

MPO Field

Fiber Optic Solution



About MPO Field:

The MPO Field upgrades a standard MPO to a ruggedized connection. The system allows for a standard MPO patch cable to be installed in a MIL-DTL-38999 Series III type connector which protects the assembly from shock, vibration, dust, and fluids.

No cabling operation or termination is required for field installation of the MPO patch cord into the MPO Field connector. The MIL-DTL-38999 style MPO Field mates using a Tri Start Thread with an anti-decoupling mechanism for high vibration environments, and provides an environmental seal using a backshell and gland.

Features:

- Uses standard MPO Patchcord allowing for a high density of fiber per connection
- MIL-DTL 38999 Series III size 13 shell provides resistance against shock and vibration
- Backshell and gland provide sealing against dust and fluid (IP68).
- No cabling operation in field

Applications:

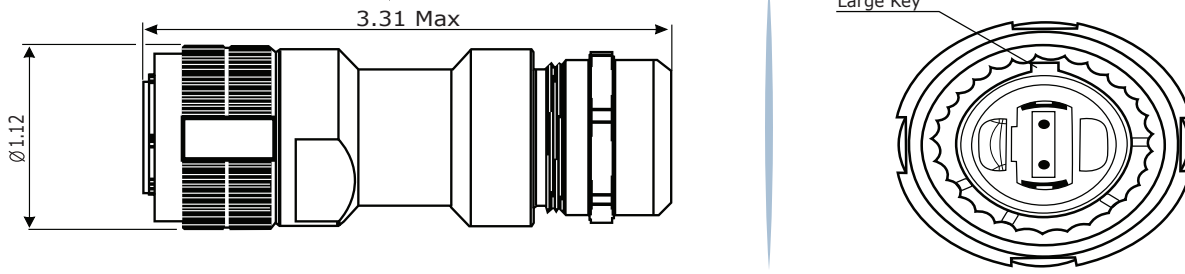
- C4ISR
- Navy
- Military Aerospace & Airframe
- Ground Vehicles

MPO Field Product Specifications

Specifications	Measurement Details
Number of Channels	12, 24 or 48 fiber MT Dependent on MPO cable assembly
Insertion Loss	0.5dB Typical Multimode or Singlemode Dependent on MPO cable assembly
Durability	500 mating/unmating cycles

MPO Field Straight Plug

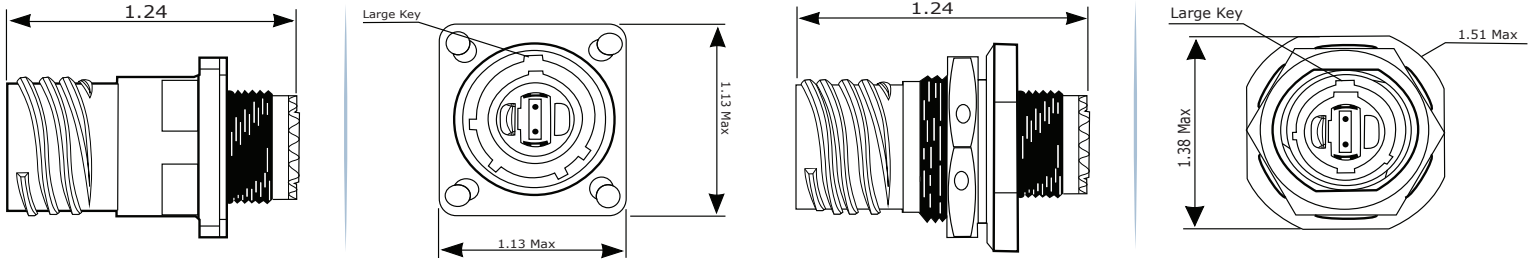
Plug with Metallic backshell and metallic gland



MPO Field Straight Receptacles

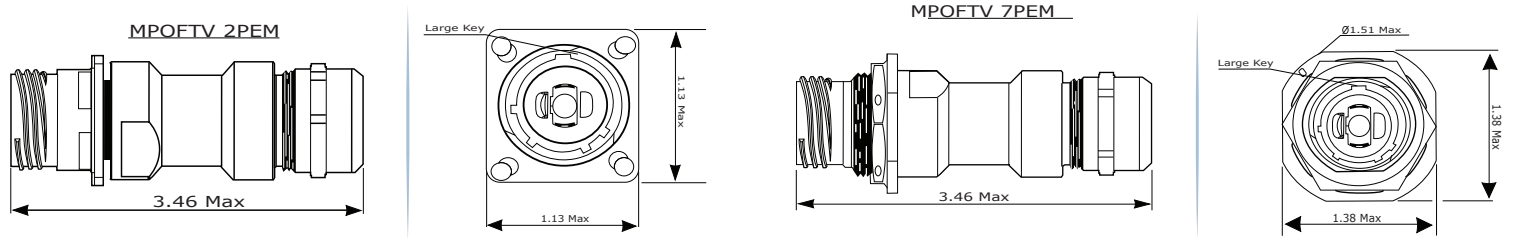
Square Flange Receptacle

Jam Nut Receptacle

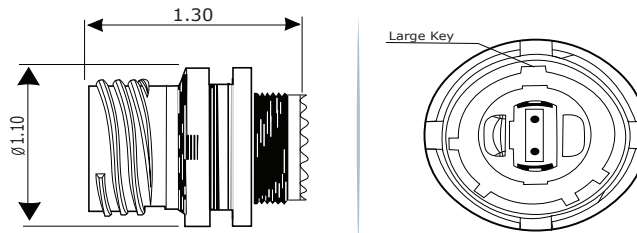


Square Flange Receptacle with Metallic Backshell and Metallic Gland

Jam Nut Receptacle with Metallic Backshell and Metallic Gland



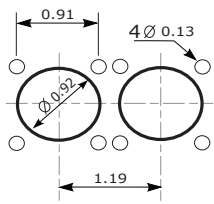
Reduced Flange Jam Nut Receptacle



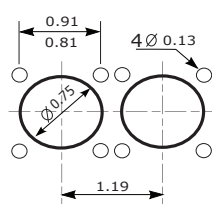
All dimensions measured in inches*

MPO Field Panel Drilling

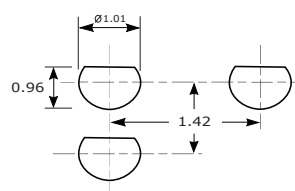
Square Flange Receptacle
Rear Panel Mounting



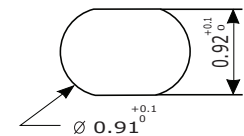
Square Flange Receptacle
Front Panel Mounting



Jam Nut Receptacle
Front Panel Mounting



Reduced flange Jam Nut
Receptacle Rear Panel Mounting

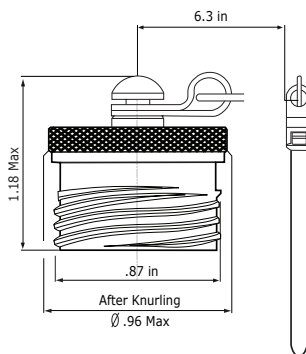


MPO Field Dust Caps

Standard Metal Protective Caps

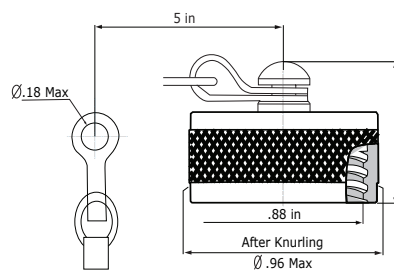
For plug

BFNTV*13



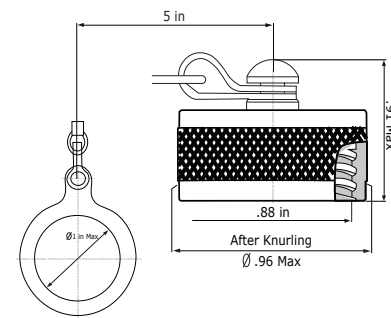
For Square Flange
Receptacle

BECNTV*13



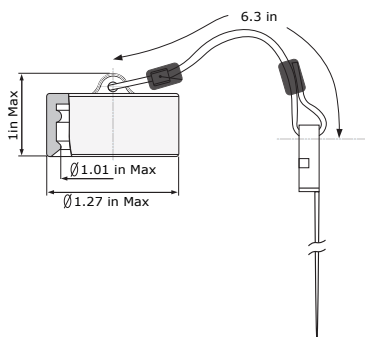
For Jam Nut
Receptacle

BERNTV*13



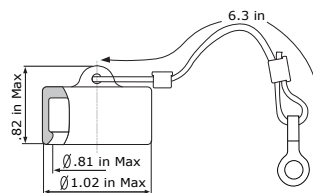
For plug

RC06NTV*13



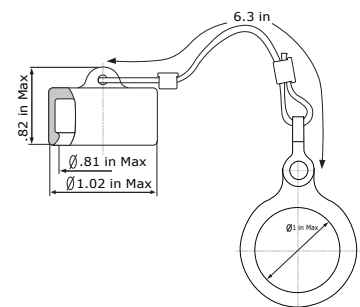
For Square Flange
Receptacle

RC00NTV*13



For Jam Nut
Receptacle

RC07NTV*13



All dimensions measured in inches*

Ordering Information Part Number Configuration

1.	2.	3.	4.	5.	6.
Series	Shell Type	Cable Type	Shell Protection	Shell Coding	Deviation
MPOFTV	6M	A	N	N	-

1. Series	
<i>MPOFT</i>	MPO Field TV Series
2. Shell Type	
<i>6M</i>	Plug with metallic backshell and metallic gland
<i>2</i>	Square Flange Receptacle
<i>2PEM</i>	Square flange receptacle with metallic backshell and metallic gland
<i>7</i>	Jam Nut Receptacle
<i>7PEM</i>	Jam Nut Receptacle with metallic backshell and metallic gland
3. Cable Type	
Only for plug <small>(rec with backshell)</small>	
<i>A</i>	Round cable from Ø.08 to 0.12in
<i>B</i>	Round cable from Ø.12 to 0.15in
<i>C</i>	Round cable from Ø.16 to 0.24in
<i>D</i>	Round cable from Ø.24 to 0.31in
Only for Receptacle <small>(no backshell available for MPO Field)</small>	
<i>0</i>	Receptacle without backshell

4. Shell Protection	
<i>N</i>	Electroless Nickel ✓
<i>G</i>	Olive Drab Cadmium
<i>B</i>	Marine Bronze ✓
<i>ZN</i>	Black Zinc Nickel ✓
5. Shell Coding	
<i>N</i>	Standard Coding N
<i>A</i>	Coding A
<i>B</i>	Coding B
<i>C</i>	Coding C
<i>D</i>	Coding D
<i>E</i>	Coding E
6. Deviation <small>(metal shells and jam nut receptacle only - TV Series)</small>	
-	Description
<i>F311</i>	Reduced flange jam nut receptacle with a safety castle nut
<i>F312</i>	Reduced flange jam nut receptacle with a standard castle nut

Standard Metal Dust Caps

1.	2.	3.	4.	5.	6.	
Cap Type	Cap Style	Wirev Type	Series	Material and Platings	Cap Size	Deviation
B	EC	N	TV	W	13	F057

1. Cap Style	
<i>EN</i>	For Square Flange Receptacle
<i>ER</i>	For Jam Nut Receptacle
<i>F</i>	For Plugs
2. Wire Type	
<i>N</i>	Nylon Cord
3. Series	
<i>TV</i>	For MIL-DTL-38999 Serie III (TV-CTV), RNJLP, SC39, Powersafe

4. Materials and Plating		
	Shell Material	Shell Finish
<i>W</i>	Aluminum	Olive Drab Cadmium
<i>F</i>		Nickel ✓
<i>ZN</i>		Black Zinc Nickel ✓
<i>B</i>	Marine Bronze ✓	-
5. Cap Size		
	13	
6. Deviation <small>(TV Series only)</small>		
<i>F0V57</i>	For Reduced flange jam nut receptacle (TV Series, RJFTV, USBFTV)	

Rubber Dust Caps

1.	2.	3.	4.
Cap Type	Cap Style	Wire Type	Cap Size
RC	00	N	13

1. Cap Style	
<i>00</i>	For Square Flange Receptacle
<i>07</i>	For Jam Nut Receptacle
<i>08</i>	For plugs
2. Wire Type	
<i>N</i>	Nylon Cord

3. Series	
<i>TV</i>	For MIL-DTL-38999 Series III (TV-CTV), RNJLP, SC39
5. Cap Size	
<i>13</i>	13



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Amphenol Fiber Systems International (AFSI), a division of Amphenol Military & Aerospace Operations (AMAO), is the largest manufacturer of harsh environment fiber optic cable assemblies & connectors in the world. Visit AMAO at amphenolmao.com

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