About the TFOCA-II® 12-Channel Connector

The TFOCA-II® 12-channel fiber optic connector is ideal for environmentally harsh conditions. The unique TFOCA-II® connector series is designed and patented by Amphenol Fiber Systems International.

This design takes advantage of the latest in fiber optic connectivity technology by utilizing industry standard physical contact ceramic ferrules.

The TFOCA-II® connector is designed for minimal maintenance in the field. However, if field level repair and cleaning are required, all TFOCA-II® connectors can be fully field repaired using all components with the exception of the termini. It has a removable end cap allowing direct access to the alignment sleeve and termini.

Features and Benefits

- **Hermaphroditic Design for Versatility** - Enables multiple TFOCA-II® plug assemblies to be concatenated.
- **Removable End Cap** - Allows for easy field maintenance and cleaning.
- **12-Channel Connector Design** - Six fold channel increase over TFOCA with better optical performance.
- **Improved Cable Retention Strength** - Designed to meet 400lb. pull strength while protecting fibers from stress.
- **Zn-Ni Plating** - Provides substantial longevity to corrosive environments. Meets new mandate set by the Environmental Protection Agency for elimination of heavy metal plating.
- **Commercial Ceramic Ferrule Technology** - Enables TFOCA-II® connector to provision multimode and single mode interconnect with a variety of polishes including SPC and UPC.
- **Solid Core Alignment Sleeves** - More robust than split alignment sleeves.
- **Hermaphroditic Dust Cap** - Plug and/or receptacle dust caps connect together to prevent dust and moisture penetration during deployment.
- **Optional Key Positions** - Four key positions (1,2,3, universal) available, enabling segregation of mated plug/receptacles or plug/plug, through mechanical interface.
- **Field Repairable Using Existing Parts** - Additional connector components (other than termini) are not required to perform field repair.
- **Also Available in Stainless Steel and Brass** - Allows the connector to be used in a variety of applications.

Applications

- U.S. Army, Navy, and Marine Corp military tactical deployments or strategic installations
- Oil, Gas and Geoscience industries
- Mining
- Industrial
- Broadcast

TFOCA-II is a registered trademark of Amphenol Fiber Systems International. TFOCA-II is covered by U.S. Patents 6,305,849; 6,371,660 and 6,357,929.
TFOCA-II® 12-Channel Connector Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Typical</th>
<th>Maximum</th>
</tr>
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<tbody>
<tr>
<td>Insertion loss (multimode)</td>
<td>0.30dB</td>
<td>0.75dB</td>
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<tr>
<td>Insertion loss (single mode)</td>
<td>0.40dB</td>
<td>0.75dB</td>
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<tr>
<td>Back reflection (single mode-UPC polish)</td>
<td>-50dB</td>
<td>-40dB</td>
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<tr>
<td>Operating temperature</td>
<td>-46° C to + 71° C</td>
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<tr>
<td>Storage temperature</td>
<td>-55° C to + 85° C</td>
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<tr>
<td>Mud</td>
<td>5 minute immersion, clean with water (per MIL-C-83526/12 /13 requirements)</td>
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<tr>
<td>Water pressure</td>
<td>MIL-STD-810, Method 512.4, 1m, 48hr</td>
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<tr>
<td>Ice crush</td>
<td>DOD-STD-1678, Method 4050</td>
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<tr>
<td>Humidity</td>
<td>MIL-STD-1678, Method 4030, 10 Cycles</td>
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<tr>
<td>Flammability</td>
<td>MIL-STD-1344, Method 1012</td>
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<tr>
<td>Vibration (operational)</td>
<td>MIL-STD-1344, Method 2500.1</td>
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<tr>
<td>Shock</td>
<td>EIA/TIA-455-14, Condition A</td>
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<tr>
<td>Mating durability</td>
<td>2,000 cycles per EIA/TIA-455-21</td>
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<tr>
<td>Cable seal flexing</td>
<td>100 cycles per MIL-STD-1344, Method 2017, Procedure 1</td>
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<td>Twist</td>
<td>1,000 cycles per EIA/TIA-455-36</td>
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<tr>
<td>Cable retention</td>
<td>400 pounds minimum per EIA/TIA-455-6, 1hr (applies to plug and strain relief receptacles)</td>
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<td>Impact</td>
<td>EIA/TIA-455-2</td>
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<tr>
<td>Crush resistance</td>
<td>450 pounds minimum per EIA/TIA-455-26</td>
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<tr>
<td>EMI shielding effectiveness (receptacle only)</td>
<td>&gt; 60dB, 15KHz to 10GHz</td>
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TFOCA-II® 12-Channel Connector Part Numbers

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Product Name</th>
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<tbody>
<tr>
<td>FS8H1000-X-Y</td>
<td>TFOCA-II® 12-Channel Hermaphroditic Plug</td>
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<td></td>
<td><strong>Product Number</strong> <strong>Product Name</strong> <strong>Product Number</strong> <strong>Product Name</strong></td>
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<tr>
<td>X=F</td>
<td>Cable Diameter Range .240 - .279</td>
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<tr>
<td>X=A</td>
<td>Cable Diameter Range .280 - .315</td>
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<tr>
<td>X=B</td>
<td>Cable Diameter Range .316 - .346</td>
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<tr>
<td>X=G</td>
<td>Cable Diameter Range .347 - .379</td>
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<tr>
<td>X=C</td>
<td>Cable Diameter Range .380 - .423</td>
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<td>X=D</td>
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<td>X=E</td>
<td>Cable Diameter Range .466 - .515</td>
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<td>FS8H8000-X-Y</td>
<td>TFOCA-II® 12-Channel “D” Mount Receptacle</td>
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<td>FS8H6000-X-Y</td>
<td>TFOCA-II® 12-Channel Flange Mount Receptacle</td>
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<tr>
<td>MTFP1X00Y</td>
<td>TFOCA-II® Terminus</td>
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<td><strong>Product Number</strong> <strong>Product Name</strong> <strong>Product Number</strong> <strong>Product Name</strong></td>
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<tr>
<td>MTFP1000</td>
<td>O= multimode</td>
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<tr>
<td>MTFP1000C</td>
<td>O= multimode</td>
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<tr>
<td>MTFP1100</td>
<td>1= single mode</td>
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<tr>
<td>MTFP1100C</td>
<td>1= single mode</td>
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<td>MTFP1150</td>
<td>TFOCA-II® Alignment Sleeve, Multimode</td>
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<td>MTFP1175</td>
<td>TFOCA-II® Alignment Sleeve, Single Mode</td>
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<tr>
<td>MTFP0000</td>
<td>TFOCA-II® Dummy Terminus</td>
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</table>
FS8H6000 TFOCA-II® 12-Channel Flange Mount
Receptacle with Panel Cutout

FS8H8000 TFOCA-II® 12-Channel “D” Mount
Receptacle with Panel Cutout

FS8H1000 TFOCA-II® 12-Channel Hermaphroditic Plug

Drawings are not to scale. Measurements are in inches.
How to Order

For more information on how to order or to obtain a price quote on the TFOCA-II® 12-channel products, please call us at 800.472.4225. For international calls please dial 1.214.547.2400 or email us at info@fibersystems.com

About Amphenol Fiber Systems International

Amphenol Fiber Systems International (AFSI) designs, manufactures, markets and supports reliable and innovative fiber optic interconnect solutions that withstand the harsh environments of military, oil & gas, mining and broadcast applications. After more than a decade in business, AFSI continues to uphold its position as a global leader in fiber optic interconnect components and systems such as termini, M28876, MIL-ST, TFOCA and the TFOCA-II® connector, which AFSI developed and patented. Altogether, AFSI has delivered millions of fiber optic connectors in more than 22 countries. Whenever there is a need for superior cost-effective fiber optic systems and products that will stand up to demanding operating environments, you can rely on AFSI for engineering know-how, top-quality products and expert technical support.

For more information about AFSI, please visit our web site at www.fibersystems.com