

Fibreco connectors

F900 Expanded Beam Connector

Productsheet
F900 Expanded Beam Connector

V1.0, 17-05-2016

Contact

In case of any questions,
call us on +31 (0)416-387700 or
sent an email to:
sales@simacelectronics.nl.

We like to help you!



The Fibreco 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 aluminium or nickel aluminium 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 Fibreco.

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
- Aluminium, Nickel Aluminium shell options

Fibreco Expanded Beam
Fast and easy
Suitable for many applications
Designed for harsh environment

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Optical

Insertion Loss	9/125 Fiber at 1310nm / 1550nm: 1 to 4 channels: -1.5dB max 8 channels: -2.0dB max* 50/125 Fiber at 850nm / 1300nm: 1 to 4 channels: -1.0dB max 8 channels: -1.5dB max*
Return Loss	> 32dB (typical 40dB) singlemode / >20dB multimode*

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

Mechanical

Durability	3000 Matings minimum
Free Fall Resistance	500 Falls from 1.2m height
Vibration	10-500Hz, 3 directions, 0.75mm amplitude@ 10g acceleration
Crush Resistance	6.7kN
Cable Retention	1500N (Cable Dependant)
Weight (approx)	Plug: Aluminium 320g, Nickel Aluminium Bronze 650g Bulkhead: Aluminium 190g, Nickel Aluminium Bronze 400g
Connector Shell Material / Color	Black anodised Aluminium, Nickel Aluminium Bronze Grip & boot: Black or Olive Green

Enviromental

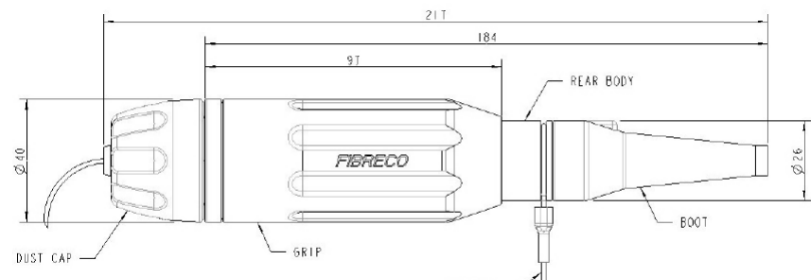
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +85°C
Water Immersion	5m
Corrosion Resistance	500 Hours Salt Spray

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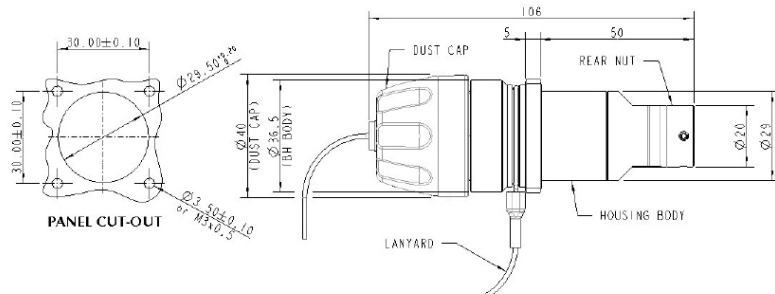
F900 Expanded Beam Connector

Drawings

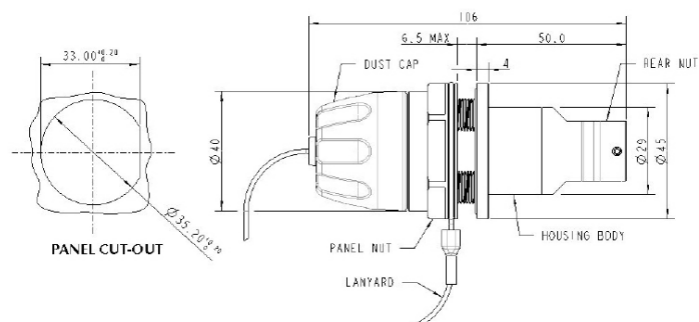
Plug Connector



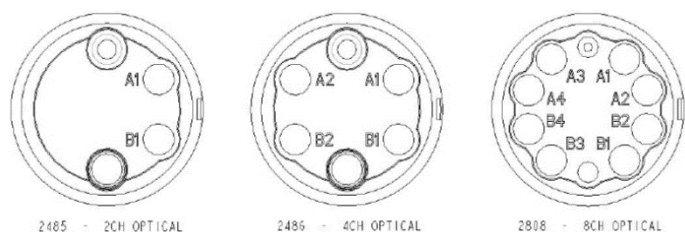
Bulkhead Connector Square-Flange mount



Bulkhead Connector Square-Flange mount



Optical Insert Arrangements



More information

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