FALCONTM EXPANDED BEAM CONNECTOR

Productsheet FALCON Expanded Beam Connector

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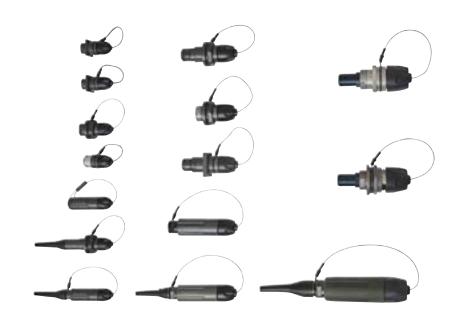
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FEATURES

- Insertion loss <1,2 dB vs. Nato std >2,5 dB
- Only expanded beam approved for 40G transmission (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 (+100°C optional)
- Hermaphroditic interconnection
- 1 to 16 fiber channels singlemode or multimode
- Rugged connector design
- Keyed boot for 'blind mating
- No adaptors needed
- Easy clean, no special tools

The FALCON connectors offer the best attentuation values and smallest 12-channel connector foot-print on the market. With an insertion loss of <1,2 dB, it outperforms the NATO specification (<2,5 dB). In addition, the FALCON is the only expanded beam connector on the market that has proven to transfer 40Gbit/s over one channel.

Micropol supplies cable systems with rugged, high-quality cables that can cope with both extreme temperatures ranging from -57°C to +100°C and high physical impact. Our fiber optic cables are tested to last +15.000.000 bends at 30 mm radius and can hang free for 2 km with proportions intact. Lengths range from a few decimeters up to several kilometers. Bulkhead connectors can be provided with conductive surface to discard EMI.



COMPATIBLE CHART

Brand	FALCON™ MINI	FALCON™ JR	FALCON™ SR
FIBRECO JUNIOR		X	
FIBRECO MINI 2	Χ		
QPC Q-MICRO	Χ		
QPC Q-MINI		X	
TE PRO-BEAM	Χ	X	X
TELECAST MX - MINI	Χ		
Amphenol TacBeam		X	
Stratos S900			X
Fibreco F900			X
Stratos HMA		X	



FALCONTM EXPANDED BEAM CONNECTOR

Standard configurations

FALCON™MINI 1 to 4 channels FALCON™JUNIOR 1 to 12 channels FALCON™SENIOR 1 to 16 channels

Optical

Type Single mode (SM), multimode (MM) or hybrid

Insertion loss (SM) Typical Insertion Loss -0,8dB (1310 nm)

Maximimum 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 >35dB at 1310nm or 1550nm

Polarization Dependent Loss less than 0,35dB

Mechanical

Coupling type Hermaphroditic
Compliant ROHS & REACH

Material Hard anodized aluminum

Alternative material Marine bronze & stainless steel

Colour Gray

Durability 3000 mating cycles

Free fall 500 falls from 1,2 meters height
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

Environmental

Operating temperature | -57°C to +85°C, +100°C optional

Water immersion IP6

Air pressure <25kPa -55°C during 4h

Corrosion resistance 500h salt spray

Flammability DOD-STD-1678, method 5010

