

# MIL-DTL-83526 CERTIFIED

**Cinch Connectivity Solutions – Mil-Junior** 

# **The Cinch Advantage**

Our military certified expanded beam 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. Typically, an expanded beam insert can be replaced within 30 minutes in field conditions.

The MIL-DTL-83526 Certified expanded beam connectors offer high performance, flexibility and cost effectiveness, combined with a simple termination process allowing rapid in-field termination and repair.

#### **Features**

- MIL-DTL-83526/20 /21 QPL
- German Defence Standard VG 95319-100 & 102
- Singlemode & multimode options
- Field terminable using standard termination tools & equipment
- Field repairable: EB insert & shell parts replaceable / re-useable
- 2 & 4 channel plugs and bulkhead receptacles
- Low insertion loss / high return loss
- Cage Code 71785





# **Outline Specification**

#### MIL-DTL-83526 Expanded Beam Connector

Insertion Loss	Singlemode	-2.5dB (typical -1.5dB)*
	Multimode	-2.0dB (typical -1.0dB)*
Return Loss		≥35dB (typical 40dB) singlemode
Durability		3000 Matings minimum
Operating Temperature		-46°C to +71°C
Storage Temperature		-57°C to +85°C
Water Immersion		15m for 24 hours (Plug & Bulkhead; mated & open-face)
Free Fall Resistance		500 Falls from 1.2m height
Vibration/Shock		As per MIL-DTL-83526/20 /21
Crush Resistance		6.7kN
Corrosion Resistance		500 Hours Salt Spray
Cable Retention		1800N (Cable Dependant)
Weight (approx)		Plug: 120g Bulkhead: 110g
Connector Shell Material / Color		Aluminium, Plug: black anodised Bulkhead: zinc cobalt Grip & boot: black, fluorosilicone

\*performance is dependent on assembly & termination; figures relate to CCS terminated harnesses.



**Insert Arrangements** 

2410 - 2CH OPTICAL

2411 - 4CH OPTICAL

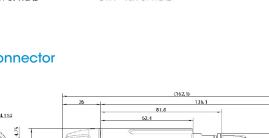
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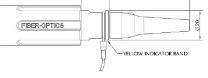
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82 B1

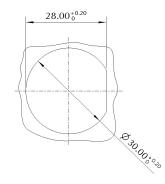
# **Plug Connector**

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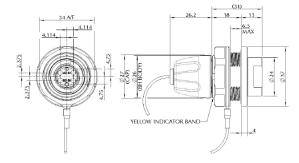




#### **Plug Cut-Out**



# **Bulkhead Connector**



Cinch Connectivity Solutions reserves the right to change specifications without notice



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