

TFOCA-III® Fiber Optic Connectors



TFOCA-III® 24-Channel Receptacle

About TFOCA-III®

The TFOCA-III® 24-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.

Enhancements with the TFOCA-III® design take advantage of the latest in fiber optic connectivity technology by utilizing industry standard physical contact ceramic ferrule and keyed termini.

The TFOCA-III[®] connector is designed to need little or no maintenance in the field. However, if field-level repair and cleaning is required, all TFOCA-III[®] connectors can be fully field repaired reusing all components with the exception of the termini. It has a removable end-cap to allow direct access to the alignment sleeve and termini.

Features and Benefits

- TFOCA-II® connector designed and patented by Fiber Systems International
- Hermaphrododitic design for versatility
- Field repairable using existing parts
- Hermaphrododitic dust cap for greatest protection
- Zn-Ni plating more environmentally friendly and more durable, corrosion resistant
- 12-channel connector design
- Zn Ni plating more environmentally friendly

- Zn-Ni plating greater salt spray corrosion resistance
- Precision ceramic termini for both single mode and multimode.

Applications

- U.S. Army, Navy, and Marine Corp military tactical deployments.
- Oil, Gas and Geoscience Industries.
- Industrial.
- Broadcast.

Materials

- Ferrule: 2.5mm diameter ceramic ferrule.
- Exterior parts: aluminum-zinc/nickel.
- Interior parts: aluminum-anodize/chemfilm.
- Hardware: stainless steel, passivated.
- Seals: nitrile.
- Alignment sleeves: solid core.

Options Available

- Plug
- Front jam nut receptacle
- Flange mount receptacle
- External jam nut receptacle
- External jam nut SRR
- Loopback
- Stainless steel (303, 304, 316 and 316L) plug and/or jam nut receptacle available.
- EPDM seals for NBC (nulclear, biological and chemical) environments.

How to Order

For more information on how to order or to obtain a price quote on any of our TFOCA-III[®] Products, please call us at 800.472.4225. For international calls please dial 214.547.2400 or email us at info@fibersystems.com

Fiber Optic Solutions www.fibersystems.com



TFOCA-III® Connector Specifications

Specification

Number of channels

Filter type

Insertion loss

Back reflection

Operating temperature

Mud Shock

Vibration

Cable retention

Twist

Cable seal flexing

Mating durability

Water pressure

Ice crush/freezing water immersion

Impact

Crush resistance

Flammability

EMI Shielding

(Receptacle only)

Measurement/Detail

24 channels

62.5/125 or 50/125 multimode, 9/125 single mode

62.5/125 or 50/125 multimode fiber: -0.3dB typical

9/125 single mode: -0.4dB typical

<-50dB with FSI 6 degree angle polish back

-460 C to +710 C

Per MIL-C-83526/12, /13 requirements

EIA/TIA-455-14, Condition A MIL-STD-1344, Method 2500.1

400 pounds minimum per EIA/TIA-455-6 (applies to plug and

strain relief receptacles)

1,000 cycles per EIA/TIA-455-36

100 cycles per MIL-STD-1344, Method 2017, Procedure 1

2,000 cycles per EIA/TIA-455-21

Per MIL-C-83526 /12 /13 requirements

Per MIL-C-83526 /12 /13 requirements

EIA/TIA-455-2

450 pounds minimum per EIA/TIA-455-26

MIL-STD-1344, Method 1012

> 60dB average H-field effectiveness 15kHz to 15MHz

> 67dB average E-field effectiveness 15kHz to 10GHz

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

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