FALCON™ EXPANDED BEAM CONNECTOR

Product sheet
FALCON Expanded Beam Connector

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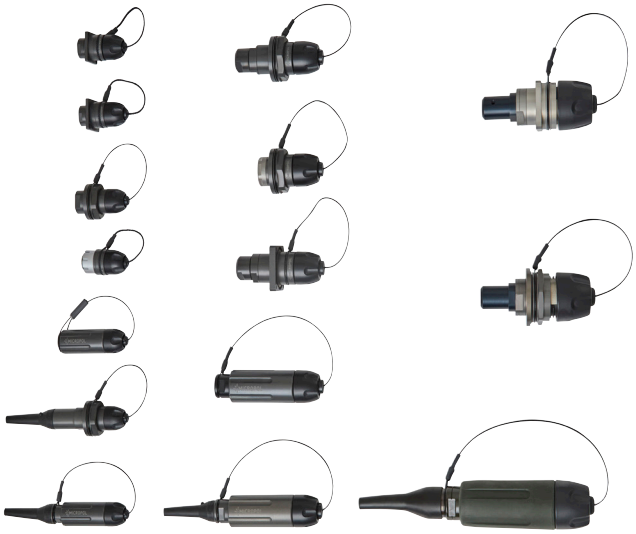
The FALCON connectors offer the best attentuation values and smallest 12-channel connector foot-print on the market. With an insertion loss of <1,2 dB, it outperforms the NATO specification (<2,5 dB). In addition, the FALCON is the only expanded beam connector on the market that has proven to transfer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



FEATURES

- Insertion loss <1,2 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 (+100°C optional)
- Hermaphroditic interconnection
- Rugged connector design
- Keyed boot for blind mating
- No adaptors needed
- Easy clean, no special tools
- FALCON™Mini 1 to 4 channels
- FALCON™JR 1 to 12 channels
- FALCON™SR 1 to 16 channels

COMPATIBLE CHART

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

FALCON™ 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
Transmission	10Gbit/s (40Gbit/s optional)
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 or titanium
Colour	Grey
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	IP67
Air pressure	<25kPa -55°C during 4h
Corrosion resistance	500h salt spray
Flammability	DOD-STD-1678, method 5010