

## 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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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](http://amphenolmao.com).

## TFOCA-III®

### 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                                    |
|------------------------------------|---|
| <b>Number of Channels</b>          | 1000 cycles per EIA-455-21                            |
| <b>Filter Type</b>                 | Per MIL-STD-1344, Method 2005, Condition II & VI      |
| <b>Insertion Loss</b>              | Per MIL-STD 901C Grade A                              |
| <b>Operating Temperature</b>       | -54°C to +65°C per MIL-STD-1344, Method 1003          |
| <b>Shock</b>                       | -62°C to +70°C per MIL-STD-1344, Method 1003          |
| <b>Vibration</b>                   | 500 hour salt spray MIL-STD-1344, Method 1001         |
| <b>Cable Retention</b>             | Per MIL-STD-1344, Method 1007                         |
| <b>Twist</b>                       | 10 cycles per MIL-STD-1678, Method 4030               |
| <b>Cable Seal Flexing</b>          | Per MIL-STD-1344, Method 1016                         |
| <b>Mating Durability</b>           | 7 tests @ 1250 Newton per MIL-STD-1344, Method 2008.1 |
| <b>Crush Resistance</b>            | Per MIL-STD-1344, Method 2002                         |
| <b>EMI Shielding Effectiveness</b> | 22 lbs. min. per MIL-STD-1344, Method 2007            |

### 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 .190 - .239 | Y=1 Key Option 1         |
| X=F Cable Diameter Range .240 - .279 | Y=2 Key Option 2         |
| X=A Cable Diameter Range .280 - .315 | Y=3 Key Option 3         |
| X=B Cable Diameter Range .316 - .346 | Y=U Universal Key Option |
| X=G Cable Diameter Range .347 - .379 |                          |

|              |  |
|--------------|--|
| 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         |
|                             | Y=2 Key Option 2         |
|                             | Y=3 Key Option 3         |
|                             | Y=U Universal Key Option |

|           |                     |
|-----------|---------------------|
| FSAF1000Y | TFOCA-III® Terminus |
|-----------|---------------------|

| Product Number | X=Ferrule Type | Y=Crimp         |
|----------------|----------------|-----------------|
| 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                |



# TFOCA-III®

## TFOCA-III® 24-Channel Connector Part Numbers:

Product Number      Product Name

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

|                                      |                          |
|--------------------------------------|--------------------------|
| X=F Cable Diameter Range .240 - .279 | Y=1 Key Option 1         |
| X=A Cable Diameter Range .280 - .315 | Y=2 Key Option 2         |
| X=B Cable Diameter Range .316 - .346 | Y=3 Key Option 3         |
| X=G Cable Diameter Range .347 - .379 | Y=U Universal Key Option |
| X=C Cable Diameter Range .380 - .423 |                          |
| X=D Cable Diameter Range .424 - .465 |                          |
| X=E Cable Diameter Range .466 - .515 |                          |

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 |

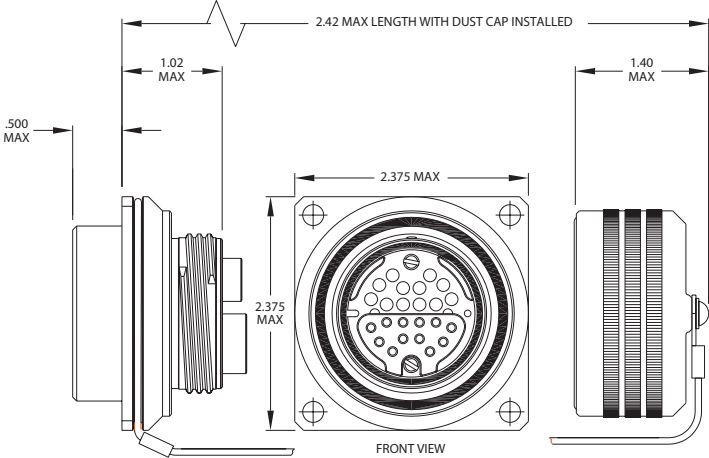
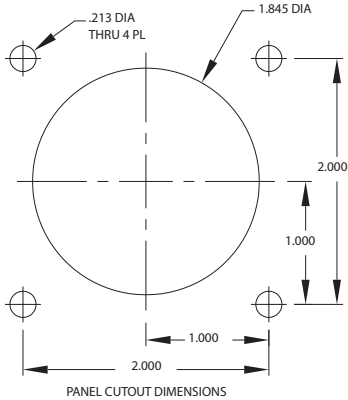
FSAF1X00Y      TFOCA-III® Terminus

| Product Number | X=Ferrule Type | Y=Crimp         |
|----------------|----------------|-----------------|
| 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

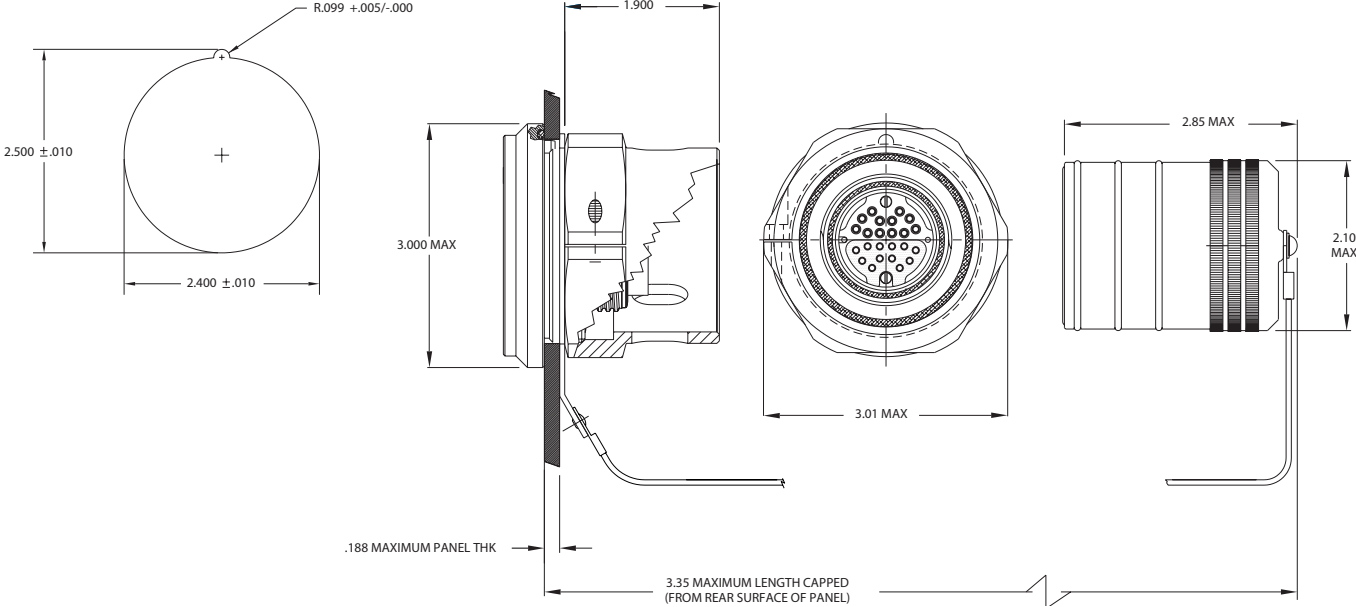


## TFOCA-III® 24-Channel Flange Mount Receptacle with Panel Cutout:

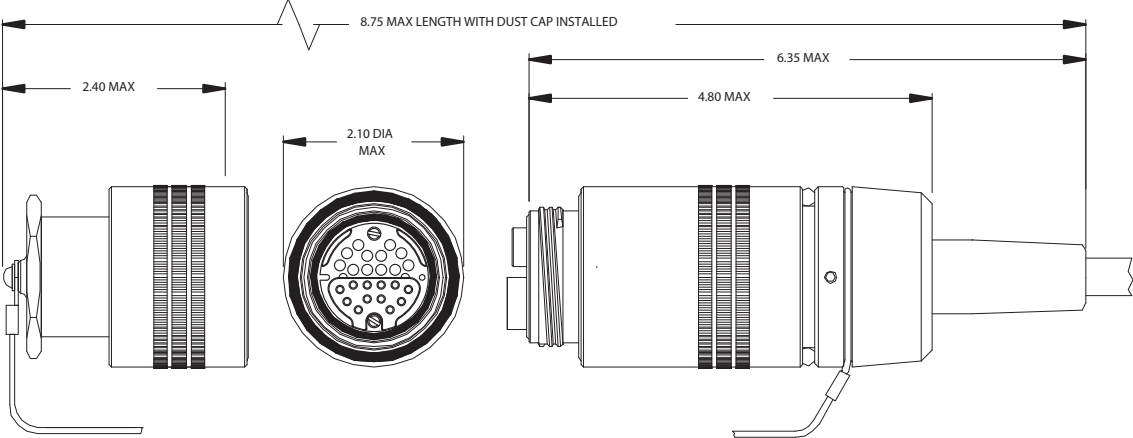


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## TFOCA-III® 24-Channel Jam Nut Receptacle with Panel Cutout:



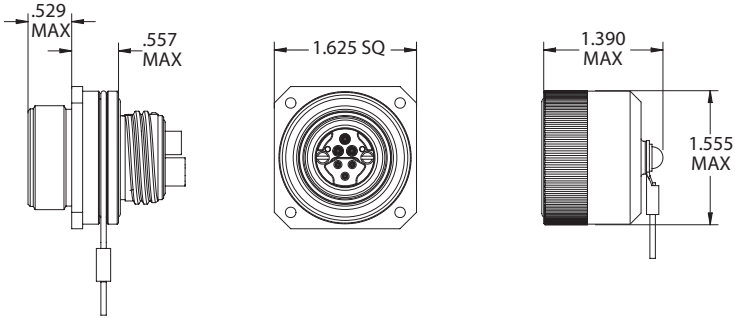
## TFOCA-III® 24-Channel Hermaphroditic Plug:



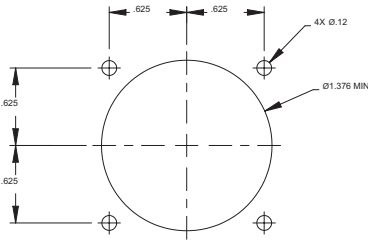
*Drawings are not to scale.  
Measurements are in inches.*

# TFOCA-III®

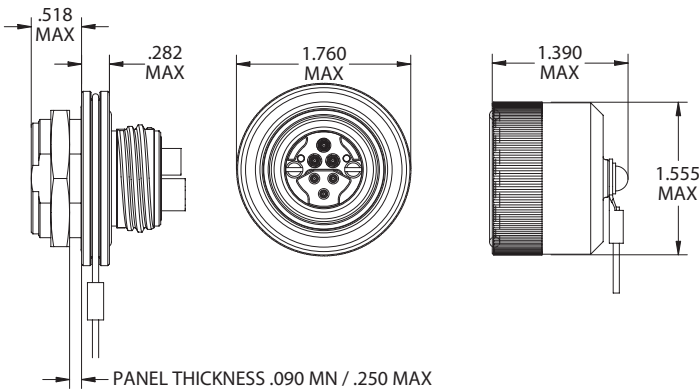
### TFOCA-III® 6-Channel Flange Mount Receptacle:



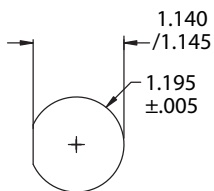
### TFOCA-III® 6-Channel Flange Mount Receptacle Panel Cutout:



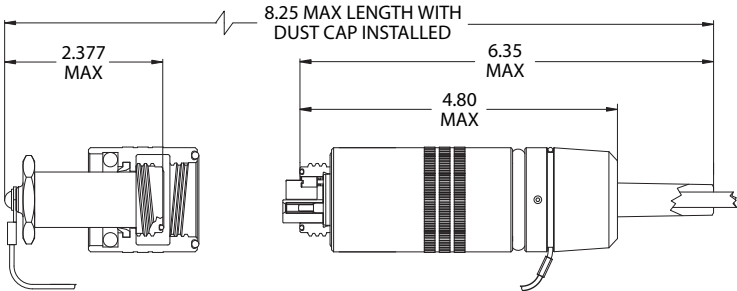
### TFOCA-III® 6-Channel Jam Nut Receptacle:



### 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® EX products, please call us at 800-472-4225. For international calls please dial 214-547-2400 or e-mail us at [info@fibersystems.com](mailto: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 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](http://www.amphenol-fsi.com) for more information.