# **Amphenol FSI**

### F-143



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

Building on the legacy of MIL-PRF-28876, Rev. E these connectors incorporate the latest technologies in fiber optic interconnect design. These connectors are precision machined to stringent tolerances and designed to provide superior optical performance in extreme environmental conditions.

The available backshells feature the Quickloc™ captivation system developed by Amphenol Fiber Systems International. Not only is it simple to install, it is also easy to remove the captivated aramid yarn of the cable and recapture without cutting back the cable. The Quickloc™ backshell also allows easy access to maintain or reconfigure termini without altering the captivated aramid fiber. The superior optical performance, ease of maintenance, and the tactical cable backshell system make the F143 a truly robust interconnect solution for tactical applications.

#### Features & Benefits:

- Precision machined metal housings and inserts Available in 3 shell sizes: 13 (4 ch), 15 (6, 8 ch), 23 (18, 31 ch)
- Ergonomic, Ratcheting, Anti-vibration coupling nut
- Alignment Sleeves Retainer (ASR) assembly can be removed without disassembly of the connector Removeable ASR can be configured on plug or receptacle
- Genderless, front release termini with integral retaining clip and seal (Dual Seal available)
- Complete line of straight, 45 degree and 90 degree backshells
- Al Alloy, Marine Bronze and SS316 versions available
- Superior optical performance with an easy to clean and maintain removable Alignment Sleeve Retainer (ASR)
- Backshell design allows simplified, removable aramid yarn captivation with no mechanical crimp rings
- "Arctic" style coupling nut resists loosening from vibration Angled backshells use the same tools as the straight
- Quickloc™ design enables faster maintenance or repair without complete disassembly of connector backshell

### **Applications:**

- **Ground Vehicle Applications**
- Shipboard, Surface Craft and Submarines
- Offshore Oil and Gas Platforms and Drillships
- Mobile Tactical Shelters Electronic Battlefield Networks
- Deployable Outdoors In Harsh Environments

### **Options Available:**

- Materials: Aluminum Alloy, Marine Bronze, or Stainless Steel
- Angle Polish Termini
- Dual Seal termini for pressurized applications

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### F-143 Specifications:

Specification	Measurement/Detail
Mating Durability	1000 cycles per EIA-455-21
Vibration	Per MIL-STD-1344, Method 2005,
	T et MIL-31D-1344, Metrioù 2003,
Mechanical Shock	Per MIL-STD 901C Grade A
Thermal Shock	-54°C to +65°C per MIL-STD-1344
Thermal Cycling	-62°C to +70°C per MIL-STD-1344
Corrosion Resistance	500 hour salt spray MIL-STD-1344
Ozone Exposure	Per MIL-STD-1344, Method 1007
Humidity	10 cycles per MIL-STD-1678
Fluid Immersion	Per MIL-STD-1344, Method 1016
Crush Resistance	7 tests @ 1250 Newton per MIL-STD-1344
Maintenance Aging	Per MIL-STD-1344, Method 2002
Terminus Retention Force	22 lbs. min. per MIL-STD-1344, Method 2007
Insert Retention Axial	100 PSI min. per MIL-STD-1344
Cable Pull Out Force	162 pounds min. per EIA-455-6
Cable Sealing Flexing	Per MIL-STD-1344, Method 2017
Impact	Per MIL-STD-1344, Method 2015
Flammability	Per MIL-STD-1344, Method 1012
Operating Temperature	-54°C to +65°C
Storage Temperature	-62°C to +70°C
Typical Insertion Loss	0.4 dB Nominal Multimode 0.5 dB Nominal Single mode
Connector Insert	Aluminum Alloy, Anodized

#### How to Order:

For more information on how to order or to obtain a price quote on any of our F-143 products, please call us at 800-472-4225. For international calls please dial 214-547-2400 or e-mail 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 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.