

F900 Expanded Beam Connector

Fiber Optic Connectors

The Cinch Advantage

F900 expanded beam fiber optic connectors are fully compatible with Stratos S900 and Tyco Pro-Beam Senior legacy connectors.

Designed specifically for military tactical communications, the F900 connector is available with 2, 4 or 8 multimode or singlemode optical channels and can be supplied with aluminum or nickel aluminum bronze shells.

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 F900 expanded beam connectors offer high performance, flexibility and cost effectiveness, combined with a simple termination process allowing rapid in-field termination and repair where compatibility with legacy products is essential.

Features

- 2, 4 or 8 Optical Channels
- Singlemode or Multimode
- Low insertion loss / high return loss
- Field terminable / repairable
- Hermaphroditic design
- Aluminum or Nickel Aluminum Bronze shell options
- Legacy product compatibility



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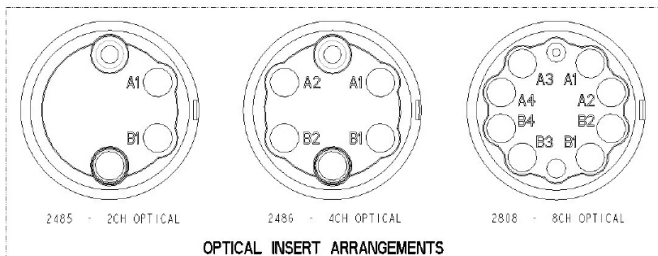
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Outline Specification

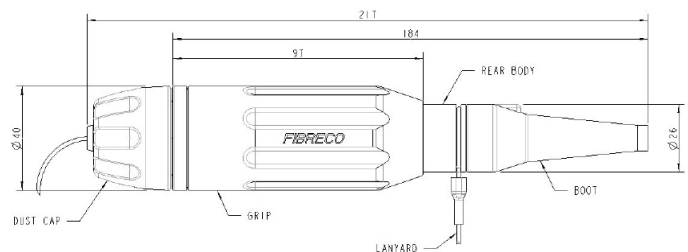
Maxi Expanded Beam Connector - Outline Specification

Insertion Loss	9/125 Fiber at 1310nm / 1550nm: 1 to 4 channels: -1.5dB max / 8 channel: -2.0dB max* 50/125 Fiber at 850nm / 1300nm: 1 to 4 channels: -1.0dB max / 8 channel: -1.5dB max*	
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 (Anodised aluminum shell)	
Cable Retention	1500N (Cable Dependant)	
Weight (approx)	Aluminum	Nickel Aluminum Bronze
Plug:	320g	650g
Bulkhead:	190g	400g
Connector Shell Material / Color	Black Anodised Aluminum, or Stainless Steel. Grip & boot: Black or Olive Green	

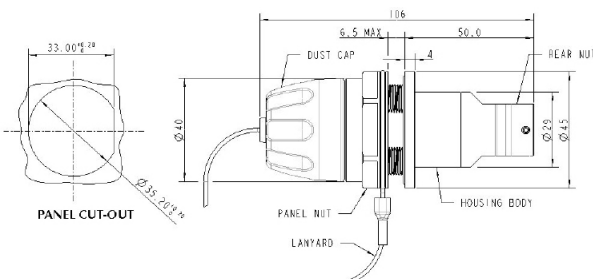
*Measurements against reference—random mate performance in line with MIL83526



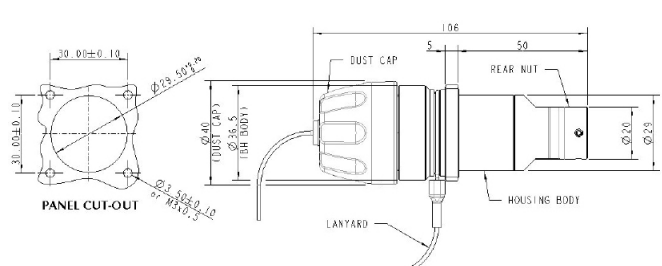
Plug Connector



Bulkhead Connector D-Hole Mount



Bulkhead Connector Square-Flange Mount



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