Slip Ring Capsules (Compact)

AC6023 Compact in various circuit configurations

Description

Aslip 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

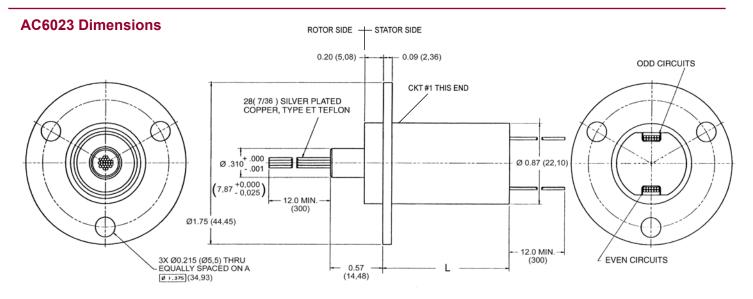
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AC6023 Specifications		Custom Assemblies	Options
Operating Speed	250 rpm* continuous	Aside from the standard configurations shown here, we	for dust and
Number of Circuits	6, 12, 18, or 24	have a wide variety of special designs, which have been customized to meet the particular needs of an individual	
Lead Lengths	12, 24, 36, and 48 inches	application.	
Lead Size / Type	28 (7 / 36) silver plated copper, type ET Teflon [®]	Termination of lead wires into your chosen crimps	
Voltage	210 VDC / 240 VAC	 and / or connectors Inclusion of coax and miniature data bus cables 	
Temperature Range	-40°C to +80°C	Addition of specialist components (chokes, in-line	
Contact Material	Gold	resistors etc.)	
Current Rating	2 amps / ckt	Placement of custom circuitry directly onto the unit Custom homosoing	
Electrical Noise	60 milliohms max. tested @ 6 VDC, 50 milliamps when running @ 5 rpm	 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 83 - 108) 	
		Please contact us to discuss your precise needs.	

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



Dimensions in inches (millimeters)