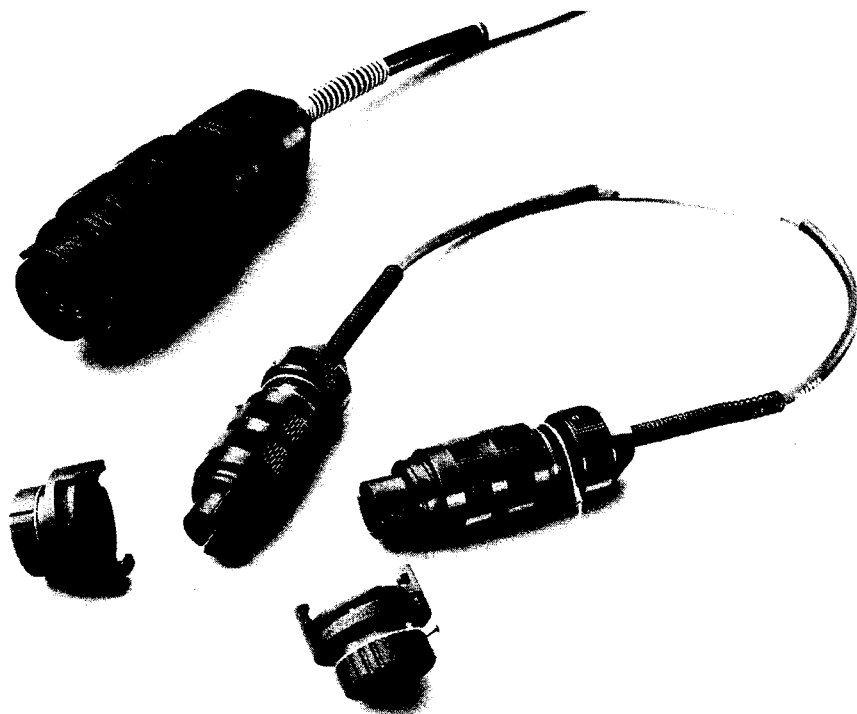


ITT Cannon's FOMC Series Fiber Optic connectors are designed to meet the needs of military and commercial customers who require a rugged environmental multifiber field connector. The FOMC combines features which provide the user with a connector that will withstand rough handling and weather extremes with features of elastomeric cable and interface sealing, scoop proof interface to prevent optical contact damage, removable front insert for easy optical contact cleaning, anodized shell finish, and a tough, strong dust cap with attaching stainless steel strap.

Hermaphroditic design means plugs will mate with an identical plug as well as receptacles. The removable insert assures correct mating and alignment. In the FOMC, ruggedness is combined with good optical performance, rapid coupling and attractive pricing. Another plus feature for ITT Cannon's FOMC design is the fiber flexure chamber which prevents tensile loads from being applied to the terminated fiber. The chamber provides space for surplus fiber in a service loop of sufficient length to permit one retermination of one or more fibers in the plug and cable receptacle without reterminating the strength member at the same time. This versatility is an ITT Cannon exclusive.

The FOMC 2, 4, and 8 channel connectors are available as a cable plug, and several receptacle shell configurations. The 8 channel can also be used with less contacts i.e. 6, 4, or 2 channels. Sealing plugs are supplied with the 8 channel connector when using less than the full complement of contacts. This catalog provides complete ordering information on available shell types, contact layouts, fiber and cable dimensional and mechanical parameters.



State-of-the-art ceramic alignment tips on the contact provide maximum coupling performance – less than 1.0 dB average coupling loss.

Fiber Optic Connectors

Standard Data

Description	Materials
Shell Hardware	Aluminum Alloy
Cable Clamp	Aluminum Alloy
Insert, Front Removable	Thermoplastic
Interfacial Seal	Elastomer
Cable Seal	Elastomer
O Rings	Elastomer
Alignment Guide	Thermoplastic
Strain Relief Spring	Steel wire with black chrome finish
Mandrel/Yoke	Thermoplastic
Receptacle Yoke	Thermoplastic
Dust Cap	Elastomer
Marking	Laser with clear chromate over exposed base metal

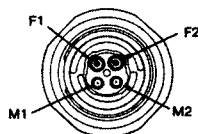
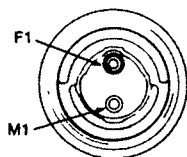
Fungus inert per requirement 4 of MIL-STD-454 Fluid resistant (elastomeric materials) per

- MIL-H-5606-Hydraulic fluid, petroleum base
- MIL-L-7808-Lubricating oil, synthetic base
- MIL-G-3056-Gasoline
- MIL-A-8243-Ethylene glycol

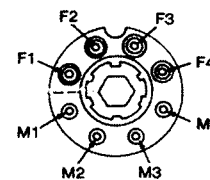
Contact Arrangements

Face View of Insert

2 and 4 Channel



8 Channel



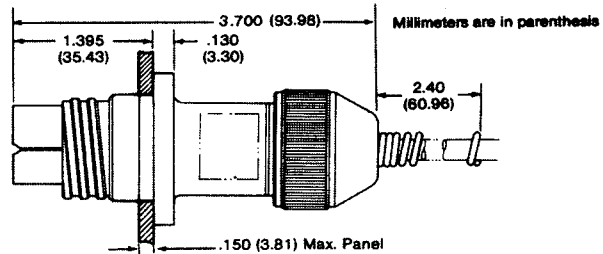
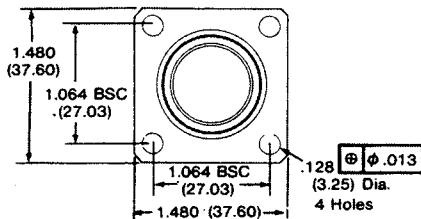
How to Order

<p>SERIES Fiber Optic Multi Channel</p> <p>SHELL STYLE 2 – Square Flange Receptacle (2/4 channel only) 6 – Cable Plug 7 – Jam Nut Receptacle</p> <p>SHELL SIZE (Channels) (Maximum number of contact positions) 2 4 8</p> <p>DUST CAP W – Connector supplied with dust cap X – Without dust cap</p> <p>CABLE TYPE 1 – Pigtail buffered fiber (receptacle only) 2 – Multi fiber strengthened cable 3 – Single fiber strengthened cables (8 channel only)</p>	<p>SERIES _____</p> <p>SHELL STYLE _____</p> <p>SHELL SIZE _____</p> <p>DUST CAP _____</p> <p>CABLE TYPE _____</p> <p>CABLE SIZE (O.D.) _____</p> <p>POLARIZATION POSITION _____</p> <p>MODIFICATION CODES _____</p> <p>CABLE SIZE (O.D.) A – .190 ± .015 (4.83 ± .38) D – .236 ± .019 (6.0 ± .5) F – .276 ± .015 (7.0 ± .4) G – .374 ± .015 (9.50 ± .38)* H – .500 ± .015 (12.70 ± .38)* P – Pigtail buffered fiber</p> <p>POLARIZATION (8 channel plug only. Omit for 2/4 channel) 0 – Not polarized 1 thru 6 – key position</p> <p>MODIFICATION CODES Consult factory</p> <p><small>*NOTE: Cable sizes G and H are for 8 channel FOMC Connector only</small></p>	<p style="text-align: right;">FOMC 6-2W2C* ***</p>
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2 and 4 Channel

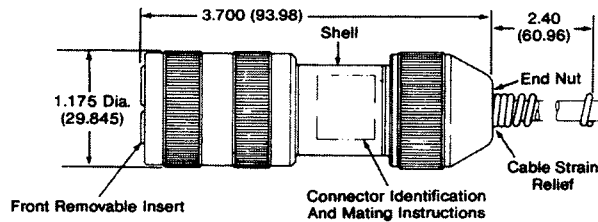
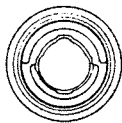
Square Flange Receptacle

FOMC 2



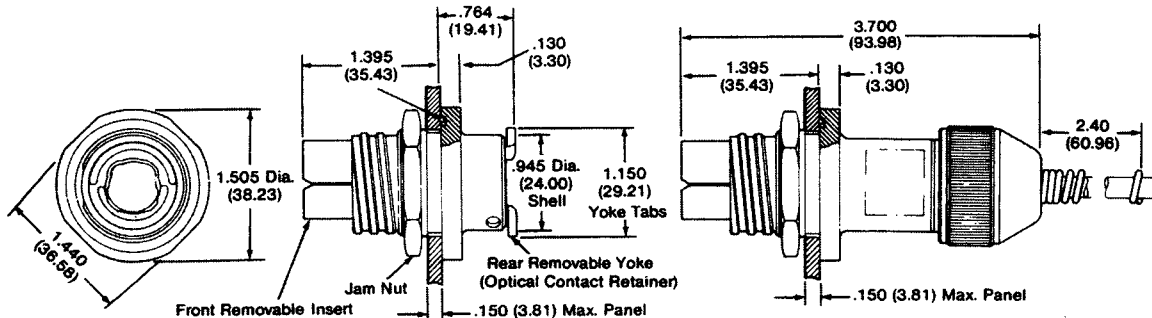
Plug

FOMC 6



Jam Nut Receptacle

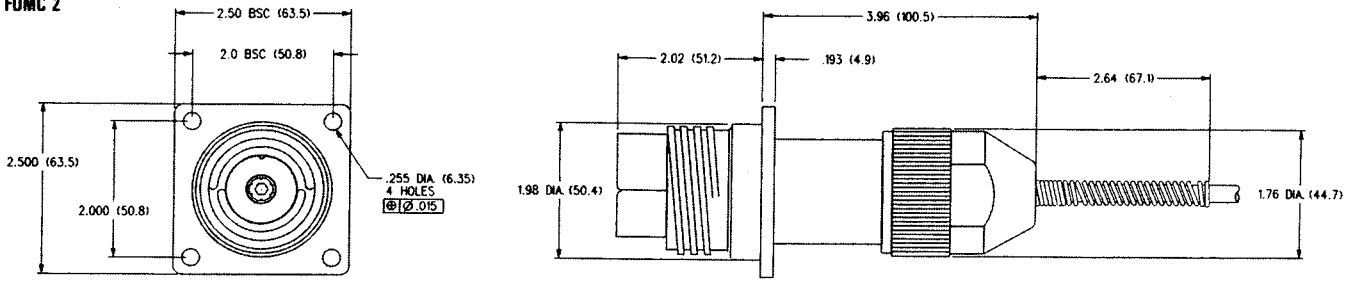
FOMC 7



8 Channel

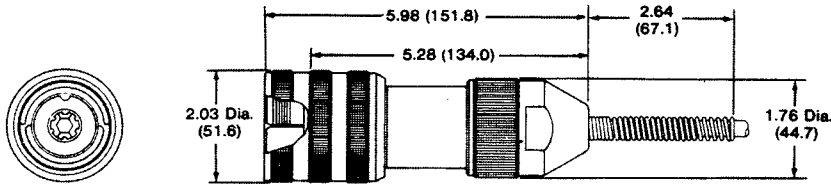
Square Flange Receptacle

FOMC 2



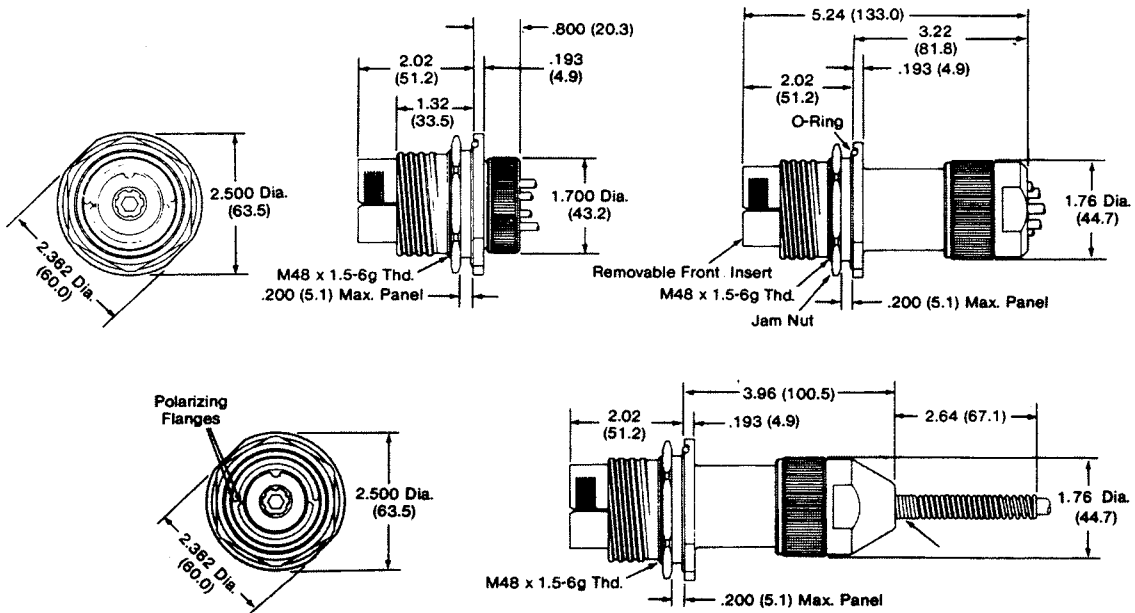
Plug

FOMC 6



Jam Nut Receptacle

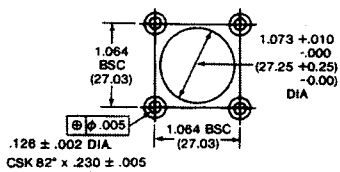
FOMC 7



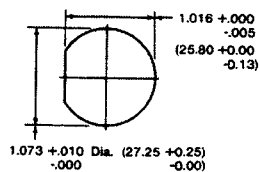
Recommended Panel Cutouts

2 and 4 Channel

FOMC 2

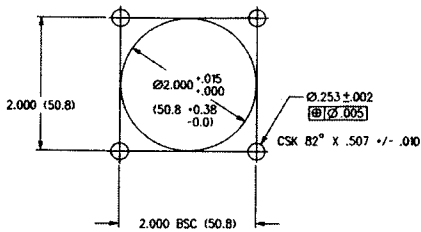


FOMC 7

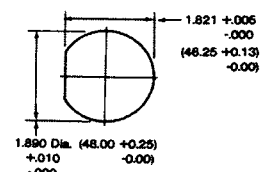


8 Channel

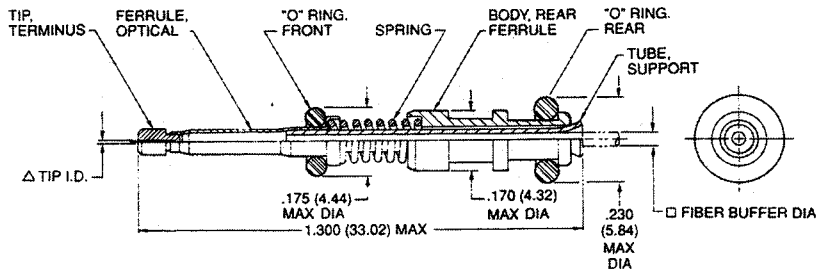
FOMC 2



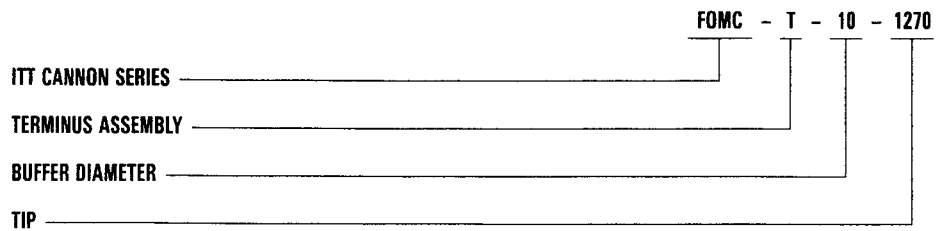
FOMC 7



Contact Assembly



How to Order – Contacts



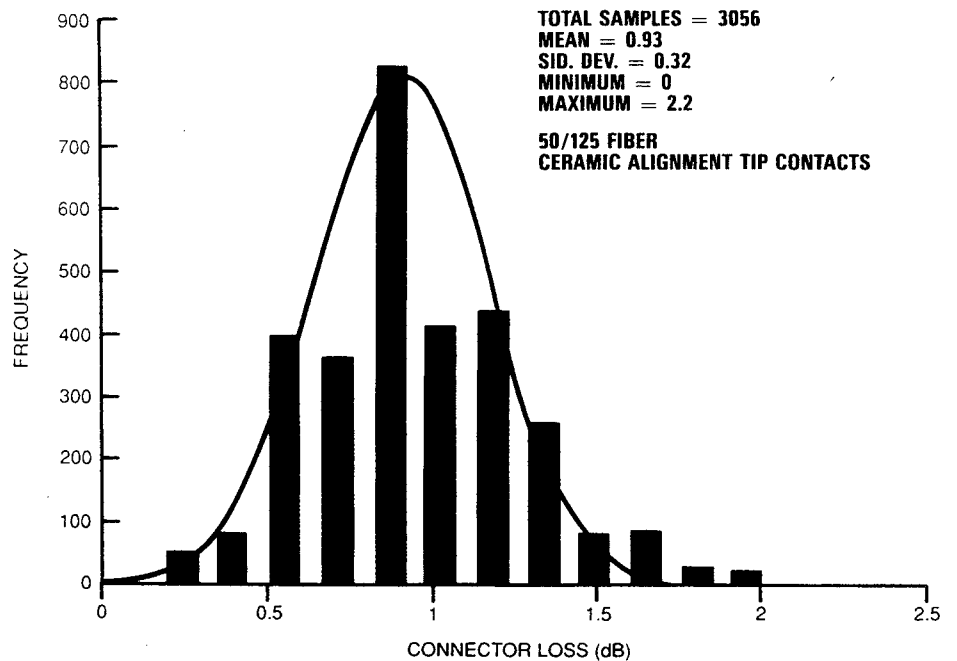
SERIES
FOMC – Fiber Optic Multi-Channel

▲ TIP (I.D. in tenths of microns)
1270 – 127.0 μm min.
1300 – 130.0 μm min.
1440 – 144.0 μm min.

TERMINUS ASSEMBLY

■ BUFFER DIAMETER (in millimeters)
05 – 0.5 mm Buffer
10 – 1.0 mm Buffer
11 – 1.1 mm Buffer

Coupling Performance



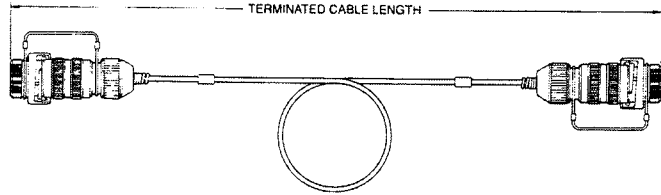
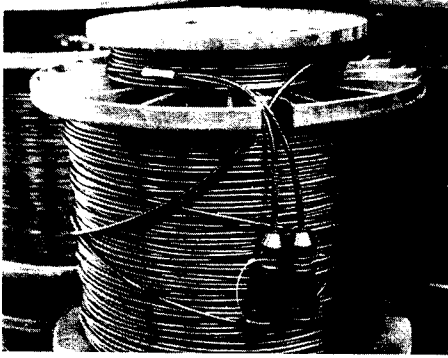
Fiber Optic Connectors

Fiber Optic Cable Assemblies

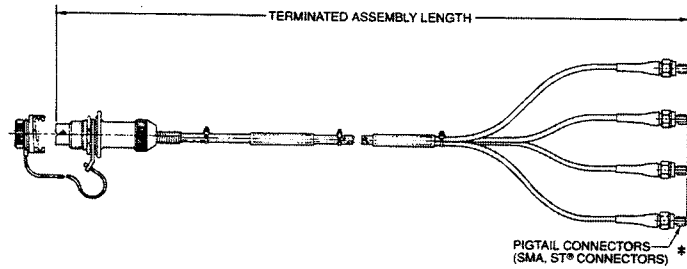
ITT Cannon is a major supplier of fiber optic cable assemblies for multi channel tactical ground based and avionics applications. Experience includes de-

livery of more than 20,000 custom fiber optic links over the past twelve years. Cable assemblies are built to specific design requirements and are 100% optically tested.

FOMC



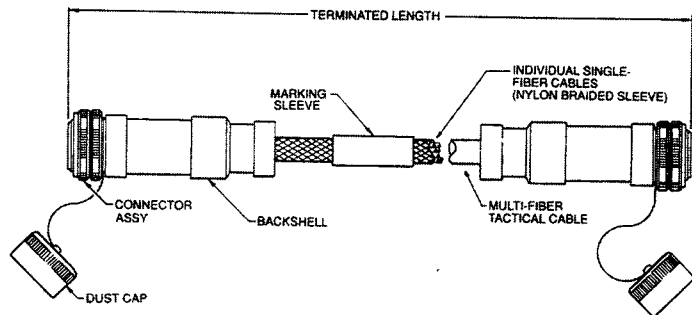
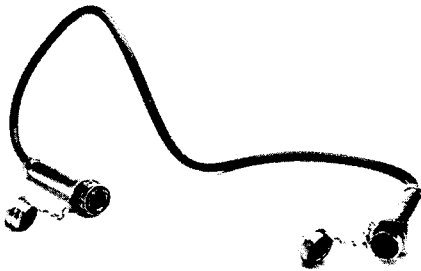
FOMC Plug-to-Plug Assembly



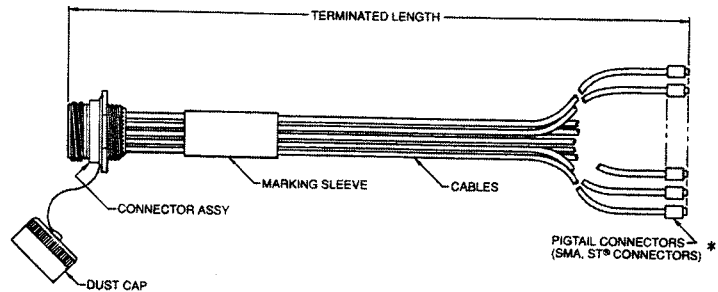
FOMC Receptacle/Pigtail Assembly

*ST is a trademark of AT&T

FOHC



38999 F.O. Plug-to-Plug Assembly



38999 F.O. Receptacle/Pigtail Assembly

*ST is a trademark of AT&T

Fiber Optic Connectors