FALCON™ JUNIOR PLUG LP

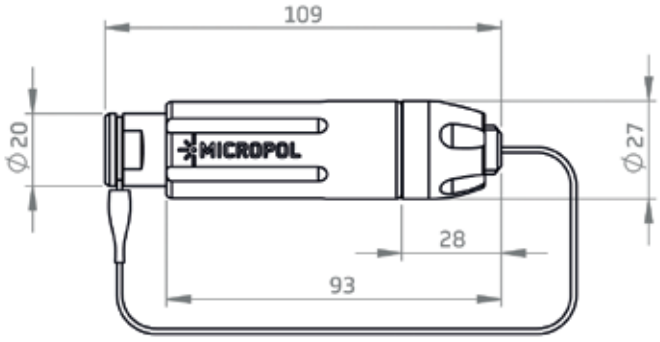
JUNIOR-SIZE EXPANDED BEAM PLUG

The FALCON Junior Plug LP is the only low-profile junior-size expanded beam plug in the world available with 1–12 fiber channels and a beam size approved according to MIL-DTL-83526/20C. The plug is designed for heavy-duty tactical applications.

This plug delivers unmatched data rates, tripling density within a standard military footprint. It mates directly with tactical fiber-optic cables fitted with other junior-size expanded beam bulkhead receptacles. It is equipped with high-performance strain relief, providing the robustness required for demanding field deployments.

Because the LP version does not include a protective boot, it is shorter than the standard FALCON Junior Plug and is therefore suitable for cabinets or confined spaces with doors or hatches. Unlike the standard version, the LP is not deployed on cable reels but is instead used for fixed installations, for example in cross-connect cabinets.

The FALCON Junior Plug LP's unique combination of 12 independent channels and 40 Gbit/s bandwidth per channel enables efficient data separation, massive multi-sensor data streams, and uncompressed high-definition video within a single rugged tactical connector footprint. Common applications include containers and combat vehicles such as the BAE CV90, where space is extremely limited.



FEATURES

- Designed in accordance with MIL-DTL-83526/20C*
- Up to 40 Gbit/s per channel
- Advanced expanded beam technology
- Compact connector design
- Hermaphroditic interconnection
- 1–12 fiber channels, single-mode, multi-mode or mixed mode
- No adapters required
- Low-downtime field maintenance
- Easy cleaning, no special tools required

* Excludes the 12-channel configuration

COMPATIBLE WITH*

- FIBRECO Junior
- QPC Q - Mini
- TE PRO-BEAM - Junior
- Amphenol TacBeam
- Stratos HMA

* Excludes the 12-channel configuration

TECHNICAL SPECIFICATION
FALCON JUNIOR PLUG LP

MICROPOL

STANDARD CONFIGURATIONS

FALCON™ Junior	1 to 12 channels

OPTICAL

Type	Single-mode (SM), multi-mode (MM) or mixed mode
Bandwidth	Up to 40Gbit/s
Insertion loss (SM)	Typical: -0.8 dB (1,310 nm) Maximum: -1.2 dB (1,310 nm)
Insertion loss (MM)	Typical: -0.8 dB (1,300 nm) Maximum: -1.0 dB (1,300 nm)
Return loss (PDL)	> 35 dB at 1,310 nm or 1,550 nm Polarization dependent loss < 0.35 dB

MECHANICAL

Coupling type	Hermaphroditic
Compliance	ROHS & REACH
Material	Hard anodized aluminum (MIL-A-8625 TYPE III CLASS 2)
Optional material	Marine bronze, stainless steel or titanium
Color	Gray
Durability	3,000 mating cycles (MIL-DTL-83526)
Free fall	500 drops from 1.2 meters height (IEC 68-2-32-P II)
Vibration	5-500 Hz, 0.75 mm amplitude at 10 g (IEC 68-2-6-Fc)
Mechanical shock	3 x 4,000 cycles at 390 m/s^2 (IEC 68-2-29-Eb)
Shock pulse	11 ms, half sine at 35 g, 3 axes (x, y, z) (IEC 68-2-29-Eb)

ENVIRONMENTAL

Operating temperature	-57 °C to +85 °C, +100 °C optional
Ingress protection	IPX7
Air pressure	< 25 kPa -55 °C during 4h (IEC 68-2-13, test M)
Corrosion resistance	500h salt spray (IEC 68-2-11 ka)
Flammability	DOD-STD-1678, method 5010

V6.3, 2026-06-29

MORE INFORMATION