

MFOCA - MIL-DTL-83526 CERTIFIED

IN ACCORDANCE WITH DLA DWG 10023

Mixed-mode expanded beam optical connector

The Cinch Advantage

Our military certified expanded beam connectors have been designed for use in the most demanding harsh environment applications including military tactical communications, outside broadcast, petrochemical plant, mining, and offshore systems. The connectors are terminated using an epoxy-polish ferrule termination process with standard fiber optic termination tools and equipment. The terminated ferrules are simply inserted into the expanded beam housing and fixed in place via a spring and cover-plate. Ferrule alignment to the lenses is achieved automatically by the unique optical arrangement developed and patented by Cinch-Fibreco.

In the event of the connector suffering severe damage in use, the connector design enables replacement of the expanded beam insert, connector front body and grip ring without the need to re-terminate the fibers. Typically, an expanded beam insert can be replaced within 30 minutes in field conditions.

The MFOCA expanded beam connectors offer high performance, flexibility and cost effectiveness, combined with a simple termination process allowing rapid in-field termination and repair.

Features

- MIL-DTL-83526/20 /21 QPL
- German Defence Standard VG 95319-100 & 102
- Singlemode, multimode and mixed-mode insert options
- Field terminable using standard termination tools & equipment
- Field repairable: EB insert & shell parts replaceable / re-useable
- 1, 2 & 4 channel plugs and bulkhead receptacles
- Low insertion loss / high return loss
- Cage Code - 71785



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Outline Specification

MFOCA Expanded Beam Connector - Outline Specification

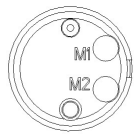
Insertion Loss	Singlemode	-2.5dB (typical -1.5dB)*
	Multimode	-2.0dB (typical -1.0dB)*
Return Loss	≥35dB (typical 40dB) singlemode	
Durability	3000 Matings minimum	
Operating Temperature	-46°C to +71°C	
Storage Temperature	-57°C to +85°C	
Water Immersion	15m for 24 hours (Plug & Bulkhead; mated & open-face)	
Free Fall Resistance	500 Falls from 1.2m height	
Vibration/Shock	As per MIL-DTL-83526/20 /21	
Crush Resistance	6.7kN	
Corrosion Resistance	500 Hours Salt Spray	
Cable Retention	1800N (Cable Dependant)	
Weight (approx)	Plug: 120g Bulkhead: 110g	
Connector Shell Material / Color	Aluminium, Plug: black anodised Bulkhead: zinc cobalt Grip & boot: black, fluorosilicone	

*performance is dependent on assembly & termination; figures relate to CCS terminated harnesses.

Insert Arrangements



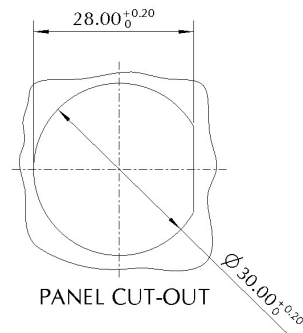
4472 - 2CH SINGLEMODE OPTICAL



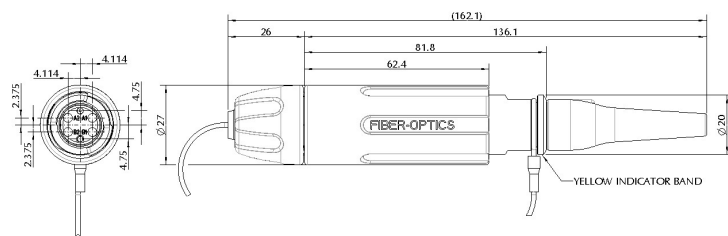
4473 - 2CH MULTIMODE OPTICAL



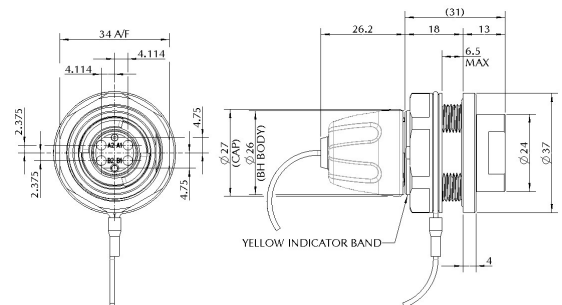
2707 - 4CH MIXED MODE OPTICAL



Plug Connector



Bulkhead Connector



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