Fibreco connectors

Senior Expanded Beam Connector

Productsheet
Senior 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!

Fibreco Expanded Beam
Fast and easy
Suitable for many apllications
Designed for harsh enviroment

The Fibreco advantage

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 Senior connector range includes 1, 2, 4, 6 and 8 optical channel versions and five fiber optic / electrical hybrid variants.
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 hybrid connectors, electrical connections are made via standard gold plated MIL-C-39029 crimp contacts.
The Senior expanded beam connectors offer high performance, flexibility and cost effectiveness, combined with a simple termination process allowing rapid in-field termination and repair.

Features

- 1 to 8 Optical Channels
- Fiber Optic / Electrical hybrid variants
- Singlemode or Multimode
- Low insertion loss / high return loss
- Field terminable / repairable
- Hermaphroditic design
- Aluminium, Nickel Aluminium, Bronze or Stainless Steel shell options

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Optical

Insertion Loss	9/125 Fiber at 1310nm / 1550nm: 1 to 4 channels: -1.5dB max 6 & 8 channels: -2.0dB max*
	50/125 Fiber at 850nm / 1300nm: 1 to 4 channels: -1.0dB max 6 & 8 channels: -1.5dB max*
Return Loss	> 35dB (typical 40dB) singlemode / >20dB multimode*

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

Electrical

Power contacts	Size 20 & size 16 MIL-C-39029. Contact resistance <4mΩ. Operating voltage 1000VAC.
	Operating current 5A (short term 15A)
Test Voltage	Between contacts and contact / housing: 3000V / 50Hz, 1 minute EN61984

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 160g, Stainless Steel 300g, Nickel Aluminium Bronze 285g Bulkhead: Aluminium 150g, Stainless Steel 255g, Nickel Aluminium Bronze 240g
Connector Shell Material / Color	Black anodised Aluminium, Nickel Aluminium Bronze or Stainless Steel. Grip & boot: Black or Olive Green

Enviromental

Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +85°C
Water Immersion	15m

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Corrosion Resistance	500 Hours Salt Spray

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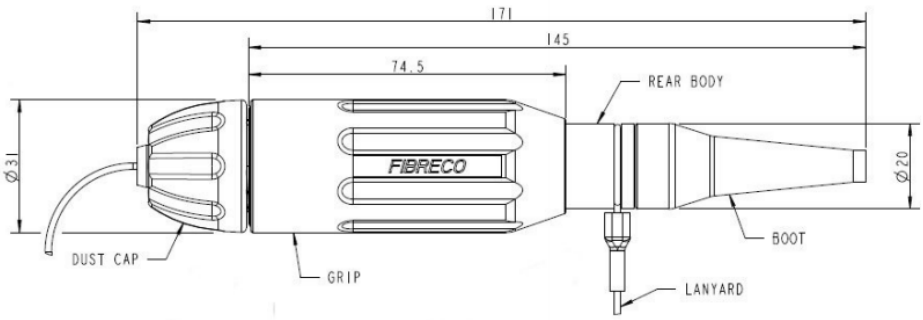
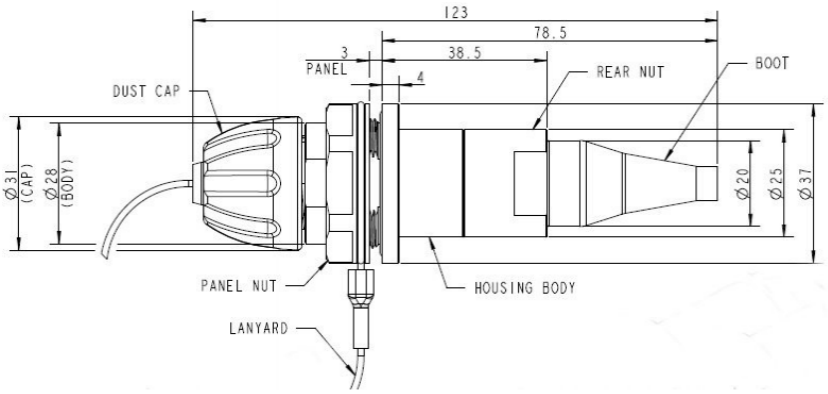
Drawings

Plug Connector

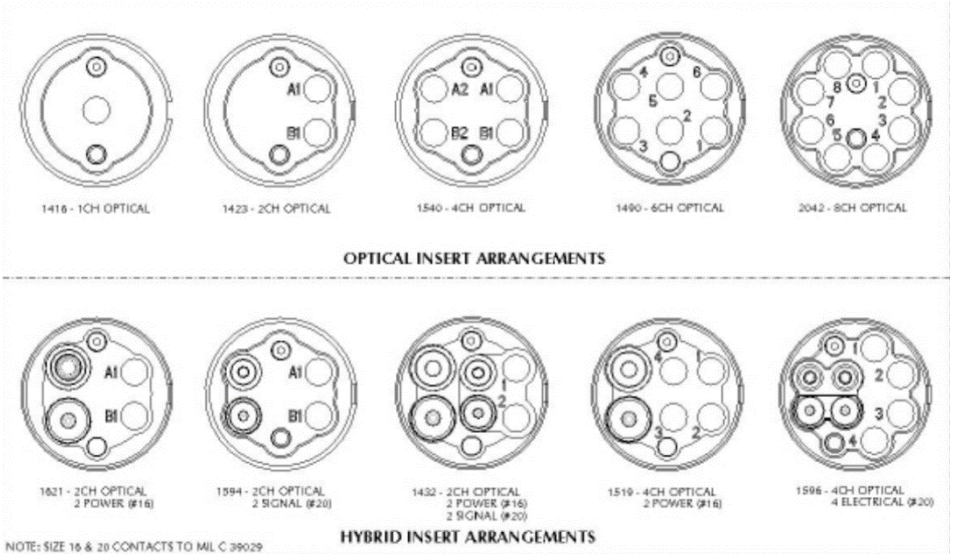


Bulkhead Connector

D-hole mount



Optical Insert Arrangements



More information

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