# Fibreco connectors

## Mini Expanded Beam Connector

Productsheet Fibreco Mini

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

Mini 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.

The Mini expanded beam plug connector has a diameter of just 21mm making it ideal for applications where size and space requirements are critical. The Mini bulkhead connector is available with D-hole, square flange and XLR mounting options. Low profile versions are also available. 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.

#### **Features**

- Mini 1 Stratos HMC Compatible
- Mini 2 Tyco Pro-Beam Mini & Telecast MX compatible
- Singlemode and Multimode Options
- Field terminable using standard termination tools & equipment
- Field repairable: EB insert & shell components replaceable / reuseable
- 1, 2 & 4 channel plugs and bulkheads
- Low insertion loss / high return loss

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





## Mini Expanded Beam Connector

### **Optical**

Insertion Loss 9/125 Fiber at 1310nm / 1550nm: -1.5dB maximum (typical –1.0dB)\*

50/125 Fiber at 850nm / 1300nm: -1.0dB maximum (typical -0.7dB)\*

Return Loss > 32dB (typical 40dB) singlemode / >20dB multimode\*

#### Mechanical

Durability 3000 Matings minimum

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

Cable Retention 1500N (Cable Dependant)
Weight (approx) Plug: 70g Bulkhead: 65g

Connector Shell Material / Color Black anodised aluminium shell / Stainless Steel grip ring

Grip & boot: Black or Olive Green

### **Enviromental**

Operating Temperature  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ Storage Temperature  $-55^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ 

Water Immersion 5m

Corrosion Resistance 500 Hours Salt Spray

#### More information

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

www.simac.co

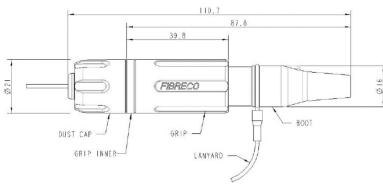
<sup>\*</sup>Measurements against reference—random mate performance in line with MIL83526

# Fibreco

# **Mini Expanded Beam Connector**

## **Drawings**

**Plug Connector** 



#### **Optical Insert Arrangements**



**Bulkhead Connector D-Hole Mount** 

22.6% 2 6 MAX 44.2

DUST CAP
PANEL CUT-OUT

PANEL NUT
LANYARD

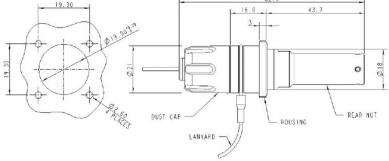
19.30

82.4

43.7

Bulkhead Connector

Square-Flange Mount



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