

AC7296

Customizable 1 inch through-bore, IP65 sealed

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

The AC7296 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 for maintenance free lifetime operation

The AC7296 leverages Moog's popular AC4598 / AC6200 series of parts while providing many new standard options including higher circuit counts and accommodating custom cable requests.

Features

- 1 inch through-bore
- Speeds up to 500 rpm
- Up to 36 ten amp, 16 AWG, circuits
- Up to 72 two amp, 26 AWG, circuits
- Optional configurations for up to 25 A, 12 AWG, power
- 12 inch lead wire standard, with options up to 10 feet
- IP65 sealing
- Standard collar mounting - flange mounting optional
- Also available with Ethernet, twisted shielded pairs, coax and custom cable requests



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
- Positioning pedestals – security, communication, sensors

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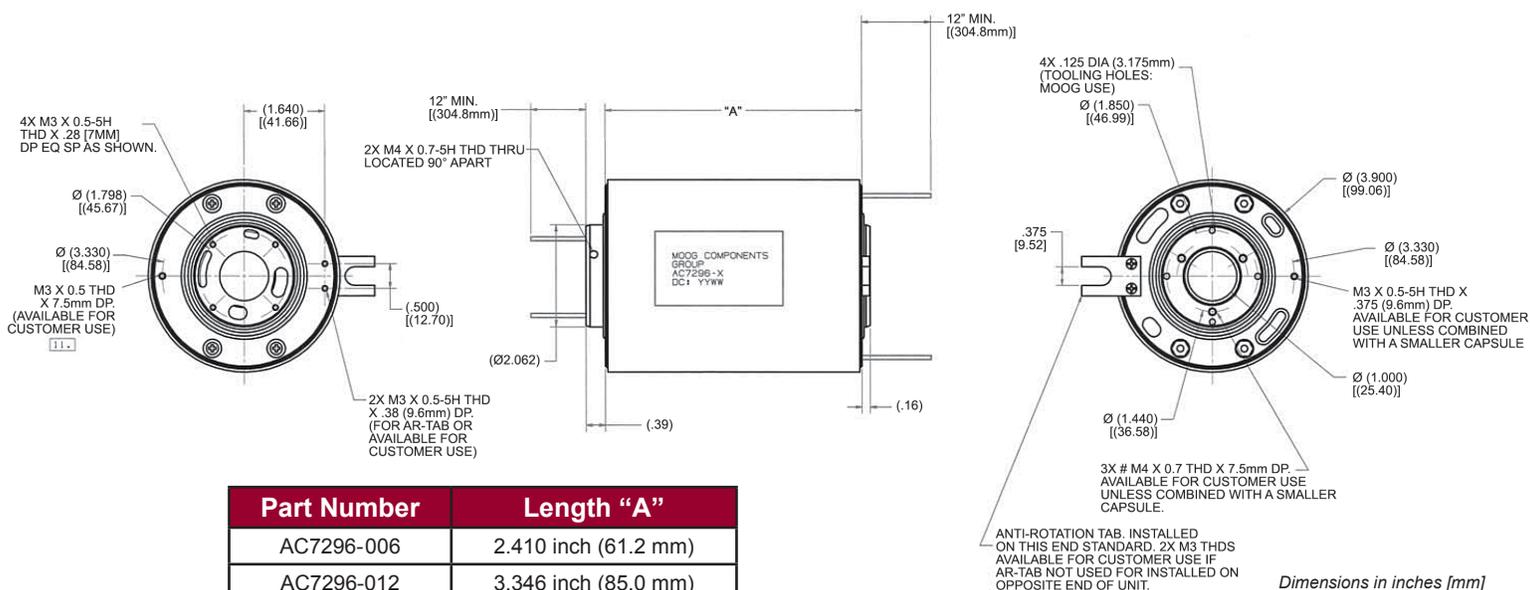
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Slip Rings With Through-Bores

AC7296 Specifications		Options
Operating Speed	500 rpm*	<ul style="list-style-type: none"> • 5 inch (127 mm) O.D. flange with 4 mounting holes • Low torque unsealed variant • Ethernet, 10 / 100BaseT and 1000BaseT (shielded or unshielded) • Leads up to 120 inches standard • Higher current and voltage capacity per circuit • Coax, shielded twisted pair, and other custom cable requests • M12 connectors, other styles by request • Gold plated rings • Can be combined with fiber optic rotary joint, RF rotary joint, or slip ring capsule mounted on the bore for more circuit density or bandwidth capability.
Number of Circuits	2 A signal in multiples of 12 up to 72 10 A power in multiples of 6 up to 36 25 A power in multiples of 3 up to 18	
Lead Wire	26 AWG signal, 16 or 12 AWG power, 12 inches (300 mm)	
Voltage	240 VDC signal / 600 VDC power	
Operating Temperature	-40°C to +80°C	
Contact Material	Silver rings with fiber brushes	
Noise	100 milliohms max	

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

AC7296 Dimensions



Part Number	Length "A"
AC7296-006	2.410 inch (61.2 mm)
AC7296-012	3.346 inch (85.0 mm)
AC7296-018	4.282 inch (108.8 mm)
AC7296-024	5.218 inch (132.5 mm)
AC7296-030	6.154 inch (156.3 mm)
AC7296-036	7.090 inch (180.1 mm)
AC7296-042	8.026 inch (203.9 mm)
AC7296-048	8.962 inch (227.6 mm)
AC7296-054	9.898 inch (251.4 mm)
AC7296-060	10.834 inch (275.2 mm)

*Please note that circuit limitations may be applicable based on available lead routing space. Contact Moog to review or verify layout.