











# Junior Expanded Beam Connector



MIL-DTL-83526 Specification

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

Low insertion loss / high return loss

90° Backshell options for plug and bulkhead

Fibreco Junior 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 connectors are terminated using an epoxy-polish ferrule termination process with standard fibre 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 fibres. Typically, an expanded beam insert can be replaced within 30 minutes in field conditions.

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

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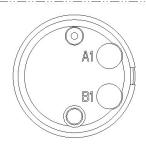




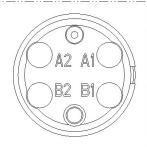
# Junior Expanded Beam Connector - Outline Specification

### Connector Specification:

Insertion Loss	9/125 Fibre at 1310nm / 1550nm: -1.5dB maximum (typical –1.0dB)* 50/125 Fibre at 850nm / 1300nm: -1.0dB maximum (typical –0.7dB)*
Return Loss	> 32dB (typical 40dB) singlemode / >20dB multimode*
Durability	3000 Matings minimum
Operating Temperature	-55°C to +85°C
Storage Temperature	-55°C to +85°C
Water Immersion	15m
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
Corrosion Resistance	500 Hours Salt Spray
Cable Retention	1500N (Cable Dependant)
Weight (approx)	Aluminium: Plug: 120g Bulkhead: 110g / Stainless Steel: Plug: 180g Bulkhead: 200g
Connector Shell Material / Colour	Black anodised Aluminium or Stainless Steel Grip & boot: Black or Olive Green







2411 - 4CH OPTICAL

### OPTICAL INSERT ARRANGEMENTS















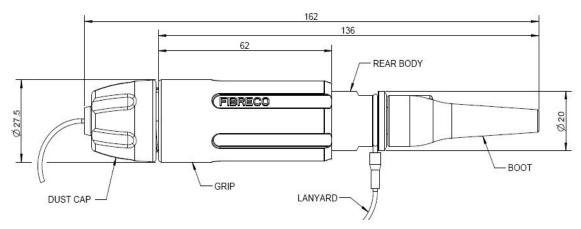




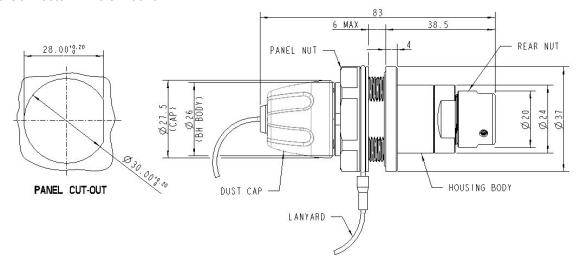


## Junior Expanded Beam Connector - Outline Specification

### Plug Connector:



#### **Bulkhead Connector D-Hole Mount:**



### Bulkhead Connector Square-Flange Mount:

