

Fluid Rotary Union

Model 306

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



A fluid rotary union (FRU) functions as a rotary interface for fluid carrying conduit between stationary and rotating equipment. The fluid being conveyed can be liquid, gas, or vacuum. A fluid rotary union is also called a rotary union, fluid swivel, utility swivel, hydraulic swivel, hydraulic utility swivel, or rotary joint. Unlike flexible conduit, a fluid rotary union allows continuous unrestrained rotation of movable joints in machinery.

The Model 306 is a single pass fluid rotary union. It can be operated as a stand alone FRU. Its design has been optimized to allow easy integration with an AC4598 / AC6200 electric slip ring (ESR). The 1-1/2 inch hollow bore and ESR pigtail channels allow concentric shaft mounting or optional flange mounting with an ESR mounted directly to it using the optional adapter.

The Model 306 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.

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Features

- 1-1/2 inch through bore
- Pigtail channels integral to shaft
- 1 pass with 1/2 inch BSPP ports
- Rated to 145 psi [10 bar] at 100 rpm continuous service
- Maximum working pressure 4000 psi [275 bar]
- Maximum recommended speed 450 rpm (intermittent or with sufficient medium flow to cool assembly)
- 1/2-13 UNC-2B thread for torque arm
- Optional ESR drive pin matches AC4598 / AC6200 torque arm allowing a single anti rotation interface
- Optional ESR mount for AC4598 / AC6200 leaves reduced bore clear
- Stainless steel version available

Benefits

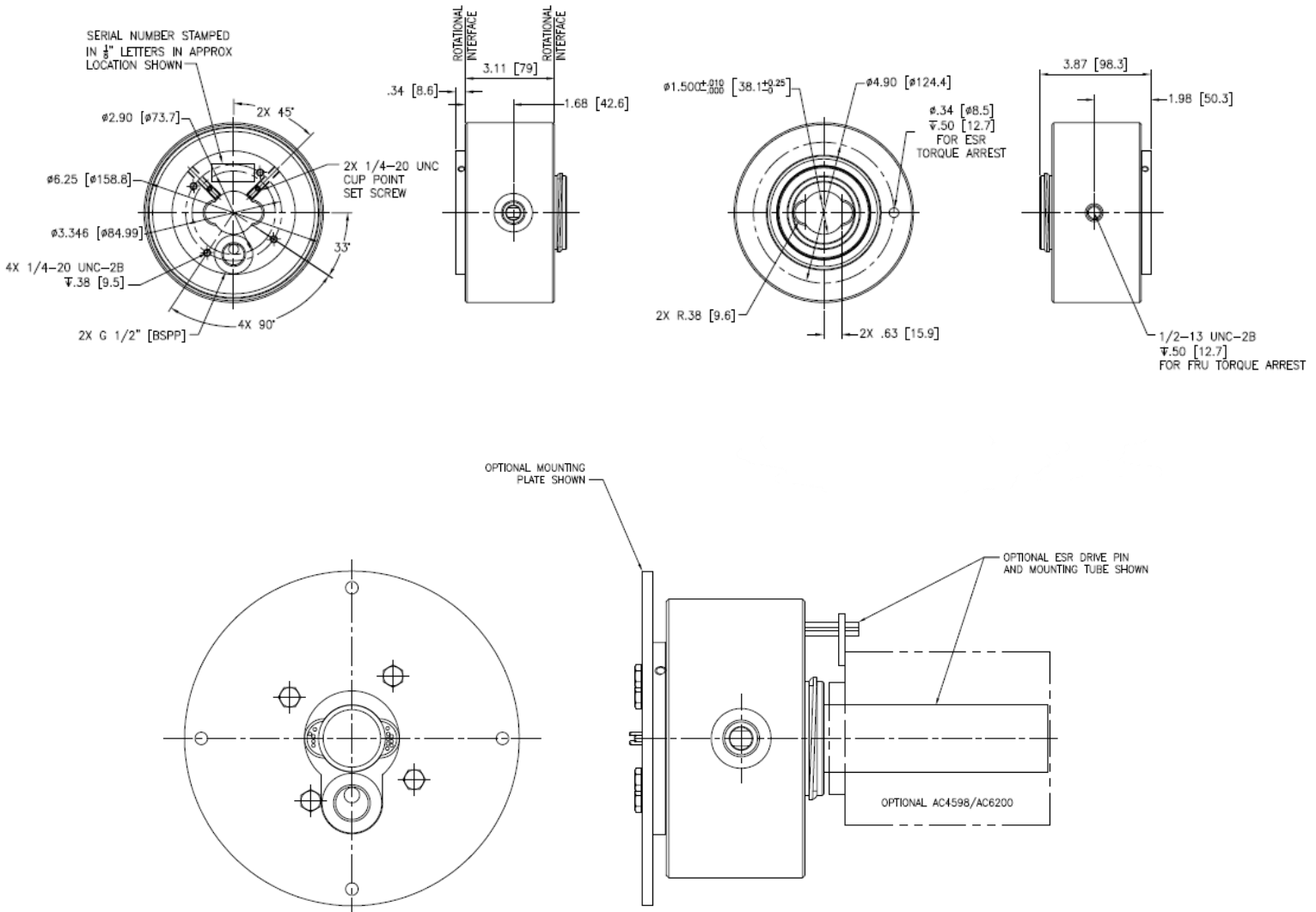
- Continuous 360° rotation
- FRU transfers air, oil, other non-corrosive medium
- Provides long maintenance free service
- Convenient mounting of FRU / ESR combination

Applications

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

Specifications

Model 306 Specifications		Options
Operating Temperature	-20°C to +100°C	Stainless steel construction
Passes Quality Size	1x 1/2 inch BSPP	Torque arm
Pressure and Speed ¹	145 psi [10 bar] @ 100 rpm	Other port types and sizes available upon request
Maximum Pressure	4000 psi [275 bar]	Integration with AC4598 or AC6200 slip rings
Maximum Speed	450 rpm (intermittent or with sufficient cooling from medium)	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.
Maximum Torque (Estimated) ²	7.5 lb-ft [10 N-m], air at 145 psi [10 bar] and 100 rpm 59 lb-ft [80 Nm], oil at 4000 psi [275 bar] and 5 rpm	
Weight	25 lb [11 kg]	
Environmental	IP42	



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

Dimensions in inches [mm].

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