

Slip Rings With Through-Bores

AC4598

10 amp per circuit 1-1/2 inch through-bore

Description

A slip ring can be used in any electromechanical system that requires unrestrained, continuous rotation while transferring power and / or data from a stationary to a rotating structure. A slip ring is also called a rotary electrical interface, collector, swivel, or a rotary joint. A slip ring can improve system performance by simplifying operations and eliminating damage-prone wires dangling from movable joints.

The 1-1/2 inch through-bore provides routing space for hydraulics, pneumatics or for a concentric shaft mount.

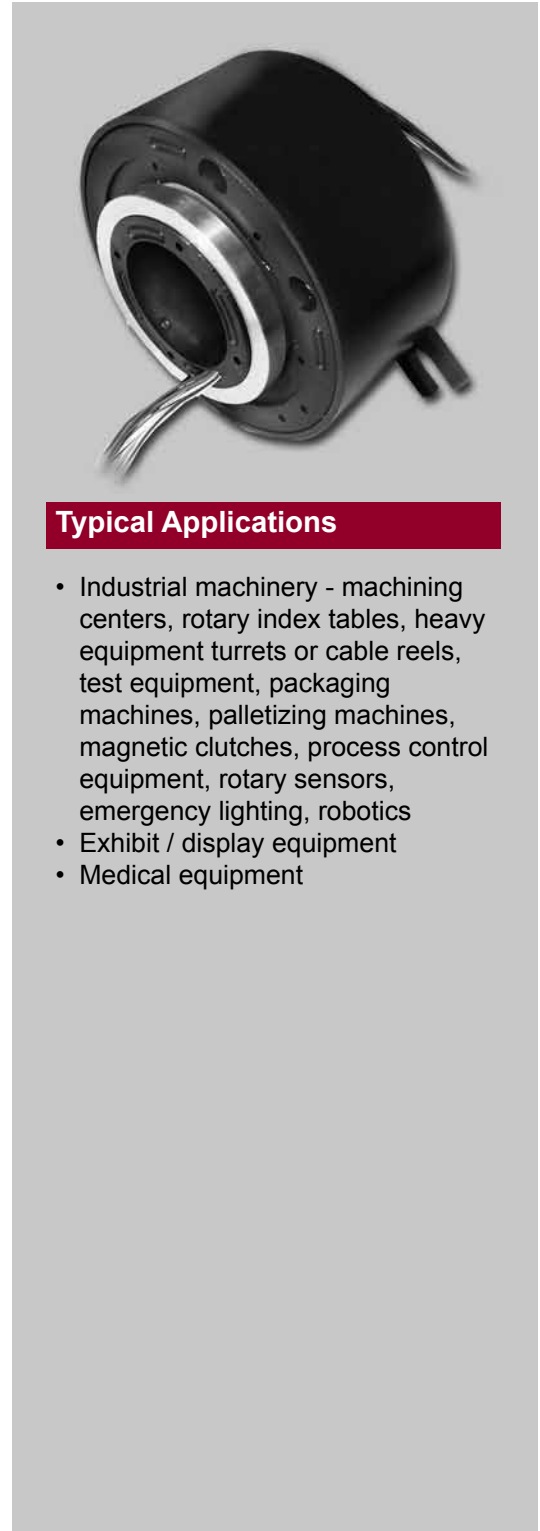
The AC4598 uses our unique fiber brush technology which offers several advantages over conventional slip ring contacts, including multiple points of contact per brush bundle, low noise, electrical and low contact wear rates. In addition, fiber brushes do not require lubrication and produce virtually no wear debris.

Features

- 1-1/2 inch through-bore
- Speeds up to 250 rpm continuous
- 6, 12, 18 or 24 ten amp circuits
- 16 gauge, 12 inch lead wire - longer lead lengths are available
- Higher rotational speeds with alternate bearings (optional)
- Various axial and radial lead exits are available
- Splash seals for dust and moisture resistance
- Standard collar mounting - flange mounting optional
- Also available with 12, 24, 36 and 48, 2 amp rings or power and signal combinations. Please refer to AC6200 data sheet.

Benefits

- Transfers analog and digital signals
- Compatible with data bus protocols
- Fiber brush technology provides long life and maintenance-free operation (no lubrication required)
- Continuous 360° rotation of power or data signals



Typical Applications

- Industrial machinery - machining centers, rotary index tables, heavy equipment turrets or cable reels, test equipment, packaging machines, palletizing machines, magnetic clutches, process control equipment, rotary sensors, emergency lighting, robotics
- Exhibit / display equipment
- Medical equipment

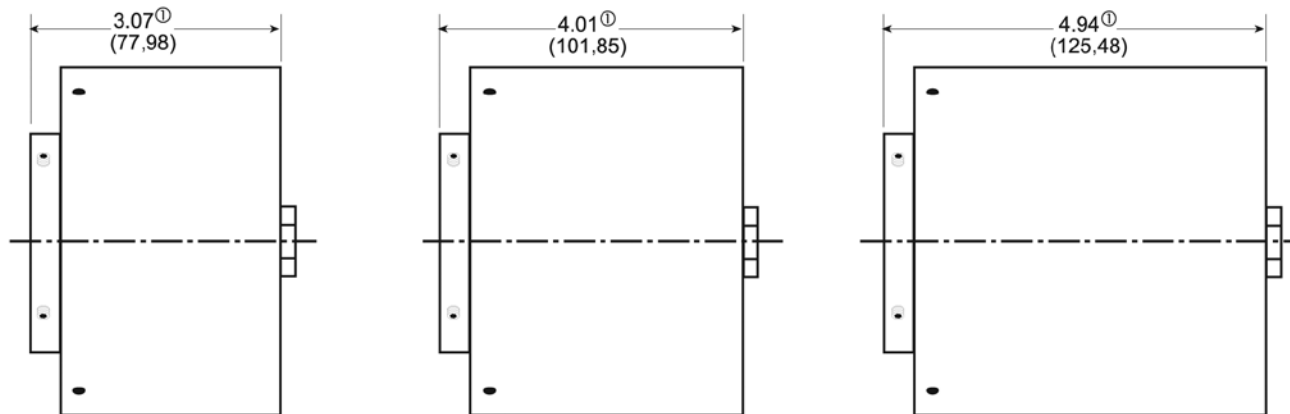
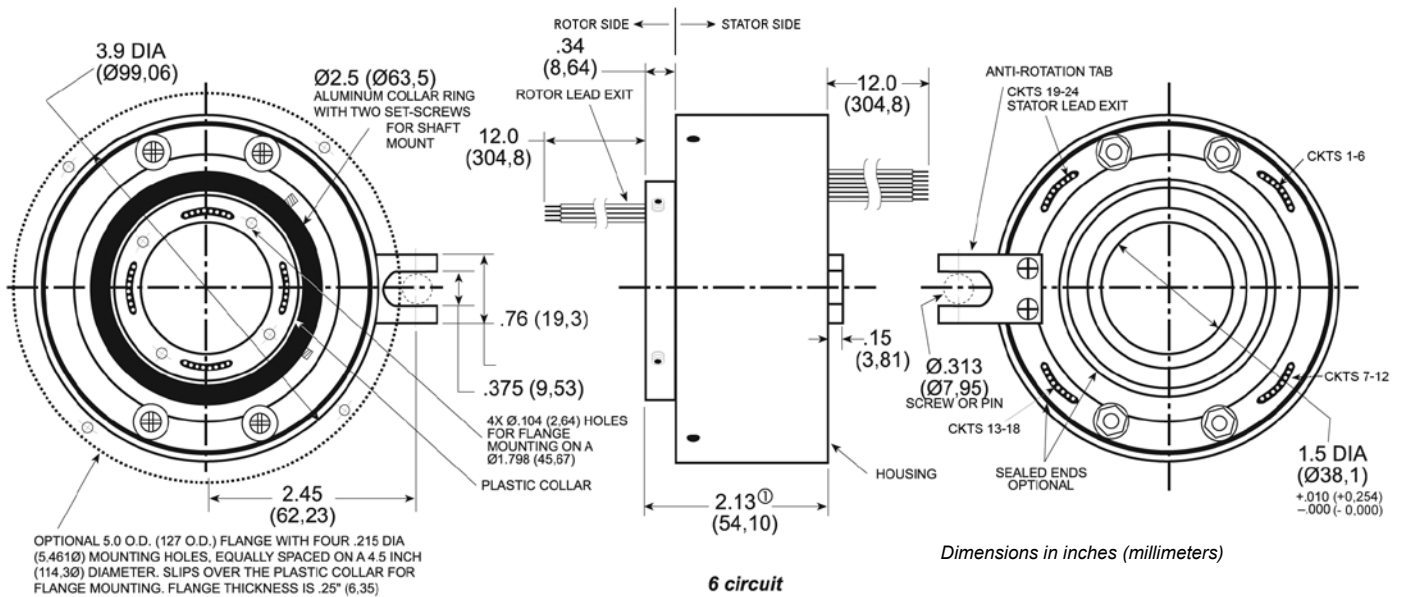
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AC4598 Specifications		Options
Operating Speed	250 rpm* continuous	<ul style="list-style-type: none"> • 5 inch (127 mm) O.D. flange with 4 mounting holes • Splash seals for dust and moisture resistance • Various axial and radial lead exits are available • Longer lead lengths are available • Higher rotational speeds with alternate bearings • Higher current and voltage capacity per circuit • Signal and power circuit combination • IP 65 rated slip ring available (P/N AC6419), see page 26
Number of Circuits	6, 12, 18 or 24	
Lead Wire	16 gauge, 12 inches (300 mm)	
Voltage	600 VAC	
Operating Temp.	-40°C to 80°C	
Current Rating	10 amp circuits	
Torque	Approx. .5 in-oz (36.00 cm-g) per circuit unsealed Add approx. 10 in-oz (720.08 cm-g) for dust seals	
Noise	Less than 100 milliohms peak @ 6 VDC, 50 mA, 5 rpm	
Sealed Units	Optional intermittent splash and gross particle exclusion only	

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

Lead Wire Color Code

Ring #	Color	Ring #	Color	Ring #	Color	Ring #	Color	Ring #	Color	Ring #	Color
1	Blk	5	Yel	9	Gry	13	Wht-Red	17	Wht-Blu	21	Wht-Blk-Red
2	Brn	6	Grn	10	Wht	14	Wht-Orn	18	Wht-Vio	22	Wht-Blk-Orn
3	Red	7	Blu	11	Wht-Blk	15	Wht-Yel	19	Wht-Gry	23	Wht-Blk-Yel
4	Orn	8	Vio	12	Wht-Brn	16	Wht-Grn	20	Wht-Blk-Brn	24	Wht-Blk-Grn



Notes:

12 circuit

18 circuit

24 circuit

1. Drawings not actual size, measurements are in inches (millimeters)
2. Rotor and stator leads exit 4 places, 90° apart, 6 leads per exit relative to circuit count
3. ① = Flange mounted, add .21 (5,3) for flange, no collar ring