

## FO5707

### Multi-Pass Fiber Optic Rotary Joint

#### Description

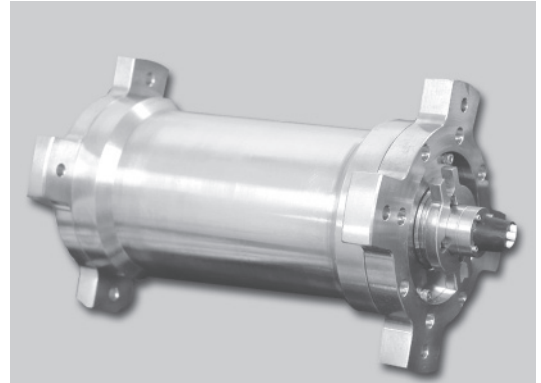
Our FO5707 multi-channel on-axis fiber optic rotary joint is a unique part with many patented features. This compact assembly is available with 2 to 7 optical circuits, which can be singlemode, multimode or a combination of both fiber types.

This assembly's features make it an ideal solution when one fiber cannot carry all the required information. Its low insertion loss, less than 4.5 dB and good back reflection performance, less than -20 dB, make it ideal for use in both laser and LED based optical systems. The broad optical bandwidth of the device, 800 to 1550 nm for multimode applications and 1300 to 1550 nm for singlemode applications, make it suitable for systems using wavelength division multiplexing.

The concentric fiber design of this fiber optic rotary joint allows its physical form factor to remain the same regardless of the number of optical channels selected.

#### Features

- 2 to 7 single or multimode channels
- Constant physical size for 2 to 7 channels
- Rugged design:
  - Mil-STD-167-1 ship vibration
  - Mil-STD-202F shock
  - Marine grade stainless steel exterior surfaces
- Uniform loss, regardless of the number of channels



#### Typical Applications

- ROVs
- Radar antennas
- Cable reels
- Hydrophone streamers

#### Kontakt: Schweiz und Fürstentum Liechtenstein

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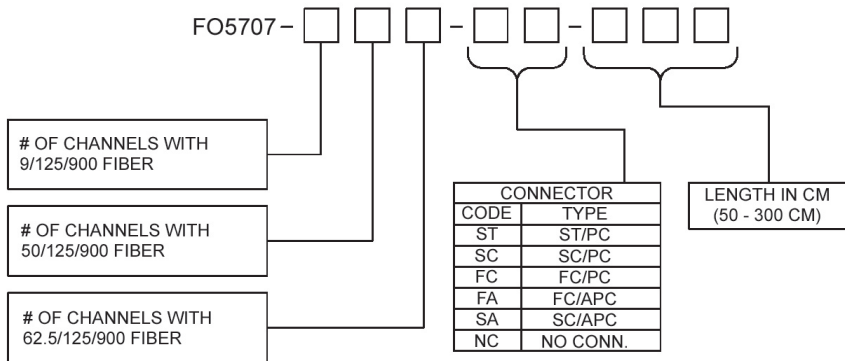
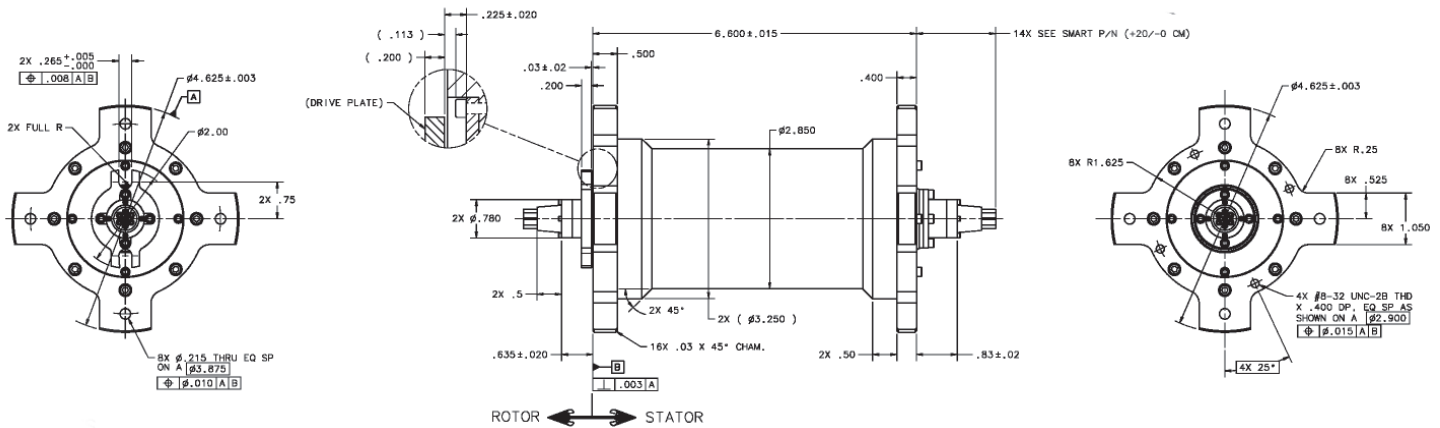
# Fiber Optic Rotary Joint (FORJ)

## Specifications

Cable Jacket	3mm diameter Kevlar Reinforced PVC		
Max. Insertion Loss (db)	850nm LED	1310nm Laser	1550nm Laser
Fiber Size (microns): 9/125/900	---	4.5	4.5
50/125/900	3.5	2.5	---
62.5/125/900	3.5	2.5	---
Back Reflection	-20 dB minimum		
Rotation Rate	To 120 RPM		
Temperature	-20 to +80 deg. C		
Vibration	Tested to MIL-STD-167-1 (ships)		
Shock	Tested to MIL-STD-202F		

\* All dimensions are in inches and tolerances unless otherwise specified are:

.xxx = ±.005 .xx = ± .01 .x = ± .03



**Note:** Modifications to the basic design are possible to alter or enhance operating characteristics. Consult factory for specific applications.

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