

FALCON™

JUNIOR SQUARE



The FALCON connectors offer the best attenuation values and smallest 12-channel connector foot print on the market. With an insertion loss of <1,2 dB it outperforms NATO specification (<2,5 dB).

This is achieved with Micropol's lens technology, state of the art production and alignment process.

The FALCON expanded beam connector JR SQ is the only junior-sized connector in the world with a range from 1- 12 fibers, that have approved beam size according to MIL-M83526/20&21.

Like the other connectors in the FALCON family, it is compatible with other Junior-size expanded beam connectors on the market.

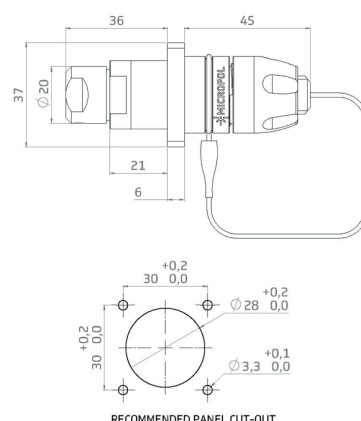
FEATURES

- Insertion loss <1,5 dB
- Only expanded beam approved for 40G transmission per channel (optional)
- Only 12-channel junior connector in the world with collimated light beam according to MIL-DTL-83526/20&21
- Temperature range 57°C – +85°C
- Hermaphroditic interconnection
- Rugged connector design
- Keyed boot for blind mating
- No adaptors needed
- Easy clean, no special tools

COMPATIBLE WITH

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

*Does not apply to 12 channels



STANDARD CONFIGURATIONS

FALCON™ Junior	1 to 12 channels
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OPTICAL

Type	Single mode (SM), multimode (MM) or hybrid
Transmission	10Gbit/s (40Gbit/s optional)
Insertion loss (SM)	Typical Insertion Loss -0,8dB (1310 nm) Maximum Insertion Loss -1,2dB (1310 nm)
Insertion loss (MM)	Typical Insertion Loss -0,8dB (1300 nm) Maximum Insertion Loss -1,0dB (1300 nm)
Return loss (PDL)	>35dB at 1310nm or 1550nm Polarization dependent loss less than 0,35dB

MECHANICAL

Coupling type	Hermaphroditic
Compliant	ROHS & REACH
Material	Hard anodized aluminum (MIL-A-8625 TYPE III CLASS 2)
Alternative material	Marine bronze, stainless steel or titanium
Colour	Grey
Durability	3000 mating cycles (MIL-DTL-83526)
Free fall	500 falls from 1,2 meters height (IEC 68-2-32-P II)
Vibration	5-500Hz, 0,75mm amplitude at 10G
Shaking	390 m/S numbers of shakes 3x4000
Shock pulse length	11 ms, half sine at 35g Numbers of axis: 3 (x, y, z)
Recommended wall thickness	2-3 mm - not valid for cable plug JR and Mini

ENVIRONMENTAL

Operating temperature	-57°C to +85°C, +100°C optional
Water immersion	IP67
Air pressure	<25kPa -55°C during 4h
Corrosion resistance	500h salt spray
Flammability	DOD-STD-1678, method 5010

V7.2, 2025-10-14



MORE INFORMATION