



TFOCA-II® 12-Channel RigLinQ Plug

About the TFOCA-II® 12-Channel Connector

The TFOCA-II® 12-channel RigLinQ fiber optic connector is ideally suited for environmentally harsh conditions. Hybrid design lowers overall systems cost and greatly reduces panel mount foot print by combining optical and electrical signals in one quick connect housing. 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 an industry exclusive fully articulating optical termini for superior optical performance and environmental open-face sealing.

The TFOCA-II® RigLinQ connector is designed for minimal maintenance in the field. Field cleaning if required is facilitated by a removable end cap allowing direct access to the alignment sleeves and termini.

Features & Benefits

- **Hermaphroditic Design for Versatility -**
 - Enables multiple TFOCA-II® plug assemblies to be concatenated
- **Removable End Cap -** Allows for easy field maintenance and cleaning
- **Improved Cable Retention Strength -** Designed to meet 400 lbs pull strength while protecting fibers from stress

- **Ni-PTFE Plating -** Provides substantial longevity to corrosive environments and is conductive allowing safe grounding of cable armor. Meets new mandate set by the Environmental Protection Agency for elimination of heavy metal plating
- **High Performance Insert -** High Performance Injection Molded Insert made from 30% GF Ultem® 2300 provides outstanding dielectric strength plus superior mechanical performance
- **Hi Performance Metal Alignment Sleeves -** More robust than ceramic alignment sleeves
- **Hermaphroditic Dust Cap -** Plug and/or receptacle dust caps connect together to prevent dust and moisture penetration during deployment
- **Field Repairable Using Existing Parts -** Additional connector components (other than termini) are not required to perform field repair
- **Panel Mount Versions Available -** In-line Panel mount with full environmental protection available as well as standard panel mount. Both designs feature industry first Blind Mate Assist Sleeves to aid user ergonomics.
- **Also Available in Stainless Steel and Brass -** Allows the connector to be used in a variety of applications Oil, Gas, and Geoscience industries
- **Multiple Fiber Types -** Supports Single mode, Multimode, and Plastic Optical Fiber (POF)

Applications

- Next Gen Drilling Rig Control Systems
- Mining
- Industrial
- Broadcast

TFOCA-II® 12-Channel Connector Specifications

Parameter	Typical	Maximum
Insertion loss (multimode)	0.30dB	0.75dB
Insertion loss (single mode)	0.40dB	0.75dB
Back reflection (single mode-UPC polish)	-50dB	-40dB
Operating temperature	-46° C to + 71° C	
Storage temperature	-52° C to + 85° C	
Mud	5 minute immersion, clean with water (per MIL-C-83526/12 /13 requirements)	
Water pressure	MIL-STD-810, Method 512.4, 1m, 48hr	
Ice crush	DOD-STD-1678, Method 4050	
Humidity	DOD-STD-1678, Method 4030, 10 Cycles	
Flammability	MIL-STD-1344, Method 1012	
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 lbs min per EIA/TIA-455-6, 1hr (plug & strain relief receptacles)	
Impact	EIA/TIA-455-2	
Crush resistance	450 lbs minimum per EIA/TIA-455-26	
EMI shielding effectiveness (receptacle only)	> 60dB, 15KHz to 10GHz	



How to Order

For more information on how to order or to obtain a price quote on our TFOCA-II® 12-Channel RigLinQ products, call toll free (U.S. only) at 800.472.4225, international calls please use 1.214.547.2400 or e-mail sales@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 21 years 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 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, visit www.fibersystems.com.