# Hybrid Fluid Rotary Union/Electrical Assembly Model 813

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 813 electrical and fluid rotary union consists of a single fluid pass with 600 V / 10 A and 220 V / 2 A power / signal circuit combinations. The design features sealed-for-life rolling element bearings and fiber brush technology for ultimate performance and long, maintenance free life in many challenging applications.

#### **Features**

- 1 pass with 1/2 inch BSPP ports
- Suitable for a variety of media
- 600 V / 10 A and 220 V / 2 A circuit combinations
- Rated to 145 psi [10 bar] at 250 rpm continuous service (higher rotational speeds and pressure possible)
- Continuous 360° rotation
- 12 inch lead wire

#### **Benefits**

- Optional splash seals for environmental protection
- Fiber brush technology provides long life and maintenance free operation
- Modular electrical slip ring design
- · Transfers analog and data signals
- Available with Ethernet

### **Applications**

- Semiconductor pick and place robot applications
- Packaging equipment
- · Automated handling



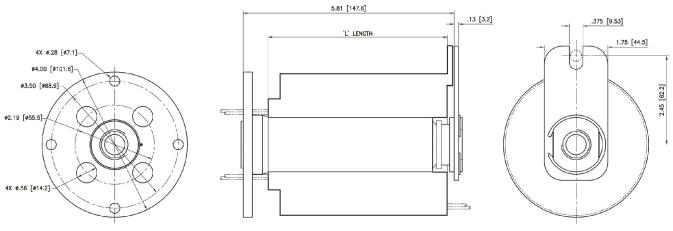
## **Specifications**

Fluid Rotary Union Componen	t Specifications	Options
Operating Temperature	-20°C to +60°C	Stainless steel construction
Passes Quality Size	1 x 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 <sup>1</sup>	250 rpm (intermittent or with sufficient cooling from medium)	
Maximum Torque (Estimated) 2	2.5 lb-in [280 N-mm]	
Environmental	IP64 environmental seal	
Electrical Slip Ring Components Specifications- Option 1 (AC6200)		Options
Number of Circuits	12, 24, 36, 48	Splash seals for dust and moisture resistance     Various axial and radial lead exits are available     Signal and power circuit combination for 2 and 10 amp applications     Gold plated rings     IP64 rated enclosure available (P/N AC6419)     Available with Ethernet, contact factory
Lead Wire	26 gauge, 12 inches (300 mm)	
Voltage	220 VAC	
Current Rating	2 amps per circuit	
Noise	100 milliohms max	
Electrical Slip Ring Componen	ts Specifications- Option 2 (AC4598)	Options
Number of Circuits	6, 12, 18, 24	Splash seals for dust and moisture resistance     Various axial and radial lead exits are available     Longer lead lengths are available     High rotational speeds with alternate bearings     Higher current and voltage capacity per unit     Signal and power circuit combination     IP65 rated slip ring available (P/N AC6419)     Available with Ethernet, contact factory
Lead Wire	16 gauge, 12 inches (300 mm)	
Voltage	600 VAC	
Current Rating	10 amps per circuit	
Noise	100 milliohms max	

<sup>&</sup>lt;sup>1</sup> 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.

<sup>2</sup> Break-in torque may be higher

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



Dimensions in inches [millimeters] "L" Length varies with electrical spec.

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