

# Fibreco connectors

## Maxi Expanded Beam Connector

**Productsheet**  
**Maxi Expanded Beam Connector**

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### **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**

Maxi 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 where high fiber counts are critical.

The Maxi connector features a fully sealed hermaphroditic coupling with high multimode and singlemode optical performance.

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.

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

### **Features**

- 12 or 16 Optical Channels
- Singlemode or Multimode
- Low insertion loss / high return loss
- Field terminable / repairable
- Hermaphroditic design
- Aluminium or Stainless Steel shell options
- Fully sealed (IP68)

**Fibreco Expanded Beam**

**Fast and easy**

**Suitable for many applications**

**Designed for harsh environment**



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## Maxi Expanded Beam Connector

### Optical

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Insertion Loss	9/125 Fiber at 1310nm / 1550nm: -2.0dB maximum (typical <-1.5dB)* 50/125 Fiber at 850nm / 1300nm: -1.5dB maximum (typical <-1.0dB)*
Return Loss	> 35dB (typical 40dB) singlemode / >20dB multimode*

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

### Mechanical

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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 310g, Stainless Steel 575g, Nickel Aluminium Bronze 575g Bulkhead: Aluminium 210g, Stainless Steel 390g, Nickel Aluminium Bronze 390g
Connector Shell Material / Color	Black anodised Aluminium or Stainless Steel. Grip & boot: Black or Olive Green

### Enviromental

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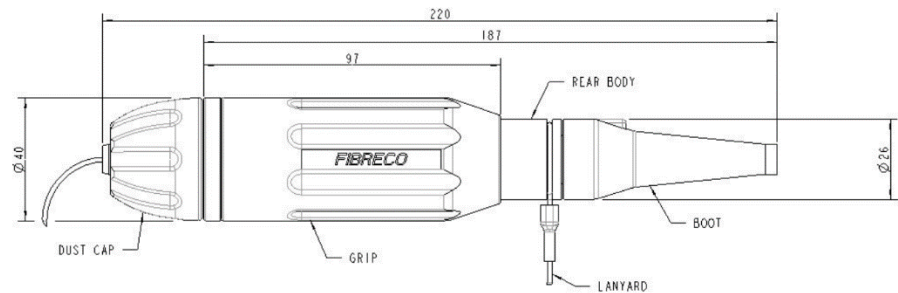
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +85°C
Water Immersion	15m
Corrosion Resistance	500 Hours Salt Spray

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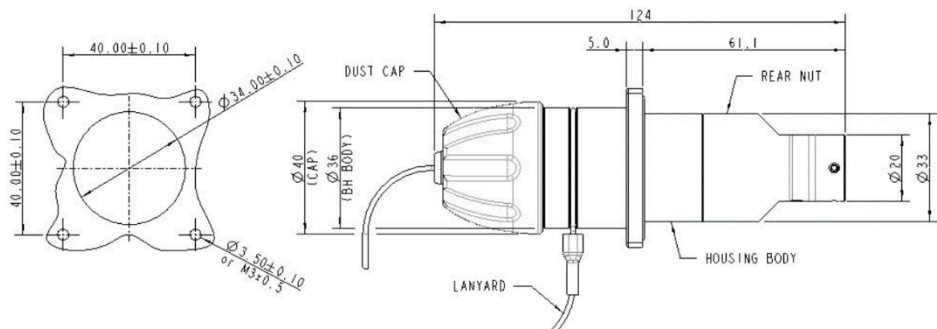
## Maxi Expanded Beam Connector

### Drawings

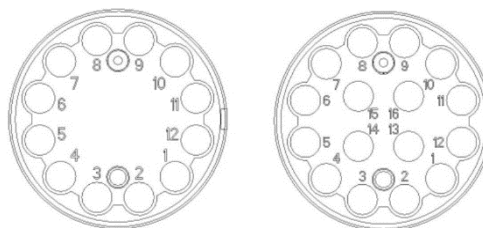
#### Plug Connector



#### Bulkhead Connector Square-Flangemount



#### Optical Insert Arrangements



### More information

Check [www.simacelectronics.nl](http://www.simacelectronics.nl) or call us on +31 (0) 416 387 711. We like to help you!

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[www.simac.co](http://www.simac.co)

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