

## Junior Expanded Beam Connector

### Fiber Optic Connectors

#### The Cinch Advantage

Junior 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 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.

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

#### Features

- Singlemode and Multimode Options
- Field terminable using standard termination tools & equipment
- Field repairable: EB insert & shell parts replaceable / re-useable
- 1, 2 & 4 channel plugs and bulkheads
- 90° Backshell options for plug and bulkhead
- Low profile
- XLR



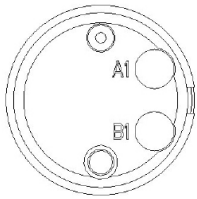
# Outline Specification

## Junior Expanded Beam Connector

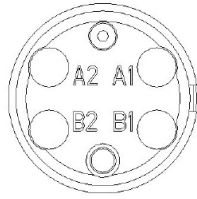
<b>Insertion Loss</b>	9/125 Fiber at 1310nm / 1550nm: -1.5dB maximum (typical -1.0dB)* 50/125 Fiber at 850nm / 1300nm: -1.0dB maximum (typical -0.7dB)*
<b>Return Loss</b>	> 32dB (typical 40dB) Singlemode / >20dB Multimode*
<b>Durability</b>	3000 Matings minimum
<b>High Temperature Storage</b>	+85°C for 16 hours
<b>Low Temperature Storage</b>	-55°C for 16 hours
<b>Water Immersion</b>	15m for 24 hours (Plug & Bulkhead, Mated & Open Face)
<b>Free Fall Resistance</b>	500 Falls from 1.2m height
<b>Vibration</b>	20-500Hz, 3 directions, 0.75mm amplitude@ 10g acceleration
<b>Stock</b>	50g 11ms Half Size
<b>Crush Resistance</b>	6.7kN
<b>Corrosion Resistance</b>	500 Hours Salt Spray
<b>Cable Retention</b>	1500N (Cable Dependant)
<b>Weight (approx)</b>	Aluminum: Plug: 120g Bulkhead: 110g / Stainless Steel: Plug: 180g Bulkhead: 200g
<b>Connector Shell Material / Color</b>	Black anodised Aluminum or Stainless Steel Grip & boot: Black or Olive Green

\*Thermal Shock -55°C to 85°C

### Optical Insert Arrangements

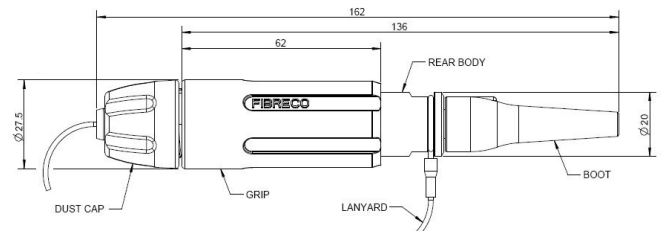


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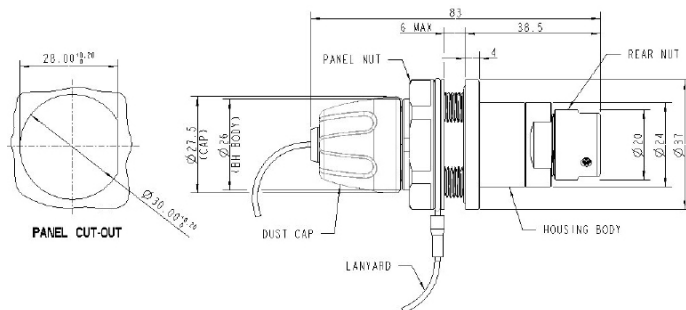


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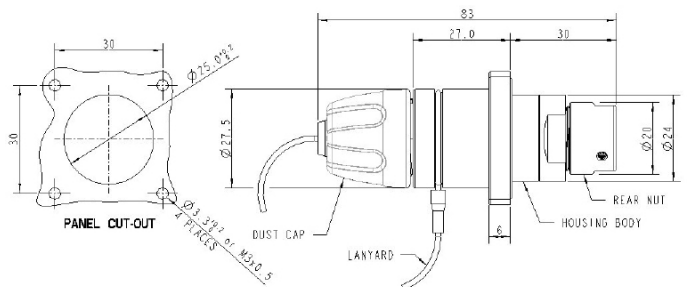
### Plug Connector



### Bulkhead Connector D-Hole Mount



### Bulkhead Connector Square-Flange Mount



Cinch Connectivity Solutions reserves the right to change specifications without notice



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