



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 (<2,5 dB).

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

The FALCON Mini Square is the smallest expanded beam connector available on the market today. It can be configured with single-mode or multi-mode from 1 channel to 4 channels.

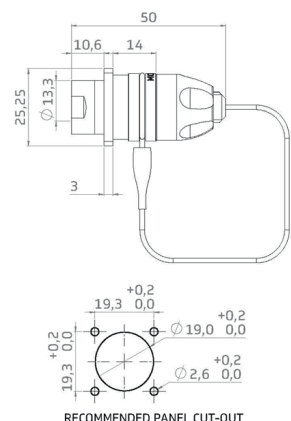
Like the other connectors in the FALCON family, it is compatible with other Mini-size expanded beam connectors on the market.

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 - MINI 2
- QPC Q - MICRO
- TE PRO-BEAM - MINI
- TELECAST MX - MINI



STANDARD CONFIGURATIONS

FALCON™ Mini	1 to 4 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	11ms, 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

V5.2, 2025-10-09



MORE INFORMATION