

HEBL (Hermaphroditic Expanded Beam Large) Plug



tde - HEB (Hermaphroditic Expanded Beam)

The tde - HEB (Hermaphroditic Expanded Beam) technology allows the usage of optical communication in the harshest environments and the tde connector range; provide the user with the security that the communication link will work: first time, every time. The hermaphroditic design is particularly useful and provides unique benefits in rapid deployment or cable extensions, as no adaptors are needed. Any two connectors can just be interconnected.

The connectors are available in Singlemode and Multimode with best performance in class. By design the connectors are future proof, as the optical path is optimized to support the range from 850nm to 1310nm in Multimode and 1310nm to 1550nm for Singlemode application.

These Connectors are agnostic to the signal passing through, so WDM is also possible, whenever higher bandwidth needs to be transmitted. The connectors are field repairable. The unique RFID tagging system provides a tool for inventory control and carries the performance data as an electronic test certificate. Having as standard; aluminium anodized housings, the connectors are also available in stainless steel, which meets the requirements for naval, mining and other extreme applications.



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Technical Data

The HEBL style Expanded Beam connector is following the family of Hermaphroditic Connectors from which is becoming the de facto standard in today's military market.

The broadcast and industrial markets are also using this connector style in a variety of application.

The HEBL range features 2-12 optical channels, Singlemode and/or Multimode

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- Hermaphroditic
- Multimode and Singlemode
- 2-12 Channels
- Field Repairable
- Anodized Alu / Stainless Steel/ Nickel Bronze Plated
- RFID Marked
- Military, Oil & Gas. Broadcast & Industrial

xx = Fiber: MM (Multimode), SM (Singlemode)

yy = Channel Counts: 02, 04, 06, 08, 12

	NATO qualified as per STANAG 4290
Optical Loss	50/125 at 850-1300nm (typ. 0.8dB) 9/125 at 1310-1550nm (typ. 1.0dB)
Return Loss	9/125 at 1310-1550nm (High Return Loss Versions >32dB, APC >45dB)
Operating temperature	-54 to +71°C
Storage temperature	-57 to +90°C
Environmental	IP67 rated
Vibration Sinusoidal	10-500Hz, 0.75 amplitude at 10g acceleration
Free fall resistance	500 falls onto concrete from 1.2m height
Bump resistance	4000 bumps at 40g acceleration
Tensile Strength	Tensile of 2000N, cable dependent
Cable Variations	Compatible with tactical cable: Plug: typical 6mm or 7mm OD Bulkheads: With strain relief - Same as Plug Bulkheads: Without Strain Relief < 3mm per channel

Product variants & accessories

Art.-No.	Description
HEBL-PLUG-xx-yy	HEBL (Hermaphroditic Expanded Beam Large) Plug