Fiber Optic Multi-Channel Connectors

FOMC

ITT Cannon's EOMC 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 correcting mating and alignment. In the FOMC, ruggedness is combined with good optical perfomance, 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 lenght to permit one retemination 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 connector 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.

1000000 Vacuum

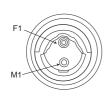
State-of-the-art ceramic alignment tips on the contact provide maximum coupling performance - less than 1.0 dB average coupling less.

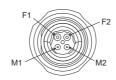
Standard Data

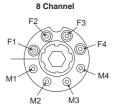
	Description	Materials
	Shell Hardware	Aluminum Alloy
	Cable Clamp	Aluminum Alloy
	Insert, Front Removable	Thermoplastic
	Interfacial Seal	Elastomer
	Cable Seal	Elastomer
	O Rings	Elastomer
Fungus inert per requirement 4 of MIL-STD-454 Fluid resistant (elasto- meric materials) per MIL-H-5606-Hydraulic fluid, petroleum base MIL-17808-Hubricating oil, synthetic base MIL-G-3056-Gasoline MIL-A-8243-Ethelyne qylcol	Alignment Guide	Thermoplastic
	Strain Relief Spring	Stell wire with black chrome finish
	Mandrel/Yoke	Thermoplastic
	Receptacle Yoke	Thermoplastic
	Dust Cap	Elastomer
	Marking	Laser with clear chromate over exposed base metal

Contact Arrangements

Face Veiw of Insert









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2 and 4 Channel

Dimensions are shown in inches (millimeters). Dimensions subject to change

How to Order

SERIES

Fiber Optic Multi-Channel

SHELL STYLE

- 2 Square Flange Receptcale (2/4) channel only)
- 6 Cable Plug
- 7 Jam Nut Receptacle

SHELL SIZE (Channels)

(Maximum number of contact positions) 2

- 4
- 8

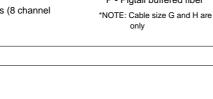
DUST CAP

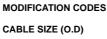
W - Connector supplied with dust cap X - Without dust cap

- CABLE TYPE
 - 1 Pigtail buffered fiber (receptacle only)
 - 2 Multi fiber strengthened cable
 - 3 Singel fiber strengthned cables (8 channel only)

2 and 4 Channel

Square Flange Receptacle





POLARIZATION POSITION

SERIES

SHELL STYLE

SHELL SIZE

DUST CAP

CABLE TYPE

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

*NOTE: Cable size G and H are for 8 channel FOMC Connector

POLARIZATION

(8 channel plug only. Omit for 2/4 channel)

Relief

Connector Identification And Mating Instructions

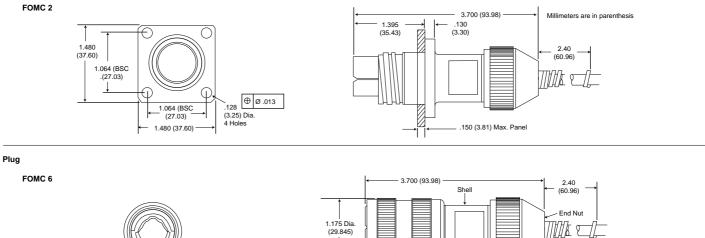
FOMC

6 2 w 2 с

- 0 Not polarized
- 1 thru 6 key position

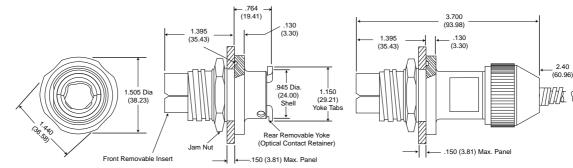
MODIFICATION CODES

Consult factory



Jam Nut Receptacle

FOMC 7



Front Removable insert



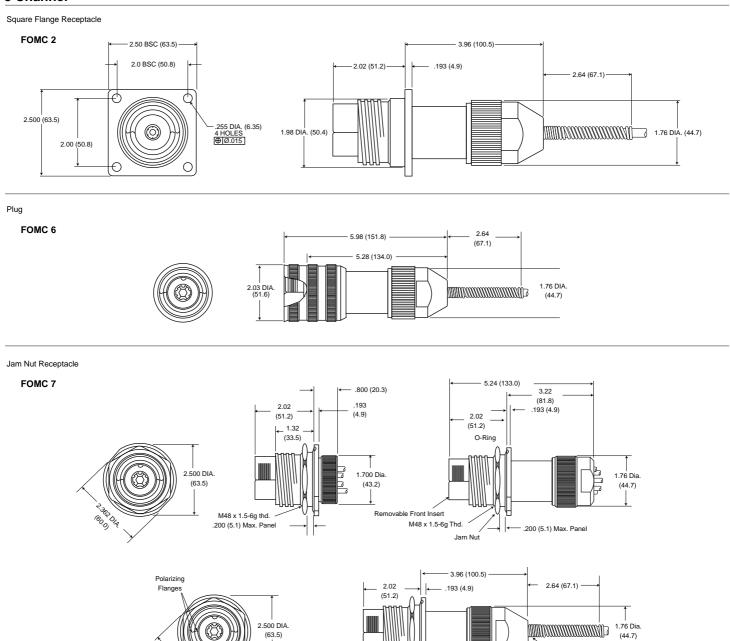
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Dimensions are shown in inches (millimeters). Dimensions subject to change.

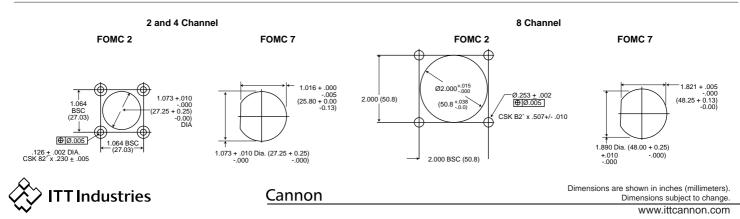
2.40

Ş

8 Channel



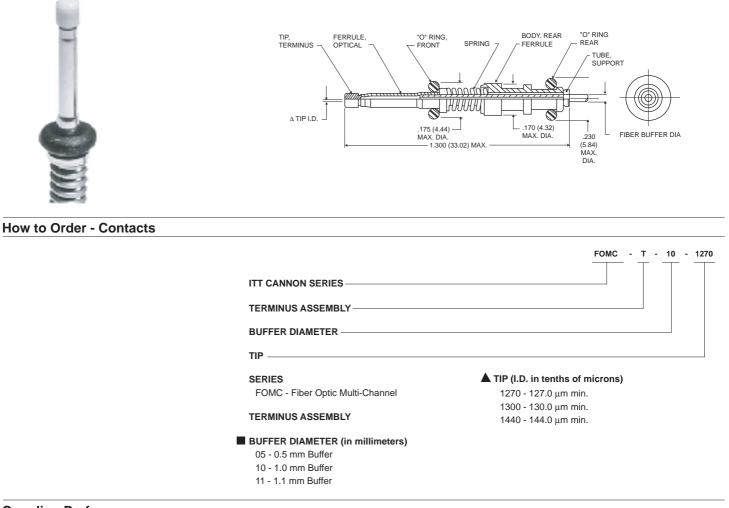
Recommended Panel Cutouts



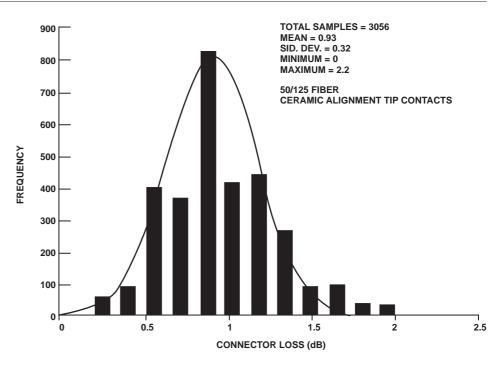
M48 x 1.5-6g Thd.

.200 (5.1) Max. Panel

Contact Assembly



Coupling Performance





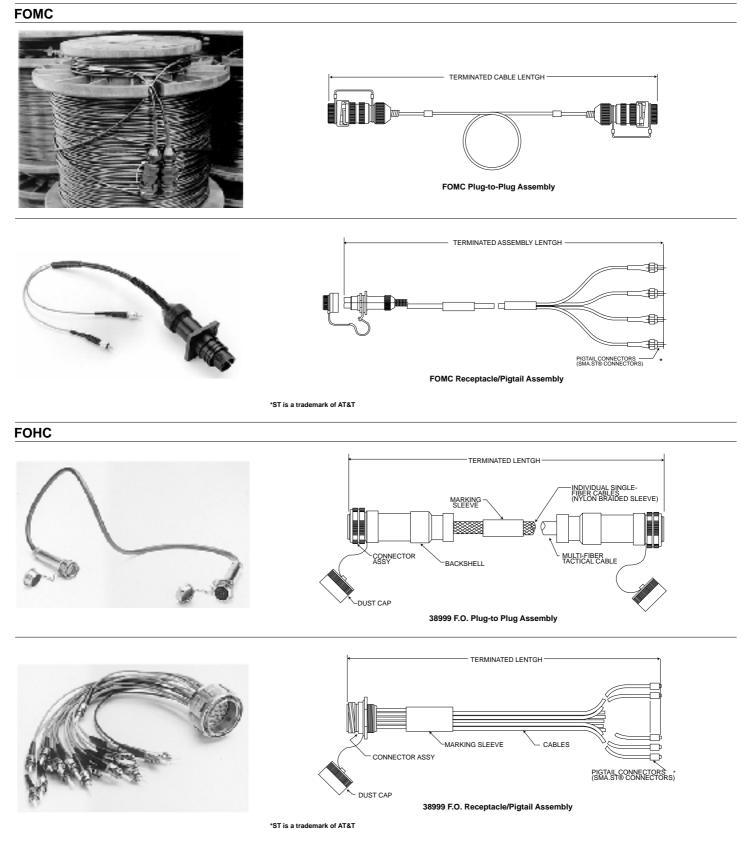
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Fiber Optic Cable Assemblies

ITT Cannon is a major supplier of fiber optic cable assemblies for mulit channel tactical ground based over the past twelve years. Cable assemblies are and avionics appliations. Experienced includes de-

livery of more than 20,000 custom fiber optic links built to specific design requirements and are 100% optically tested.





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