



Maxi Expanded Beam Connector

The Maxi Expanded Beam Fibre 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 where fibre counts are critical.

The Maxi Connector features are a fully-sealed hermaphroditic coupling, high multimode and single-mode optical performance, and a plug shell diameter of just 40 mm.

The connectors are terminated using an epoxy-polish ferrule termination process with standard fibre 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.

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 fibres.

The Maxi Expanded Beam connectors offer high performance, flexibility and cost effectiveness.

Features

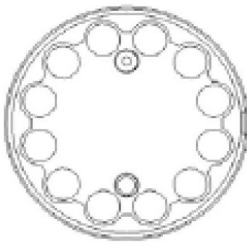
- 12 or 16 Optical channels
- Single-mode or multimode
- Low insertion loss/high return loss
- Field terminable/repairable
- Hermaphroditic design
- Aluminium, nickel aluminium bronze or 316 grade stainless steel shell options
- Fully sealed (IP68)

Maxi Expanded Beam Connector

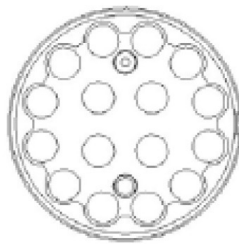
Connector Specifications

| | | | | |
|-----------------------------------|--|------------------|----------------------------------|--------------------------------|
| Insertion loss | 9/125 Fibre at 1310 nm / 1550 nm: -2.0 dB maximum (typical < -1.5 dB) 50/125 Fibre at 850 nm / 1300 nm: -1.5 dB maximum (typical < -1.0 dB) | | | |
| Return loss | > -32 dB (typical - 40 dB) | | | |
| Durability | 3000 Matings minimum | | | |
| Operating temperature | -40°C to +85°C | | | |
| Storage temperature | -55°C to +85°C | | | |
| Water immersion | 15 m | | | |
| Free fall resistance | 500 falls from 1.2 height | | | |
| Vibration | 10-500 Hz, 3 directions, 0.75 mm amplitude at 10 g acceleration | | | |
| Bump | 4000 bumps at 40 g acceleration | | | |
| Crush resistance | 6.7kN | | | |
| Corrosion resistance | 500 hours salt spray | | | |
| Cable retention | 1500 N (Cable dependent) | | | |
| Weight (approx) | | Aluminium | 316 Grade Stainless Steel | Nickel Aluminium Bronze |
| | Plug: | 310 g | 575 g | 575 g |
| | Bulkhead: | 210 g | 390 g | 390 g |
| Connector shell material / colour | Black anodised aluminium, nickel aluminium bronze or 316 grade stainless steel. Grip and boot: Black or olive green | | | |

Optical Insert Arrangement



2161 - 12CH Optical

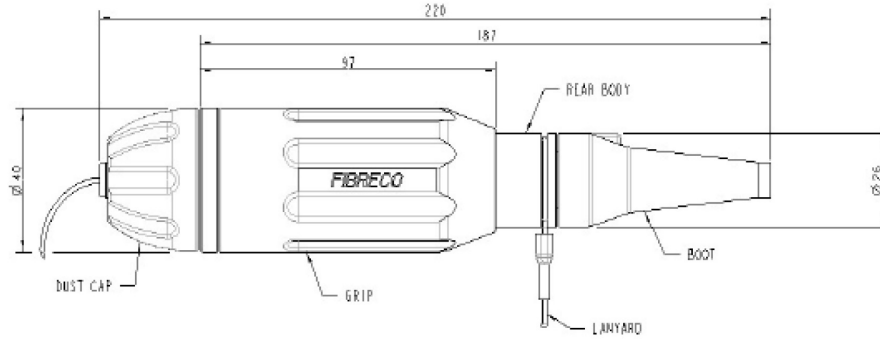


2162 - 16CH Optical

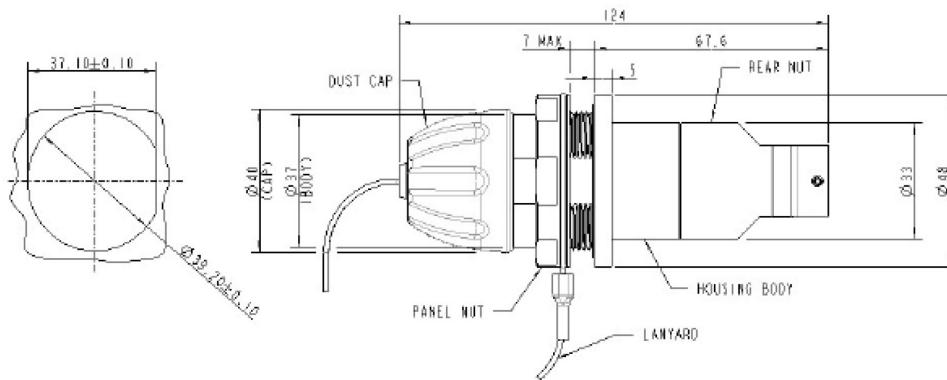


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Plug Connector



Bulkhead Connector D-Hole Mount



Bulkhead Connector Square-Flange Mount

