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FORJ: Multi-channel fibre optic rotary joint (JXn series, SM & MM)

JX4-155-28
CLICK for larger view

FORJ catalog
Product selection guide

JXn series multi-pass Fibre optic Rotary Joints (FORJs) can accommodate 2-7, 8-12, or 13-19 independent fibre channels as standard options. When channel count is eight or higher, the stator body length is slightly longer. Download PDF drawings for details. Loss and back reflection are uniform across all channels. There is no channel "drop off" or "blind spot" during rotation. They feature low crosstalk performance (<-60 dB) for both single and multi-mode fibres.

This model shares the same body diameter and mounting schemes with MJn series FORJs. However, the JXn design makes it more convenient to integrate with electrical slip rings. Pressure compensation is available as an option. Like our other multi-channel FORJs, all channels can accommodate either singlemode or multimode fibres. It is also possible to combine the two types of fibres in one device across three optical windows (850, 1310, and 1550 nm).

SPECIFICATIONS

PARAMETERS	VALUES
Wavelength	1270-1610 nm for SM; 850 and 1310 nm for MM
Insertion loss	<5 dB (typical: 2-3 dB)
Insertion loss ripple	~+/-0.5 to 1 dB
Return loss	45 dB
Crosstalk	>50 dB (typical: 63 dB)
Chromatic dispersion	<0.01 ps/nm
Polarization mode dispersion	<0.01 ps
Maximum speed	200 rpm
Pulling strength	10 N
Start up torque	<1 Nm
Estimated life cycle	100 million revolutions
Optical power handling	23 dBm
Working temperature	-20 to 65 C
Storage temperature	-25 to 75 C
Package style	Pigtails or receptacles(FC or ST; up to 7 channels)
Housing material	Stainless steel
Fibre types	SM or MM w/3 mm jacket, 1 m (Kevlar/PVC or armor)
Connector types	FC, SC, ST, SMA, LC or /APCs
Dimensions	67 mm dia. x 122 mm length
Weight	2.5 kg
Vibration	MIL-STD-167-1
Mechanical shock	MIL-STD-810F
IP rating	Up to IP 65

CREATE YOUR PART NUMBER

JXn- wavelength code- fiber code- connector code

DOCUMENTS DOWNLOAD

- Download PDF drawing for JXn
- Download PDF drawing for JXn (n=8-19)
- Download Solidworks 3-D drawing for JXn