

The logo for Princetel, featuring the word "Princetel" in a white, stylized, italicized font on a blue square background.

## MicroJx Series Miniature Fiber Optic Rotary Joint



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# MicroJx Series Miniature Fiber Optic Rotary Joint

## Description

Princetel has broken the record again by pushing the size limit to a new level! The MJX series Fiberoptic Rotary Joints (FORJs) are the world's smallest and lightest. They feature extremely low insertion loss and impressive return loss performance. These rugged devices can operate under arctic temperature environment.

The standard packages are dust and water tight for harsh environment applications. They are designed to tolerate both occasional water splash and shallow water (or oil) immersion.

FORJs, sometimes also called fiber optic slip rings or connectors, allow uninterrupted transmission of an optical signal while rotating along the fiber axis.

## Specification

Wavelength range	850-1650 nm
Insertion loss	<2 dB (typical: <0.5 dB)
Insertion loss variation	<+/-0.25 dB (typical: 0.15)
Return loss (SM & MM)	>40 dB (call for >55 dB)
Maximum rotation speed	2,000 rpm
Pressure compensation	No (consider RPT series)
Maximum load	10 N for 900 um buffer fiber
Optical power handling	23 dBm
Operating temperature	-40 to 65 C
Storage temperature	-50 to 85 C
Package type	Pigtailed
Housing Material	Stainless steel
Fiber types	Singlemode or multimode
Jacket types	900 um tight buffer
Connector types	FC, SC, ST, or LC
Dimensions	6.8 mm dia x 29 mm length
Weight	10 g

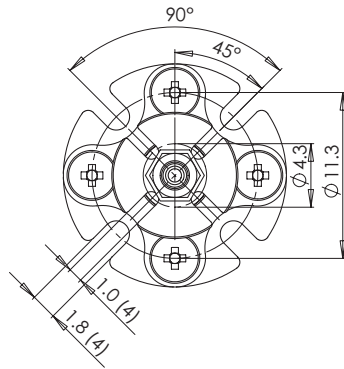
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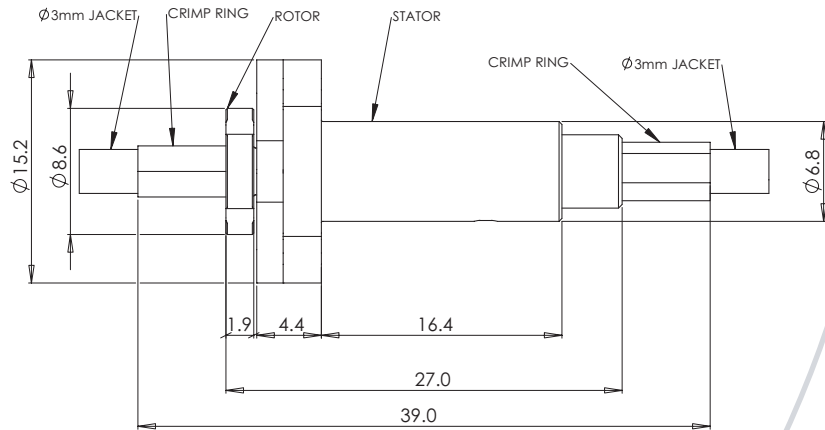


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## Mechanical



Unit: mm



## Part Number



Wavelength  
155=1550 nm

Fiber  
28=SMF28

FC=FC  
FA=FCAPC

**Wavelength**  
165=1625 nm  
162=1625 nm  
159=1590 nm  
155=1550 nm  
153=1530 nm  
148=1480 nm  
131=1310 nm  
980=980 nm  
850=850 nm  
780=780 nm  
670=670 nm  
650=650 nm  
635=635 nm  
532=532 nm

**Fiber**  
28=CorningSMF28  
13=Fujikura SM13 PANDA  
15=Fujikura SM15 PANDA  
56=Nufern 1060XP (980 nm)  
42=Nufern 780HP (850 nm)  
32=Nufern 630HP (635 nm)  
46=Nufern 460HP (532 nm)  
50=GI 50/125 multimode  
62=GI 62.5/125 multimode  
10=SI 105/125 multimode  
20=200/240 multimode  
40=400/425 multimode  
60=600/630 multimode  
01=1000 um plastic

**Connector**  
FC=FC/UPC  
FA=FC/APC  
SC=SC/UPC  
SA=SC/APC  
LC=LC/UPC  
LA=LC/APC  
ST=ST  
SM=SMA

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