

Mini Expanded Beam Connector

Fiber Optic Connectors

The Cinch Advantage

Mini expanded beam fiber optic 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 Mini expanded beam plug connector has a diameter of just 21mm making it ideal for applications where size and space requirements are critical. The Mini bulkhead connector is available with D-hole, square-flange and XLR mounting options. Low profile versions are also available.

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.

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

Features

- Mini 1 - Stratos HMC Compatible
- Mini 2 - Tyco Pro-Beam Mini & Telecast MX compatible
- Singlemode and Multimode Options
- Field terminable using standard termination tools & equipment
- Field repairable: EB insert & shell components replaceable / re-useable
- 1, 2 & 4 channel plugs and bulkheads
- Low insertion loss / high return loss



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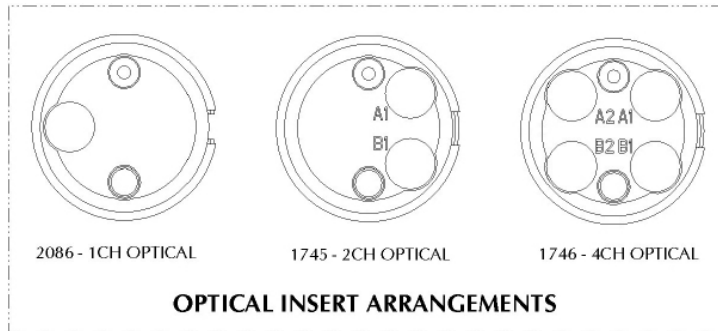
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Outline Specification

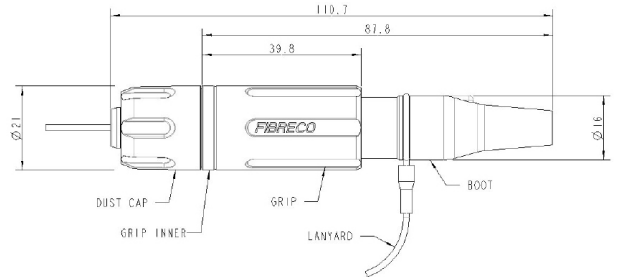
Mini Expanded Beam Connector - Outline Specification

Insertion Loss	9/125 Fiber at 1310nm / 1550nm: -1.5dB maximum (typical -1.0dB)* 50/125 Fiber at 850nm / 1300nm: -1.0dB maximum (typical -0.7dB)*
Return Loss	> 32dB (typical 40dB) singlemode / >20dB multimode*
Durability	3000 Matings minimum
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +85°C
Water Immersion	5m
Free Fall Resistance	500 Falls from 1.2m height
Vibration	10-500Hz, 3 directions, 0.75mm amplitude@ 10g acceleration
Bump	4000 bumps @ 40g acceleration
Crush Resistance	6.7kN
Corrosion Resistance	500 Hours Salt Spray
Cable Retention	1500N (Cable Dependant)
Weight (approx)	Plug: 70g Bulkhead: 65g
Connector Shell Material / Color	Black anodised aluminum shell / Stainless Steel grip ring Grip & boot: Black or Olive Green

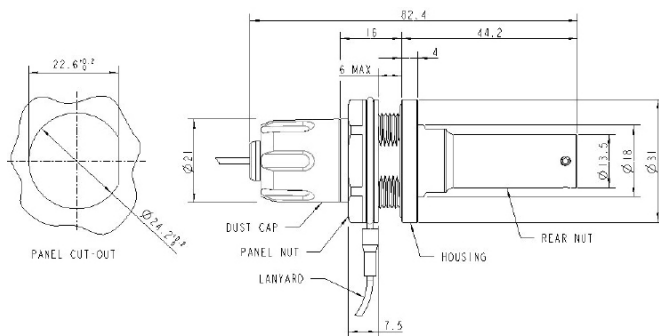
*Measurements against reference—random mate performance in line with MIL83526



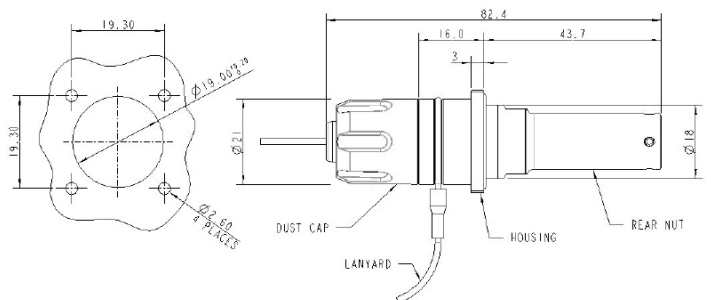
Plug Connector



Bulkhead Connector D-Hole Mount



Bulkhead Connector Square-Flange Mount



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