

Slip Rings With Through-Bores

AC6200

1-1/2 inch through-bore 12, 24, 36 and 48 circuit versions

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 unobstructed through-bore provides routing space for hydraulics, pneumatics or for a concentric shaft mount.

The AC6200 uses fiber brush technology which offers several advantages over conventional slip ring contacts including multiple points of contact per brush bundle and low contact wear rates. In addition, fiber brushes do not require lubrication and produce virtually no wear debris, for maintenance free, life time operation.

Features

- 1-1/2 inch through-bore
- Speeds up to 250 rpm continuous
- 12, 24, 36 and 48 circuit versions with 2 amp contacts
- Power and signal (10 and 2 amp) circuits may be combined
- Shaft, brush block and cover are molded of high-impact thermoplastic
- Optional steel bearing and splash seals for harsh environments (special order)
- Collar mounting is standard; flange mounting optional
- 26 gauge color coded, 12" lead wires
- Continuous 360° rotation of power or data signals
- Also available with 6, 12 and 18, 10 amp rings. Please refer to AC4598 data sheet.
- Silver plated rings, silver alloy brushes

Benefits

- Transfers control and data signals
- Fiber brush technology provides maintenance-free operation (no lubrication required)
- Modular design meets special requirements through off-the-shelf manufacturing techniques
- Compact packaging



Typical Applications

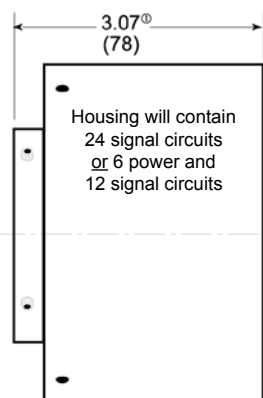
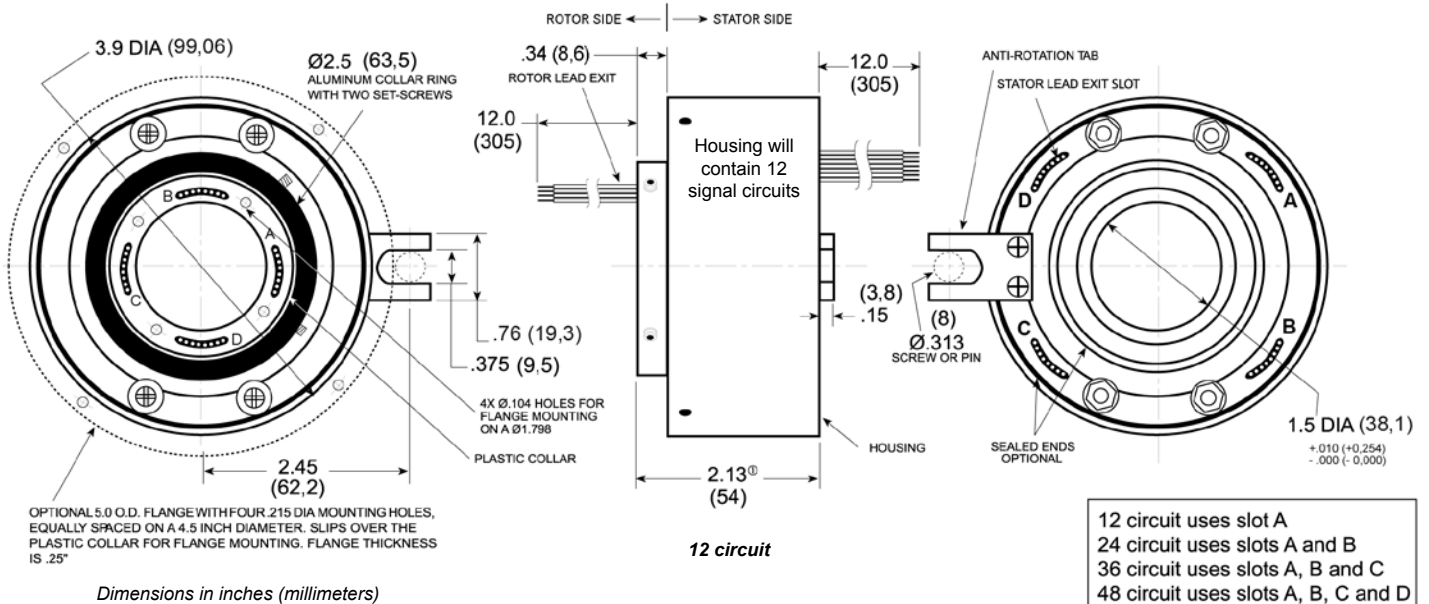
- Industrial machinery – machining centers, rotary index tables, heavy equipment turrets or cable reels, test equipment, packaging and palletizing machines, magnetic clutches, process equipment, rotary sensor, emergency lighting, robotics
- Exhibit / display equipment
- Medical equipment

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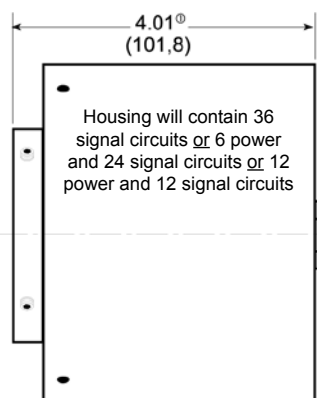
AC6200 Specifications		Options
Operating Speed	250 rpm* continuous	<ul style="list-style-type: none"> • 5 inch O.D. flange with 4 mounting holes • Splash seals for dust and moisture resistance • Various axial and radial lead exits are available • Signal and power circuit combination for <ul style="list-style-type: none"> • 2 and 10 amp applications • Gold plated rings • IP 65 rated enclosure available (P/N AC6419), see page 26
Number of Circuits	12, 24, 36, 48	
Lead Wire	26 gauge, 12 inches, 12 colors with number tags	
Voltage	220 VAC	
Operating Temp.	-40°C to 80°C	
Current Rating	2 amps / circuits	
Torque	Approx. .5 in-oz per circuit unsealed Add approx. 10 in-oz for dust seals	
Noise	Less than 60 milliohms peak @ 6 VDC, 50 mA, 5 - 15 rpm	
Sealed Units	Optional intermittent splash and large particle exclusion only	

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

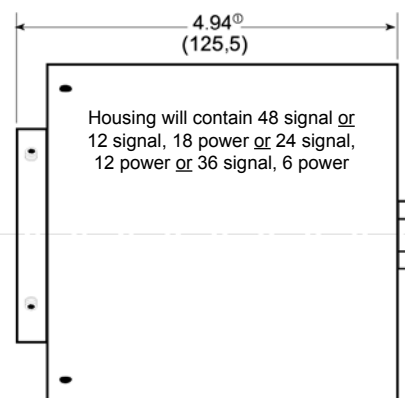
Lead Wire Color Code											
A			B			C			D		
1. Blk	5. Yel	9. Gry	13. Blk	17. Yel	21. Gry	25. Blk	29. Yel	33. Gry	37. Blk	41. Yel	45. Gry
2. Brn	6. Grn	10. Wht	14. Brn	18. Grn	22. Wht	26. Brn	30. Grn	34. Wht	38. Brn	42. Grn	46. Wht
3. Red	7. Blu	11. Wht-Blk	15. Red	19. Blu	23. Wht-Blk	27. Red	31. Blu	35. Wht-Blk	39. Red	43. Blu	47. Wht-Blk
4. Orn	8. Vio	12. Wht-Brn	16. Orn	20. Vio	24. Wht-Brn	28. Orn	32. Vio	36. Wht-Brn	40. Orn	44. Vio	48. Wht-Brn



24 circuit



36 circuit



48 circuit

Notes:

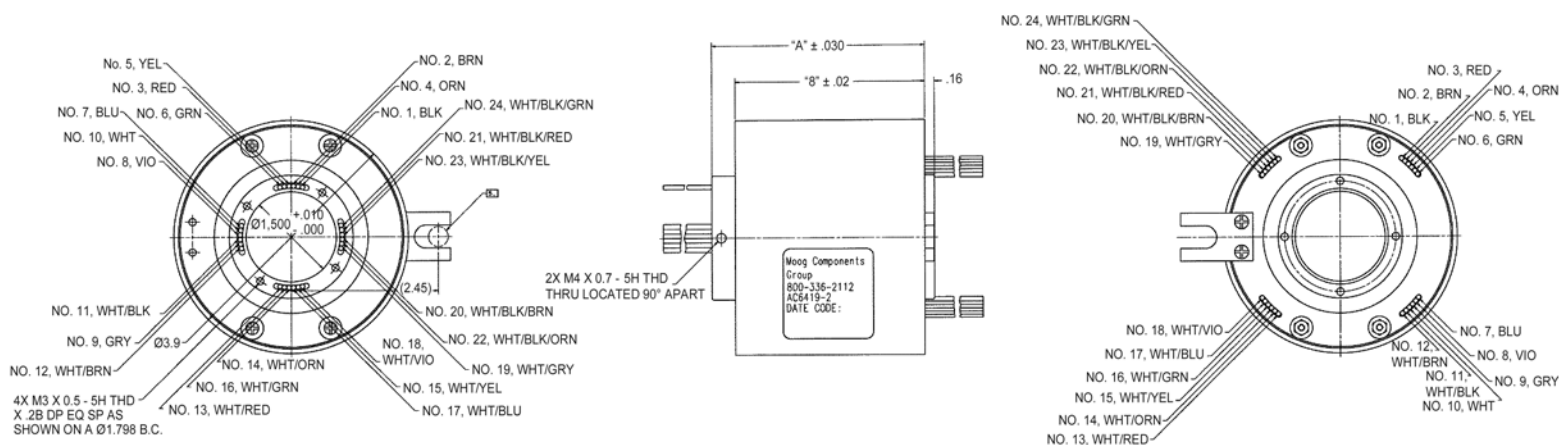
1. Drawings not actual size, dimensions are in inches (millimeters)
2. Rotor and stator leads exit 4 places, 90° apart, 12 leads per exit relative to circuit count
3. Ⓞ = Flange mounted, add .21 (5,3) for flange

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AC6419 Specifications (IP 65 Sealed Version of AC4598 and AC6200)		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
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	
Environmental	IP 65 sealed	

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

AC6419 Dimensions



Dimensions in inches