

M28876/1



*Wall Mount
Receptacle*

M28876/11



*D-Mount
Receptacle*

M28876/6



Plug

About M28876

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.

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

Features

- 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 degree and 90 degree backshells.
- COTS version available

Benefits

- 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

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 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

500 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, 303 Stainless Steel
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[®] 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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