

## M28876 Fiber Optic Connectors



### Amphenol Fiber Systems International (AFSI) designs and manufactures a complete line of circular fiber optic connectors designed and qualified to MIL-PRF-28876, Rev E.

These connectors are precision machined to stringent tolerances and designed to provide superior optical performance in extreme environmental conditions. M28876 offers rugged military and industrial multichannel fiber optic connectors for deployable, shipboard, outdoor and fixed system requirements.

The backshell features the Quickloc™ captivation system developed by Amphenol Fiber Systems International. Not only is it simple to install, it is also easy to remove the aramid yarn of the cable (KEVLAR®) captivation 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.

#### Features & Benefits :

- Precision machined to MIL-PRF-28876, Rev E specification
- Available in 3 shell sizes:  
13 (4 ch), 15 (6, 8 ch), 23 (18, 31 ch)
- Six keying options (plus universal keying for COTS product) for both plugs and receptacles; ideal for test cables
- Inserts are interchangeable from plug to receptacle. Either can be operated with pins or socket termini
- Fully intermateable with all qualified M28876 connectors
- Operates with all qualified single mode or multimode M29504/14 and /15 termini
- Complete line of straight, 45° and 90° backshells.
- COTS version available
- Fully intermateable and interchangeable with any qualified M28876 connector manufacturer
- Backshell design allows simplified, removable KEVLAR® captivation with no mechanical crimp rings
- Angled backshells operate identically using the same tools as the straight backshell
- Quickloc™ design enables faster maintenance or repair without complete disassemble of connector backshell assembly
- Commercial Off-The-Shelf (COTS) versions of this product are available in aluminum and other materials

Amphenol Fiber Systems International, Inc. | 1300 Central Expressway N, Suite 100 Allen, TX 75013

Phone: (214) 547-2400 | Email: [sales@fibersystems.com](mailto:sales@fibersystems.com) | Website: [amphenol-fsi.com](http://amphenol-fsi.com)

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).

## Applications :

- U.S. Navy shipboard, surface craft and submarines
- Mission critical combat and communications systems
- Mobile tactical shelters electronic battlefield networks
- Mobile Emergency Telecommunications (MET) Stations
- Deployable outdoors in harsh environments

## MIL-C-28876 Fiber Optic Connector Specifications :

Specification	Measurement/Detail
Mating Durability	500 cycles per EIA-455-21
Vibration	Per MIL-STD-1344, Method 2005, Condition II & VI
Mechanical Shock	Per MIL-STD 901C Grade A
Thermal Shock	-54°C to +65°C per MIL-STD-1344, Method 1003
Thermal Cycling	-62°C to +70°C per MIL-STD-1344, Method 1003
Corrosion Resistance	500 hour salt spray MIL-STD-1344, Method 1001
Ozone Exposure	Per MIL-STD-1344, Method 1007
Humidity	10 cycles per MIL-STD-1678, Method 4030
Fluid Immersion	Per MIL-STD-1344, Method 1016
Crush Resistance	7 tests @ 1250 Newton per MIL-STD-1344, Method 2008.1
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, Method 2010
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
Connector, Backshells, & Dust Cover	Aluminum Alloy, CAD Plate, 316L Stainless Steel, 303 Stainless Steel
Cable Sealing Strain Relief	Polyolefin, Self Encapsulating

## How to Order :

For more information on how to order or to obtain a price quote on our M28876 products, call toll free (U.S. only) at 800.472.4225, international calls please use 1.214.547.2400 or e-mail [info@fibersystems.com](mailto:info@fibersystems.com).

## Options Available :

- Following configurations available: M28876/1, /2, /3, /4, /5, /6, /7, /8, /9, /10, /11, /12, /13, /14, /15, /27, /28, /29
- Materials: Aluminum (other materials available on Commercial Off The Shelf basis)
- Finish: Olive drab cadmium over electroless nickel

## Certifications and Qualifications :

- MIL-PRF-28876 Rev. E QPL Listed

## Amphenol Fiber Systems International (AFSI) :



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.

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.fibersystems.com](http://www.fibersystems.com) for more information.

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