

High Speed Slip Ring Capsules

Endura-Trac™

Plus W series

Description

The Endura-Trac™ series of slip ring assemblies were developed for a wide variety of applications and environments. The flexible design and through-bore capability of up to 9 inches, along with many other options make it ideal for a designer to incorporate into new and retrofit applications. Modular construction allows a range of signal and power combinations with power circuits up to 30 amps and signal circuits up to 5 amps. These slip ring assemblies are a quick turn solution for your application. Off-the-shelf components allow for a delivery which meets your needs. The Plus W series is DeviceNet and ControlNet capable.

Features

- Unobstructed bore sizes from 1.5 inch to 9.0 inch
- Up to 100 signal circuits (rated at 250 V / 5 A each)
Up to 24 power circuits (rated at 600 V / 30 A each)
For combinations of these, see chart on next page
- Continuous bidirectional rotation up to 1,000 rpm
- Flying lead wire bundle, 24 inch lead length
- #20 AWG signal lead wire, #12 AWG power lead wire
- All metal exterior cover
- Shaft and flange mounting
- Stator, rotor, or both can rotate

Benefits

- Ease of installation
- Compatible with data bus protocols
- Transfers power, as well as analog and digital signals
- Replaceable brush blocks
- 169 different combinations of signals and power circuits



Typical Applications

- Packaging machines
- Index tables
- Paper and film converting
- Rotary machines
- Machine tools
- Automation equipment
- Medical equipment
- Surveillance equipment
- Inspection equipment

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Plus W Series Specifications		Options
Maximum Speed	1.5 and 3.0 inch bore: 1000 rpm 4.0, 6.0 and 9.0 inch bore: 600 rpm	<ul style="list-style-type: none"> • Open frame • Drive adaptor for stator de-rotation • Longer lead lengths • Special wiring or harness requirements (coaxial, twinaxial and triaxial cable, thermocouple) • Sealed version (NEMA 12) • High voltage option to 3000 V • Various power and signal configurations available
Power Circuits	Up to 24 power circuits: 30 A / 600 volts	
Signal Circuits	Up to 100 signal circuits: 5 A / 250 volts	
Terminals	Power circuits - 12 AWG flying leads Signal circuits - 20 AWG flying leads	
Mounting	Shaft mounting	
Temperature Range	-20°C to +90°C	

*Please note that the operational life of the unit is dependent upon rotational speed, environment and temperature.

Bore Size	ID Actual	OD	Max RPM	"L1"	S	R
1.5 inch (38,1 mm)	1.52 (38,61)	5.00 (127,00)	1000	.2 (XX) + .4 (YY) + 1.63	4.033 (102,44)	1.896 (48,16)
3.0 (76,2)	3.02 (76,71)	6.50 (165,10)	1000	.2 (XX) + .4 (YY) + 1.52	5.488 (139,40)	3.396 (86,26)
4.0 (101,6)	4.02 (102,11)	7.50 (190,50)	600	.2 (XX) + .4 (YY) + 1.38	6.500 (165,10)	4.396 (111,66)
6.0 (152,40)	6.02 (152,91)	9.50 (241,30)	600	.2 (XX) + .4 (YY) + 1.39	8.332 (211,63)	6.646 (168,81)
9.0 (228,60)	9.02 (229,11)	12.50 (317,50)	600	.2 (XX) + .4 (YY) + 1.63	11.500 (292,10)	9.858 (250,39)

Note: For "Sealed Unit" add .75 (19,05) for length.

To determine length of overall unit, use the following formulas or contact us for assistance.

xx = Total number of signal rings

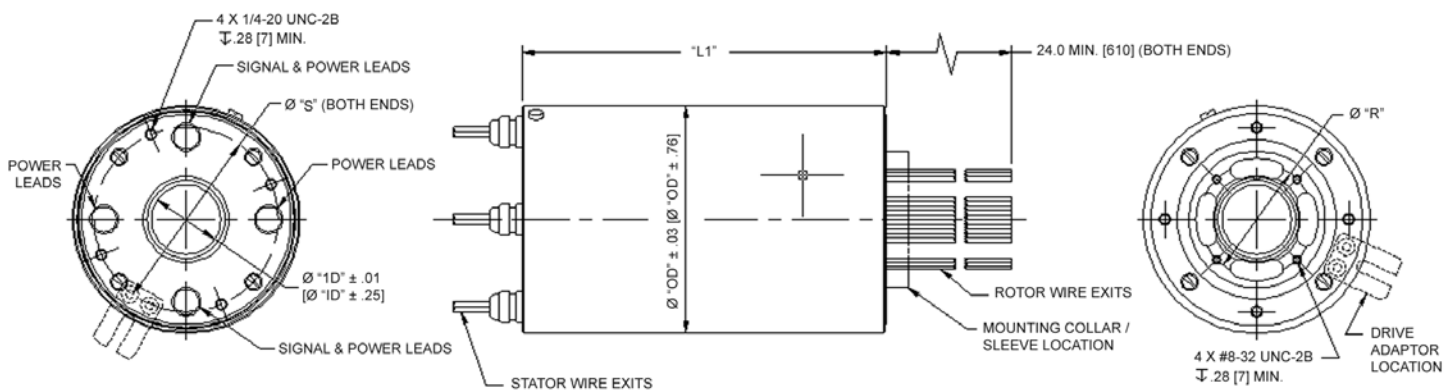
yy = Total number of power rings

$$L1 = .2 (xx) + .4 (yy) + .1.63$$

Number of signal rings
(multiples of 4)

	0	4	8	12	16	20	24	28	32	36	40
0	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-

Plus W Series Dimensions



Dimensions in inches [millimeters]

The end views shown above are for the 1.5 inch ID slip ring. Please consult factory for 3, 4, 6 and 9 inches.