

Fiber Optic Connector Series

X-BEAM TECH

HXB15 CONNECTOR

FEATURES

RoHS
COMPLIANT

- Advanced expanded beam technology
- Rugged field deployable fiber optic connector
- Hermaphroditic interconnection
- 2, 4, 6, 8, and 10 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 HXB15 connectors, featuring expanded beam technology, hermaphroditic connections, and rugged construction for field deployment have been designed for harsh environment applications such as military tactical communications, avionics, offshore systems, outside broadcast, mining and plant.

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. HXB15 connectors also enable the transfer of electrical signals or power using a hybrid insert configuration.

APPLICATIONS

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

SPECIFICATION

Optical Performance

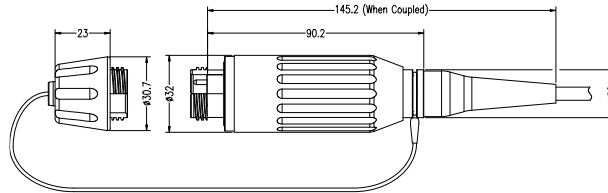
Insertion Loss	Typical 0.8 - 1.8 dB @ 1310, 1550 nm Typical 0.5 - 1.0 dB @ 850, 1300 nm	Singlemode Multimode
Return Loss	> 32 dB	Singlemode only

Mechanical Performance

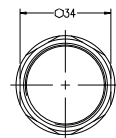
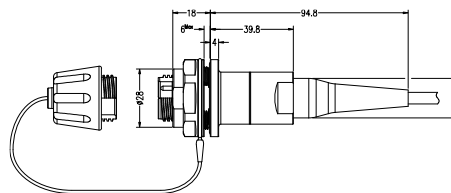
Durability	3,000 mating cycles
Operating Temperature	-40 °C to 85 °C
Storage Temperature	-55 °C to 85 °C
Water Immersion	Up to 15 m
Free Fall	500 falls @ 1.2 m
Vibration	10 - 500 Hz, 3 axis, 0.75 mm, 10 g
Shock	11 ms, 3 axis, 50 g

HXB15 CONNECTOR**DIMENSIONS****HXB15
Plug Connector**

HXB15-PSD
Standard Plug with Dust Cap

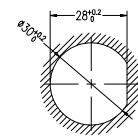
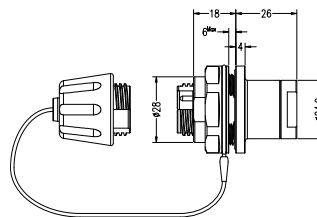
**HXB15
Jam Nut Receptacle**

HXB15-RJS
Receptacle, Jam Nut,
Standard, Dust Cap



Flange Nut

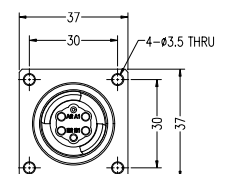
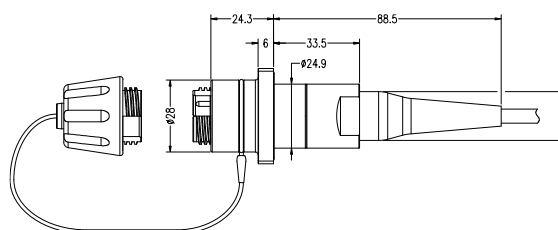
HXB15-RJL
Receptacle, Jam Nut,
Low Profile, Dust Cap



Panel Cut Out
D-Hole Mount Data

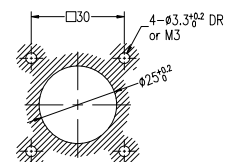
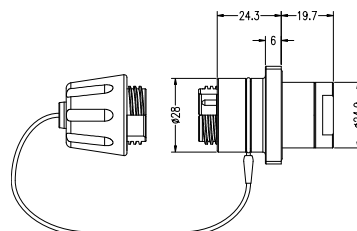
**HXB15
Square Flange Receptacle**

HXB15-RQS
Receptacle, Square Flange,
Standard, Dust Cap



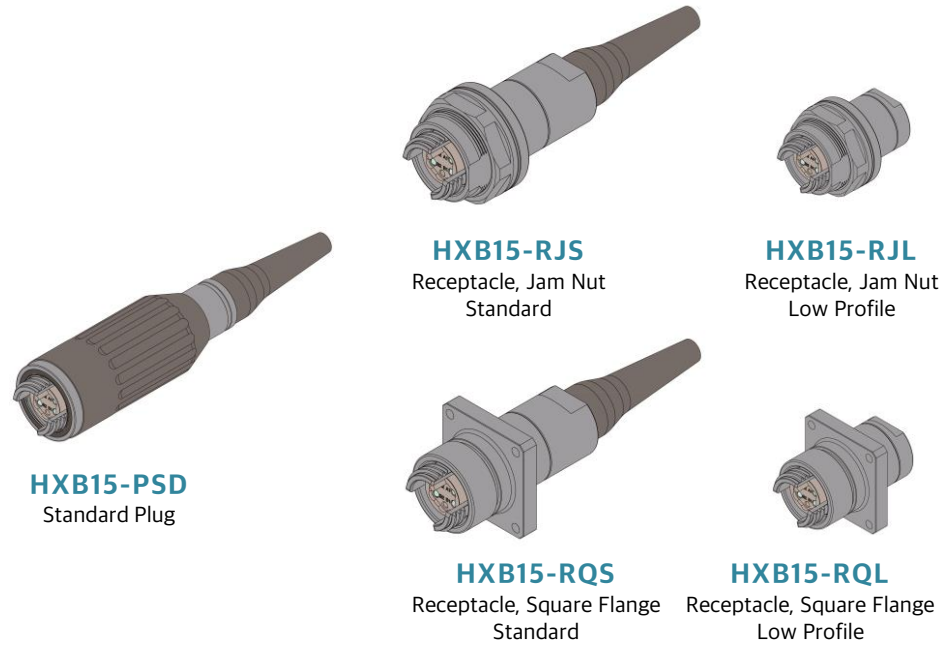
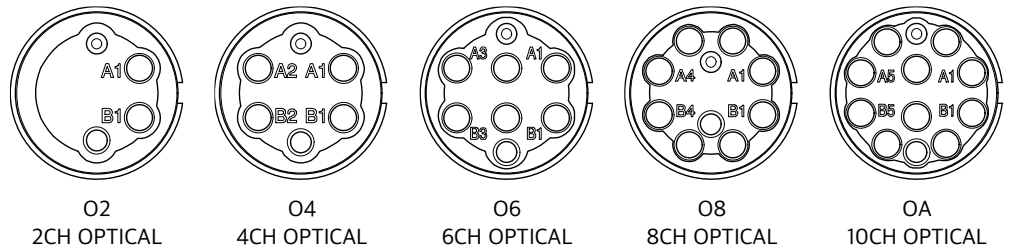
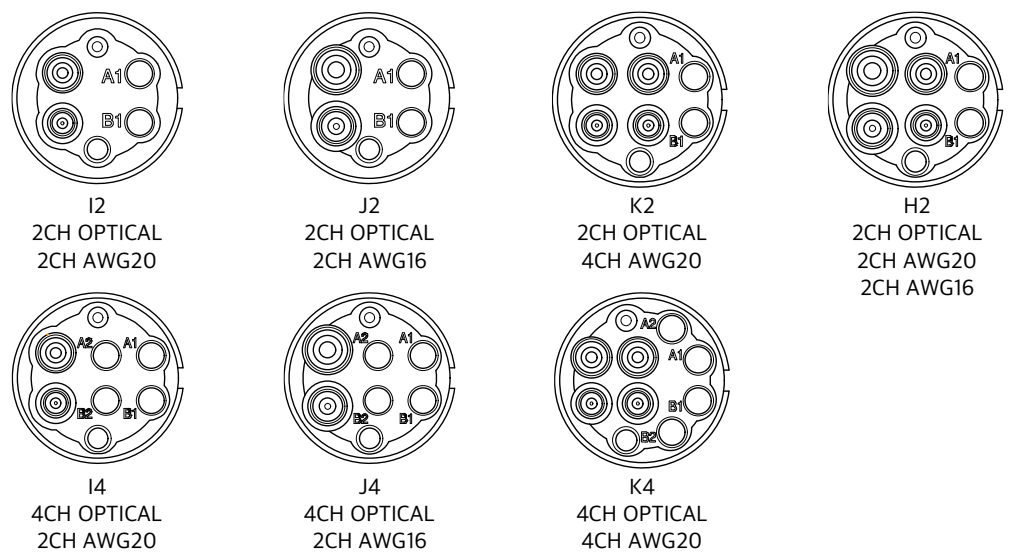
Square Flange

HXB15-RQL
Receptacle, Square Flange,
Low Profile, Dust Cap



Panel Cut Out
Square Flange Mount Data

Note. Other configurations, materials and finishes available upon request

HXB15 CONNECTOR**MODELINGS****OPTICAL INSERT ARRANGEMENTS****HYBRID INSERT ARRANGEMENTS**

HXB15 CONNECTOR

ORDER INFORMATION Order Example)

Connector only

Cable assembly

HXB15 - PSD - B - O4 - M1 - D55 _(C03)

HXB15AS - RJS - B - O4 - M1 - S20 - LC - 020/30D _(C03)

1

2

3

4

5

6

7

1	Connector A	PSD	Plug with Dust Cap
		RJS	Receptacle, Jam Nut, Standard, Dust Cap
		RJL	Receptacle, Jam Nut, Low Profile, Dust Cap
		RQS	Receptacle, Square Flange, Standard, Dust Cap
		RQL	Receptacle, Square Flange, Low Profile, Dust Cap
		CXX	Customized Connector
2	Material & Finish	B	Aluminum Alloy, Black Hard Anodized
		P	Stainless Steel, Passivated
		X	Others
3	Channel Count	O2, O4, O6, O8, OA	2 / 4 / 6 / 8 / 10 CH OPTICAL
		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
4	Fiber Type	S1	SM - 9 μm core Singlemode Fiber
		M1	OM1 - 62.5 μm core Multimode Fiber
		M2	OM2 - 50 μm core Multimode Fiber
		M3	OM3 - 50 μm core Multimode Fiber
5	Cable Diameter	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
6	Connector B	SA	Same as Connector A
		SC	SC Connector
		LC	LC Connector
		ST	ST Connector
		CX	Customized Connector
7	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