

Fluid Rotary Union (FRU)

Model 301

Focal Technologies Corporation, a Moog Inc. company, has over 30 years of expertise in supplying standard and custom marine products for harsh environments and is a leading manufacturer of high performance and high quality fluid rotary unions. Contact Focal for any assistance in selecting the best solution for your requirements.



The Model 301 is a single pass fluid rotary union that can be operated as a stand alone FRU. Its design has been optimized to allow any standard AC4598 / AC6200 Moog electrical slip ring (ESR) to be mounted directly on the Model 301 body, simplifying the integration and mounting arrangement.

The Model 301 utilizes sealed-for-life rolling element bearings to provide long trouble free service. Filled PTFE based seals run on a hardened surface to provide long service life, minimizing frictional heat generation and operational torque. This unit has been tested in excess of 80 million revolutions. The BSPP ports and mounting flange allow convenient fixturing against an O-ring sealed shaft or separate threaded conduit.

Features

- 1-1/2 inch body O.D. to mount any standard AC4598 / AC6200
- 1 pass with 1/2 inch BSPP ports
- Rated to 145 psi [10 bar] at 250 rpm continuous service
- Maximum working pressure 180 psi [12.5 bar]
- Maximum recommended speed 2000 rpm (intermittent or with sufficient medium flow to cool assembly)
- Stainless steel version available
- Longer housing available to accommodate slip ring length

Benefits

- Continuous 360° rotation
- FRU transfers air, oil, other non-corrosive media
- Provides long maintenance free service
- Convenient mounting of FRU / ESR combination
- Tested in excess of 80 million revolutions

Applications

- Machining centers
- Rotary index tables
- Heavy equipment turrets
- Cable reels
- Packaging machines
- Palletizing machines
- Labeling machines
- Remote sensing

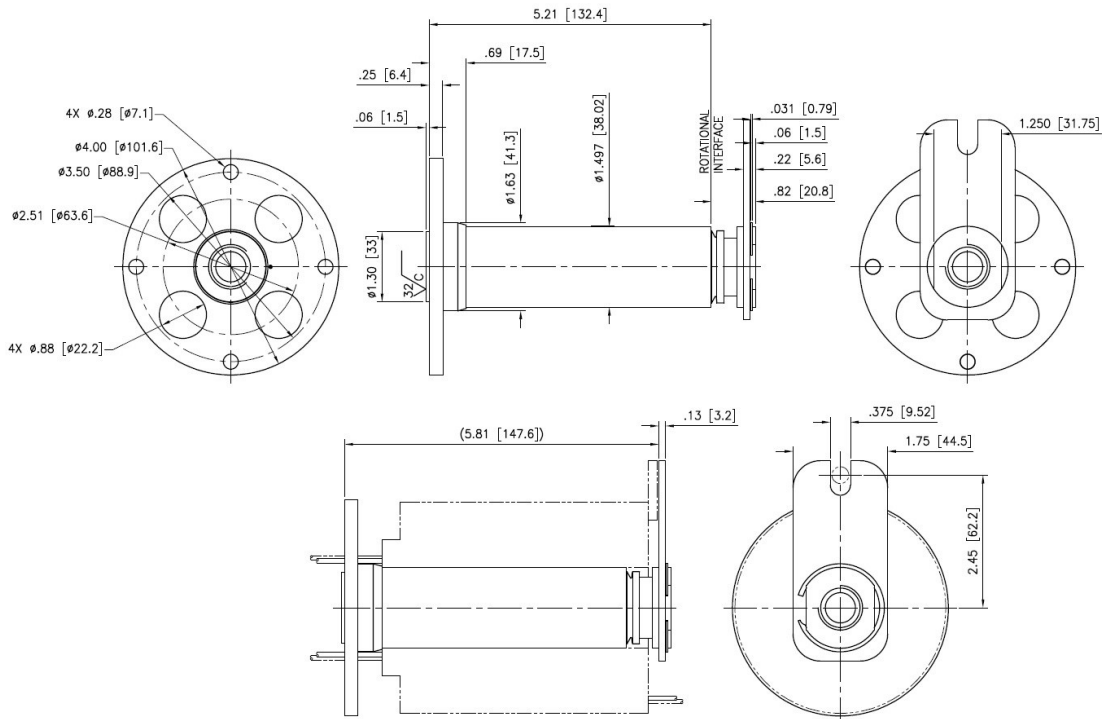
Specifications

Model 301 Specifications		Options
Operating Temperature	-20° to 60° C with optional ESR -20° to 80° C without ESR installed	<ul style="list-style-type: none"> Stainless steel construction Longer housing available to accommodate slip ring length Low temp option available. Please contact factory Integrated with any standard AC4598 or AC6200 ESR (see Model 813 datasheet) Clean room compliant
Pass Quantity & Size	1x 1/2 inch BSPP	
Continuous Pressure and Speed ¹	145 psi [10 bar] @ 250 rpm	
Maximum Pressure ¹	180 psi [12.5 bar]	
Maximum Speed ¹	2000 rpm (intermittent or with sufficient cooling from medium)	
Maximum Operating Torque (Estimated) ^{2,3}	2.5 lb-in [280 N-mm]	
Environmental	Protected against dust and water ingress (IP64)	

¹ Operational life is dependent on pressure, temperature, rotational speed and duty cycle. Maximum values do not apply concurrently. Please consult the factory for actual value.

² Break-in torque may be higher

³ Flexible conduit should be used to couple to the rotating component. The torque arm must be loose coupled.



All specifications and information are subject to change without notice. Please contact Focal for the latest updates.

Dimensions in inches [mm].