



MicroJ Fiber Optic Rotary Joint



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MicroJ Fiber Optic Rotary Joint

Description

Fiber optic Rotary Joint (FORJ) is the optical equivalent of the electrical slip ring. It allows uninterrupted transmission of optical signal while rotating along the fiber axis. FORJs are widely used in guidance systems, robotic systems, medical equipment, oil drilling systems, sensing systems, and many other field applications where a twist-free fiber cable is essential.

The MJP, MJF, and MJS series FORJs are high-speed single-channel rotary joints that are the smallest and lightest in this category. Stainless steel construction and ceramic ball bearings make the device rugged, precise, stable, and long lasting. Our advanced packaging technology gives the device the lowest insertion loss and the highest return loss available today.

Specification

Wavelength range available	850-1650 (see code for choices)
Insertion loss (MJP)	<2 dB (typical for singlemode: 0.7 dB)
Insertion loss (MJS & MJF)	<3 dB
IL variation (MJP)	<0.5 dB
IL variation (MJS & MJF)	<1 dB
Return loss (singlemode)	>50 dB (typical: 65 dB for MJP)
Return loss (MJS & MJF)	>45 dB
Maximum speed	2000 rpm
Maximum load	10 N for 900 um buffer fiber
Optical power handling	23 dBm
Operating temperature	-20 to 65 C
Storage temperature	-40 to 85 C

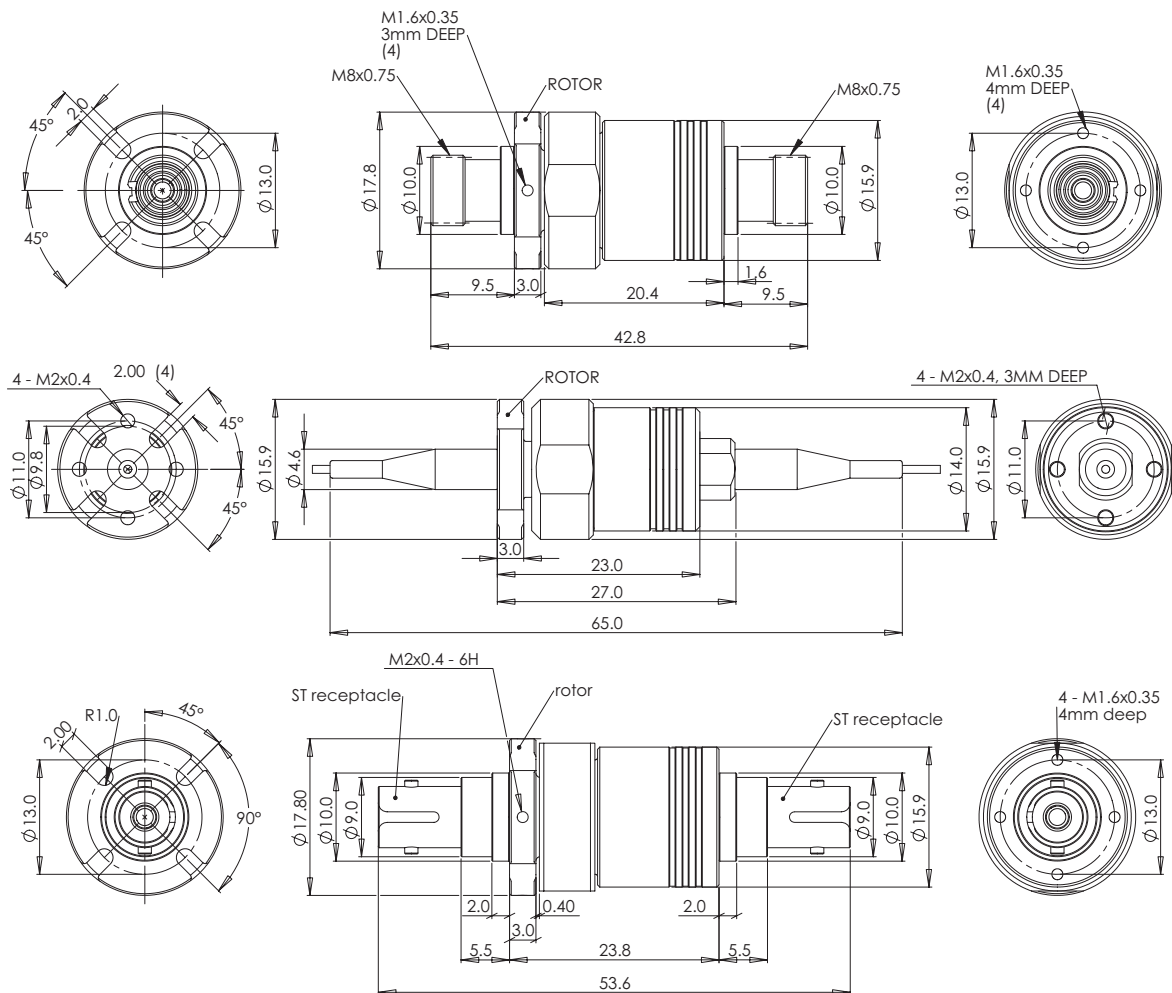


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Physical

Package type	Pigtailed, FC, or ST receptacle
Package Material	Stainless steel
Fiber type	Singlemode, multimode, or plastic
Jacket type (MJP)	900 um
Connector type (MJP)	FC, SC, ST, LC, FC/APC, or SC/APC
Dimensions (pigtailed)	See drawing below
Pressure compensation	Consider our MJX series FORJ

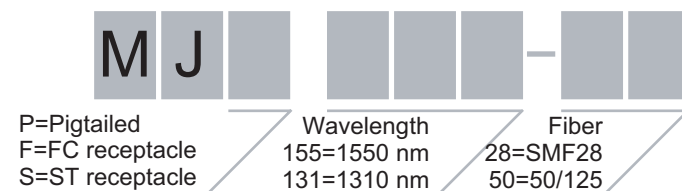
Mechanical





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Part Number



Wavelength and Fiber Code

Wavelength	Fiber
165=1625 nm	28=CorningSMF28 (1290=1650 nm)
162=1625 nm	13=Fujikura SM13 PANDA fiber
159=1590 nm	15=Fujikura SM15 PANDA fiber
155=1550 nm	56=3M FS-SN5624 (980 nm)
153=1530 nm	42=3M FS-SN4224 (850 nm)
148=1480 nm	32=3M FS-SN3224 (635 nm)
131=1310 nm	50=50/125 multimode
980=980 nm	62=62.5/125 multimode
850=850 nm	10=100/125 multimode
780=780 nm	20=200/240 multimode
670=670 nm	40=400/425 multimode
650=650 nm	60=600/630 multimode
635=635 nm	01=1000 um Mitsubishi plastic

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