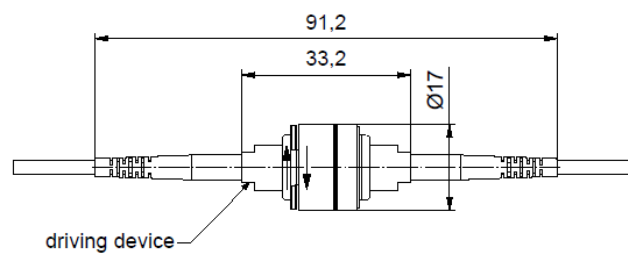


## Single-Channel Fiber Optic Rotary Joints (FORJ) 1.17

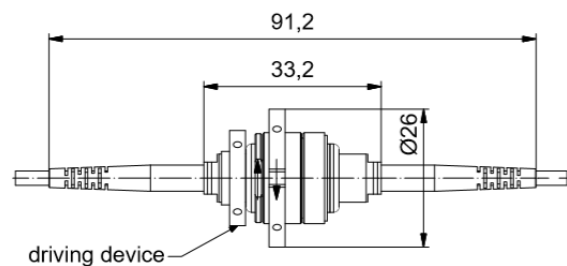
The SPINNER single-channel FORJ 1.17 is ideal for applications "above water" in humid or dirty environments. It uses the optimized optical system of the 1.14, therefore shows excellent optical values. Due to its descent from the 1.17PC (which is equipped with a pressure compensation system and was developed for deep sea up to 10,000 m), the 1.17 has particularly robust properties. It is made of a saltwater-resistant hardened steel and features IP68 sealing thanks to a built-in rotary seal. It meets high requirements in terms of shock and vibration resistance and is also resistant to moisture associated with seawater. The 1.17 FORJ is ideal when exposed to the weather or installed in a machines with lubricants. It is therefore often used in wind power or in the marine and offshore sectors.

### SPINNER FORJ 1.17



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Refer to protection notice ISO 16016.

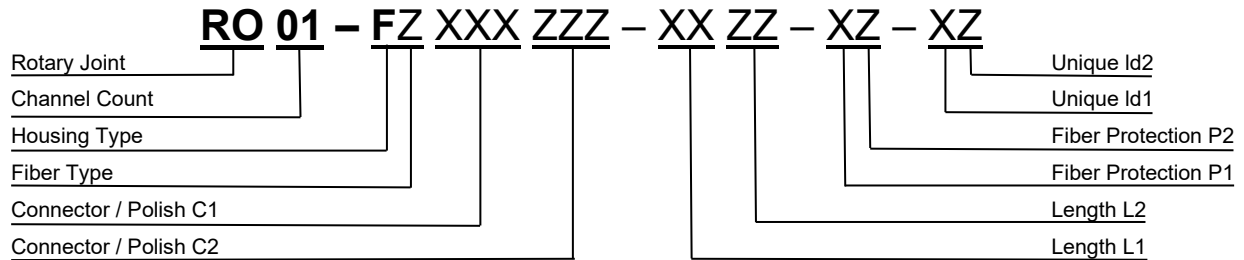
### SPINNER FORJ 1.17 with SPINNER FLEXIFLANGE



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Schutzvermerk ISO 16016 beachten.

## Single-Channel Fiber Optic Rotary Joints (FORJ) 1.17

## Standard series part number explanation



Rotary Joint	Fiber Optic	Channel Count		Housing Type	Fiber Type		Connector Polish C1	Connector Polish C2		Length L1	Length L2		Fiber Protection P1 / P2		Unique ID1	Unique ID2
R	O	01	-	F	Z	-	XXX	ZZZ	-	XX	ZZ	-	XZ	-	X	Z
Ø 17 mm (1.17) IP68				F												
Single-mode E9 / 125 (standard OS1)				S												
Single-mode SMF28 Ultra				U												
Multi-mode G50 / 125 (standard OM2)				M												
Multi-mode G62.5 / 125				N												
Special fiber (e.g. G657, H11060, etc.)				X												
Connector Type C1 & C2																
Single Mode Connector / Polish				Multi Mode Connector / Polish												
LC / APC (Standard)								LCA	LCA							
LC / UPC								LCU	LCU							
				LC / PC				LCP	LCP							
FC / APC								FCA	FCA							
FC / UPC								FCU	FCU							
FC / PC				FC / PC (Standard)				FCP	FCP							
SC / APC								SCA	SCA							
SC / UPC								SCU	SCU							
SC / PC				SC / PC				SCP	SCP							
ST / UPC								STU	STU							
ST / PC				ST / PC				STP	STP							
Other connectors: LSA, LuxCis, Molex, special, expanded beam etc. unique ID								OTH	OTH							
Length L1 in m [0.2 ... 4.5] (standard 4.5 m for 900µm, 1.5 m for 3 mm and 2 mm)																
Length L2 in m [0.2 ... 4.5] (standard 4.5 m for 900µm, 1.5 m for 3 mm and 2 mm)																
Bare fiber only				5 mm bending radius								0				
Fiber protective tube 900µm buffer				30 mm bending radius (Standard)								1				
Fiber protective tube Kevlar / aramid armor				20 mm bending radius								2				
Metallic protective tube				30 mm bending radius								M				
Special protection (e.g. military grade)												X				
FLEXIFLANGE							Unique identifier									

Example: FORJ 1.17 type with SMF28 Ultra, FC/APC and SC/UPC, 1 m length each side with Kevlar protection.

**RO01-FU-FCASCU-1010-22-\*\***

## Single-Channel Fiber Optic Rotary Joints (FORJ) 1.17

### Fiber optic channel characteristics

Channels	1 CH	
Fiber type	Singlemode	Multimode
Fiber model	See fiber list	See fiber list
Wavelength (dependent on fiber model)	450 nm – 1650 nm	450 nm – 1650 nm
Average power capability, max.	500 mW	500 mW
Return Loss, min. / premium	45 dB - 55 dB	35 dB - 45 dB
Insertion loss, max. / premium	2.0 dB - 1.0 dB	2.0 dB - 1.0 dB
Insertion loss variation over rotation, max. / prem.	1.0 dB - 0.4 dB	1.0 dB - 0.2 dB

### Mechanical characteristics

Rotation speed, max.	100 rpm
Life, min.	Up to 600 x 10 <sup>6</sup> revolutions
Torque (room temperature), max.	0.1 Nm
Interface loads, max.	No loads allowed
Case material	Stainless steel, copper alloy (corrosion resistant)
Case surface finish	no finish
IP protection level	IP68 per EN 60529 (all interfaces connected with appropriate gaskets)
Weight, approx. (FORJ only, without flexi flanges)	0.06 kg

### Environmental conditions

<b>Operation</b>	
Ambient temperature range	-40 °C to +85 °C
Relative humidity, max.	100%
<b>Storage</b>	
Ambient temperature range	-40 °C to +85 °C
Relative humidity, max.	100%