

# Fibreco Mini Series Expanded Beam



Fibreco Mini 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.

The Fibreco 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.

Fibreco Mini expanded beam connectors offer a cost effective high performing, compact and flexible solution that is proven in the toughest environments and is the solution for mission critical communications.

## Applications

- Broadcast
- Military communications
- Industrial, mining and petrochemical
- Intermateable with Stratos HMC<sup>1</sup>, Tyco Pro-beam mini<sup>2</sup> & Telecast MX<sup>2</sup>

## Features & Benefits

- Advanced expanded beam technology
- Hermaphroditic interconnection
- 1 to 4 fibre channels single mode or multi mode
- Compact size plug with only a 21mm outside diameter
- Rugged housing and construction
- Keyed boot for 'Blind Mating'
- Industry leading expanded beam optical performance
- No adapters necessary
- Inexpensive, low downtime field cleaning requiring no special tools
- Designed to match optical requirements of MIL83526

1. Request Fibreco 'Mini 1'

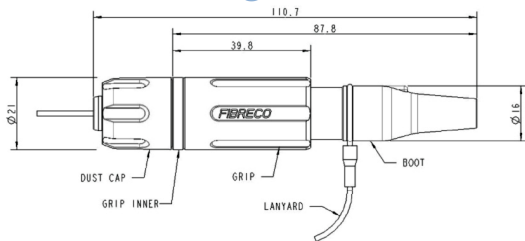
2. Request Fibreco 'Mini 2'

## Technical Specifications

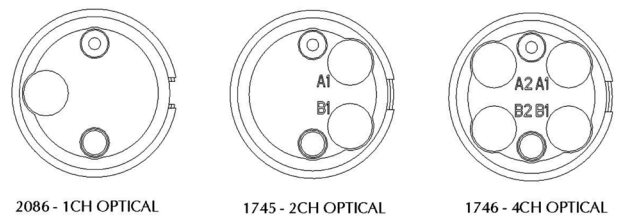
	Singlemode 9/125um @1310/1550nm	Multimode 50/125um @ 850/1300nm				
Insertion loss	1-4 Channel: 1.5 dB max 1.0 typ	1-4 Channel: 1.0 dB max 0.7 typ				
Return loss	> 32 dB (typical 40dB)	> 20 dB				
Durability	3000 matings minimum					
Operating temperature	-40 to +85°C					
Storage temperature	-55 to +85°C					
Water immersion	up to 15M depth					
Vibration sinusoidal	10-500Hz, 0.75 amplitude @ 10g acceleration, 3 directions					
Free fall resistance	500 falls onto concrete from 1.2M height					
Bump resistance	4000 bumps @ 40g acceleration					
Crush resistance	6.7 kN					
Corrosion resistance	500 hours salt spray					
Tensile strength	Tensile of 1500N, cable dependent					
Weight (nominal)	Aluminium:	<table border="1"> <thead> <tr> <th>Plug</th> <th>Bulkhead</th> </tr> </thead> <tbody> <tr> <td>120g</td> <td>110g</td> </tr> </tbody> </table>	Plug	Bulkhead	120g	110g
Plug	Bulkhead					
120g	110g					
Connector shell material & colour	Body: Black anodised aluminium with stainless steel grip ring Grip and boot: black or olive green					

## Connector Geometry & End Face Arrangement

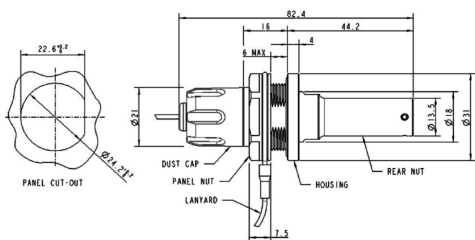
### Junior EB Plug



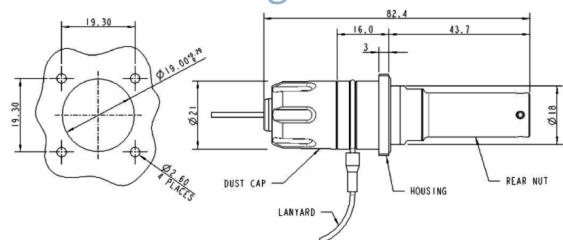
### Channel Arrangement



### Junior EB Jam Nut Bulkhead



### Junior EB Flange Mount Bulkhead



Note: All dimensions are in mm

Active | Passive | Test Equipment | Tooling | Cable | Fibre Management

For further information:  
[www.fibreoptic.com.au](http://www.fibreoptic.com.au)  
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**FOS**  
 Fibre Optic Systems