

Slip Ring Capsules (Compact)

AC6023

Compact in various circuit configurations

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, commutator, collector, swivel or an electrical rotary joint.

The AC6023 slip ring capsule is a standard, off-the-shelf unit that uses gold contacts at the rotary interface. Color-coded lead wires are used on both the stator and rotor for simplified electrical connections.

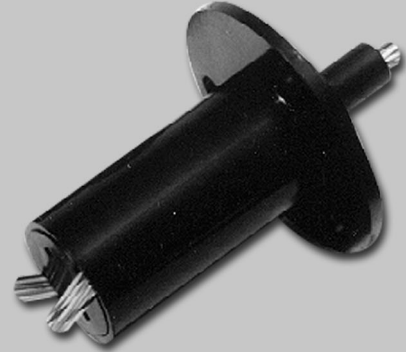
The AC6023 utilizes 90° V-groove rings to provide smoother running, lower torque and lower (electrical) noise than competitive slip rings. It is available in 6, 12, 18 and 24 circuit models.

Features

- 6, 12, 18 and 24 circuit models
- 2 amp / 210 VDC / 240 VAC circuits
- Precision ball bearings meet or exceed life requirements for most commercial applications
- Speeds up to 250 rpm continuous
- Compact size: 0.57 inch to 1.38 inch lengths (depending upon number of circuits)
- Gold-on-gold contacts
- 12 inch, 24 inch, 36 inch, 48 inch standard lead lengths
- Compatible with data bus protocols
- Sealed units are also available (dust and light splash only)
- Flexible, color-coded, silver-plated, Teflon® insulated lead wires
- Transfers analog and digital signals
- Also available with 5 and 10 amp power rings combined with 2 amp rings. Please refer to AC6305 / AC6310 data sheet.

Benefits

- Smooth running
- Low torque
- Compact
- Quick shipment



Typical Applications

- CCTV pan / tilt camera mounts
- Electrical test equipment
- Manufacturing and process control equipment
 - Indexing tables
 - Robotics (end-effectors, arms, vision systems, sensors)
- Exhibit / display equipment
- Medical equipment

Slip Ring Capsules (Compact)

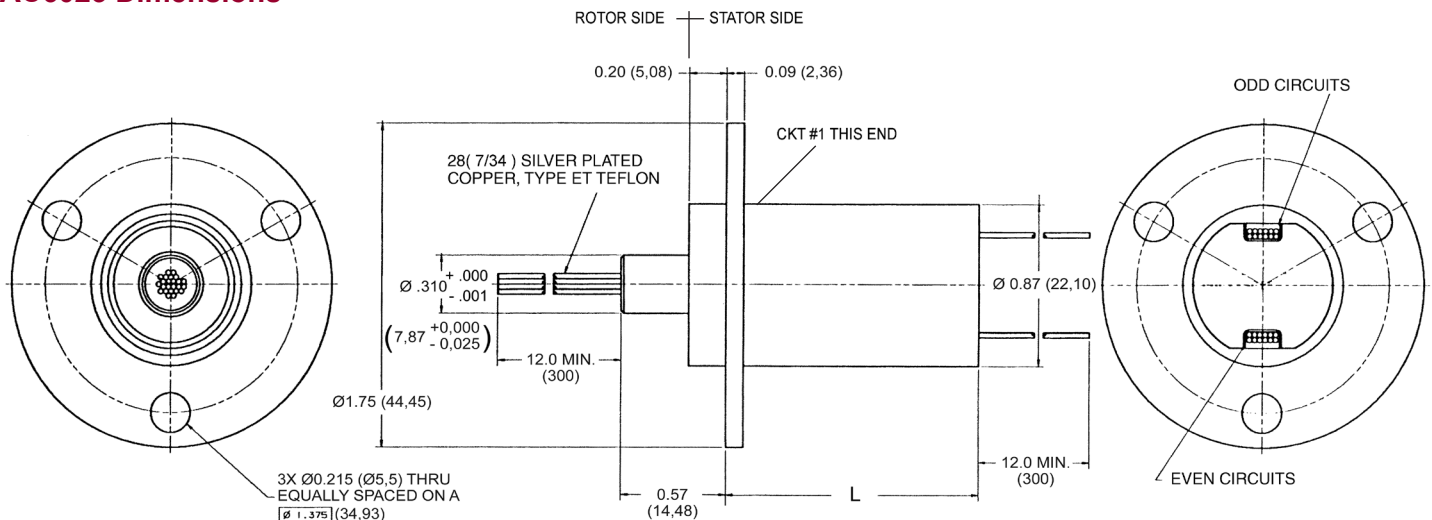
Specifications		Custom Assemblies	Options
Operating Speed	250 rpm* continuous	Aside from the standard configurations shown here, we have a wide variety of special designs, which have been customized to meet the particular needs of an individual application. <ul style="list-style-type: none"> Termination of lead wires into your chosen crimps and / or connectors Inclusion of coax and miniature data bus cables Addition of specialist components (chokes, in-line resistors etc.) Placement of custom circuitry directly onto the unit Custom harnessing Custom mechanical integration features Rear access (through) shafts Low rotational torque units for self-levelling applications Combination slip ring / fiber optic joints (see also pages 75 - 110) Please contact us to discuss your precise needs.	<ul style="list-style-type: none"> Splash seals for dust and moisture resistance
Number of Circuits	6, 12, 18, or 24		
Lead Lengths	12, 24, 36, and 48 inches		
Lead Size / Type	28 (7 / 34) silver plated copper, type ET Teflon®		
Voltage	210 VDC / 240 VAC		
Temperature Range	-40°C to +80°C		
Contact Material	Gold		
Current Rating	2 amps / ckt		
Dielectric Strength	250 VAC @ 60 Hz, between each circuit and all other circuits		
Insulation Resistance	1000 megohms @ 500 VDC		
Electrical Noise	60 milliohms max. tested @ 6 VDC, 50 milliamps when running @ 5 rpm		

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

Lead Wire Color Codes					
Ring#	Color Code	Ring#	Color Code	Ring#	Color Code
1	BLK	9	GRY	17	WHT-BLU
2	BRN	10	WHT	18	WHT-VIO
3	RED	11	WHT-BLK	19	WHT-GRY
4	ORN	12	WHT-BRN	20	WHT-BLK-BRN
5	YEL	13	WHT-RED	21	WHT-BLK-RED
6	GRN	14	WHT-ORN	22	WHT-BLK-ORN
7	BLU	15	WHT-YEL	23	WHT-BLK-YEL
8	VIO	16	WHT-GRN	24	WHT-BLK-GRN

Capsule Length = L		
# Of Circuits	Capsule Length (L)	Part #
6	0.57 inch (14,5 mm)	AC6023-6
12	0.84 inch (21,3 mm)	AC6023-12
18	1.11 inch (28,2 mm)	AC6023-18
24	1.38 inch (35,1mm)	AC6023-24

AC6023 Dimensions



Dimensions in inches (millimeters)