OPTIMIZED FOR USE WITH FIBER KING FIBER OPTIC CABLES

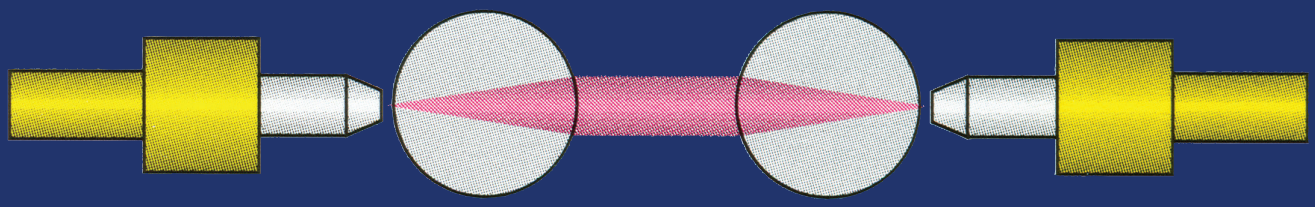
Rugged Fiber Optic CONNECTORS

Eye-Beam GLT, Eye-Beam GMA, and Eye-Beam Power, plus rugged field (PC) GFOCA D83526

Glenair's rugged, low-maintenance F/O solutions include GFOCA, an hermaphroditic battlefield fiber optic system available as discrete components or turnkey cable assemblies

Commonly used in harsh environmental applications such as directed energy weapons, long-run battlefield communications, and Free Space Optical applications, Glenair Expanded Beam fiber optics virtually eliminate field maintenance and cleaning difficulties, with low dB-loss mating system performance rated to 1000-2000 cycles depending on fiber media selection.

EXPANDED BEAM TECHNOLOGY



Expanded Beam connectors utilize a sealed lens to expand the emitting beam of light from the fiber media, making connections less sensitive to alignment and contaminants. The expanded beam enters an air gap between connectors and is then refocused back into the fiber of the mating half. Sealed expanded beam assemblies are ideally suited for environmental applications where optical connectors are subject to repeated mating and unmating cycles. Easy to clean, terminate, and insensitive to contamination.

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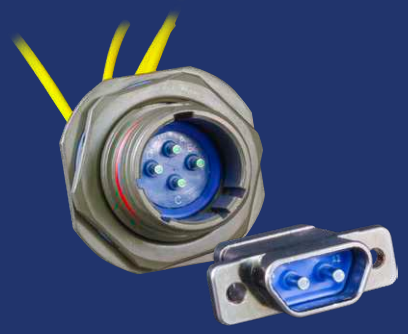
EXPANDED-BEAM AND RUGGED FIELD

Fiber Optic Connection System: Eye-Beam and GFOCA Type

Connectors, termini, and cable assemblies

Eye-Beam GLT, Eye-Beam GMA, and Eye-Beam Power are optimized for reliable, low-maintenance performance in ground and air applications. Eye-Beam GLT is a grin-lens termini solution, Eye-Beam GMA is a workalike for the popular HMA hermaphroditic connector system, and Eye-Beam Power is a ruggedized, optical power terminus design for directed energy and Free Space Optical applications. GFOCA hermaphroditic F/O interconnects are built IAW MIL-DTL-83526 and equipped with MIL-PRF-29504/16 type termini. GFOCA is Glenair's most ruggedized field-deployable fiber optic platforms.

INNOVATIVE EYE-BEAM GLT EXPANDED BEAM TERMINI DELIVER OPTIMAL PERFORMANCE IN HARSH ENVIRONMENTS



- The benefits of an expanded beam system built into an optical terminus
- Factory-terminated Eye-Beam® GLT termini easily integrated into any connector package
- Innovative expanded beam lens terminus expands signal 27X from a standard 9.3 micron fiber core
- Revolutionary design delivers low dB loss performance (1.5 dB multimode, 2.0 dB singlemode untuned) while reducing maintenance, inspection and test costs
- Ultra-high precision ceramic sleeves and custom designed terminus bodies ensure axial alignment

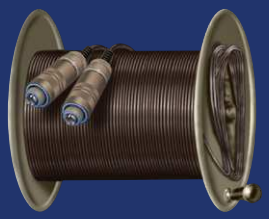
MIL-DTL-83526 HMA TYPE EYE-BEAM GMA BALL-LENS EXPANDED-BEAM FIBER OPTICS

- Field-deployable system for both indoor and outdoor applications
- Beam expansion dramatically reduces loss due to contamination
- Large ball lens facilitates easy cleaning
- Fully intermateable with all MIL-DTL-83526 /20 and /21 compliant connectors
- 2 and 4-channel insert arrangements
- Singlemode / multimode and broad cable support

EYE-BEAM POWER RUGGED, HIGH-POWER FIBER OPTICS FOR DIRECTED ENERGY AND FSO APPLICATIONS

- Size #8 drop-in expanded-beam optical contact
- Powerful 20W and higher optical contact ideally suited for directed energy applications
- Compatible with 1064nm polarization-maintaining fiber with a 0.5 dB typical insertion loss
- Low temperature rise at peak power
- Signature assembly process optimizes optical alignment for mission-critical reliability

HARSH-ENVIRONMENT, FIELD-DEPLOYABLE GFOCA FIBER OPTIC CONNECTION SYSTEM



- Low insertion loss genderless termini
- 2.5 mm dia ceramic ferrules and alignment sleeves
- 4 channel singlemode and multimode configurations
- Designed to meet the requirements of MIL-PRF-29504/16 and MIL-DTL-83526 military specifications
- Discrete components or complete cable-on-reel solutions available