

Fiber Optic Connectors & Cable Assemblies

X-BEAM TECH

HXB CONNECTOR SERIES

FEATURES

RoHS
COMPLIANT

- Advanced expanded beam technology
- Rugged field deployable fiber optic connector
- Hermaphroditic interconnection
- 1 to 16 optical channels
- Singlemode (SM) or Multimode (MM)
- Optical/electric hybrid configurations available
- Custom configurations available
- Environmental sealing (IPX8)
- Very high resistance to vibration, shock, environmental effects, dust, and debris
- Easy clean, no special tools
- No adaptors necessary
- Cables assemblies with plugs and bulkheads



DESCRIPTION

The HXB13 Connectors, featuring expanded beam technology, hermaphroditic connections, and rugged construction for field deployment and hybrid configurability, have been designed for harsh environment applications such as military tactical communications, avionics, offshore systems, outside broadcast, mining, and plants.

The expanded beam technology uses expanded and collimated beams to couple optical fibers without any contact. It could allow for optics to be used in areas that have been quite restrictive due to the presence of damage or contamination at the fiber end. The hermaphroditic connector design enables fast deployment by daisy-chaining multiple cable segments.

APPLICATIONS

- Military Communications
- Avionics, Marine
- Mining, Oil and Gas
- Rail, Transport
- Broadcast
- Telecommunications
- Medical
- Industrial

SPECIFICATIONS

Optical Performance

Insertion Loss	Typical 0.8 - 1.8 dB @ 1310, 1550 nm Typical 0.5 - 1.0 dB @ 850, 1300 nm	Singlemode Multimode
Return Loss	> 32 dB	Singlemode only

Mechanical Performance

Durability	3,000 mating cycles
Operating Temperature	-40 °C to 85 °C
Storage Temperature	-55 °C to 85 °C
Water Immersion	Up to 15 m
Free Fall	500 falls @ 1.2 m
Vibration	10 - 500 Hz, 3 axis, 0.75 mm, 10 g
Shock	11 ms, 3 axis, 50 g

HOW TO ORDER

X-BEAM TECH

HXB CONNECTOR SERIES

HOW TO ORDER

For more information on how to order or to obtain a price quote on our HXB Connectors, please call us at +82-2-864-7280 or email sales@xbeamtech.co.kr.

ORDER INFORMATION Order Example)

Connector only

Cable assembly

HXB 13 - PSD - B - O4 - M1 - D55_(C03)

HXB 13AS - RJS - B - O4 - M1 - S20 - LC - 020/30 D

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---

1	Shell Size	11 13 15	Shell Size 11, Mini Size Shell Size 13, Junior Size Shell Size 15, Senior Size	
2	Connector A	PSD RJS RJL RQS RQL CXX	Plug with Dust Cap Receptacle, Jam Nut, Standard, Dust Cap Receptacle, Jam Nut, Low Profile, Dust Cap Receptacle, Square Flange, Standard, Dust Cap Receptacle, Square Flange, Low Profile, Dust Cap Customized Connector	
3	Shell Material & Finish	B X	Aluminum Alloy, Black Hard Anodized Others	
4	Arrangement	O1, O2, O4	1 / 2 / 4 CH OPTICAL	Shell Size 11
		O2, O4	2 / 4 CH OPTICAL	Shell Size 13
		I2	2 CH OPTICAL, 2 CH AWG20	
		O2, O4, O6, O8, O4	2 / 4 / 6 / 8 / 10 CH OPTICAL	Shell Size 15
		H2	2 CH OPTICAL, 2 CH AWG20, 2 CH AWG16	
		I2, I4	2 / 4 CH OPTICAL, 2 CH AWG20	
		J2, J4	2 / 4 CH OPTICAL, 2 CH AWG16	
		K2, K4	2 / 4 CH OPTICAL, 4 CH AWG20	
5	Fiber Type	S1 M1 M2 M3	SM – 9 μm core Single-mode Fiber OM1 – 62.5 μm core Multimode Fiber OM2 – 50 μm core Multimode Fiber OM3 – 50 μm core Multimode Fiber	
6	Cable Option	S09	ø 0.9 mm Buffered Fiber – RJL, RQL	
		S20	ø 2.0 mm Jacketed Cable – RJS, RQS	
		D55	ø 5.5 mm Outdoor Cable – PSD, RJS, RQS	
		DXX	Others	
7	Connector B	SA SC LC ST CX	Same as Connector A SC Connector LC Connector ST Connector Customized Connector	
8	Cable Length	L1/L2	Total Length (m)/ Distribution Length (cm)	
		100	Total 100m	
		020/30B	Total 20m / Distribution 30cm Breakout Cable	
		020/30D	Total 20m / Distribution 30cm Distribution Cable	
		For custom requirements, please consult us.		

Note. Other configurations, materials and finishes available upon request