155-8 |
| 9 | 2M600MM005-09 | 2M600-140-9 | 2M600-141-9 | 2M600-155-9 |
| 10 | 2M600MM005-10 | 2M600-140-10 | 2M600-141-10 | 2M600-155-10 |
| 11 | | | | 2M600-155-11 |
| 12 | | 2M600-140-12 | 2M600-141-12 | 2M600-155-12 |
| 13 | 2M600MM005-13 | | | |
| 14 | | 2M600-140-14 | 2M600-141-14 | |
| 15 | | 2M600-140-15 | 2M600-141-15 | 2M600-155-15 |
| 16 | 2M600MM005-16 | | | |
| 17 | 2M600MM005-17 | | | |
| 18 | | | | 2M600-155-18 |
| 19 | | | | 2M600-155-19 |
| 21 | 2M600MM005-21 | | | |
| 23 | | | | 2M600-155-23 |

*Add P for Plug holder or R for receptacle holder, followed by polarizing position (N, X, Y, Z)

• Add P for Plug holder or R for Receptacle holder, followed by polarizing position (A, B, C, D).

× Add P for Plug holder or R for Receptacle holder.

# 2M Series Contacts and Tools

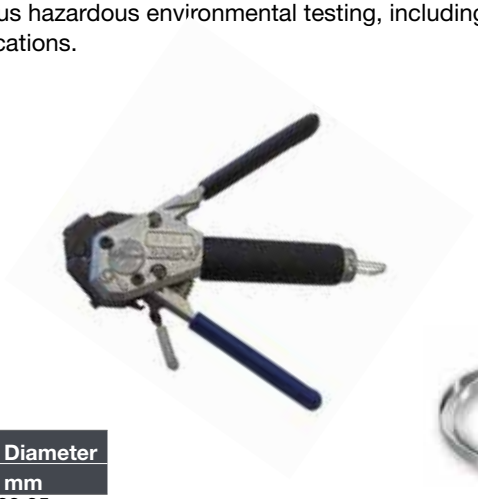
## Micro Band Shield Termination Tool

### Micro Band Shield Termination System:

Micro Band Termination: For assembling cables to overmolded style 2M connectors or backshells, the Micro Band System offers quick termination of cable shields and flexibility to be utilized on a wide range of parts with just one band size. These rugged straps have passed numerous hazardous environmental testing, including shock and vibration. Approved for use in military and aerospace applications.

**MATERIALS:**
Micro Band Installation Tool. Use with .120" (3.05 mm) wide bands. 6.75 inches (172 mm.) length, 1.2 pounds (0.6 Kg.)

Micro Band, .120" (3.05 mm) wide. Available in two lengths, flat or pre-coiled. Stainless steel.



| Description | Part Number |
|---|---|
| Micro Band Installation Tool | **2M600-061** |

| Length | | Part Number | Accommodates Diameter | |
|---|---|---|---|---|
| inch | mm | Flat | inch | mm |
| 8.125 | 206.38 | **2M600-057** | .88 | 22.35 |
| 14.250 | 361.95 | **2M600-083** | 1.88 | 47.75 |

### Micro Band Shield Termination Instructions:

1. Prepare cable braid for termination process (Figure 1).
2. Push braid forward over adapter retention lip to the adapter incline point (or .4" [10.2mm] minimum braid length). Milk braid as required to remove slack and winsure a snug fit around the shield termination area (Figure 2).
3. Prepare the band in the following manner:
   **IMPORTANT:** Due to connector/adapter circumference, it may be necessary to prepare the band around the cable or retention area.
   A. Roll band through the buckle slot twice. (Band must be double-coiled!)
   B. Pull on band until mark ( ▷| ) is within approximately .250 inch (6.4mm) of buckle slot (Figure 3). The band may be tightened further if desired.
   NOTE: Prepared band should have this ( ▷| ) mark visible approximately where shown in Figure 3.

   **Shield Termination Clamping Process (Figures 4 thru 8)**
   NOTE: To free tool handles, squeeze handles together and move holding clips to center of tool.

4. Squeeze gray gripper release lever and insert band into the front end opening of the tool. (Circular portion of looped band must always face downward.)
5. Aligning the band and tool with the shield termination area, squeeze blue pull-up handle repeatedly in full strokes until it locks against tool body. (This indicates the band is compressed to the tool precalibrated tension.)
   NOTE: To loosen or remove band before locking and cut-off, squeeze gray grip per release lever on tool and pull band out. To loosen or remove band after blue pull-up handle locks against tool body, squeeze pull-up handle and push tension release lever on top of tool forward. Let tension handle return to original position and use the gripper release lever to remove band.
6. Complete the clamping process by squeezing the black cut-off handle to form lock and trim excess band. To remove excess band from tool, squeeze gray gripper release handle, pull out and dispose. Inspect shield termination.

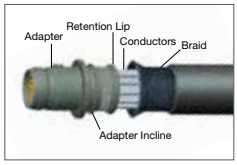


Fig. 1

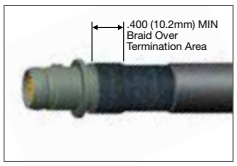


Fig. 2

Fig. 3


Fig. 4


Fig. 5


Fig. 6


Fig. 7

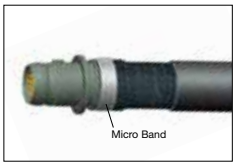


Fig. 8

# 2M Micro Miniature Python

## Low Profile EMI/RFI Plug and Backshell Combo

Micro38999

### BENEFITS:

#### SPACE SAVINGS

This plug and backshell combo design saves space, with a minimum height and superior EMI performance.

#### EASY MAINTENANCE

The rear removable cover makes it easy to cut wires and remove contacts for easy maintenance.

#### SIMPLE ASSEMBLY

Assembles with crimp or solder cup size 23 contacts.

Multiple cable entry options available for each connector size (rear opening).

#### KEY ROTATIONS

All key rotations are available as well as several connector clockings (rotating main key).

### OVERVIEW

2M Python is a low profile EMI/RFI plug and backshell combo. This innovative combination reduces space requirements without compromising on ruggedness or shielding performance. Available in 2M 801 Series, 804 Series, and 805 Series, Python assemblies provide superior low profile cable routing and 2M Micro-miniature connector performance all-in-one.

# 2M Strain Relief Clamp Ordering Information

## 2M620MS064 and 2M620MS065

| 1. | 2. | 3. |
|---|---|---|
| **PART NUMBER** | **SERVICE CLASS** | **SIZE CODE** |
| **2M620MS06X** | **-M** | **07** |

**1. PART NUMBER**

| Part # | Description |
|---|---|
| **2M620MS065** | Rotatable Coupling |
| **2M620MS064** | Direct Coupling |

**2. SERVICE CLASS**

| Material | Part # | Description | RoHS |
|---|---|---|---|
| ALUMINUM | **-C** | Black Anodized (Non-conductive) | ✓ |
| | **-M** | Electroless Nickel | ✓ |
| | **-NF** | Olive Drab Cadmium | |
| | **-MT** | Durmalon (Ni PTFE) | ✓ |
| | **-ZN** | Olive Drab Zinc Nickel | ✓ |
| | **-ZNU** | Black Zinc Nickel | ✓ |
| STAINLESS STEEL | **-Z1** | Passivated | ✓ |
| | **-ZL** | Electrolytic Nickel | ✓ |

**3. SIZE CODE**

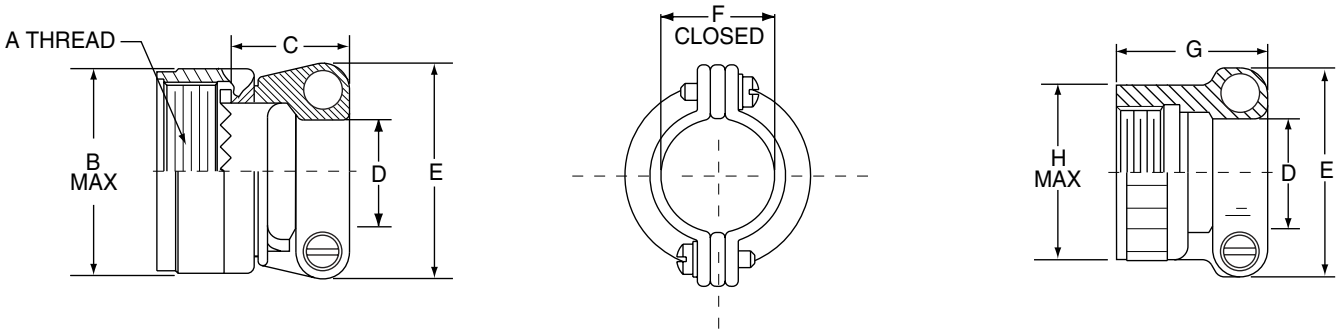
| Size Code | UNEF-2B Thread Size | Cable Entry Diameter | Shell Size | |
|---|---|---|---|---|
| | | | Series 2M801, 2M803, 2M804 | Series 2M805 |
| **05** | .2500-32 UNEF | .11 | 5 | |
| **06** | .3125-32 UNEF | .17 | 6 | |
| **11** | .3750-32 UNEF | .17 | | 8 |
| **07** | .4375-28 UNEF | .23 | 7 | 9 |
| **08** | .5000-28 UNEF | .30 | 8 | 10 |
| **09** | .5625-24 UNEF | .30 | 9 | 11 |
| **10** | .6250-24 UNEF | .36 | 10 | 12 |
| **12** | .6875-24 UNEF | .42 | 12, 13 | |
| **13** | .7500-20 UNEF | .42 | | 15 |
| **14** | .9375-20 UNEF | .48 | 14, 15, 16, 17 | 18, 19 |
| **15** | .9375-20 UNEF | .61 | 14, 15, 16, 17 | 18, 19 |
| **17** | 1.1875-18 UNEF | .86 | 21 | 23 |

**MATERIALS**

| | |
|---|---|
| Nut, Clamp, and Saddles | Aluminum Alloy 6061-T6 or 300 Series SST |
| Hardware | 300 Series Stainless Steel |

# 2M Strain Relief Clamp Dimensions

## 2M620MS064 and 2M620MS065




| Size Code | A Threads UNEF-2B | B Max. | | C Max. | | D DIA. | | E | | F | | G Max | | H Max. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | in. | mm. | in. | mm. | in. ± .015 | mm. ± 0.38 | in. ± .015 | mm. ± 0.38 | in. ± .030 | mm. ± 0.76 | in. | mm. | in. | mm. |
| 05 | .2500-32 | .470 | 11.94 | .688 | 17.48 | .119 | 3.02 | .496 | 12.60 | .110 | 2.79 | .625 | 15.88 | .350 | 8.89 |
| 06 | .3125-32 | .530 | 13.46 | .688 | 17.48 | .182 | 4.62 | .582 | 14.78 | .170 | 4.32 | .625 | 15.88 | .415 | 10.54 |
| 11 | .3750-32 | .570 | 14.48 | .688 | 17.48 | .182 | 4.62 | .582 | 14.78 | .170 | 4.32 | .625 | 15.88 | .465 | 11.81 |
| 07 | .4375-28 | .637 | 16.18 | .688 | 17.48 | .244 | 6.20 | .656 | 16.66 | .230 | 5.08 | .688 | 17.48 | .530 | 13.46 |
| 08 | .5000-28 | .700 | 17.78 | .688 | 17.48 | .307 | 7.80 | .726 | 18.44 | .300 | 7.62 | .688 | 17.48 | .595 | 15.11 |
| 09 | .5625-24 | .758 | 19.25 | .750 | 19.05 | .307 | 7.80 | .726 | 18.44 | .300 | 7.62 | .750 | 19.05 | .650 | 16.51 |
| 10 | .6250-24 | .819 | 20.80 | .750 | 19.05 | .369 | 9.37 | .885 | 22.48 | .360 | 9.14 | .875 | 22.23 | .715 | 18.16 |
| 12 | .6875-24 | .896 | 22.76 | .750 | 19.05 | .432 | 10.97 | .952 | 24.18 | .420 | 10.67 | .875 | 22.23 | .785 | 19.94 |
| 13 | .7500-20 | .930 | 23.62 | .750 | 19.05 | .432 | 10.97 | .952 | 24.18 | .420 | 10.67 | .875 | 22.23 | .830 | 21.08 |
| 14 | .9375-20 | 1.137 | 28.88 | .750 | 19.05 | .494 | 12.55 | 1.018 | 25.86 | .480 | 12.19 | 1.000 | 25.40 | 1.020 | 25.91 |
| 15 | .9375-20 | 1.137 | 28.88 | .750 | 19.05 | .619 | 15.72 | 1.148 | 29.16 | .610 | 15.49 | 1.000 | 25.40 | 1.020 | 25.19 |
| 17 | 1.1875-18 | 1.397 | 35.48 | .750 | 19.05 | .869 | 22.07 | 1.400 | 35.56 | .860 | 21.84 | 1.125 | 28.58 | 1.280 | 32.51 |

# 2M Thread-On Micro Band Adapter

## Ordering Information 2M440MS135, MK135 and ML135

| 1. PART NUMBER | 2. SERVICE CLASS | 3. SIZE CODE | 4. CABLE ENTRY SIZE | 5. LENGTH | 6. BAND OPTIONS |
|---|---|---|---|---|---|
| 2M440MX135 | -M | 07 | 05 | -6 | K |

Omit for no band supplied
K adapter is supplied with **Micro Band** shield termination band, pre-coiled

### 1. PART NUMBER

| Part # | Description |
|---|---|
| **2M440MS135** | Straight Entry |
| **2M440MK135** | 45° Entry |
| **2M440ML135** | 90° Entry |

### 2. SERVICE CLASS

| Material | Part # | Description | RoHS |
|---|---|---|---|
| ALUMINUM | **-C** | Black Anodized (Non-conductive) | ✓ |
| | **-M** | Electroless Nickel | ✓ |
| | **-NF** | Olive Drab Cadmium | |
| | **-MT** | Durmalon (Ni PTFE) | ✓ |
| | **-ZN** | Olive Drab Zinc Nickel | ✓ |
| | **-ZNU** | Black Zinc Nickel | ✓ |
| STAINLESS STEEL | **-Z1** | Passivated | ✓ |
| | **-ZL** | Electrolytic Nickel | ✓ |

### 3. SIZE CODE

| | |
|---|---|
| **05** | .2500-32 |
| **06** | .3125-32 |
| **11** | .3750-32 |
| **07** | .4375-28 |
| **08** | .5000-28 |
| **09** | .5625-24 |
| **10** | .6250-24 |
| **12** | .6875-24 |
| **13** | .7500-20 |
| **14** | .9375-20 |
| **17** | 1.1875-18 |

### 4. CABLE ENTRY SIZE

| | | |
|---|---|---|
| **02** | .125 | 05-17 |
| **03** | .188 | 05-17 |
| **04** | .250 | 06-17 |
| **05** | .312 | 07-17 |
| **06** | .375 | 07-17 |
| **07** | .438 | 08-17 |
| **08** | .500 | 09-17 |
| **09** | .562 | 10-17 |
| **10** | .625 | 12-17 |
| **11** | .688 | 14-17 |
| **12** | .750 | 14-17 |
| **13** | .812 | 14-17 |
| **14** | .875 | 14-17 |

### 5. LENGTH

Straight Entry
2M440MS135 Only

| Length Code | Length (inches) |
|---|---|
| **-6** | .750 |
| **-7** | .875 |
| **-8** | 1.000 |
| **-9** | 1.125 |
| **-10** | 1.250 |
| **-11** | 1.375 |
| **-12** | 1.500 |
| **-13** | 1.625 |
| **-14** | 1.750 |
| **-15** | 1.875 |
| **-16** | 2.000 |
| **-17** | 2.125 |
| **-18** | 2.250 |
| **-19** | 2.375 |
| **-20** | 2.500 |

Specify Length in increments of .125 inches (3.18 mm.)

### SHELL SIZE

| Accessory Thread | Size Code | Series 2M801 | Series 2M803 | Series 2M804 | Series 2M805 |
|---|---|---|---|---|---|
| .2500-32 UNEF-2B | **05** | 5 | 5 | 5 | |
| .3125-32 UNEF-2B | **06** | 6 | 6 | 6 | |
| .3750-32 UNEF-2B | **11** | | | | 8 |
| .4375-28 UNEF-2B | **07** | 7 | 7 | 7 | 9 |
| .5000-28 UNEF-2B | **08** | 8 | 8 | 8 | 10 |
| .5625-24 UNEF-2B | **09** | 9 | 9 | 9 | 11 |
| .6250-24 UNEF-2B | **10** | 10 | 10 | 10 | 12 |
| .6875-24 UNEF-2B | **12** | 13 | 12 | 12 | |
| .7500-20 UNEF-2B | **13** | | | | 15 |
| .9375-20 UNEF-2B | **14** | 16,17 | 14, 15 | 14, 15 | 18, 19 |
| 1.1875-18 UNEF-2B | **17** | 21 | | | 23 |

### MATERIALS

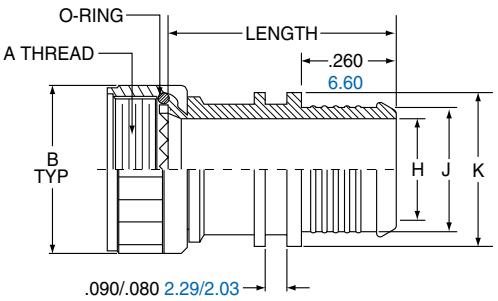
| | |
|---|---|
| Nut, Adapter | Aluminum Alloy or 300 Series SST |
| Band | 300 Series SST |
| O-Ring | Silicone Elastomer |

# 2M Thread-On Micro Band Adapter

## 2M440MS135, MK135 and ML135

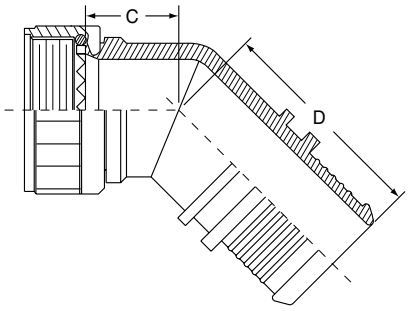
| Size Code | A Threads UNEF-2B | B Max | | C Max. | | D Max. | | E Max. | | F Max. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | in. | mm. | in. | mm. | in. | mm. | in. | mm. | in. | mm. |
| 05 | .2500-32 | .470 | 11.94 | .530 | 13.46 | .660 | 16.76 | .630 | 16.00 | .780 | 19.81 |
| 06 | .3125-32 | .530 | 13.46 | .550 | 13.97 | .670 | 17.02 | .660 | 16.76 | .790 | 20.27 |
| 11 | .3750-32 | .570 | 14.48 | .560 | 14.22 | .680 | 17.27 | .680 | 17.27 | .810 | 20.57 |
| 07 | .4375-28 | .637 | 16.18 | .570 | 14.48 | .690 | 17.53 | .700 | 17.48 | .830 | 21.08 |
| 08 | .5000-28 | .700 | 17.78 | .580 | 14.73 | .700 | 17.78 | .740 | 18.80 | .860 | 21.84 |
| 09 | .5625-24 | .758 | 19.25 | .590 | 14.99 | .710 | 18.03 | .770 | 19.56 | .890 | 22.61 |
| 10 | .6250-24 | .819 | 20.80 | .610 | 15.49 | .730 | 18.54 | .800 | 20.32 | .920 | 23.37 |
| 12 | .6875-24 | .896 | 22.76 | .640 | 16.26 | .750 | 19.05 | .840 | 21.34 | .970 | 24.64 |
| 13 | .7500-20 | .930 | 23.62 | .660 | 16.76 | .770 | 19.56 | .880 | 22.35 | 1.020 | 25.91 |
| 14 | .9375-20 | 1.137 | 28.88 | .690 | 17.53 | .800 | 20.32 | .950 | 24.13 | 1.090 | 27.69 |
| 17 | 1.1875-18 | 1.387 | 35.23 | .720 | 18.29 | .830 | 21.08 | 1.010 | 25.65 | 1.160 | 29.46 |

STRAIGHT ENTRY ROTATABLE COUPLING 2M440MS135



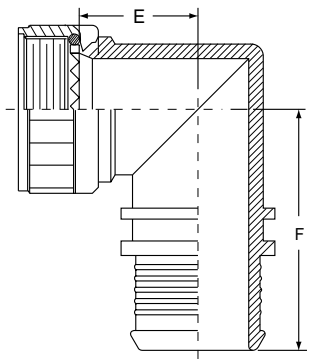

| CABLE ENTRY | | | | | | | |
|---|---|---|---|---|---|---|---|
| Cable Entry Code | H Dia. | | J Dia. | | K Dia. | | Use With Size Codes |
| | in. ± .015 | mm. ± 0.38 | in. ± .015 | mm. ± 0.38 | in. ± .015 | mm. ± 0.38 | |
| 02 | .125 | 3.18 | .164 | 4.17 | .266 | 6.76 | 05-14 |
| 03 | .188 | 4.78 | .227 | 5.77 | .329 | 8.36 | 05-14 |
| 04 | .250 | 6.35 | .289 | 7.34 | .391 | 9.93 | 06-14 |
| 05 | .312 | 7.92 | .351 | 8.92 | .453 | 11.51 | 07-14 |
| 06 | .375 | 9.53 | .414 | 10.52 | .516 | 13.11 | 07-14 |
| 07 | .438 | 11.13 | .477 | 12.12 | .579 | 14.71 | 08-14 |
| 08 | .500 | 12.70 | .539 | 13.69 | .641 | 16.28 | 09-14 |
| 09 | .562 | 14.27 | .601 | 15.27 | .703 | 17.86 | 10-14 |
| 10 | .625 | 15.88 | .664 | 16.87 | .766 | 19.46 | 12-14 |
| 11 | .688 | 17.48 | .727 | 18.47 | .829 | 21.06 | 14 |
| 12 | .750 | 19.05 | .789 | 20.04 | .891 | 22.63 | 14 |
| 13 | .812 | 20.62 | .851 | 21.62 | .953 | 24.21 | 14 |
| 14 | .875 | 22.23 | .914 | 23.22 | 1.016 | 25.81 | 14 |

45° ENTRY ROTATABLE COUPLING 2M440MK135




| CONNECTOR SHELL SIZE | | | |
|---|---|---|---|
| Size Code | A Threads | Shell Size | |
| | | Series 2M801, 2M803, 2M804 | Series 2M805 |
| 05 | .2500-32 UNEF-2B | 5 | |
| 06 | .3125-32 UNEF-2B | 6 | |
| 11 | .3750-32 UNEF-2B | | 8 |
| 07 | .4375-28 UNEF-2B | 7 | 9 |
| 08 | .5000-28 UNEF-2B | 8 | 10 |
| 09 | .5625-24 UNEF-2B | 9 | 11 |
| 10 | .6250-24 UNEF-2B | 10 | 12 |
| 12 | .6875-24 UNEF-2B | 12, 13 | |
| 13 | .7500-20 UNEF-2B | | 15 |
| 14 | .9375-20 UNEF-2B | 14, 15, 16, 17 | 18, 19 |
| 17 | 1.1875-18 UNEF-2B | 21 | 23 |

90° ENTRY ROTATABLE COUPLING 2M440ML135



# 2M Low-Profile Micro Band Adapter Order Info

## 2M440MS134

| 1. PART NUMBER | 2. SERVICE CLASS | 3. SIZE CODE | 4. CABLE ENTRY SIZE | 5. LENGTH | 6. BAND OPTIONS |
|---|---|---|---|---|---|
| 2M440MS134 | -M | 07 | 05 | -6 | K |

Omit for no band supplied
K adapter is supplied with **Micro Band** shield termination band, pre-coiled

### 1. PART NUMBER

| Part # | Description |
|---|---|
| **2M440MS134** | Straight Entry |

### 2. SERVICE CLASS

| Material | Part # | Description | RoHS |
|---|---|---|---|
| ALUMINUM | -C | Black Anodized (Non-conductive) | ✓ |
| | -M | Electroless Nickel | ✓ |
| | -NF | Olive Drab Cadmium | |
| | -MT | Durmalon (Ni PTFE) | ✓ |
| | -ZN | Olive Drab Zinc Nickel | ✓ |
| | -ZNU | Black Zinc Nickel | ✓ |
| STAINLESS STEEL | -Z1 | Passivated | ✓ |
| | -ZL | Electrolytic Nickel | ✓ |

### 3. SIZE CODE

| | |
|---|---|
| **05** | .2500-32 |
| **06** | .3125-32 |
| **11** | .3750-32 |
| **07** | .4375-28 |
| **08** | .5000-28 |
| **09** | .5625-24 |
| **10** | .6250-24 |
| **12** | .6875-24 |
| **13** | .7500-20 |
| **14** | .9375-20 |
| **17** | 1.1875-18 |

### 4. CABLE ENTRY SIZE

| | | |
|---|---|---|
| **01** | .094 | 05-06, 11 |
| **02** | .125 | 05-07, 11 |
| **03** | .175 | 05-08, 11 |
| **04** | .234 | 06-08 |
| **05** | .272 | 07-09 |
| **06** | .312 | 07-10 |
| **07** | .375 | 08-13 |
| **08** | .438 | 09-13 |
| **09** | .500 | 10-13 |
| **10** | .562 | 12-14, 17 |
| **11** | .625 | 14, 17 |
| **12** | .688 | 14, 17 |
| **13** | .750 | 14, 17 |
| **14** | .812 | 14, 17 |

### 5. LENGTH

Straight Entry
2M440MS135 Only

| Length Code | Length (inches) |
|---|---|
| **-6** | .750 |
| **-7** | .875 |
| **-8** | 1.000 |
| **-9** | 1.125 |
| **-10** | 1.250 |
| **-11** | 1.375 |
| **-12** | 1.500 |
| **-13** | 1.625 |
| **-14** | 1.750 |
| **-15** | 1.875 |
| **-16** | 2.000 |
| **-17** | 2.125 |
| **-18** | 2.250 |
| **-19** | 2.375 |
| **-20** | 2.500 |

Specify Length in increments of .125 inches (3.18 mm.)

### SHELL SIZE

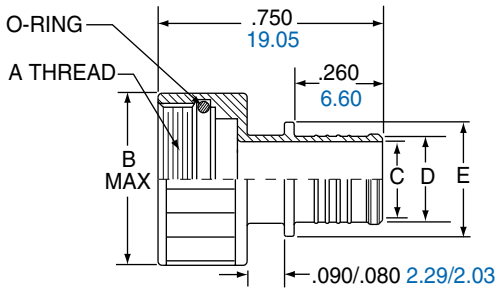
| Accessory Thread | Size Code | Series 2M801 | Series 2M803 | Series 2M804 | Series 2M805 |
|---|---|---|---|---|---|
| .2500-32 UNEF-2B | **05** | 5 | 5 | 5 | |
| .3125-32 UNEF-2B | **06** | 6 | 6 | 6 | |
| .3750-32 UNEF-2B | **11** | | | | 8 |
| .4375-28 UNEF-2B | **07** | 7 | 7 | 7 | 9 |
| .5000-28 UNEF-2B | **08** | 8 | 8 | 8 | 10 |
| .5625-24 UNEF-2B | **09** | 9 | 9 | 9 | 11 |
| .6250-24 UNEF-2B | **10** | 10 | 10 | 10 | 12 |
| .6875-24 UNEF-2B | **12** | 13 | 12 | 12 | |
| .7500-20 UNEF-2B | **13** | | | | 15 |
| .9375-20 UNEF-2B | **14** | 16,17 | 14, 15 | 14, 15 | 18, 19 |
| 1.1875-18 UNEF-2B | **17** | 21 | | | 23 |

### MATERIALS

| | |
|---|---|
| Nut, Adapter | Aluminum Alloy or 300 Series SST |
| Band | 300 Series SST |
| O-Ring | Silicone Elastomer |

# 2M Low-Profile Micro-Band Adapter Dimensions

## 2M440MS134




| CONNECTOR SHELL SIZE | | | |
|---|---|---|---|
| Size Code | A Threads | B Max. | |
| | | in. | mm. |
| 05 | .2500-32 UNEF-2B | .350 | 8.89 |
| 06 | .3125-32 UNEF-2B | .415 | 10.54 |
| 11 | .3750-32 UNEF-2B | .465 | 11.81 |
| 07 | .4375-28 UNEF-2B | .530 | 13.46 |
| 08 | .5000-28 UNEF-2B | .595 | 15.11 |
| 09 | .5625-24 UNEF-2B | .650 | 16.51 |
| 10 | .6250-24 UNEF-2B | .715 | 18.16 |
| 12 | .6875-24 UNEF-2B | .785 | 19.94 |
| 13 | .7500-20 UNEF-2B | .830 | 21.08 |
| 14 | .9375-20 UNEF-2B | 1.020 | 25.91 |
| 17 | 1.1875-18 UNEF-2B | 1.280 | 32.51 |

| CABLE ENTRY | | | | | | | |
|---|---|---|---|---|---|---|---|
| Cable Entry Code | C Dia. | | D Dia. | | E Dia. | | Use With Size Codes |
| | in. ± .015 | mm. ± 0.38 | in. ± .015 | mm. ± 0.38 | in. ± .015 | mm. ± 0.38 | |
| 01 | .094 | 2.39 | .133 | 3.38 | .235 | 5.97 | 05-06 |
| 02 | .125 | 3.18 | .164 | 4.17 | .266 | 6.76 | 05-07 |
| 03 | .172 | 4.37 | .211 | 5.36 | .313 | 7.95 | 05-08 |
| 04 | .234 | 5.94 | .273 | 6.93 | .375 | 9.53 | 06-08 |
| 05 | .272 | 6.91 | .311 | 7.90 | .413 | 10.49 | 07-09 |
| 06 | .312 | 7.92 | .351 | 8.92 | .453 | 11.51 | 07-10 |
| 07 | .375 | 9.53 | .414 | 10.52 | .516 | 13.11 | 08-12 |
| 08 | .438 | 11.13 | .477 | 12.12 | .579 | 14.71 | 09-12 |
| 09 | .500 | 12.70 | .539 | 13.69 | .641 | 16.28 | 10-12 |
| 10 | .562 | 14.27 | .601 | 15.27 | .703 | 17.88 | 12-14 |
| 11 | .625 | 15.88 | .664 | 16.87 | .766 | 19.46 | 14 |
| 12 | .688 | 17.48 | .727 | 18.47 | .829 | 21.06 | 14 |
| 13 | .750 | 19.05 | .789 | 20.04 | .891 | 22.63 | 14 |
| 14 | .812 | 20.62 | .851 | 21.62 | .953 | 24.21 | 14 |

| CONNECTOR SHELL SIZE | | | |
|---|---|---|---|
| Size Code | A Threads | Shell Size | |
| | | Series 2M801, 2M803, 2M804 | Series 2M805 |
| 05 | .2500-32 UNEF-2B | 5 | |
| 06 | .3125-32 UNEF-2B | 6 | |
| 11 | .3750-32 UNEF-2B | | 8 |
| 07 | .4375-28 UNEF-2B | 7 | 9 |
| 08 | .5000-28 UNEF-2B | 8 | 10 |
| 09 | .5625-24 UNEF-2B | 9 | 11 |
| 10 | .6250-24 UNEF-2B | 10 | 12 |
| 12 | .6875-24 UNEF-2B | 12, 13 | |
| 13 | .7500-20 UNEF-2B | | 15 |
| 14 | .9375-20 UNEF-2B | 14, 15, 16, 17 | 18, 19 |
| 17 | 1.1875-18 UNEF-2B | 21 | 23 |

# 2M Environmental Backshell Ordering Info

## 2M370MS37, MS038, MB038 and MA038

| 1. | 2. | 3. | 4. | 5. | 6. |
|---|---|---|---|---|---|
| PART NUMBER | SERVICE CLASS | SIZE CODE | CABLE ENTRY SIZE | LENGTH | OPTIONS |
| 2M370MS038 | -M | 07 | 05 | -6 | N |

Omit for screw clamp with saddle bars
N Optional Compression Nut, Low Profile

### 1. PART NUMBER

| Part # | Description |
|---|---|
| 2M370MS038 | Straight Entry Rotatable Coupling |
| 2M370MS037 | Straight Entry, Direct Coupling |
| 2M370MB038 | 45° Entry |
| 2M370MA038 | 90° Entry |

### 2. SERVICE CLASS

| Material | Part # | Description | RoHS |
|---|---|---|---|
| ALUMINUM | -C | Black Anodized (Non-conductive) | ✓ |
| | -M | Electroless Nickel | ✓ |
| | -NF | Olive Drab Cadmium | |
| | -MT | Durmalon (Ni PTFE) | ✓ |
| | -ZN | Olive Drab Zinc Nickel | ✓ |
| | -ZNU | Black Zinc Nickel | ✓ |
| STAINLESS STEEL | -Z1 | Passivated | ✓ |
| | -ZL | Electrolytic Nickel | ✓ |

### 3. SIZE CODE

| | |
|---|---|
| 05 | .2500-32 |
| 06 | .3125-32 |
| 11 | .3750-32 |
| 07 | .4375-28 |
| 08 | .5000-28 |
| 09 | .5625-24 |
| 10 | .6250-24 |
| 12 | .6875-24 |
| 13 | .7500-20 |
| 14 | .9375-20 |
| 17 | 1.1875-18 |

### 4. CABLE ENTRY SIZE

| Code | Max. | Min. |
|---|---|---|
| 01 | .109 | .031 |
| 02 | .172 | .078 |
| 03 | .234 | .140 |
| 04 | .297 | .203 |
| 05 | .359 | .265 |
| 06 | .422 | .328 |
| 07 | .484 | .390 |
| 08 | .547 | .463 |
| 09 | .609 | .515 |

### 5. LENGTH

Straight Entry 2M440MS. Only

| Length Code | Length (inches) |
|---|---|
| -5 | .625 |
| -6 | .750 |
| -7 | .875 |
| -8 | 1.000 |
| -9 | 1.125 |
| -10 | 1.250 |
| -11 | 1.375 |
| -12 | 1.500 |
| -13 | 1.625 |
| -14 | 1.750 |
| -15 | 1.875 |
| -16 | 2.000 |
| -17 | 2.125 |
| -18 | 2.250 |
| -19 | 2.375 |
| -20 | 2.500 |

Specify Length in increments of .125 inches (3.18 mm.)

### SHELL SIZE

| Accessory Thread | Size Code | Series 2M801 | Series 2M803 | Series 2M804 | Series 2M805 |
|---|---|---|---|---|---|
| .2500-32 UNEF-2B | 05 | 5 | 5 | 5 | |
| .3125-32 UNEF-2B | 06 | 6 | 6 | 6 | |
| .3750-32 UNEF-2B | 11 | | | | 8 |
| .4375-28 UNEF-2B | 07 | 7 | 7 | 7 | 9 |
| .5000-28 UNEF-2B | 08 | 8 | 8 | 8 | 10 |
| .5625-24 UNEF-2B | 09 | 9 | 9 | 9 | 11 |
| .6250-24 UNEF-2B | 10 | 10 | 10 | 10 | 12 |
| .6875-24 UNEF-2B | 12 | 13 | 12 | 12 | |
| .7500-20 UNEF-2B | 13 | | | | 15 |
| .9375-20 UNEF-2B | 14 | 16,17 | 14, 15 | 14, 15 | 18, 19 |
| 1.1875-18 UNEF-2B | 17 | 21 | | | 23 |

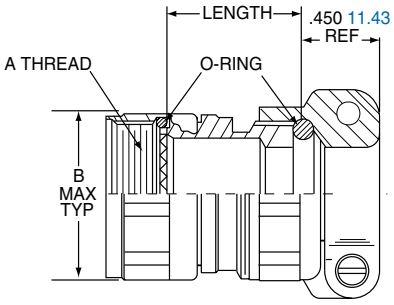
### MATERIALS

| | |
|---|---|
| Adapter, Clamp, Nut and Saddles | Aluminum Alloy 6061-T6 or 300 Series Stainless Steel |
| O-Rings | Silicone Rubber |
| Hardware | 300 Series Stainless Steel |

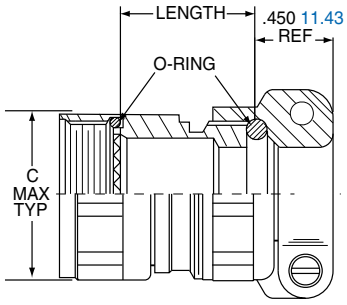
# 2M Environmental Backshell

## 2M370MS037, MS038, MB038 and MA038

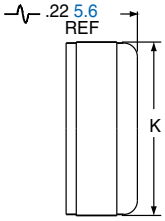
STRAIGHT ENTRY
ROTATABLE COUPLING
2M370MS038



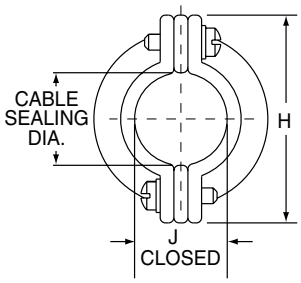

STRAIGHT ENTRY
DIRECT COUPLING
2M370MS037



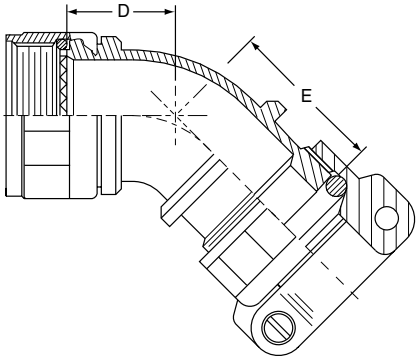

CLAMP STYLE N
COMPRESSION NUT



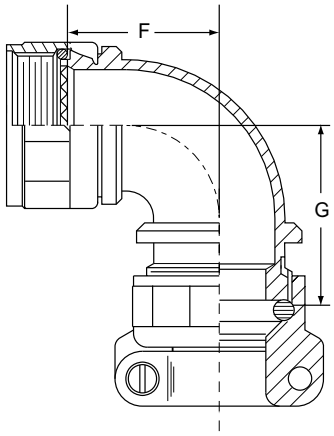

SADDLE CLAMP




45º ENTRY
ROTATABLE COUPLING
2M370MB038




90º ENTRY
ROTATABLE COUPLING
2M370MA038




| Size Code | A Threads UNEF-2B | B Max. | | C Max. | |
|---|---|---|---|---|---|
| | | in. | mm. | in. | mm. |
| 05 | .2500-32 | .470 | 11.94 | .350 | 8.89 |
| 06 | .3125-32 | .530 | 13.46 | .415 | 10.54 |
| 11 | .3750-32 | .570 | 14.48 | .465 | 11.68 |
| 07 | .4375-28 | .637 | 16.18 | .530 | 13.46 |
| 08 | .5000-28 | .700 | 17.78 | .595 | 15.11 |
| 09 | .5625-24 | .758 | 19.25 | .650 | 16.51 |
| 10 | .6250-24 | .819 | 20.80 | .715 | 18.16 |
| 12 | .6875-24 | .896 | 22.76 | .785 | 19.94 |
| 13 | .7500-20 | .930 | 23.62 | .830 | 21.08 |
| 14 | .9375-20 | 1.137 | 28.88 | 1.020 | 25.91 |
| 17 | 1.1875-18 | 1.280 | 32.51 | 1.280 | 32.51 |

| CABLE ENTRY | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cable Entry Code | Cable Sealing Dia. | | D Max. | | E Max. | | F Max. | | G Max. | | H Dia. | | J Dia. | | K Dia. | |
| | Max. | Min. | In. | mm. | in. | mm. | in. | mm. | in. | mm. | in. ± .015 | mm. ± 0.38 | in. ± .030 | mm. ± 0.76 | in. ± .015 | mm. ± 0.38 |
| 01 | .109 | .031 | .603 | 15.32 | .581 | 14.67 | .724 | 18.39 | .702 | 17.83 | .496 | 12.60 | .110 | 2.79 | .398 | 10.11 |
| 02 | .172 | .078 | .603 | 15.32 | .581 | 14.67 | .724 | 18.39 | .702 | 17.83 | .582 | 14.78 | .170 | 4.32 | .460 | 11.68 |
| 03 | .234 | .140 | .603 | 15.32 | .581 | 14.67 | .724 | 18.39 | .702 | 17.83 | .656 | 16.66 | .230 | 5.84 | .523 | 13.28 |
| 04 | .297 | .203 | .629 | 15.98 | .607 | 15.42 | .786 | 19.96 | .764 | 19.41 | .726 | 18.44 | .300 | 7.62 | .585 | 14.86 |
| 05 | .359 | .265 | .629 | 15.98 | .607 | 15.42 | .786 | 19.96 | .764 | 19.41 | .885 | 22.48 | .360 | 9.14 | .647 | 16.43 |
| 06 | .422 | .328 | .655 | 16.64 | .633 | 16.00 | .848 | 21.54 | .826 | 20.98 | .952 | 24.18 | .420 | 10.67 | .710 | 18.03 |
| 07 | .484 | .390 | .655 | 16.64 | .633 | 16.00 | .848 | 21.54 | .826 | 20.98 | 1.018 | 25.86 | .480 | 12.19 | .773 | 19.63 |
| 08 | .547 | .453 | .707 | 17.96 | .685 | 17.40 | .911 | 23.14 | .889 | 22.68 | 1.084 | 27.53 | .550 | 13.97 | .835 | 21.21 |
| 09 | .609 | .515 | .707 | 17.96 | .685 | 17.40 | .911 | 23.14 | .889 | 22.58 | 1.148 | 29.16 | .610 | 15.49 | .897 | 22.76 |

# 2M EMI Backshell Ordering Information

## 2M380MS137, MS135, MB137 and MA137

| 1. | 2. | 3. | 4. | 5. | 6. |
|---|---|---|---|---|---|
| PART NUMBER | SERVICE CLASS | SIZE CODE | CABLE ENTRY SIZE | LENGTH | OPTIONS |
| 2M380MS135 | -M | 07 | 05 | -6 | N |

Omit for screw clamp
with saddle bars
N Optional Compression Nut,
Low Profile

### 1. PART NUMBER

| Part # | Description |
|---|---|
| 2M380MS137 | Straight Entry Rotatable Coupling |
| 2M380MS135 | Straight Entry, Direct Coupling |
| 2M380MB137 | 45° Entry |
| 2M380MA137 | 90° Entry |

### 2. SERVICE CLASS

| Material | Part # | Description | RoHS |
|---|---|---|---|
| ALUMINUM | -C | Black Anodized (Non-conductive) | ✓ |
| | -M | Electroless Nickel | ✓ |
| | -NF | Olive Drab Cadmium | |
| | -MT | Durmalon (Ni PTFE) | ✓ |
| | -ZN | Olive Drab Zinc Nickel | ✓ |
| | -ZNU | Black Zinc Nickel | ✓ |
| STAINLESS STEEL | -Z1 | Passivated | ✓ |
| | -ZL | Electrolytic Nickel | ✓ |

### 3. SIZE CODE

| | |
|---|---|
| 05 | .2500-32 |
| 06 | .3125-32 |
| 11 | .3750-32 |
| 07 | .4375-28 |
| 08 | .5000-28 |
| 09 | .5625-24 |
| 10 | .6250-24 |
| 12 | .6875-24 |
| 13 | .7500-20 |
| 14 | .9375-20 |
| 17 | 1.1875-18 |

### 4. CABLE ENTRY SIZE

| Code | Saddle Clamp Dia. Fully Closed |
|---|---|
| 01 | .109 |
| 02 | .172 |
| 03 | .234 |
| 04 | .297 |
| 05 | .359 |
| 06 | .422 |
| 07 | .484 |
| 08 | .547 |
| 09 | .609 |

### 5. LENGTH

Straight Entry 2M380MS Only

| Length Code | Length (inches) |
|---|---|
| -5 | .625 |
| -6 | .750 |
| -7 | .875 |
| -8 | 1.000 |
| -9 | 1.125 |
| -10 | 1.250 |
| -11 | 1.375 |
| -12 | 1.500 |
| -13 | 1.625 |
| -14 | 1.750 |
| -15 | 1.875 |
| -16 | 2.000 |
| -17 | 2.125 |
| -18 | 2.250 |
| -19 | 2.375 |
| -20 | 2.500 |

Specify Length in increments of .125 inches (3.18 mm.)

### SHELL SIZE

| Accessory Thread | Size Code | Series 2M801 | Series 2M803 | Series 2M804 | Series 2M805 |
|---|---|---|---|---|---|
| .2500-32 UNEF-2B | 05 | 5 | 5 | 5 | |
| .3125-32 UNEF-2B | 06 | 6 | 6 | 6 | |
| .3750-32 UNEF-2B | 11 | | | | 8 |
| .4375-28 UNEF-2B | 07 | 7 | 7 | 7 | 9 |
| .5000-28 UNEF-2B | 08 | 8 | 8 | 8 | 10 |
| .5625-24 UNEF-2B | 09 | 9 | 9 | 9 | 11 |
| .6250-24 UNEF-2B | 10 | 10 | 10 | 10 | 12 |
| .6875-24 UNEF-2B | 12 | 13 | 12 | 12 | |
| .7500-20 UNEF-2B | 13 | | | | 15 |
| .9375-20 UNEF-2B | 14 | 16,17 | 14, 15 | 14, 15 | 18, 19 |
| 1.1875-18 UNEF-2B | 17 | 21 | | | 23 |

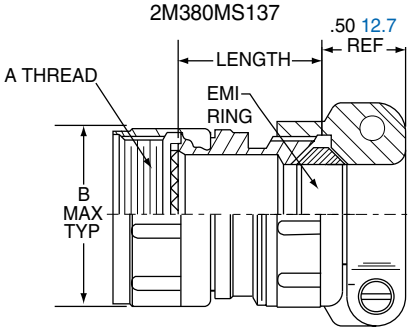
### MATERIALS

| | |
|---|---|
| Adapter, Clamp, Nut and Saddles | Aluminum Alloy 6061-T6 or 300 Series Stainless Steel |
| O-Rings | Silicone Rubber |
| Hardware | 300 Series Stainless Steel |

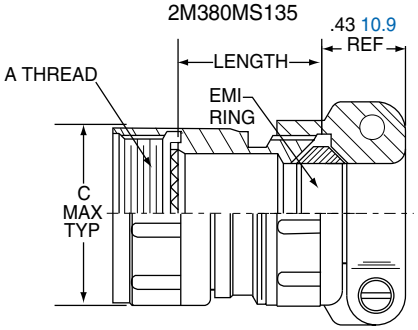
# 2M EMI Backshell

## 2M380MS137, MS135, MB138 and MA138

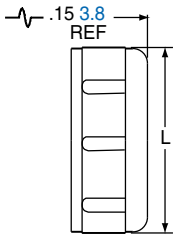
STRAIGHT ENTRY
ROTATABLE COUPLING
2M380MS137



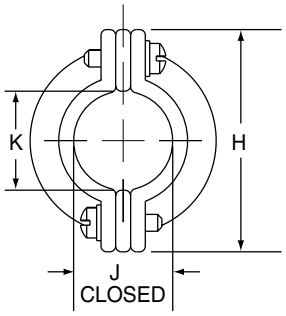

STRAIGHT ENTRY
DIRECT COUPLING
2M380MS135



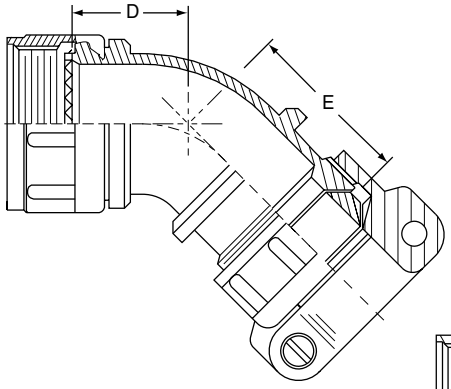

CLAMP STYLE N
COMPRESSION NUT



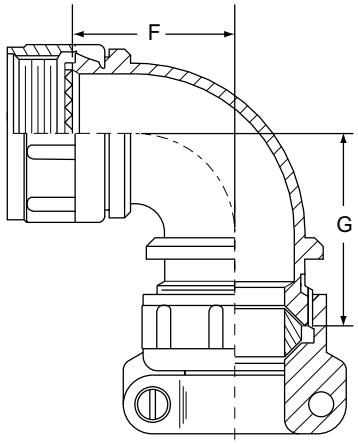

SADDLE CLAMP




45º ENTRY
ROTATABLE COUPLING
2M380MB137




90º ENTRY
ROTATABLE COUPLING
2M380MA137




| Size Code | A Threads | B Max. | | C Max. | |
|---|---|---|---|---|---|
| | | in. | mm. | in. | mm. |
| 05 | .2500-32 UNEF-2B | .470 | 11.94 | .350 | 8.89 |
| 06 | .3125-32 UNEF-2B | .530 | 13.46 | .415 | 10.54 |
| 11 | .3750-32 UNEF-2B | .570 | 14.48 | .465 | 11.68 |
| 07 | .4375-28 UNEF-2B | .637 | 16.18 | .530 | 13.46 |
| 08 | .5000-28 UNEF-2B | .700 | 17.78 | .595 | 15.11 |
| 09 | .5625-24 UNEF-2B | .758 | 19.25 | .650 | 16.51 |
| 10 | .6250-24 UNEF-2B | .819 | 20.80 | .715 | 18.16 |
| 12 | .6875-24 UNEF-2B | .896 | 22.76 | .785 | 19.94 |
| 13 | .7500-20 UNEF-2B | .930 | 23.62 | .830 | 21.08 |
| 14 | .9375-20 UNEF-2B | 1.137 | 28.88 | 1.020 | 25.91 |
| 17 | 1.1875-18 UNEF-2B | 1.387 | 35.23 | 1.280 | 32.51 |

| CABLE ENTRY | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cable Entry Code | D Max. | | E Max. | | F Max. | | G Max. | | H | | J Dia. Closed | | K Dia. | | L Dia. | |
| | In. | mm. | in. | mm. | in. | mm. | in. | mm. | in. ± .015 | mm. ± 0.38 | in. ± .030 | mm. ± 0.76 | in. ± .015 | mm. ± 0.38 | in. ± .015 | mm. ± 0.38 |
| 01 | .603 | 15.32 | .581 | 14.67 | .724 | 18.39 | .702 | 17.83 | .496 | 12.60 | .110 | 2.79 | .119 | 3.02 | .398 | 10.11 |
| 02 | .603 | 15.32 | .581 | 14.67 | .724 | 18.39 | .702 | 17.83 | .582 | 14.78 | .170 | 4.32 | .182 | 4.62 | .460 | 11.68 |
| 03 | .603 | 15.32 | .581 | 14.67 | .724 | 18.39 | .702 | 17.83 | .656 | 16.66 | .230 | 5.84 | .244 | 6.20 | .523 | 13.28 |
| 04 | .629 | 15.98 | .607 | 15.42 | .786 | 19.96 | .764 | 19.41 | .726 | 18.44 | .300 | 7.62 | .307 | 7.80 | .585 | 14.86 |
| 05 | .629 | 15.98 | .607 | 15.42 | .786 | 19.96 | .764 | 19.41 | .885 | 22.48 | .360 | 9.14 | .369 | 9.37 | .647 | 16.43 |
| 06 | .655 | 16.64 | .633 | 16.00 | .848 | 21.54 | .826 | 20.98 | .952 | 24.18 | .420 | 10.67 | .432 | 10.97 | .710 | 18.03 |
| 07 | .655 | 16.64 | .633 | 16.00 | .848 | 21.54 | .826 | 20.98 | 1.018 | 25.86 | .480 | 12.19 | .494 | 12.55 | .773 | 19.63 |
| 08 | .707 | 17.96 | .685 | 17.40 | .911 | 23.14 | .889 | 22.68 | 1.084 | 27.53 | .550 | 13.97 | .557 | 14.15 | .835 | 21.21 |
| 09 | .707 | 17.96 | .685 | 17.40 | .911 | 23.14 | .889 | 22.58 | 1.148 | 29.16 | .610 | 15.49 | .619 | 15.72 | .897 | 22.76 |

# 2M Environmental EMI Backshell Ordering Info

## 2M390MS077, MS076, 2M390MB077 and 2M390MA077

| 1. PART NUMBER | 2. SERVICE CLASS | 3. SIZE CODE | 4. CABLE ENTRY SIZE | 5. LENGTH | 6. OPTIONS |
|---|---|---|---|---|---|
| 2M390MS076 | -M | 07 | 05 | -6 | N |

Omit for screw clamp
with saddle bars
N Optional Compression Nut,
Low Profile

### 1. PART NUMBER

| Part # | Description |
|---|---|
| 2M390MS077 | Straight Entry Rotatable Coupling |
| 2M390MS076 | Straight Entry, Direct Coupling |
| 2M390MB077 | 45° Entry Rotatable Coupling |
| 2M390MA077 | 90° Entry Rotatable Coupling |

### 2. SERVICE CLASS

| Material | Part # | Description | RoHS |
|---|---|---|---|
| ALUMINUM | -C | Black Anodized (Non-conductive) | ✓ |
| | -M | Electroless Nickel | ✓ |
| | -NF | Olive Drab Cadmium | |
| | -MT | Durmalon (Ni PTFE) | ✓ |
| | -ZN | Olive Drab Zinc Nickel | ✓ |
| | -ZNU | Black Zinc Nickel | ✓ |
| STAINLESS STEEL | -Z1 | Passivated | ✓ |
| | -ZL | Electrolytic Nickel | ✓ |

### 3. SIZE CODE

| | |
|---|---|
| 05 | .2500-32 |
| 06 | .3125-32 |
| 11 | .3750-32 |
| 07 | .4375-28 |
| 08 | .5000-28 |
| 09 | .5625-24 |
| 10 | .6250-24 |
| 12 | .6875-24 |
| 13 | .7500-20 |
| 14 | .9375-20 |
| 17 | 1.1875-18 |

### 4. CABLE ENTRY SIZE

| Code | Max. | Min. |
|---|---|---|
| 01 | .109 | .031 |
| 02 | .172 | .078 |
| 03 | .234 | .140 |
| 04 | .297 | .203 |
| 05 | .359 | .265 |
| 06 | .422 | .328 |
| 07 | .484 | .390 |
| 08 | .547 | .463 |
| 09 | .609 | .515 |
| 10 | .672 | .578 |
| 11 | .734 | .640 |

### 5. LENGTH

Straight Entry 2M380MS Only

| Length Code | Length (inches) |
|---|---|
| -5 | .625 |
| -6 | .750 |
| -7 | .875 |
| -8 | 1.000 |
| -9 | 1.125 |
| -10 | 1.250 |
| -11 | 1.375 |
| -12 | 1.500 |
| -13 | 1.625 |
| -14 | 1.750 |
| -15 | 1.875 |
| -16 | 2.000 |
| -17 | 2.125 |
| -18 | 2.250 |
| -19 | 2.375 |
| -20 | 2.500 |

Specify Length in increments of .125 inches (3.18 mm.)

### SHELL SIZE

| Accessory Thread | Size Code | Series 2M801 | Series 2M803 | Series 2M804 | Series 2M805 |
|---|---|---|---|---|---|
| .2500-32 UNEF-2B | 05 | 5 | 5 | 5 | |
| .3125-32 UNEF-2B | 06 | 6 | 6 | 6 | |
| .3750-32 UNEF-2B | 11 | | | | 8 |
| .4375-28 UNEF-2B | 07 | 7 | 7 | 7 | 9 |
| .5000-28 UNEF-2B | 08 | 8 | 8 | 8 | 10 |
| .5625-24 UNEF-2B | 09 | 9 | 9 | 9 | 11 |
| .6250-24 UNEF-2B | 10 | 10 | 10 | 10 | 12 |
| .6875-24 UNEF-2B | 12 | 13 | 12 | 12 | |
| .7500-20 UNEF-2B | 13 | | | | 15 |
| .9375-20 UNEF-2B | 14 | 16,17 | 14, 15 | 14, 15 | 18, 19 |
| 1.1875-18 UNEF-2B | 17 | 21 | | | 23 |

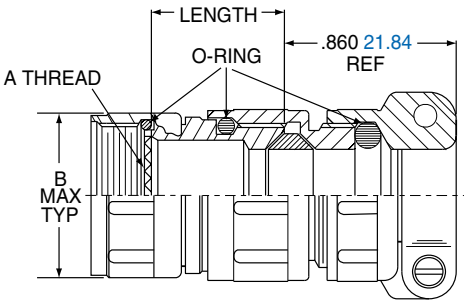
### MATERIALS

| | |
|---|---|
| Adapter, Clamp, Nut and Saddles | Aluminum Alloy 6061-T6 or 300 Series Stainless Steel |
| O-Rings | Silicone Rubber |
| Hardware | 300 Series Stainless Steel |

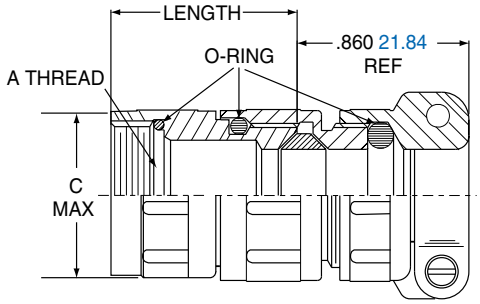
# 2M Environmental EMI Backshell

## 2M390MS077, MS076, MB077 and MA077

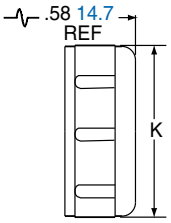
STRAIGHT ENTRY
ROTATABLE COUPLING
2M390MS077



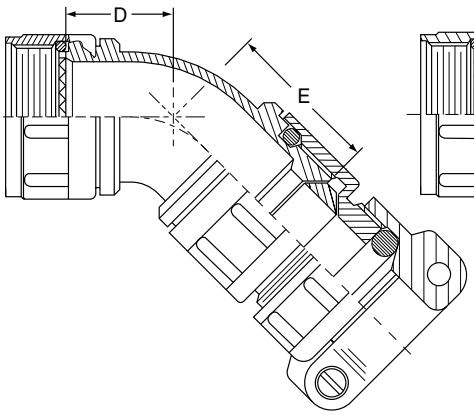

STRAIGHT ENTRY
DIRECT COUPLING
2M390MS076



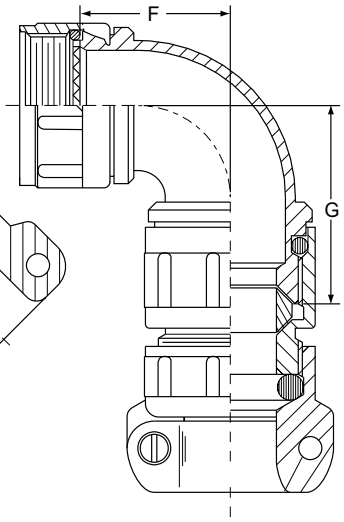

CLAMP STYLE N
COMPRESSION NUT



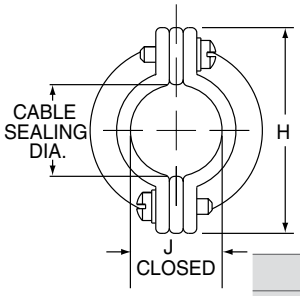

45º ENTRY
ROTATABLE COUPLING
2M390MB077




90º ENTRY
ROTATABLE COUPLING
2M390MA077




SADDLE CLAMP




| Size Code | A Threads UNEF-2B | B Max. | | C Max. | |
|---|---|---|---|---|---|
| | | in. | mm. | in. | mm. |
| 05 | .2500-32 | .470 | 11.94 | .350 | 8.89 |
| 06 | .3125-32 | .530 | 13.46 | .415 | 10.54 |
| 11 | .3750-32 | .570 | 14.48 | .570 | 14.48 |
| 07 | .4375-28 | .637 | 16.18 | .530 | 13.46 |
| 08 | .5000-28 | .700 | 17.78 | .595 | 15.11 |
| 09 | .5625-24 | .758 | 19.25 | .650 | 16.51 |
| 10 | .6250-24 | .819 | 20.80 | .715 | 18.16 |
| 12 | .6875-24 | .896 | 22.76 | .785 | 19.94 |
| 13 | .7500-20 | .930 | 23.62 | .830 | 21.08 |
| 14 | .9375-20 | 1.137 | 28.88 | 1.020 | 25.91 |
| 17 | 1.1875-18 | 1.387 | 35.23 | 1.280 | 32.51 |

| CABLE ENTRY | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cable Entry Code | Cable Sealing Dia. | | D Max. | | E Max. | | F Max. | | G Max. | | H | | J Dia. Closed | | K Dia. | |
| | Max. | Min. | In. | mm. | in. | mm. | in. | mm. | in. | mm. | in. ± .010 | mm. ± 0.25 | in. ± .030 | mm. ± 0.76 | in. ± .010 | mm. ± 0.25 |
| 01 | .109 | .031 | .603 | 15.32 | 681 | 14.67 | .724 | 18.39 | .802 | 20.37 | .496 | 12.60 | .110 | 2.79 | .398 | 10.11 |
| 02 | .172 | .078 | .603 | 15.32 | .681 | 14.67 | .724 | 18.39 | .802 | 20.37 | .582 | 14.78 | .170 | 4.32 | .460 | 11.68 |
| 03 | .234 | .140 | .603 | 15.32 | .681 | 14.67 | .724 | 18.39 | .802 | 20.37 | .656 | 16.66 | .230 | 5.84 | .523 | 13.28 |
| 04 | .297 | .203 | .629 | 15.98 | .707 | 15.42 | .786 | 19.96 | .864 | 21.95 | .726 | 18.44 | .300 | 7.62 | .585 | 14.86 |
| 05 | .359 | .265 | .629 | 15.98 | .707 | 15.42 | .786 | 19.96 | .864 | 21.95 | .885 | 22.48 | .360 | 9.14 | .647 | 16.43 |
| 06 | .422 | .328 | .655 | 16.64 | .733 | 16.00 | .848 | 21.54 | .926 | 23.52 | .952 | 24.18 | .420 | 10.67 | .710 | 18.03 |
| 07 | .484 | .390 | .655 | 16.64 | .733 | 16.00 | .848 | 21.54 | .926 | 23.52 | 1.018 | 25.86 | .480 | 12.19 | .773 | 19.63 |
| 08 | .547 | .453 | .707 | 17.96 | .785 | 17.40 | .911 | 23.14 | .989 | 25.12 | 1.084 | 27.53 | .550 | 13.97 | .835 | 21.21 |
| 09 | .609 | .515 | .707 | 17.96 | .785 | 17.40 | .911 | 23.14 | .989 | 25.12 | 1.148 | 29.16 | .610 | 15.49 | .897 | 22.78 |

# 2M Shorting Cap Backshell Ordering Info

## 2M340MS026

| 1. | 2. | 3. | 4. | 5. | 6. | 5. |
|---|---|---|---|---|---|---|
| PART NUMBER | SERVICE CLASS | ATTACHMENT TYPE | SIZE CODE | LENGTH | ATTACHMENT CODE | LENGTH |
| 2M340MS026 | -M | -G | 07 | -4 | 02 | -5 |

Omit for attachment Type N (No Attachment) Ex. "-5" equals five inch length

### 1. PART NUMBER

| Part # | Description |
|---|---|
| 2M340MS026 | Shorting Cap Backshell |

### 2. SERVICE CLASS

| Material | Part # | Description | RoHS |
|---|---|---|---|
| ALUMINUM | -C | Black Anodized (Non-conductive) | ✓ |
| | -M | Electroless Nickel | ✓ |
| | -NF | Olive Drab Cadmium | |
| | -MT | Durmalon (Ni PTFE) | ✓ |
| | -ZN | Olive Drab Zinc Nickel | ✓ |
| | -ZNU | Black Zinc Nickel | ✓ |
| STAINLESS STEEL | -Z1 | Passivated | ✓ |
| | -ZL | Electrolytic Nickel | ✓ |

### 3. ATTACHMENT TYPE

| | |
|---|---|
| -G | Nylon Rope |
| -H | Stainless Steel Wire Rope, Teflon® Jacket |
| -N | No Attachment |
| -S | Stainless Steel Sash Chain |
| -SK | Nylon Rope With Slip Knot |
| -U | Stainless Steel Wire Rope, Polyurethane Jacket |

### 4. SIZE CODE

| | |
|---|---|
| 05 | .2500-32 |
| 06 | .3125-32 |
| 11 | .3750-32 |
| 07 | .4375-28 |
| 08 | .5000-28 |
| 09 | .5625-24 |
| 10 | .6250-24 |
| 12 | .6875-24 |
| 13 | .7500-20 |
| 14 | .9375-20 |
| 17 | 1.1875-18 |

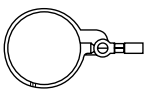
### 5. LENGTH

Overall Length in Inches

| Length Code | Length (inches) |
|---|---|
| -4 | .50 |
| -5 | .75 |
| -6 | 1.00 |
| -7 | 1.25 |
| -8 | 1.50 |
| -9 | 1.75 |
| -10 | 2.00 |
| -11 | 2.25 |
| -12 | 2.50 |
| -13 | 2.75 |
| -14 | 3.00 |

### 6. ATTACHMENT CODE

Omit for attachment Types N (No Attachment) and SK (Slip Knot)

| | | |
|---|---|---|
|  | SMALL RING | **01** –.126 (3.20) I.D.<br>**02** –.145 (3.68) I.D.<br>**04** –.188 (4.78) I.D.<br>**06** –.197 (5.00) I.D. |
|  | LARGE RING | **14** –.385 (9.78) I.D.<br>**15** –.445 (11.30) I.D.<br>**16** –.570 (14.48) I.D.<br>**17** –.635 (16.13) I.D.<br>**18** –.695 (17.65) I.D.<br>**19** –.885 (22.48) I.D.<br>**20** –1.070 (27.17) I.D. |
|  | SPLIT RING | **50** –.420 (10.67) I.D.<br>**52** –.480 (12.19) I.D.<br>**54** –.635 (16.13) I.D.<br>**56** –.745 (18.92) I.D.<br>**58** –.885 (22.48) I.D.<br>**60** –1.010 (25.65) I.D.<br>**64** –1.125 (28.58) I.D.<br>**68** –1.345 (34.16) I.D. |

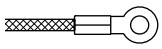
Assembly Instructions for Protection Cap, see page 100.

### MATERIALS

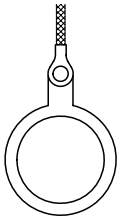
| | |
|---|---|
| Adapter, Clamp, Nut and Saddles | Aluminum Alloy 6061-T6 or 300 Series Stainless Steel |
| Hardware | 300 Series SST |
| O-Ring | Silicone Elastomer |

# 2M Shorting Cap Backshell Dimensions

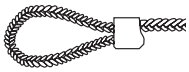
## 2M340MS026



Small Ring for Attaching to a Panel with a Screw



Large Solid Ring for Attaching to a Jam Nut Receptacle



Nylon Rope Slip Knot (SK) for attaching Covers to Cables

### ATTACHMENT OPTIONS

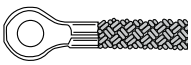
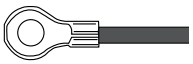
| Dia. Code | Ring I.D. | | Ring O. D. | |
|---|---|---|---|---|
| | in. | mm. | in. | mm. |
| | ± .005 | ± .13 | Max | Max |
| 01 | .126 | 8.89 | .31 | 7.9 |
| 02 | .145 | 10.54 | .31 | 7.9 |
| 04 | .188 | 11.81 | .31 | 7.9 |
| 06 | .197 | 13.46 | .31 | 7.9 |
| **Dia. Code** | **Ring I.D.** | | **Ring O. D.** | |
| | in. | mm. | in. | mm. |
| | ± .010 | ± .25 | ± .015 | ± .38 |
| 14 | .385 | 9.78 | .510 | 12.95 |
| 15 | .445 | 11.30 | .565 | 14.35 |
| 16 | .570 | 14.48 | .685 | 17.40 |
| 17 | .635 | 16.13 | .760 | 19.30 |
| 18 | .695 | 17.65 | .820 | 20.82 |
| 19 | .885 | 22.48 | 1.010 | 25.65 |
| 20 | 1.070 | 27.17 | 1.195 | 30.35 |
| 21 | 1.135 | 28.83 | 1.250 | 31.75 |
| 22 | 1.210 | 30.73 | 1.312 | 33.32 |

55° to +100°C., black, flexible, good abrasion resistance, good resistance to fuels, .120" 3mm diameter. Length includes .5" 13mm diameter loop.

### DIMENSIONS

| Size Code | A Max Dia. | | B Threads |
|---|---|---|---|
| | in. | mm. | |
| 05 | .350 | 8.89 | .2500-32 UNEF-2B |
| 06 | .415 | 10.54 | .3125-32 UNEF-2B |
| 11 | .465 | 11.81 | .3750-32 UNEF-2B |
| 07 | .530 | 13.46 | .4375-28 UNEF-2B |
| 08 | .595 | 14.35 | .5000-28 UNEF-2B |
| 09 | .650 | 16.51 | .5625-24 UNEF-2B |
| 10 | .715 | 18.16 | .6250-24 UNEF-2B |
| 12 | .785 | 19.94 | .6875-24 UNEF-2B |
| 13 | .830 | 21.08 | .7500-20 UNEF-2B |
| 14 | 1.020 | 25.91 | .9375-20 UNEF-2B |
| 17 | 1.270 | 32.26 | 1.1875-18 UNEF-2B |

### LANYARD OPTIONS

| | |
|---|---|
| Nylon Rope  | -55° to +100°C., black, very flexible, good abrasion resistance, good resistance to fuels, .120" 3mm diameter |
| Polyurethane Coated Wire Rope  | Black polyurethane over stainless steel rope, very flexible, excellent abrasion resistance, excellent resistance to fuels, .080" 2mm diameter |
| Teflon® Jacketed Wire Rope  | Translucent FEP jacket over stainless steel, -55° to +200°C., fair flexibility, good abrasion resistance, .100" diameter |
| Sash Chain  | Stainless steel, #8 chain, .240'' 6mm diameter |

# 2M Series Backshells and Accessories

## 2M809S060, 2M809A060 Shrink Boots

The 2M Series of Shrink Boots is intended for use with the 2M series of connectors supplied with Integral Backshells. All shrink boots are supplied pre-coated with Hi-Temperature, Hot-Melt adhesive that will seal the boot to both the cable and connector. The boots also contains a lip that will lock on to a groove on the connector for improved strain relief.

### High Performance Elastomer - Lipped Shrink Boot

- Pre-coated with Adhesive
- Operating Temperature: -70°C to +150°C
- Rated for 3000 hrs. continuous operation at +150°C
- Excellent resistance to fuels, oils, and solvents

| Material | Spec |
|---|---|
| Fluid Resistant Polymer | VG 95343 Part 6 |

| Boot Size | Shell Size | | Straight Shrink Boots Part Number | Right Angle Boots Part Number |
|---|---|---|---|---|
| | Series 2M801, 2M803, 2M804 | Series 2M805 | Pre-Coated with Hi-Temp Hot-Melt Adhesive | Pre-Coated with Hi-Temp Hot-Melt Adhesive |
| 1 | 5 | N/A | **2M809S060-1G** | **2M809A060-1G** |
| 2 | 6, 7 | 8,9 | **2M809S060-2G** | **2M809A060-2G** |
| 3 | 8, 9 | 10,11 | **2M809S060-3G** | **2M809A060-3G** |
| 4 | 10, 12, 13 | 12, 15 | **2M809S060-4G** | **2M809A060-4G** |
| 5 | 14, 15, 16, 17 | 18, 19 | **2M809S060-5G** | **2M809A060-5G** |
| 6 | 21 | 23 | **2M809S060-6G** | **2M809A060-6G** |

### Zero Halogen - Lipped Shrink Boots

- Low Smoke, Zero Halogen
- Toxicity Requirements: Meets U.S. and EU standards
- Pre-coated with Adhesive
- Operating Temperature: -30°C to +125°C
- Good resistance to fuels, oils, and solvents

| Material | Spec |
|---|---|
| Low Smoke Halogen Free | NAVSEA 5617649 |

| Boot Size | Shell Size | | Straight Shrink Boot Part Number | Right Angle Shrink Boots Part Number |
|---|---|---|---|---|
| | Series 2M801, 2M803, 2M804 | Series 2M805 | Pre-Coated with Hi-Temp Hot-Melt Adhesive | Pre-Coated with Hi-Temp Hot-Melt Adhesive |
| 1 | 5 | N/A | **2M809S060-1H** | **2M809A060-1H** |
| 2 | 6, 7 | 8,9 | **2M809S060-2H** | **2M809A060-2H** |
| 3 | 8, 9 | 10,11 | **2M809S060-3H** | **2M809A060-3H** |
| 4 | 10, 12, 13 | 12, 15 | **2M809S060-4H** | **2M809A060-4H** |
| 5 | 14, 15, 16, 17 | 18, 19 | **2M809S060-5H** | **2M809A060-5H** |
| 6 | 21 | 23 | **2M809S060-6H** | **2M809A060-6H** |

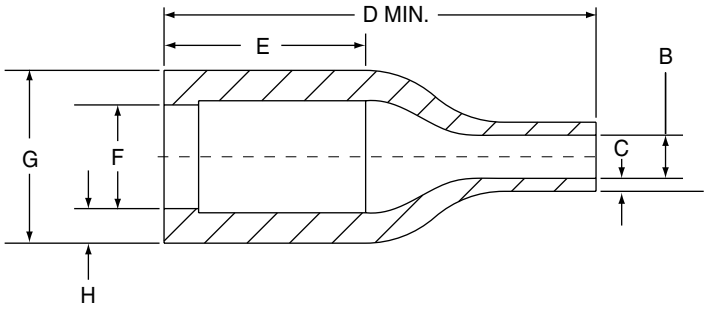
Size 1 right angle supplied less lip see page 108

### Series 2M Torque Values

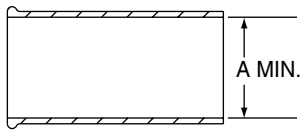
| Series 2M801, 2M803, 2M804, 2M805 Recommended Torque Values | | | | | |
|---|---|---|---|---|---|
| Shell Size Series 2M801, 2M803, 2M804 | Shell Size Series 2M805 | Backshell Tightening | | | |
| | | In-LBs. | | N-m | |
| | | Min. | Max. | Min. | Max. |
| 5 | - | 13 | 17 | 1.5 | 1.9 |
| 6 | 8 | 18 | 22 | 2.0 | 2.5 |
| 7 | 9 | 30 | 40 | 3.4 | 4.5 |
| 8 | 10 | 30 | 40 | 3.4 | 4.5 |
| 9 | 11 | 35 | 45 | 4.0 | 5.1 |
| 10 | 12 | 35 | 45 | 4.0 | 5.1 |
| 12, 13 | 15 | 35 | 45 | 4.0 | 5.1 |
| 14, 16 | 18 | 35 | 45 | 4.0 | 5.1 |
| 15, 17 | 19 | 35 | 45 | 4.0 | 5.1 |
| 21 | 23 | 35 | 45 | 4.0 | 5.1 |

## Lipped Straight Shrink Boots

**STANDARD LENGTH AFTER SHRINKING**



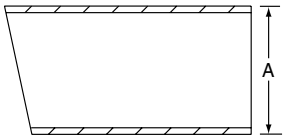

**AS SUPPLIED (EXPANDED)**



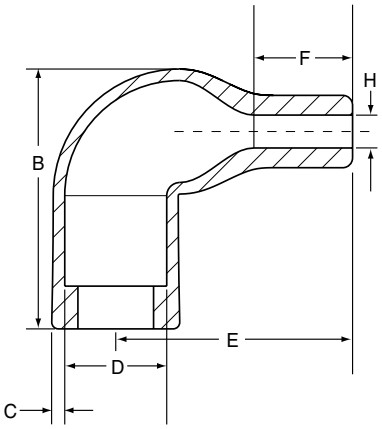

| Boot Size | A Min. | | B Max. | | C±20% | | D±10% | | E Ref. | | F Max. | | G Ref. | | H±30% | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | in. | mm. | in. | mm. | in. | mm. | in. | mm. | in. | mm. | in. | mm. | in. | mm. | in. | mm. |
| 1 | .350 | 9.0 | .075 | 1.91 | .023 | .584 | .750 | 19.0 | .350 | 9.0 | .182 | 4.62 | .300 | 7.6 | .060 | 1.52 |
| 2 | .650 | 16.5 | .150 | 3.8 | .050 | 1.27 | 1.000 | 25.4 | .560 | 14.2 | .238 | 6.05 | .410 | 10.5 | .090 | 2.29 |
| 3 | .920 | 23.4 | .220 | 5.6 | .060 | 1.52 | 1.500 | 38.1 | 0.830 | 21.1 | .338 | 8.59 | .530 | 13.46 | .100 | 2.54 |
| 4 | 1.120 | 28.4 | .260 | 6.6 | .070 | 1.78 | 2.160 | 54.9 | 1.090 | 27.7 | .488 | 12.40 | .700 | 17.8 | .110 | 2.79 |
| 5 | 1.220 | 31.0 | .280 | 7.1 | .080 | 2.03 | 2.640 | 67.0 | 1.380 | 35.0 | .628 | 15.95 | .860 | 21.8 | .120 | 3.05 |
| 6 | 1.680 | 42.7 | .390 | 9.9 | .080 | 2.03 | 4.080 | 103.6 | 2.220 | 56.4 | .984 | 25.00 | 1.270 | 32.2 | .143 | 3.63 |

## Lipped Right Angle Shrink Boots

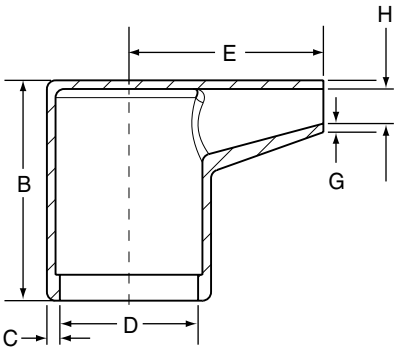
**AS SUPPLIED (EXPANDED)**




**AFTER SHRINKING**



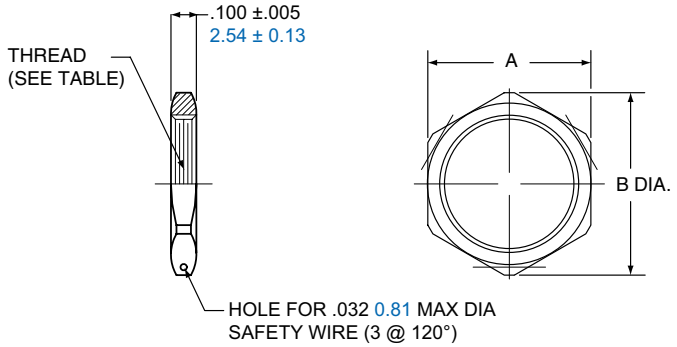

**AFTER SHRINKING SIZE 1**




| Boot Size | A Min. | | B Ref. | | C±30% | | D Max. | | E±20% | | F Ref. | | G±20% | | H Max | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | in. | mm. | in. | mm. | in. | mm. | in. | mm. | in. | mm. | in. | mm. | in. | mm. | in. | mm. |
| 1 | .240 | 6.0 | .510 | 13.0 | .040 | 1.0 | .322 | 8.18 | .410 | 10.5 | N/A | N/A | .020 | 0.5 | .080 | 2.0 |
| 2 | .650 | 16.5 | .790 | 20.1 | .040 | 1.0 | .310 | 7.9 | .720 | 18.3 | .300 | 7.62 | .060 | 1.6 | .100 | 2.5 |
| 3 | .920 | 23.3 | .900 | 22.9 | .050 | 1.3 | .410 | 10.4 | .800 | 20.3 | .230 | 5.8 | .050 | 1.3 | .220 | 5.6 |
| 4 | 1.120 | 28.5 | 1.120 | 28.5 | .060 | 1.5 | .560 | 14.2 | 1.170 | 29.8 | .280 | 7.1 | .060 | 1.5 | .250 | 6.3 |
| 5 | 1.220 | 30.9 | 1.200 | 30.5 | .070 | 1.8 | .700 | 17.8 | 1.400 | 35.6 | .340 | 8.6 | .070 | 1.8 | .280 | 7.1 |
| 6 | 1.680 | 42.6 | 1.700 | 43.2 | .080 | 2.0 | 1.100 | 27.9 | 2.100 | 53.3 | .620 | 15.7 | .080 | 2.0 | .380 | 9.7 |

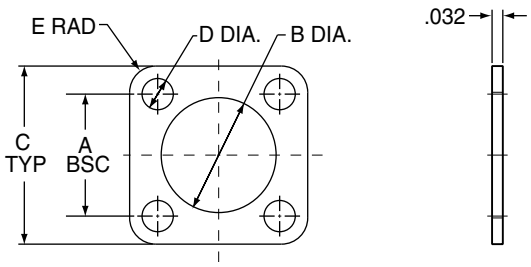
# 2M Backshells and Accessories

## Hex Jam Nuts for 2M Receptacles- 2M809-035



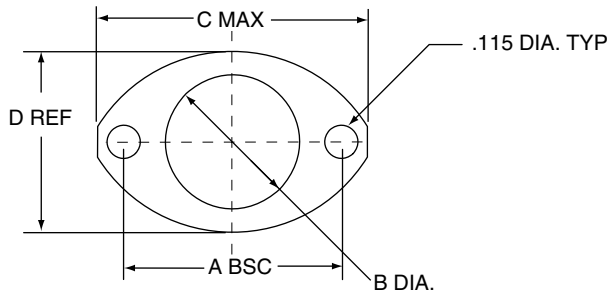

| Thread Size Class 2B | Part Number | | | | | | Dimensions | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Aluminum | | | | Stainless Steel | | A Hex. | | B Dia. | |
| | Electroless Nickel | Olive Drab Cadmium | Black Zinc Nickel | Nickel-PTFE | Passivated | Black Zinc-Cobalt | In. | mm. | In. | mm. |
| .2500-32 UNEF | 2M809-035M01W | 2M809-035NF01W | 2M809-035ZNU01W | 2M809-035MT01W | 2M809-035Z101W | 2M809-035ZC01W | .375 | 9.53 | .403 | 10.24 |
| .3125-28 UN | 2M809-035M02W | 2M809-035NF02W | 2M809-035ZNU02W | 2M809-035MT02W | 2M809-035Z102W | 2M809-035ZC02W | .4375 | 11.11 | .475 | 12.07 |
| .3125-32 UNEF | 2M809-035M03W | 2M809-035NF03W | 2M809-035ZNU03W | 2M809-035MT03W | 2M809-035Z103W | 2M809-035ZC03W | .4375 | 11.11 | .475 | 12.07 |
| .3750-28 UN | 2M809-035M04W | 2M809-035NF04W | 2M809-035ZNU04W | 2M809-035MT04W | 2M809-035Z104W | 2M809-035ZC04W | .500 | 12.70 | .547 | 13.89 |
| .4375-28 UNEF | 2M809-035M05W | 2M809-035NF05W | 2M809-035ZNU05W | 2M809-035MT05W | 2M809-035Z105W | 2M809-035ZC05W | .5625 | 14.29 | .620 | 15.75 |
| .5625-24 UNEF | 2M809-035M06W | 2M809-035NF06W | 2M809-035ZNU06W | 2M809-035MT06W | 2M809-035Z106W | 2M809-035ZC06W | .6875 | 17.46 | .755 | 19.18 |
| .5625-28 UN | 2M809-035M16W | 2M809-035NF16W | 2M809-035ZNU16W | 2M809-035MT16W | 2M809-035Z116W | 2M809-035ZC16W | .6875 | 17.46 | .755 | 19.18 |
| .5625-32 UN | 2M809-035M07W | 2M809-035NF07W | 2M809-035ZNU07W | 2M809-035MT07W | 2M809-035Z107W | 2M809-035ZC07W | .6875 | 17.46 | .755 | 19.18 |
| .6250-28 UN | 2M809-035M08W | 2M809-035NF08W | 2M809-035ZNU08W | 2M809-035MT08W | 2M809-035Z108W | 2M809-035ZC08W | .750 | 19.05 | .830 | 21.08 |
| .6875-28 UN | 2M809-035M09W | 2M809-035NF09W | 2M809-035ZNU09W | 2M809-035MT09W | 2M809-035Z109W | 2M809-035ZC09W | .8125 | 20.64 | .898 | 22.81 |
| .7500-28 UN | 2M809-035M10W | 2M809-035NF10W | 2M809-035ZNU10W | 2M809-035MT10W | 2M809-035Z110W | 2M809-035ZC10W | .875 | 22.23 | .970 | 24.64 |
| .8125-28 UN | 2M809-035M17W | 2M809-035NF17W | 2M809-035ZNU17W | 2M809-035MT17W | 2M809-035Z117W | 2M809-035ZC17W | .9375 | 23.81 | 1.030 | 26.16 |
| .8750-28 UN | 2M809-035M11W | 2M809-035NF11W | 2M809-035ZNU11W | 2M809-035MT11W | 2M809-035Z111W | 2M809-035ZC11W | 1.000 | 25.40 | 1.078 | 27.38 |
| .9375-20 UNEF | 2M809-035M12W | 2M809-035NF12W | 2M809-035ZNU12W | 2M809-035MT12W | 2M809-035Z112W | 2M809-035ZC12W | 1.0625 | 26.99 | 1.187 | 30.15 |
| .9375-28 UN | 2M809-035M13W | 2M809-035NF13W | 2M809-035ZNU13W | 2M809-035MT13W | 2M809-035Z113W | 2M809-035ZC13W | 1.0625 | 26.99 | 1.187 | 30.15 |
| 1.0000-28 UN | 2M809-035M18W | 2M809-035NF18W | 2M809-035ZNU18W | 2M809-035MT18W | 2M809-035Z118W | 2M809-035ZC18W | 1.125 | 28.58 | 1.200 | 30.48 |
| 1.0625-20 UN | 2M809-035M14W | 2M809-035NF14W | 2M809-035ZNU14W | 2M809-035MT14W | 2M809-035Z114W | 2M809-035ZC14W | 1.1875 | 30.16 | 1.264 | 32.11 |
| 1.1250-28 UN | 2M809-035M15W | 2M809-035NF15W | 2M809-035ZNU15W | 2M809-035MT15W | 2M809-035Z115W | 2M809-035ZC15W | 1.250 | 31.75 | 1.325 | 33.66 |
| 1.1875-28 UN | 2M809-035M19W | 2M809-035NF19W | 2M809-035ZNU19W | 2M809-035MT19W | 2M809-035Z119W | 2M809-035ZC19W | 1.3125 | 33.34 | 1.415 | 35.94 |
| 1.2500-28 UN | 2M809-035M20W | 2M809-035NF20W | 2M809-035ZNU20W | 2M809-035MT20W | 2M809-035Z120W | 2M809-035ZC20W | 1.375 | 34.93 | 1.490 | 37.85 |
| 1.5000-28 UN | 2M809-035M21W | 2M809-035NF21W | 2M809-035ZNU21W | 2M809-035MT21W | 2M809-035Z121W | 2M809-035ZC21W | 1.625 | 41.28 | 1.750 | 44.45 |

## Flange Gaskets for Series 2M801 Receptacles




| Shell Size | Part Number | | | A Bsc. | | B Dia. | | C Typ. | | D Dia. | | E Rad. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Fluorosilicone | Viton® | Conductive Fluorosilicone | in. | mm. | in. | mm. | in. | mm. | in. | mm. | in. | mm. |
| 5 | 2M809-108F11 | 2M809-108V11 | 2M809-108X11 | .363 | 9.22 | .342 | 8.69 | .530 | 13.46 | .093 | 2.36 | .078 | 1.98 |
| 6 | 2M809-108F12 | 2M809-108V12 | 2M809-108X12 | .423 | 10.74 | .405 | 10.29 | .590 | 14.99 | .093 | 2.36 | .078 | 1.98 |
| 7 | 2M809-108F13 | 2M809-108V13 | 2M809-108X13 | .483 | 12.27 | .467 | 11.86 | .650 | 16.51 | .093 | 2.36 | .078 | 1.98 |
| 8 | 2M809-108F14 | 2M809-108V14 | 2M809-108X14 | .545 | 13.84 | .530 | 13.46 | .712 | 18.08 | .093 | 2.36 | .078 | 1.98 |
| 9 | 2M809-108F16 | 2M809-108V16 | 2M809-108X16 | .607 | 15.42 | 560 | 14.22 | .850 | 21.59 | .125 | 3.18 | .105 | 2.67 |
| 10 | 2M809-108F15 | 2M809-108V15 | 2M809-108X15 | .670 | 17.02 | .655 | 16.64 | .890 | 22.61 | .125 | 3.18 | .105 | 2.67 |
| 13 | 2M809-108F17 | 2M809-108V17 | 2M809-108X17 | .812 | 20.62 | .842 | 21.39 | 1.030 | 26.16 | .125 | 3.18 | .105 | 2.67 |
| 16 | 2M809-108F18 | 2M809-108V18 | 2M809-108X18 | .981 | 24.92 | 1.030 | 26.16 | 1.219 | 30.96 | .125 | 3.18 | .105 | 2.67 |
| 17 | 2M809-108F19 | 2M809-108V19 | 2M809-108X19 | 1.060 | 26.92 | 1.092 | 27.74 | 1.280 | 32.51 | .125 | 3.18 | .105 | 2.67 |
| 21 | 2M809-108F43 | 2M809-108V43 | 2M809-108X43 | 1.205 | 30.61 | 1.332 | 33.83 | 1.427 | 36.25 | .125 | 3.18 | .105 | 2.67 |

## Flange Gaskets for Series 2M803 Receptacles

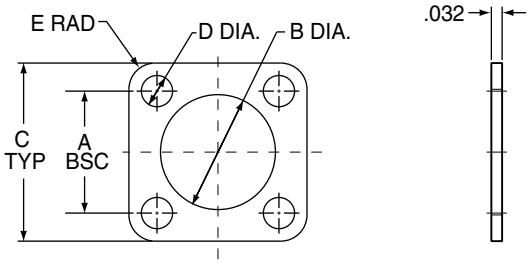



| Shell Size | Part Number | | | A Bsc. | | B Dia. | | C Max. | | D Ref. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Fluorosilicone | Viton® | Conductive Fluorosilicone | in. | mm. | in. | mm. | in. | mm. | in. | mm. |
| 5 | 2M809-108F31 | 2M809-108V31 | 2M809-108X31 | .513 | 13.03 | .345 | 8.00 | .710 | 18.03 | .460 | 11.68 |
| 6 | 2M809-108F32 | 2M809-108V32 | 2M809-108X32 | .598 | 15.19 | .405 | 10.29 | .795 | 20.19 | .522 | 13.26 |
| 7 | 2M809-108F33 | 2M809-108V33 | 2M809-108X33 | .708 | 17.98 | .475 | 12.07 | .900 | 22.86 | .590 | 14.99 |
| 8 | 2M809-108F34 | 2M809-108V34 | 2M809-108X34 | .964 | 24.51 | .545 | 13.84 | 1.160 | 29.46 | .670 | 17.02 |
| 9 | 2M809-108F35 | 2M809-108V35 | 2M809-108X35 | 1.017 | 25.83 | .605 | 15.37 | 1.215 | 30.86 | .721 | 18.31 |
| 10 | 2M809-108F36 | 2M809-108V36 | 2M809-108X36 | 1.101 | 37.97 | .682 | 17.32 | 1.295 | 32.89 | .795 | 20.19 |
| 12 | 2M809-108F37 | 2M809-108V37 | 2M809-108X37 | 1.204 | 30.58 | .757 | 19.23 | 1.400 | 35.56 | .874 | 22.20 |
| 14 | 2M809-108F38 | 2M809-108V38 | 2M809-108X38 | 1.280 | 32.51 | .910 | 23.11 | 1.555 | 39.50 | 1.050 | 26.67 |
| 15 | 2M809-108F39 | 2M809-108V39 | 2M809-108X39 | 1.370 | 34.80 | .970 | 24.64 | 1.640 | 41.66 | 1.150 | 29.21 |

# 2M Backshells and Accessories

## Flange Gaskets 2M809-108

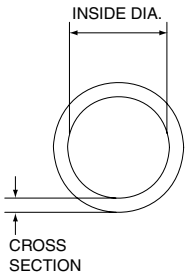
### Flange Gaskets for Series 2M805 Receptacles




| Shell Size | Part Number | | | A Bsc. | | B Dia. | | C Typ. | | D Dia. | | E Rad. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Fluorosilicone | Viton® | Conductive Fluorosilicone | in. | mm. | in. | mm. | in. | mm. | in. | mm. | in. | mm. |
| 8 | 2M809-108F20 | 2M809-108V20 | 2M809-108X20 | .660 | 16.76 | .530 | 13.46 | .850 | 21.46 | .093 | 2.36 | .078 | 1.98 |
| 9 | 2M809-108F21 | 2M809-108V21 | 2M809-108X21 | .723 | 18.36 | .590 | 14.99 | .913 | 23.19 | .093 | 2.36 | .078 | 1.98 |
| 10 | 2M809-108F22 | 2M809-108V22 | 2M809-108X22 | .785 | 19.94 | .660 | 16.76 | .975 | 24.77 | .093 | 2.36 | .078 | 1.98 |
| 11 | 2M809-108F23 | 2M809-108V23 | 2M809-108X23 | .848 | 21.54 | .720 | 18.29 | 1.039 | 26.39 | .093 | 2.36 | .078 | 1.98 |
| 12 | 2M809-108F24 | 2M809-108V24 | 2M809-108X24 | .909 | 23.09 | .780 | 19.81 | 1.099 | 27.91 | .093 | 2.36 | .078 | 1.98 |
| 15 | 2M809-108F25 | 2M809-108V25 | 2M809-108X25 | 1.058 | 26.87 | .970 | 24.64 | 1.288 | 32.72 | .125 | 3.18 | .105 | 2.67 |
| 18 | 2M809-108F26 | 2M809-108V26 | 2M809-108X26 | 1.255 | 31.88 | 1.160 | 29.46 | 1.475 | 37.47 | .125 | 3.18 | .105 | 2.67 |
| 19 | 2M809-108F27 | 2M809-108V27 | 2M809-108X27 | 1.327 | 33.71 | 1.220 | 30.99 | 1.537 | 39.04 | .125 | 3.18 | .105 | 2.67 |
| 23 | 2M809-108F28 | 2M809-108V28 | 2M809-108X28 | 1.570 | 39.88 | 1.458 | 37.03 | 1.797 | 45.64 | .125 | 3.18 | .105 | 2.67 |

## O-Rings Series 2M801 Jam Nut Receptacles

| Shell Size | Part Number | | | | Inside Dia. | | Cross-Section | |
|---|---|---|---|---|---|---|---|---|
| | Fluorosilicone | EPDM | Conductive Silicone Cho-Seal 1285 | Conductive Fluoro-Silicone Cho-Seal 1298 | in. | mm. | in. | mm. |
| 5 | 2M809-054-05F | 2M809-054-05E | 249-003-2M801-05B | 249-003-2M801-05C | .395 | 10.03 | .048 | 1.22 |
| 6 | 2M809-054-06F | 2M809-054-06E | 249-003-2M801-06B | 249-003-2M801-06C | .458 | 11.63 | .048 | 1.22 |
| 7 | 2M809-054-07F | 2M809-054-07E | 249-003-2M801-07B | 249-003-2M801-07C | .595 | 15.11 | .048 | 1.22 |
| 8 | 2M809-054-08F | 2M809-054-08E | 249-003-2M801-08B | 249-003-2M801-08C | .595 | 15.11 | .048 | 1.22 |
| 9 | 2M809-054-09F | 2M809-054-09E | 249-003-2M801-09B | 249-003-2M801-09C | .660 | 16.76 | .048 | 1.22 |
| 10 | 2M809-054-10F | 2M809-054-10E | 249-003-2M801-10B | 249-003-2M801-10C | .710 | 18.03 | .048 | 1.22 |
| 13 | 2M809-054-13F | 2M809-054-13E | 249-003-2M801-13B | 249-003-2M801-13C | .900 | 22.86 | .048 | 1.22 |
| 16 | 2M809-054-16F | 2M809-054-16E | 249-003-2M801-16B | 249-003-2M801-16C | 1.090 | 27.69 | .048 | 1.22 |
| 17 | 2M809-054-17F | 2M809-054-17E | 249-003-2M801-17B | 249-003-2M801-17C | 1.135 | 28.83 | .048 | 1.22 |
| 21 | 2M809-054-21F | 2M809-054-21E | 249-003-2M801-21B | 249-003-2M801-21C | 1.535 | 38.99 | .048 | 1.22 |




## O-Rings Series 2M804 Rear Mount Jam Nut Receptacles

| Shell Size | Part Number | | | | Inside Diameter | | Cross Section | |
|---|---|---|---|---|---|---|---|---|
| | Fluorosilicone | EPDM | Conductive Silicone Cho-Seal 1285 | Conductive Fluorosilicone Cho-Seal 1298 | in. | mm. | in. | mm. |
| 5 | 2M809-055-05F | 2M809-055-05E | 249-003-2M804-05B | 249-003-2M804-05C | .489 | 12.42 | .070 | 1.78 |
| 6 | 2M809-055-06F | 2M809-055-06E | 249-003-2M804-06B | 249-003-2M804-06C | .525 | 13.34 | .070 | 1.78 |
| 7 | 2M809-055-07F | 2M809-055-07E | 249-003-2M804-07B | 249-003-2M804-07C | .630 | 16.00 | .070 | 1.78 |
| 8 | 2M809-055-08F | 2M809-055-08E | 249-003-2M804-08B | 249-003-2M804-08C | .676 | 17.17 | .070 | 1.78 |
| 9 | 2M809-055-09F | 2M809-055-09E | 249-003-2M804-09B | 249-003-2M804-09C | .739 | 18.77 | .070 | 1.78 |
| 10 | 2M809-055-10F | 2M809-055-10E | 249-003-2M804-10B | 249-003-2M804-10C | .801 | 20.35 | .070 | 1.78 |
| 12 | 2M809-055-12F | 2M809-055-12E | 249-003-2M804-12B | 249-003-2M804-12C | .926 | 23.52 | .070 | 1.78 |
| 14 | 2M809-055-14F | 2M809-055-14E | 249-003-2M804-14B | 249-003-2M804-14C | 1.051 | 26.70 | .070 | 1.78 |
| 15 | 2M809-055-15F | 2M809-055-15E | 249-003-2M804-15B | 249-003-2M804-15C | 1.114 | 28.30 | .070 | 1.78 |

## O-Rings Series 2M805 Jam Nut Receptacles

| Shell Size | Part Number | | | | Inside Diameter | | Cross Section | |
|---|---|---|---|---|---|---|---|---|
| | Fluorosilicone | EPDM | Conductive Silicone Cho-Seal 1285 | Conductive Fluorosilicone Cho-Seal 1298 | in. | mm. | in. | mm. |
| 8 | 2M809-150-08F | 2M809-150-08E | 249-003-2M805-08B | 249-003-2M805-08C | .595 | 15.11 | .048 | 1.22 |
| 9 | 2M809-150-09F | 2M809-150-09E | 249-003-2M805-09B | 249-003-2M805-09C | .710 | 18.03 | .048 | 1.22 |
| 10 | 2M809-150-10F | 2M809-150-10E | 249-003-2M805-10B | 249-003-2M805-10C | .710 | 18.03 | .048 | 1.22 |
| 11 | 2M809-150-11F | 2M809-150-11E | 249-003-2M805-11B | 249-003-2M805-11C | .785 | 19.94 | .048 | 1.22 |
| 12 | 2M809-150-12F | 2M809-150-12E | 249-003-2M805-12B | 249-003-2M805-12C | .900 | 22.86 | .048 | 1.22 |
| 15 | 2M809-150-15F | 2M809-150-15E | 249-003-2M805-15B | 249-003-2M805-15C | 1.030 | 26.16 | .048 | 1.22 |
| 18 | 2M809-150-18F | 2M809-150-18E | 249-003-2M805-18B | 249-003-2M805-18C | 1.200 | 30.48 | .048 | 1.22 |
| 19 | 2M809-150-19F | 2M809-150-19E | 249-003-2M805-19B | 249-003-2M805-19C | 1.250 | 31.75 | .048 | 1.22 |
| 23 | 2M809-150-23F | 2M809-150-23E | 249-003-2M805-23B | 249-003-2M805-23C | 1.535 | 38.99 | .048 | 1.22 |

**Notes:**