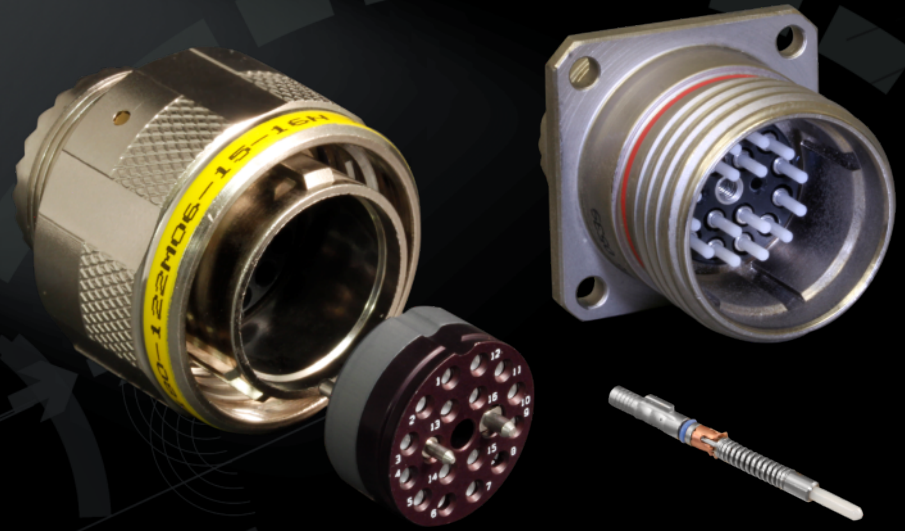
The widest range of mission-critical interconnect technologies in the world



Glenair®

Fiber Optic Connectors and Cables

Rugged • High-Bandwidth • Mil-Aero Grade

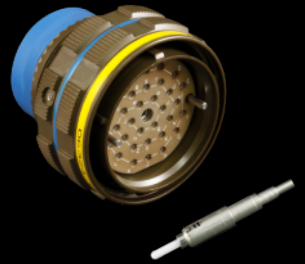
Fiber Optic Interconnect Solutions

MIL-DTL-38999
Series III Type

GHD
Glenair High Density

Series 80
Mighty Mouse

Eye-Beam®
GMA and GLT



ARINC 801

GFR
Front-Release Termini

NGCON
MIL-PRF-62466

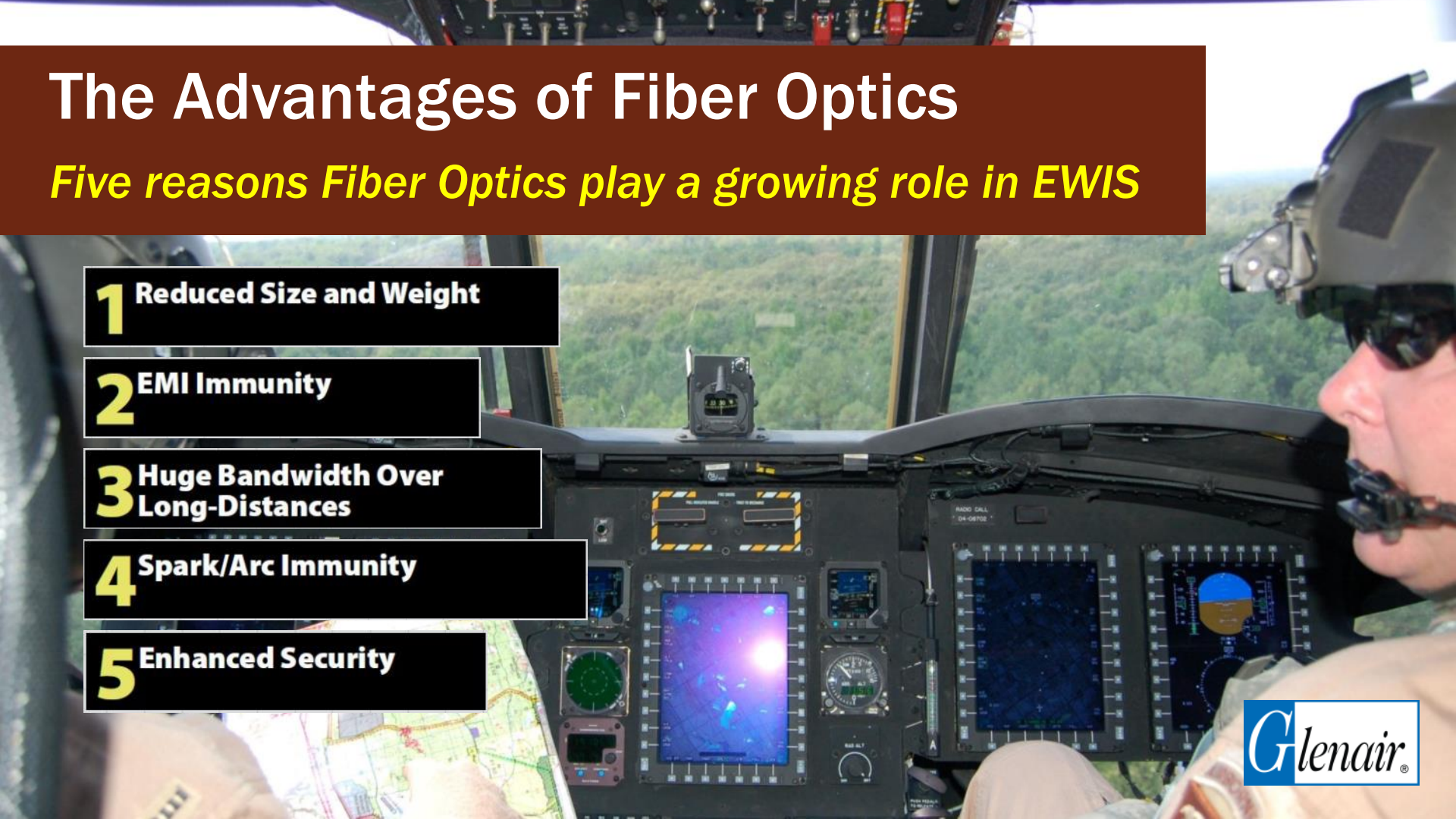
GFOCA
MIL-DTL-83526 Type

MIL-PRF-28876

MT Ferrule

The Advantages of Fiber Optics

Five reasons Fiber Optics play a growing role in EWIS



1. Reduced Size and Weight
2. EMI Immunity
3. Huge Bandwidth Over Long-Distances
4. Spark/Arc Immunity
5. Enhanced Security

Glenair®

Fiber Optics = Reduced Size and Weight

1 Reduced Size and Weight

- Relative to copper, optical fiber is smaller and lighter—a major advantage for avionics
- Easier to install—especially in retrofits—because the smaller cable diameters fit comfortably within the layout of existing electrical harnesses and conduits
- This size reduction makes it possible to run multiple backups for redundancy in mission-critical systems

Glenair

Fiber Optic CONNECTORS

Fiber Optics = EMI Immunity

2 EMI Immunity

- Fiber optic media uses light to transmit signals
- Not subject to electromagnetic interference, RFI or voltage surges
- Greater reliability in mission-critical communications

Glenair

Fiber Optic CONNECTORS

Fiber Optics = Huge Bandwidth Over Long Distances

3 Huge Bandwidth Over Long-Distances

- Fiber can transmit infinitely more data than bulky copper cable
- Reduced transmission errors and bottlenecks, particularly over longer cable runs

Glenair

Fiber Optic CONNECTORS

Fiber Optics = Spark/Arc Immunity

4 Spark/Arc Immunity

- Fiber media is totally electrically isolated
- Safer, spark-free media for use in aircraft fuel cells or volatile gas environments
- No risk of spark or short-circuit from a damaged cable

Glenair

Fiber Optic CONNECTORS

Fiber Optics = Enhanced Security

5 Enhanced Security

- Light pulses, unlike electrical signals, are almost impossible to intercept or monitor
- Total immunity from wiretapping
- Undetectable to metal or electromagnetic flux detection equipment

Glenair

Fiber Optic CONNECTORS

MIL-DTL-38999 Series III Type
Tight-Tolerance Fiber Optic Connection System

Fiber Optic CONNECTORS

Glenair mil-qualified 29504/4 and /5 termini

- Available materials range from composite thermoplastic to stainless steel
- Shell sizes range from 11 to 25, and the corresponding cavity counts from 2 to 37 channels
- Same Day inventory for connectors and termini

QPL qualified

Glenair

Glenair High Density (GHD) Fiber Optic Connection System

Nearly double the density of M28876 and D38999

- Genderless, front release termini
- Ø1.25mm precision ceramic ferrule and alignment sleeve
- Precision guide pin mating
- Removable alignment sleeve module
- PC and APC polish terminus options
- Complete environmental sealing
- Equal optical performance to D38999
- M85045/16 cable support

GHD Keyed Terminus (APC)

Series 80 Mighty Mouse Fiber Optic Systems – Size 16/20/23

- Highest density, smallest size mil-aero grade fiber optic connection system
- Environmental performance:
  - D38999 Vibration
  - D38999 Shock
  - Thermal Cycling -55° to +85° C
- In-stock and available for immediate, same-day shipment

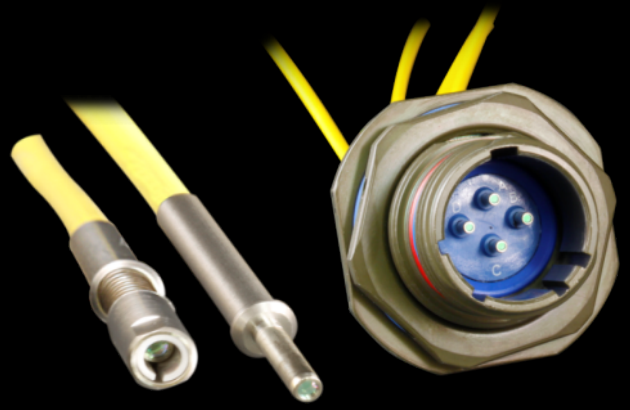
EYE-BEAM®

Fiber Optic CONNECTORS

Low-maintenance, high-performance expanded beam fiber optic connection systems

GMA Lens-Insert

EYE-BEAM® GMA



GLT Lens-Termini

EYE-BEAM® GLT

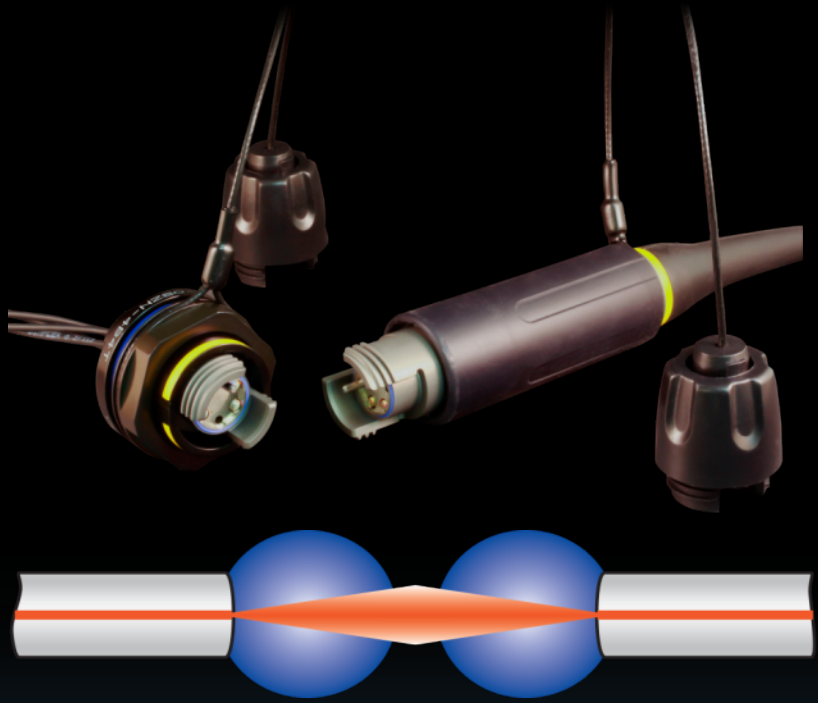
Glenair®

EYE-BEAM® GMA

Fiber Optic CONNECTORS

Rugged expanded beam fiber optic connectors IAW MIL-DTL-83526/20 and /21

- Easy field maintenance, cleaning, and troubleshooting
- Hermaphroditic
- Singlemode and multimode
- Intermateable/interoperable with all 2-channel and 4-channel HMA type connectors:
  - Tyco Pro Beam Jr., Stratos HMA, Fibreco Junior, etc.
- The fiber beam cross sectional area is expanded approximately 2000 times for singlemode fibers and 200 times for multimode



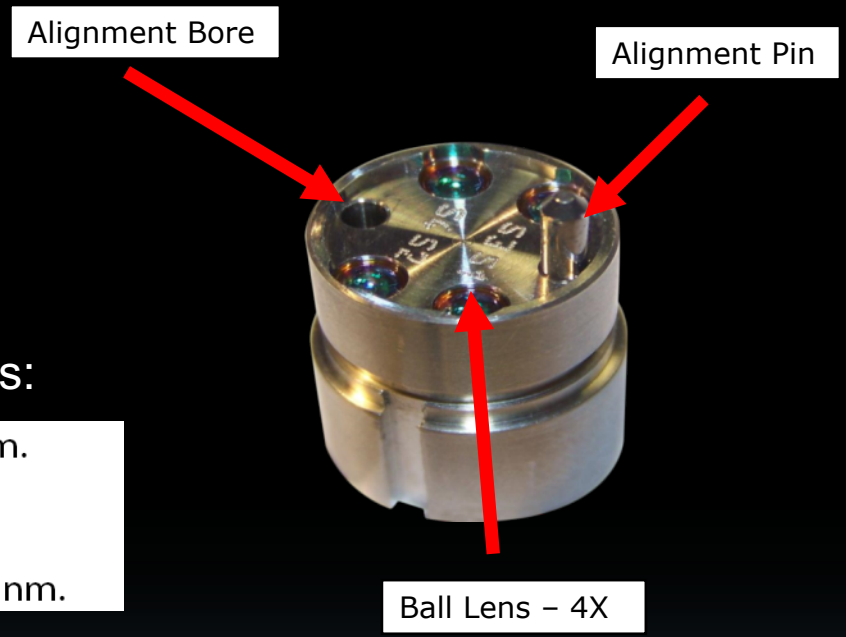
Glenair

EYE-BEAM® GMA

HMA Type Intermateable Ball Lens • IAW MIL-DTL-83526/20 and /21

- Precision optical alignment system
  - Less than 2.0 dB loss for singlemode fiber (1 dB typical, 2.0 dB Maximum)
  - Less than 1.5 dB loss for multimode fiber (0.5dB typical 850nm, 1.5dB Maximum)
    (0.6 dB typical 1300nm, 1.5dB Maximum)
- Inserts optimized for operating wavelengths:

Multimode dual wavelength, 850 / 1300 nm.
Singlemode, 1310 nm.
Singlemode, 1550 nm.
Singlemode dual wavelength, 1310 / 1550 nm.



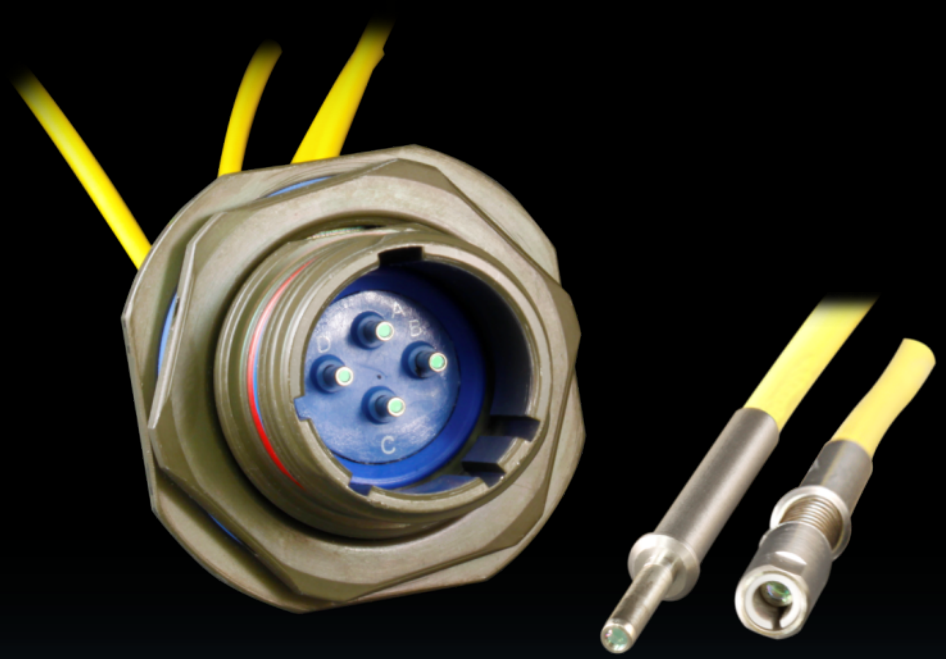
GMA Lens-Insert

EYE-BEAM® GLT

Fiber Optic CONNECTORS

Expanded beam termini for easy integration into any fiber optic connector

- High-performance #16 GRIN lens termini
- Terminated jumpers for easy field fusion splicing
- Innovative expanded beam lens terminus expands signal 27X
- Ease-of-installation and reduced maintenance costs compared to standard butt-joint termini



Glenair®

EYE-BEAM® GLT

Fiber Optic CONNECTORS

Expanded beam termini for easy integration into any fiber optic connector including Series 80 Mighty Mouse, Series 79 Micro-Crimp, Series 28 HiPer-D (M24308), Series ITS Reverse-Bayonet, GFOCA, and MIL-DTL-38999

Glenair®

ARINC 801 Avionic Fiber Optic Connection System

ARINC 801 circular connectors, all shell sizes

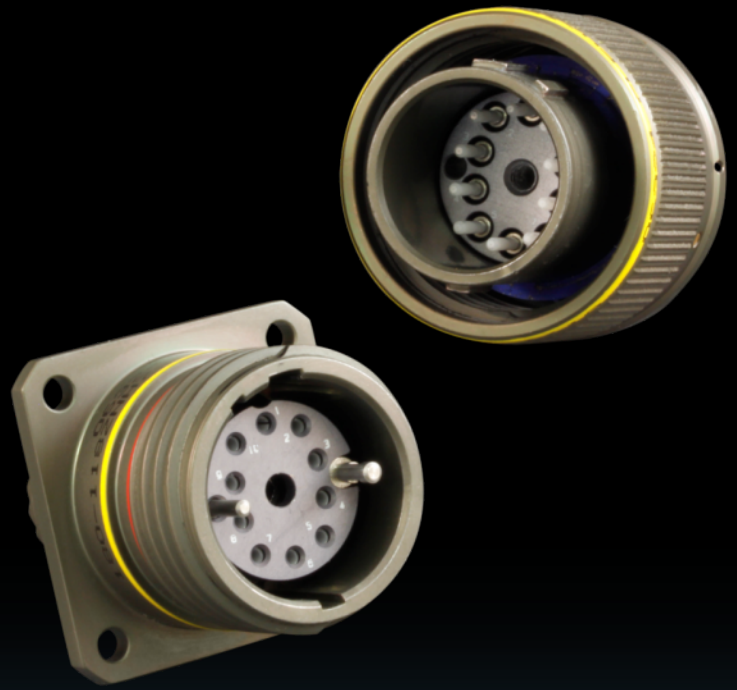
- Genderless terminus design eliminates pin and socket complexity
- Rear-release size #16 termini
- Singlemode (1310 and 1550 nm) and multimode (850 and 1300 nm)
- Mechanical and environmental performance IAW MIL-DTL-38999 Series III

NGCON MIL-PRF-64266
Fiber Optic Connection System

Fiber Optic CONNECTORS

Next-generation MIL-PRF-62466

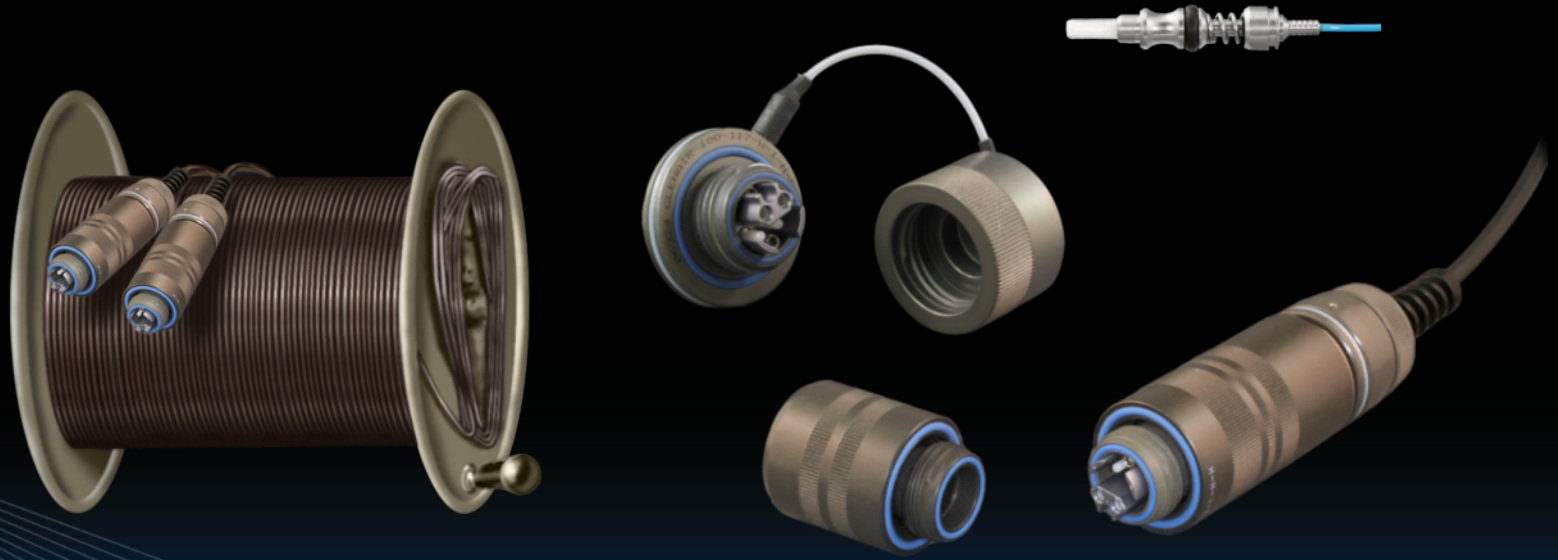
- All shell sizes tooled and available, 11-2, 11-4, 13-6, 15-8, 15-10 & 23-36
- Precision 1.25mm genderless front release Terminus with O-ring sealing
- Removable ASR for easy cleaning
- Conforms to MIL-PRF-64266 standard
- For avionics and shipboard applications



Glenair

Glenair GFOCA
Fiber Optic Connection System

Hermaphroditic · field deployable IAW MIL-DTL-83526 · harsh environment · easy maintenance



MIL-DTL-28876 QPL
Fiber Optic Connection System

Qualified navy fiber optic system

- Qualified M29504 front-release termini
- Qualified plugs, receptacles, and dust covers
- Singlemode and multimode
- Corrosion-resistant, environmentally sealed
- 500 mating cycles, 500 hrs. salt spray

Fiber Optic CONNECTORS

QPL qualified

Glenair

180-183 MIL-DTL-38999 Type with MT Ferrule

Fiber Optic CONNECTORS

Ultra high-density, multiple termination (MT) commercial interconnect in a ruggedized mil-aero package

- IP 67 environmental performance (IP 68 available) mated
- Precision alignment keys and pins
- MIL-STD-810F shock and vibe
- 85°C high temperature tolerance
- 500 mating cycles

Glenair

Fiber Optic Backshells

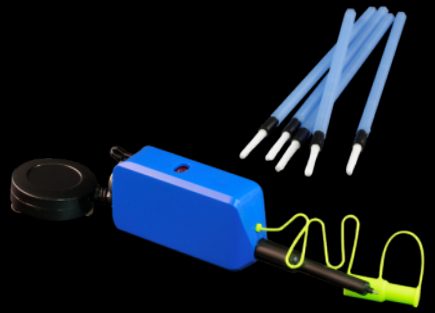
Available for all fiber optic connection systems

- Minimized bend radius
- Fiber strain relief
- Integrated grommet
- Retractable conduit fittings
- Special clamshell designs
- Convoluted tubing adapters

Glenair Fiber Optic Termination, Cleaning, and Inspection Toolkits and Training

Turnkey workstations and field maintenance kits

Test cables, probes and adapters



Dry action cleaning tools and swabs

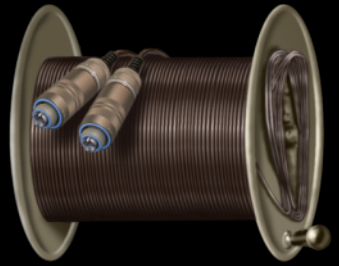
Fiber optic training and certification

Turnkey Fiber Optic Interconnect Cables

Environmental and non-environmental materials and designs

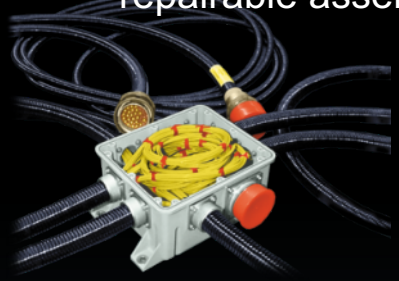
Harsh-environment overmolded

Backshell-equipped repairable assembly



Terminated and spooled cable reels

Support for all commercial I/O-to-board terminations



Integrated cable bays and box assemblies

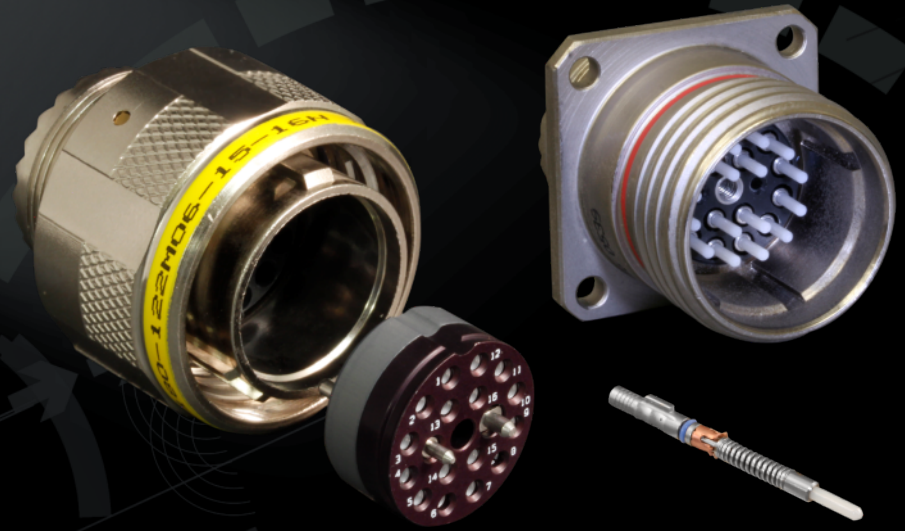
Inside-the-box pigtails

Glenair Culture

One-of-a-Kind Service From a One-of-a-Kind Supplier

- Outstanding product availability: literally thousands of items in stock
- Liberal policies on NRE costs, samples, and RMA's
- The industry's best engineering and technical support team
- No dollar or quantity minimums on standard products
- Comprehensive product documentation and information access
- Ample, professionally-managed manufacturing capacity
- The size and scale to tackle every interconnect challenge

The widest range of mission-critical interconnect technologies in the world



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