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
• 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**

| Operating Speed | 250 rpm* |
| 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 |
| Noise | 100 milliohms max. |

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

**Options**

- 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)
- Available with Ethernet, contact factory

**Lead Wire Color Code**

<table>
<thead>
<tr>
<th>Ring #</th>
<th>Color</th>
<th>Ring #</th>
<th>Color</th>
<th>Ring #</th>
<th>Color</th>
<th>Ring #</th>
<th>Color</th>
<th>Ring #</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Blk</td>
<td>5</td>
<td>Yel</td>
<td>9</td>
<td>Gry</td>
<td>13</td>
<td>Wht-Red</td>
<td>17</td>
<td>Wht-Blu</td>
</tr>
<tr>
<td>2</td>
<td>Brn</td>
<td>6</td>
<td>Gm</td>
<td>10</td>
<td>Wht</td>
<td>14</td>
<td>Wht-Blm</td>
<td>18</td>
<td>Wht-Yel</td>
</tr>
<tr>
<td>3</td>
<td>Red</td>
<td>7</td>
<td>Blu</td>
<td>11</td>
<td>Wht-Blk</td>
<td>15</td>
<td>Wht-Blk-Bl</td>
<td>19</td>
<td>Wht-Blk-Yel</td>
</tr>
<tr>
<td>4</td>
<td>Orm</td>
<td>8</td>
<td>Vio</td>
<td>12</td>
<td>Wht-Blm</td>
<td>16</td>
<td>Wht-Gm</td>
<td>20</td>
<td>Wht-Blk-Blm</td>
</tr>
</tbody>
</table>

**Dimensions in Inches (millimeters)**

- **3.9 DIA (Ø99.06)**
- **Ø2.5 (Ø63.5)** Aluminum collar ring with two set-screws for shaft mount
- **.76 (19.3)**
- **.375 (9.53)**
- **4x Ø1.104 (2.81) Holes for flange mounting on A Ø1.905 (48.15) Plastic collar CkTS 1-13-18**
- **2.13 (54.10)**
- **1.5 DIA (Ø38.1)**

**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. @ = Flange mounted, add .21 (5.3) for flange, no collar ring

Moog Components Group • www.moog.com/components