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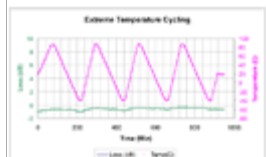
FORJ: Single-channel fiber optic rotary joints (R series)



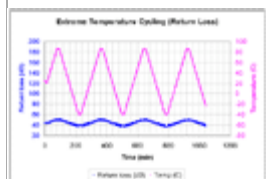
RST, RPT, & RFC

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RFP-155-28

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IL temperature cycling

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RL temperature cycling

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The R series Single-channel (SM or MM) rotary joints offer many variations. The rugged body allows fiber pigtail, ST, or FC receptacles on either the rotor or the stator side. There can be total nine different configurations to fit the need exactly. The standard base models are RPT, RFC, and RST for pigtails, FC/PC, and ST/PC receptacles.

The R series features extremely low insertion loss and impressive return loss performance for both singlemode and multimode fibers. Model RPTA typically yields return loss figures higher than 60 dB. These rugged devices can operate under arctic temperature environment (See insertion loss and return loss temperature cycling plots on the left). All models are dust and water tight for harsh environment. Optional pressure compensation is available with model RPTPC for shallow water applications.

Note: All insertion loss and return loss measurements are performed by joining the FORJ to the light source through fusion splice (without the use of connectors). Insertion loss of all receptacle type of FORJs, such as RST, RFC, and RFCX, are measured with connectors of similar type. Their return loss is not measured.

SPECIFICATIONS

PARAMETERS	VALUES
Wavelength range	650-1650 nm
Insertion loss	<2 dB/RPT&RPTA; <3 dB/RFC; <3 dB/RST
Insertion loss ripple	<+/-0.25 dB (typical: +/-0.15 dB)
Return loss (SM)	>40 dB(RPT), >30 dB(RFC/RST), >55 dB(RPTA)
Maximum speed	2,000 rpm
Water submersion	1 m, (RPT only, model RPC for pressure compensation)
Pulling strength	10 N
Start up torque	<0.1 Nm
Estimated life cycle	>500 million revolutions (1,000 rpm/365 days continous)
Optical power handling	23 dBm
Working temperature	-40 to 85 C
Storage temperature	-50 to 85 C
Package style	Pigtail or receptacles (FC, FC/APC, or ST)
Housing material	Stainless steel
Fiber types	SM/MM, 3 mm Kevlar/PVC or 2.9 mm armor
Connector types for RPT	FC, SC, ST, SMA, or LC (PC and APC)
Dimensions	17 mm dia. (body) x 26 mm dia. (flange)
Weight	~50 g
Vibration	MIL-STD-167-1A
Mechanical shock	MIL-STD-810G
IP rating	IP 68 for all models

CREATE YOUR PART NUMBER

RPT- wavelength code- fiber code- connector code
 RPTA- wavelength code- fiber code- connector code
 RPTPC- wavelength code- fiber code- connector code
 RFC- wavelength code- fiber code

RST- wavelength code- fiber code

DOCUMENTS DOWNLOAD

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