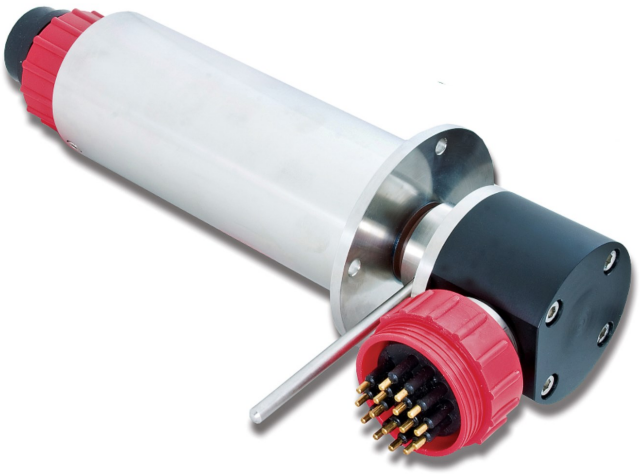
2.85” Diameter Electrical Slip Ring

Model 180

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 electrical slip rings. Contact Focal for assistance in selecting the best solution for your requirement.



Please note diagram shows model 180 with optional connectors

The Model 180 is comprised of electrical power and signal passes, and provides superior performance and reliability in demanding operational environments. The slip ring is waterproof rated to IP66, with the option for greater ingress protection.

The Model 180 may be constructed for subsea use where underwater operation is required. The slip ring may be fluid-filled, and pressure compensated unit.

For hazardous locations, the Model 180-X variant is fully certified as a flameproof and explosion proof enclosure.

Features

- Standard electrical passes rated up to 1000 V / 7 A
- 1500V passes optional
- Pigtail exits are capable of being sealed
- Can accommodate a variety of wire and cable types
- Maintained type certification for Hazardous locations
- Rugged design intended for harsh environments
- Reliable operation under shock and vibration
- Underwater designs available

Benefits

- Compliance with the highest quality standards for design, manufacture and test
- Maintenance free operation
- More than 30 years of proven field performance
- Integration with fiber optic rotary joints and fluid rotary unions to provide a complete rotating interface solution

Applications

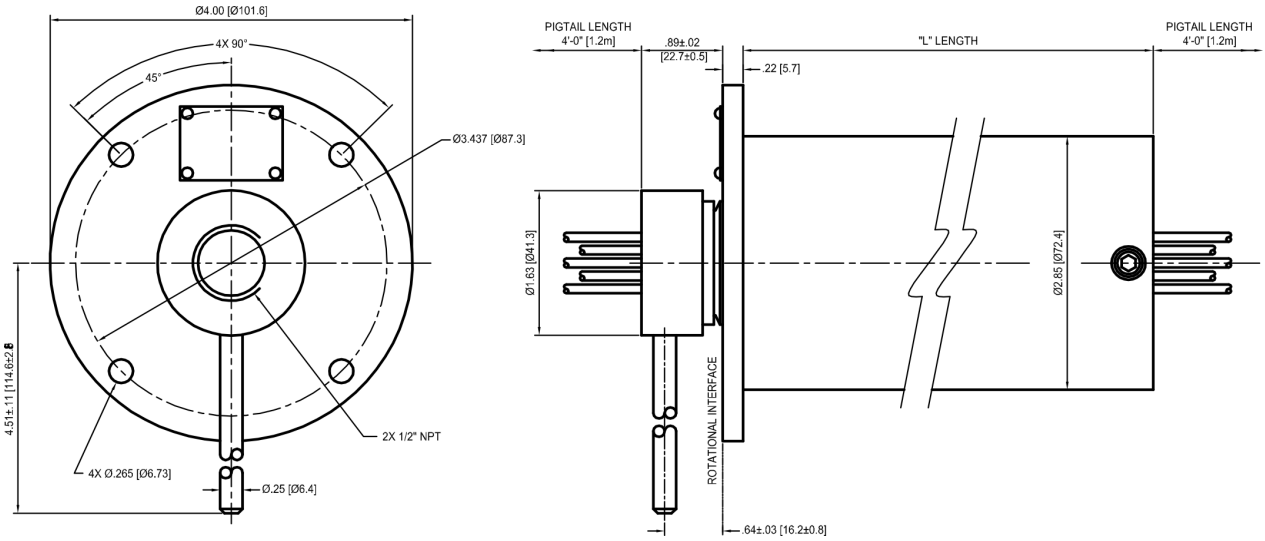
- Winch cable reels and TMS applications
- Remotely Operated Vehicles (ROVs)
- Oceanographic winches (surface and subsea)
- Industrial machinery
- Land based oil and gas

Specifications

Electrical	
Voltage	1000 VAC standard 1500 VAC optional
Current	Maximum 7 A per pass Maximum 100 A total current
Electrical Performance	
Contact Resistance	20 mΩ nominal
Insulation Resistance	Typically > 500 MΩ @ 1 kVDC
Signal Types	Analog Video, CanBus, Profibus, Device Net, 10 Base-T Ethernet, SHDSL, RS-485, 1000 Base-T Ethernet, 100 Base-T Ethernet
Mechanical	
Rotation Speed	Maximum 100 rpm
Ingress Protection	Sealed to IP66, except for pigtail exits
Operating Temperature	-20°C to +55°C
Housing	Stainless steel (304)
Insertion Length "L" (see drawing below)	Varies with number of electrical passes
Environment Test	
Temperature	Tested to MIL-STD-810F Methods 501.4 and 502.4
Vibration	Tested to MIL-STD-167-1
Shock	Tested to MIL-STD-810D, method 516.3
Humidity	Tested to MIL-STD-810F, method 507.4

Please contact factory with your application details

Hazardous Area Option: Model 180-X		
Certifications	US:	Class I, Division 1, Group C & D, T5 Class I, Zone 1, AEx db IIB T5 Gb ETL ATM 4007859
	CAN:	Class I, Division 1, Group C & D, T5 ETL ATM 4007859 Ex db IIB T5 Gb ETL22CA105073054X
	ATEX:	CE 0344 Ⓔx II 2 G Ex db IIB T5 Gb ETL 23 ATEX 0295X
	GB:	UKCA 8505 Ⓔx II 2 G Ex db IIB T5 Gb ITS 22 UKEX 0584X
	IECEx:	Ex db IIB T5 Gb ETL 13.0013X
Terminations		
Standard		Wire pigtails, 4 ft [1.2 m], exiting via 1/2" or 3/4" NPT female ports
Special		Supply and installation of connectors, terminals, conduit, cable, glands, junction boxes, sealed pigtail exits
Additional Options		
Optics		Fiber Optic Rotary Joint (FORJ) or optical converter
Design Classification		ABS, DNV, BV, LRS
Submersed Applications		Fluid fill fittings or fluid filled/ pressure compensated at factory
Other Devices		RF Rotary Joint, shaft encoder, sensors, Fluid Rotary Union, customer supplied product
Ingress Protection		IP 67 or IP 68
Housing Material		316 stainless steel
Certifications		Intrinsically safe (IS)



Dimensions in inches [mm]

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

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