# 6.62" Diameter Electrical Slip Ring

Model 159

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 swivels. Contact Focal for assistance in selecting the best solution for your requirements.



The Model 159 is the solution for higher current applications. Designed to accommodate up to 1000 amps total current, the Model 159 can be customized to fit specific requirements. Incorporating both power and signal transfer into a single unit provides the needed versatility for marine, industrial, and defense applications.

## Features

- Stainless steel housing for rugged environments
- Slip ring design provides sealing to IP66 requirements
- Can accommodate a variety of wire and cable types
- Power and signal transfer integrated into a single unit

#### **Benefits**

- Each unit is designed, manufactured, and tested in accordance with the highest quality standards
- Maintenance free operation
- Proven, reliable, long life performance
- Integration with fiber optic rotary joints and fluid rotary unions to provide a complete rotating interface solution

### Applications

- Winches
- Remotely Operated Vehicles (ROV)
- FPSO swivel stacks



# **Specifications**

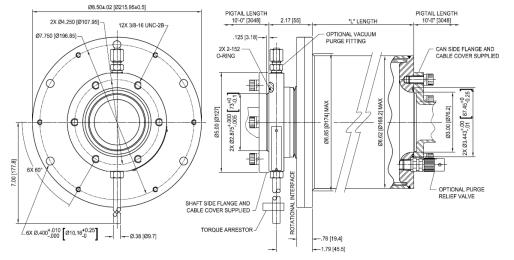
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Electrical Power Performance			
Voltage	Maximum 7200 VAC		
Current	Maximum 60 A per pass, wire in parallel for higher current Maximum 1000 A total current * *Maximum total current is dependent on duty cycle, ambient temperature and specific configuration. Consult factory to ensure configuration is suitable for application.		
Contact Resistance	20 mΩ nominal		
Insulation Resistance	Minimum 500 M $\Omega$ @ 1 kVDC, dependent on wire type		
Short Circuit Rating	2.2 kA / 1s, 5.6 kA peak		
Electrical Signal Performance			
Contact Resistance	20 mΩ nominal		
Insulation Resistance	Minimum 500 MΩ @ 1 kVDC		
Signal Type	Analog Video, CanBus, Profibus, Device Net, 10 Base-T Ethernet, SHDSL, RS-485		
Mechanical			
Rotation Speed	Maximum 50 rpm continuous, contact factory for higher speeds		
Protection Class	Sealed to IP66, except for pigtail exits		
Operating Temperature	-20 °C to + 55 °C		
Housing	Stainless steel (304)		
Length "L"	Varies with number of electrical passes		

Hazardous Area Opt	ion: Mo	del 159-X/295-X		
Certification	<u>US</u> :	Class I, Zone 1, AEx d IIB T5 Class I, Zone 1, AEx d IIB T4 ETL ATM 4007859		
	<u>ATEX</u> :	<ul> <li>C€ 0334 ☺ II 2 G Ex d IIB T5 Gb</li> <li>C€ 0334 ☺ II 2 G Ex d IIB T4 Gb</li> <li>ITS 15ATEX 18 235 X</li> </ul>		
Terminations				
Standard	Loose	e wire pigtails, 10 ft [3.0m]		
Flange and Cable Covers	Vario	Various entry types available.		
Cabled Pigtails		d copper braid and heat shrink led over loose wire pigtails		
Special	termir	Supply and installation of connectors, terminals, conduit, cable glands, junction boxes		
Options				
Fiber Optics		Fiber Optic Rotary Joint (FORJ) or Optical Converter		
Fluid	Fluid	Fluid Rotary Union (FRU)		
Design Certification	ABS,	DNV GL, BV, LRS		
Submersed Applications		Fluid fill fittings or fluid filled/pressure compensated at factory		
Other Devices	Heate	RF Rotary Joint, Shaft Encoder, Sensors, Heater or Heat Trace Cable, Integration of customer supplied product possible		
Ingress Protection	IP66,	IP66, IP68		

Extended Temperature Range Available

Please contact factory with your application details



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

Dimensions in inches [millimeters].

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