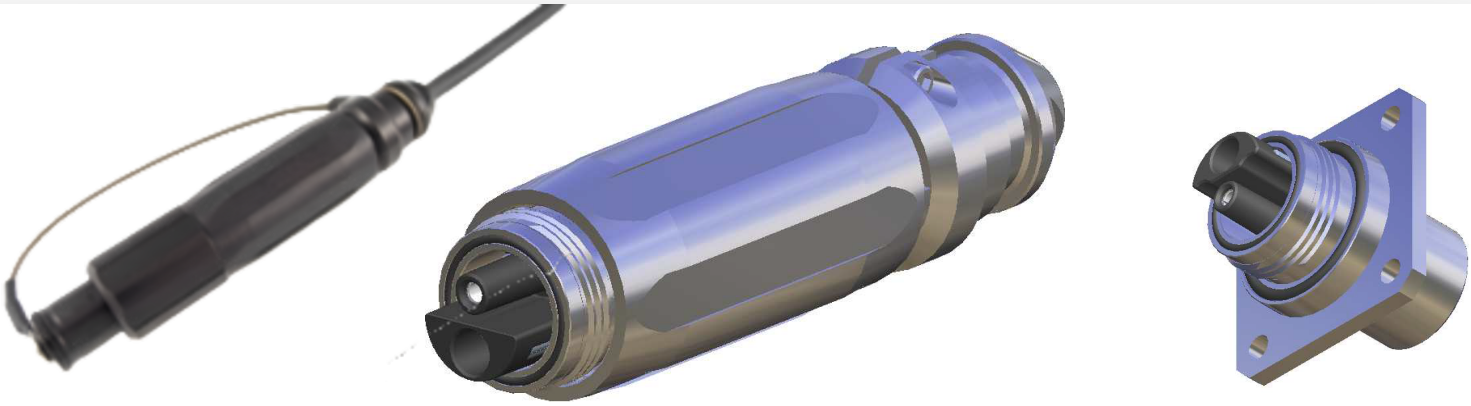
mTACh

Miniature 2-Channel Fiber Optic Connector

Amphenol FSI



Amphenol Fiber Systems International (AFSI) offers a high-performance, dual-channel hermaphroditic fiber optic connector, ideally suited for the energy, broadcast, and military markets. The mTACh connector is rugged yet compact. It is designed for use in tight spaces yet durable enough for use in applications requiring multiple mating cycles and harsh environments.

The connector design utilizes a simple termination procedure allowing users to terminate the connectors on site. The simple tools required for assembly and maintenance are available from AFSI, and test equipment is also available. AFSI offers training on the termination procedure at our facility in Allen, Texas, or at the customer's location.

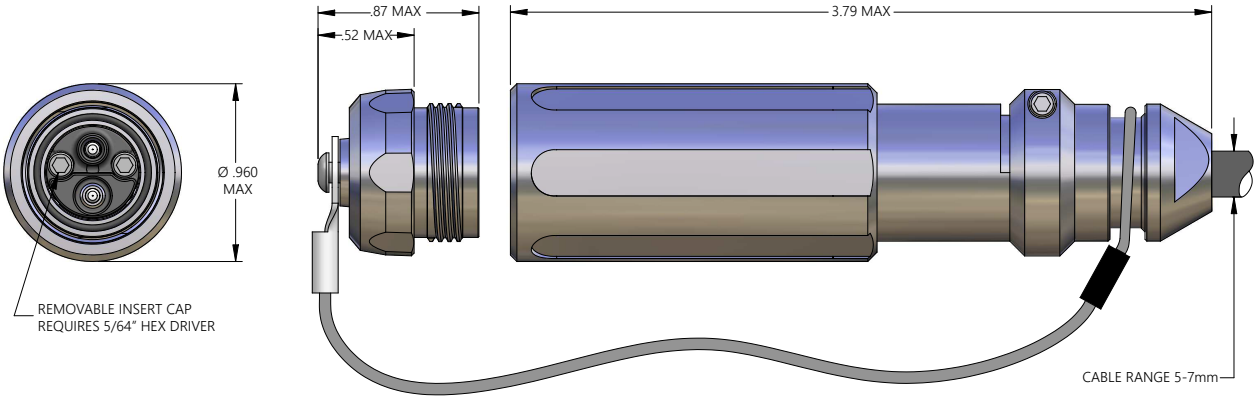
Features & Benefits:

- Hermaphroditic design facilitates concatenation
- Single mode and multimode versions
- Compact size
- Multiple finishes and materials available
- RoHS compliant
- Environmentally sealed
- 2000 mating cycles durability

Applications:

- Insertion loss (SM or MM): -0.75dB max

mTACh1000 Product Drawing



Amphenol Fiber Systems International, Inc.
859 State Highway 121, Suite #2000 Allen, TX 75013 | (214) 547-2400 | sales@fibersystems.com | www.fibersystems.com

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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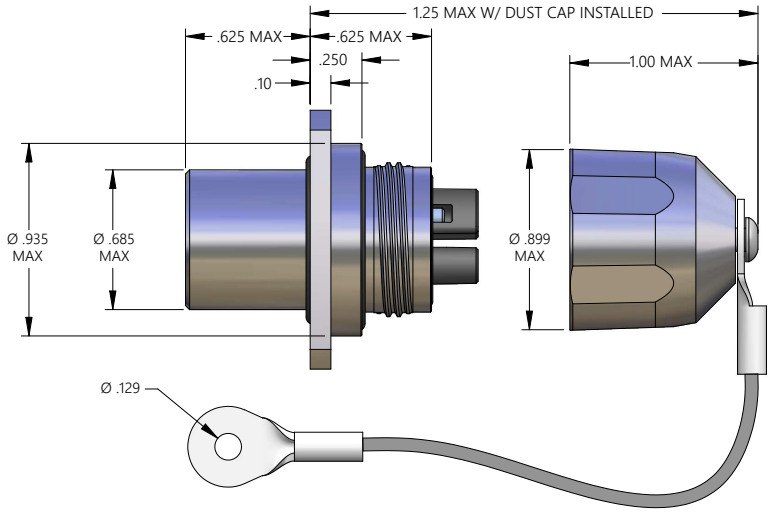
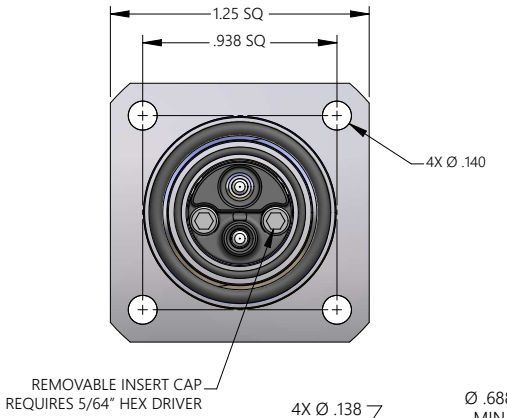
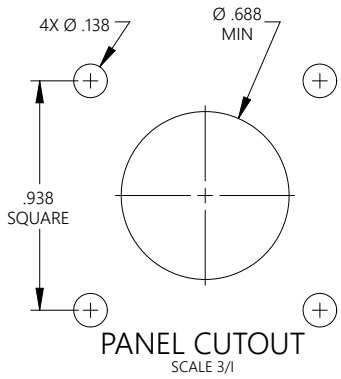
mTACh6000 Product Drawing







Performance:

Parameter	Typical	Maximum
Insertion Loss (multimode)	0.30dB	0.75dB
Insertion Loss (singlemode)	0.40dB	0.75dB
Back Reflection (singlemode-UPC polish)	-50dB	-40dB
Operating Temperature	-46°C to 71°C	
Storage Temperature	-55°C to 85°C	
Mud	5 minute immersion clean with water (per MIL-C-83526/12/13 requirments)	
Water Pressure	MIL-STD-810, Method 512.4, 1m, 48hr	
Humidity	DOD-STD-1678, Method 4050	
Vibration (operational)	MIL-STD-1344, Method 2500.1	
Shock	EIA/TIA-455-14, Condition A	
Mating Durability	2,000 cycles per EIA/TIA-455-21	
Cable Seal-Flexing	100 cycles per MIL-STD-1344, Method 2017, Procedure 1	
Twist	1,000 cycles per EIA/TIA-455-36	
Cable Retention	400 pounds minimum per EIA/TIA-455-6, 1hr (applies to plug and strain relief receptacles)	

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Part Numbering Schemes

Plug

Base Part Num.	Dust Cap		Key Option	Connector Material & Finish
mTACh1000 -	1	A	1	7

Dust Cap	
1	Hermaphroditic, same material/finish as connector
2	Hermaphroditic, black plastic
3	Male, same material/finish as connector
4	Male, black plastic

Key Option	
1	Plastic Key 1 Cap with Ceramic Sleeve
2	Aluminum Key 2 Cap with PH-Bronze Sleeve
3	Aluminum Key 2 Cap with Ceramic Sleeve

Connector Material & Finish	
3	6061-T6 Alum, gloss black hard anodized PTFE
7	6061-T6 Alum, natural hard anodized PTFE
C	303 stainless, passivated

Flange Mount Receptacle

Base Part Num.	Dust Cap		Key Option	Connector Material & Finish
mTACh1000 -	1	A	1	7

Dust Cap	
1	Female, same material/finish as connector
2	Female, black plastic

Key Option	
1	Plastic Key 1 Cap with Ceramic Sleeve
2	Aluminum Key 1 Cap with PH-Bronze Sleeve
3	Aluminum Key 1 Cap with Ceramic Sleeve

Connector Material & Finish	
3	6061-T6 Alum, gloss black hard anodized PTFE
7	6061-T6 Alum, natural hard anodized PTFE
C	303 stainless, passivated

About AFSI:

Amphenol Fiber Systems International (AFSI) designs, manufactures, markets and supports the broadest portfolio of reliable and innovative fiber optic interconnect solutions to withstand the harsh environments of military, aerospace, heavy industrial, broadcast and medical applications. Since inception in 1993, AFSI continues to advance its position as a global leader in harsh environment fiber optic interconnect.

AFSI has delivered millions of fiber optic solutions in more than 30 countries. Whenever there is a need for superior, cost-effective fiber optic systems to withstand the harshest of operating environments, you can rely on AFSI for engineering know-how, top-quality products and expert technical support.
Visit **www.fibersystems.com** for more information.

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For more information on how to order or to obtain a price quote on our products, call toll free (U.S. only) at 800.472.4225, international calls please use 1.214.547.2400 or e-mail info@fibersystems.com.

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