TFOCA-III®



Amphenol Fiber Systems International (AFSI) manufactures a complete line of next generation fiber optic connectors designed to meet the needs of harsh environment applications.

The TFOCA-III® series of 6 and 24-channel fiber optic connectors are ideal for environmentally harsh conditions. The TFOCA-III® design utilizes the latest technology in fiber optic connectivity by incorporating industry standard physical contact ceramic ferrules and alignment sleeves.

Features & Benefits:

- Hermaphroditic Design for Versatility Enables multiple TFOCA-III® plug assemblies to be daisy-chained
- Removable End Cap Allows for easy field maintenance and cleaning
- 6 and 24-Channel Connector Design Ideal for high density, harsh environment applications
- Superior Cable Retention Strength Designed to meet 400 lb pull strength while protecting fibers from stress
- Zn-Ni Plating Provides substantial longevity to corrosive environments. Meets new mandate set by Environmental Protection Agency for the elimination of heavy metal plating
- •Commercial Ceramic Ferrule Technology Enables TFOCA-III® connector to provision multi-mode 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 deployable conditions
- Optional Key Positions Available in four key positions (1, 2, 3 and universal), enables 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 Allows the connector to be used in a variety of applications

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Applications:

- US Army, Navy and Marine Corps Military Tactical Deployments
- Oil, Gas and Geo-science Industries
- Mining
- Industrial
- Broadcast
- Disaster Recovery

TFOCA-III[®] Connector Specifications:

| Specification | Measurement/Detail |
|------------------------------------|---|
| Number of Channels | 6 and 24 Channels |
| Filter Type | 62.5/125 or 50/125 multimode 8/125 singlemode |
| Operating Temperature | -46° C to + 71° C |
| Insertion Loss | -62.5/125 mm fiber: -0.3dB typical 50/125 mm fiber: -0.3dB typical 9/125 sm: -0.4dB typical |
| Shock | EIA/TIA-455-14, Condition A |
| Vibration | MIL-STD-1344, Method 2500.1 |
| Cable Retention | 400lb minimum per EIA/TIA-455-6 (Applies to plug and strain relief receptacles) |
| Twist | 1,000 cycles per EIA/TIA-455-36 |
| Cable Seal Flexing | 100 cycles per MIL-STD-1344, Method 2017, Procedure 1 |
| Mating Durability | 500 cycles per EIA/TIA-455-21 |
| Crush Resistance | 450lb minimum per EIA/TIA-455-26 |
| EMI Shielding (Receptacle only) | > 60dB, 15kHz to 10GHz |

TFOCA-III® 6-Channel Connector Part Numbers:

| Product Number | Product Name |
|----------------|--------------|
|----------------|--------------|

FS6H1000-X-Y TFOCA-III® 6-Channel Plug

FS6H6200-X-Y TFOCA-III® 6-Channel Flange Mount Receptacle with ISR

| X=H Cable Diameter Range .190239 | Y=1 Key Option 1 |
|----------------------------------|--------------------------|
| X=F Cable Diameter Range .240279 | Y=2 Key Option 2 |
| X=A Cable Diameter Range .280315 | Y=3 Key Option 3 |
| X=B Cable Diameter Range .316346 | Y=U Universal Key Option |
| X=G Cable Diameter Range .347379 | |

FS6H8000-X-Y TFOCA-III[®] 6-Channel Jam Nut Receptacle FS6H6000-X-Y TFOCA-III[®] 6-Channel Flange Mount Receptacle

| X=1 EMI Shielded Panel Seal | Y=1 Key Option 1 |
|---------------------------------|--------------------------|
| A-1 Livii Silielded Pariel Seal | Y=2 Key Option 2 |
| | Y=3 Key Option 3 |
| | Y=U Universal Key Option |

FSAF1000Y TFOCA-III® Terminus

| Product Number | X=Ferrule Type | <u>Y=Crimp</u> |
|----------------|----------------|-----------------|
| FSAF1000 | 0=MM/SM | Blank=W/O Crimp |
| FSAF1000C | 0=MM/SM | C=With Crimp |

FSAF1150 TFOCA-III® Alignment Sleeve, Multimode FSAF1175 TFOCA-III® Alignment Sleeve, Single mode M29E1000 TFOCA-III® Dummy Terminus



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TFOCA-III® 24-Channel Connector Part Numbers:

$\ensuremath{\mathsf{TFOCA\text{-}III}^{\circledR}}$ 24-Channel Flange Mount Receptacle with Panel Cutout:

Product Number Product Name

FS5H1000-X-Y TFOCA-III® 24-Channel Hermaphroditic Plug

| X=F Cable Diameter Range .240279 | Y=1 Key Option 1 |
|----------------------------------|--------------------------|
| X=A Cable Diameter Range .280315 | Y=2 Key Option 2 |
| X=B Cable Diameter Range .316346 | Y=3 Key Option 3 |
| X=G Cable Diameter Range .347379 | Y=U Universal Key Option |
| X=C Cable Diameter Range .380423 | |
| X=D Cable Diameter Range .424465 | |
| X=E Cable Diameter Range .466515 | |

FS5H8800-X-Y TFOCA-III[®] 24-Channel Jam Nut Receptacle FS5H6000-X-Y TFOCA-III[®] 24-Channel Flange Mount Receptacle

| X=1 EMI Shielded Panel Seal | Y=1 Key Option 1 |
|-----------------------------|--------------------------|
| | Y=2 Key Option 2 |
| | Y=3 Key Option 3 |
| | Y=U Universal Key Option |

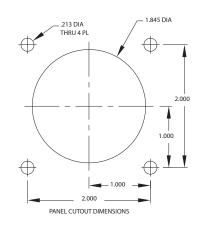
FSAF1X00Y TFOCA-III® Terminus

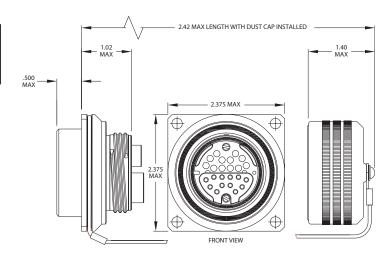
| Product Number | X=Ferrule Type | <u>Y=Crimp</u> |
|----------------|----------------|-----------------|
| FSAF1000 | 0=MM/SM | Blank=W/O Crimp |
| FSAF1000C | 0=MM/SM | C=With Crimp |

FSAF1150 TFOCA-III® Alignment Sleeve, Multimode
FSAF1175 TFOCA-III® Alignment Sleeve, Single Mode

M29E1000 TFOCA-III® Dummy Terminus



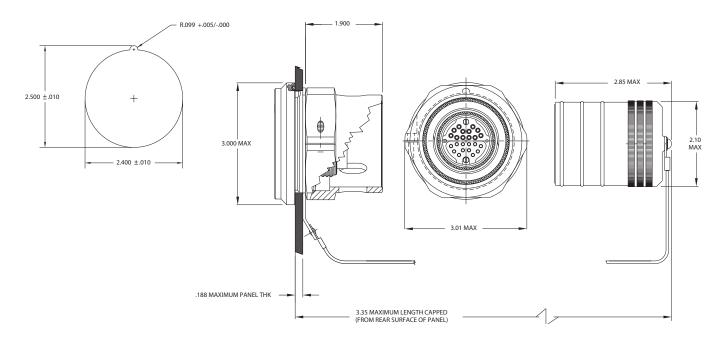




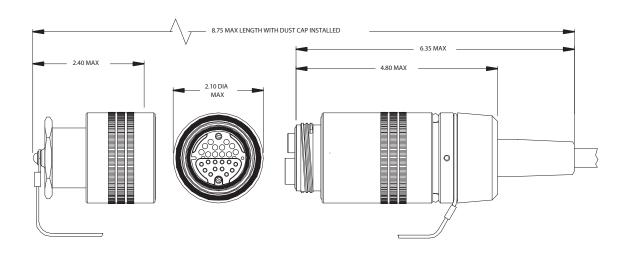


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TFOCA-III® 24-Channel Jam Nut Receptacle with Panel Cutout:



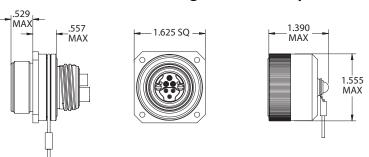
TFOCA-III® 24-Channel Hermaphroditic Plug:



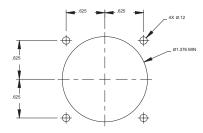
Drawings are not to scale. Measurements are in inches.

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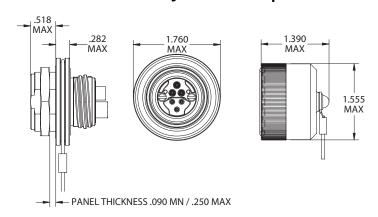
TFOCA-III® 6-Channel Flange Mount Receptacle:



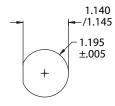
TFOCA-III[®] 6-Channel Flange Mount Receptacle Panel Cutout:



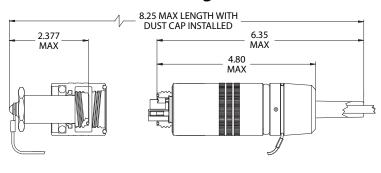
TFOCA-III[®] 6-Channel Jam Nut Receptacle:



TFOCA-III[®] 6-Channel Jam Nut Receptacle Panel Cutout:



TFOCA-III® 6-Channel PLug:



How to Order:

For more information on how to order or to obtain a price quote on any of our TFOCA-II $^{\textcircled{\$}}$ EX products, please call us at 800-472-4225. For international calls please dial 214-547-2400 or e-mail us at info $^{\textcircled{\$}}$ info $^{\textcircled{\$}}$ ibersystems.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 two decades 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.

AFSI has delivered millions of fiber optic connectors in more than 34 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.

Visit **www.amphenol-fsi.com** for more information.