

## FO3585

### *On-Axis Fiber Optic Rotary Joint*

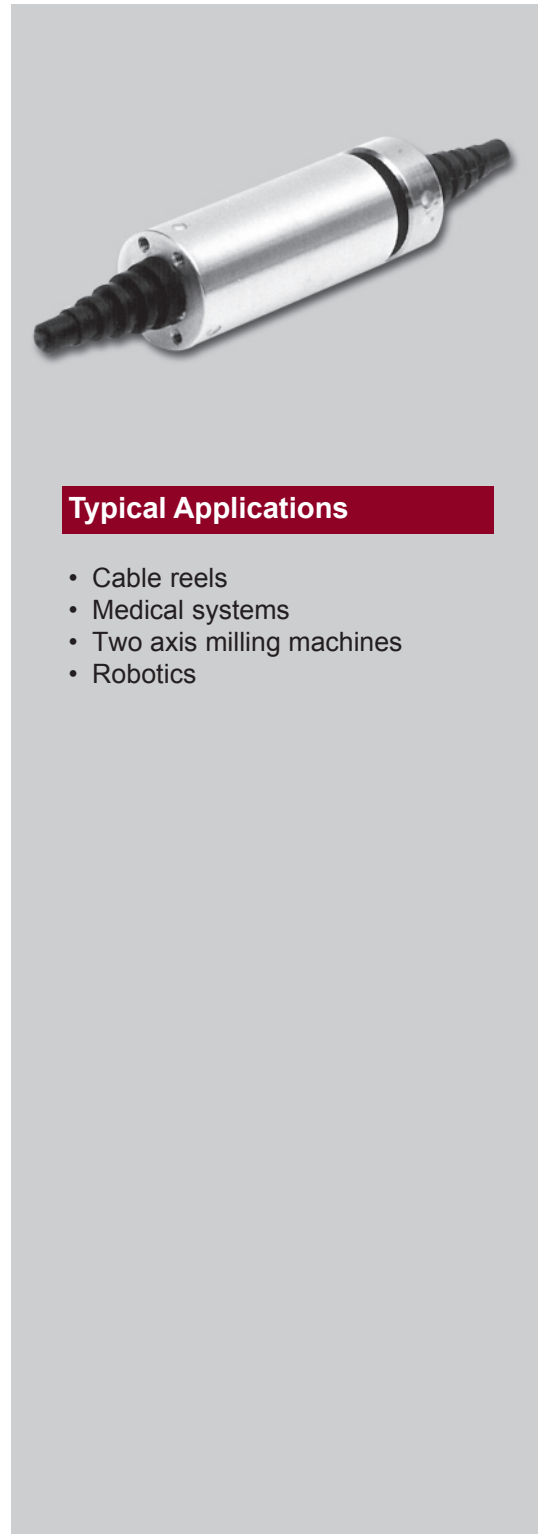
#### **Description**

The FO3585 is our ruggedized single channel multimode fiber optic rotary joint. This part was designed to withstand the most severe environments and has a demonstrated history in both commercial and military applications. The design features an expanded beam optical system to provide minimum insertion loss and rotational variation.

The assembly can be produced with pigtails lengths tailored to the customer's application. Most popular optical connectors are available with this product; please consult the factory about your specific needs. Additional options for this part include mounting flanges and drive pins.

#### **Features**

- Provides rotary coupling for multimode fiber links
- Wide operating wavelength range for wavelength multiplexing
- Completely bidirectional
- Available in wide range of fiber sizes and pigtail lengths
- Can be integrated into existing slip ring designs
- Environmentally sealed



#### **Typical Applications**

- Cable reels
- Medical systems
- Two axis milling machines
- Robotics

#### **Kontakt: Schweiz und Fürstentum Liechtenstein**

##### **Peromatic GmbH**

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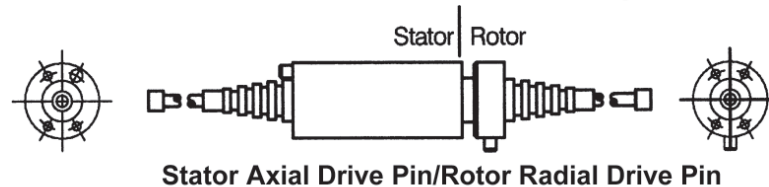
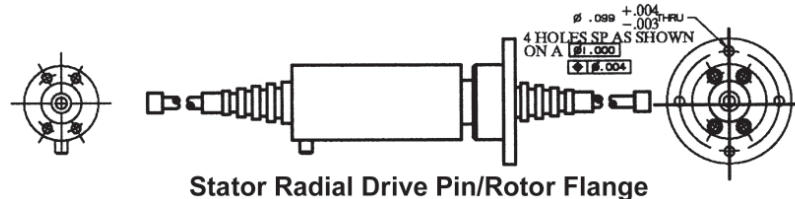
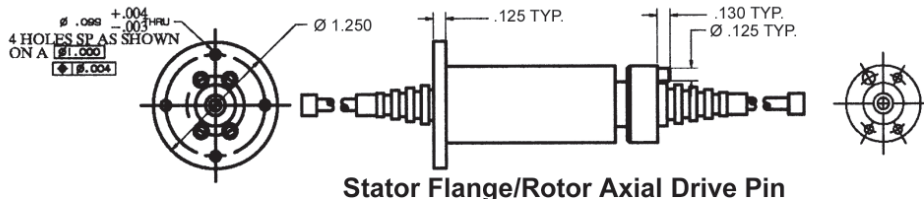
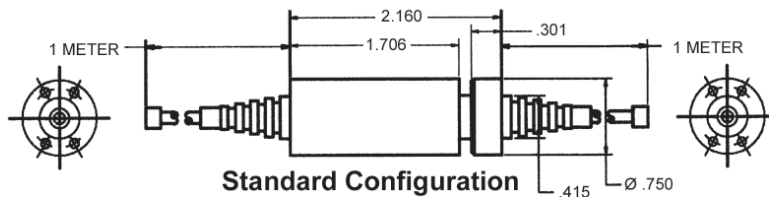
# Fiber Optic Rotary Joint (FORJ)

Specifications		Options
Operating Wavelength	830 or 1300 nanometers (customer specified)	
Insertion Loss*	MAX dB	Typical Variation dB
Fiber Size (Microns):	50 / 125	3.0
	62.5 / 125	3.0
	100 / 140	2.5
	200 / 240	2.0
Torque	2.0 in-oz	
Side Loading	5 pounds maximum (continuous)	
Bend Radius	1.0 inch minimum	
Sealing	Environmental	
Rotation Rate	1000 rpm (without seals)	
Operating Temp.	-55° C to +85° C	
Life**	200 million revolutions	
Vibration*	MIL-STD-202 method 201A simple harmonic motion, 0.03 inch amplitude, 10 - 55 Hz	
Shock*	MIL-STD-202 method 213 test condition 1, 100g's, 6ms duration, sawtooth waveform	

- Flange PIN: 3585015001
- Drive PIN: 3585015000

\* These are minimum performance values to which the design has been subjected. More severe levels are within the design limits.  
 \*\* The operational life of the unit may vary depending upon individual operating parameters, environment, temperature and other factors.

**Notes:**  
 Modifications to the basic design are possible to alter or enhance operating characteristics. Consult factory for specific applications.  
 All dimensions are in inches and tolerances unless otherwise specified are .xxx=±.005 .xx=±.01



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