# **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
- 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
- · Available with Ethernet

#### **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

### **Slip Rings With Through-Bores**

	AC4598 Specifications	Options		
Operating Speed	250 rpm*	• 5 inch (127 mm) O.D. flange with 4 mounting holes		
Number of Circuits	6, 12, 18 or 24	Splash seals for dust and moisture resistance		
Lead Wire	16 gauge, 12 inches (300 mm)	I onger lead lengths are available		
Voltage	600 VAC	Higher rotational speeds with alternate bearings		
Operating Temp.	-40°C to 80°C	Higher current and voltage capacity per circuit		
Current Rating	10 amp circuits	<ul> <li>Signal and power circuit combination</li> <li>IP 65 rated slip ring available (P/N AC6419)</li> <li>Available with Ethernet, contact factory</li> </ul>		
Noise	100 milliohms max.			

\*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:

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

## **Slip Rings With Through-Bores**

(IP 65 \$	AC6419 Specifications Sealed Version of AC4598 and AC6200)	Options		
Operating Speed	250 rpm*	• 5 inch (127 mm) O.D. flange with 4 mounting holes		
Number of Circuits	Refer to AC4598 and AC6200 data sheets	• Various axial and radial lead exits are available		
Lead Wire	16 gauge power, 26 gauge signal 12 inches (300 mm)	• Higher rotational speeds with alternate bearings		
Voltage	600 VAC (10 amp rings) / 220 VAC (2 amp rings)	Higher current and voltage capacity per circuit		
Operating Temp.	-40°C to 80°C	<ul> <li>Signal and power circuit combination</li> </ul>		
Current Rating	10 amp circuits			
Noise	100 milliohms max.			

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

Part Number	" <b>A</b> "	" <b>B</b> "
AC6419-6	2.602 inch (66.090 mm)	2.214 inch (56.235 mm)
AC6419-12	3.538 inch (89.865 mm)	3.150 inch (80.01 mm)
AC6419-18	4.474 inch (113.639 mm)	4.086 inch (103.784 mm)
AC6419-24	5.410 inch (137.414 mm)	5.022 inch (127.558 mm)

#### AC6419 Dimensions





Refer to AC4598 / AC6200 for lead exits

Dimensions in inches