

# F-143 Fiber Optic Connectors



Amphenol Fiber Systems International (AFSI) manufactures a complete line of next generation circular 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 backshells feature the Quickloc<sup>™</sup> 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<sup>™</sup> backshell also allows easy access to maintain or reconfigure termini without altering the captivated aramid fiber.

## **Options Available**

- Materials: Aluminum Alloy, Marine Bronze, or SS316
- Angle Polish Termini

### **Features**

- 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
- Multiple Key Options
- 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
- Complete line of straight, 45 degree and 90 degree backshells
- Al Alloy, Marine Bronze and SS316 versions available

### **Benefits**

- Superior optical performance with an easy to clean and maintain removeable Alignment Sleeve Retainer (ASR)
- Backshell design allows simplified, removable aramid yarn captivation with no mechanical crimp rings
- "Artic" style coupling nut resists lossening from vibration
- Angled backshells use the same tools as the straight backshell
- Quickloc<sup>™</sup> design enables faster maintenance or repair without complete disassembly of connector backshell assembly

## **Applications**

- Shipboard, surface craft and submarines
- Offshore Oil and Gas Platforms and Drillships
- Mobile tactical shelters electronic battlefield networks
- Mobile Emergency Telecommunications (MET) stations
- Deployable outdoors in harsh environments

### **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 email us at info@fibersystems.com



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### F-143 Fiber Optic Connector Product Specifications

Specification Mating Durability Vibration Mechanical Shock Thermal Shock Thermal Cycling Corrosion Resistance Ozone Exposure Humidity Fluid Immersion Crush Resistance Maintenance Aging Terminus Retention Force Insert Retention Axial Cable Pull Out Force Cable Sealing Flexing Impact Flammability **Operating** Temperature Storage Temperature **Typical Insertion Loss** Connector Insert Connector, Backshells and Dust Cover Cable Sealing Strain Relief

#### Measurement/Detail

1000 cycles per EIA-455-21 Per MIL-STD-1344, Method 2005, Condition II & VI Per MIL-STD 901C Grade A -54°C to +65°C per MIL-STD-1344, Method 1003 -62°C to +70°C per MIL-STD-1344, Method 1003 500 hour salt spray MIL-STD-1344, Method 1001 Per MIL-STD-1344, Method 1007 10 cycles per MIL-STD-1678, Method 4030 Per MIL-STD-1344, Method 1016 7 tests @ 1250 Newton per MIL-STD-1344, Method 2008.1 Per MIL-STD-1344, Method 2002 22 lbs. min. per MIL-STD-1344, Method 2007 100 PSI min. per MIL-STD-1344, Method 2010 162 pounds min. per EIA-455-6 Per MIL-STD-1344, Method 2017 Per MIL-STD-1344, Method 2015 Per MIL-STD-1344, Method 1012 -54°C to +65°C -62°C to +70°C 0.4 dB Nominal Multimode, 0.5 dB Nominal Single mode Aluminum Alloy, Anodized Aluminum Alloy, CAD Plate, 316L Stainless Steel, Marine Bronze

Polyolefin, Self Encapsulating

### 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<sup>®</sup> connector, which AFSI developed and patented. Altogether, AFSI has delivered millions of fiber optic connectors globally. 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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