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. It is available in 6, 12, 18 and 24 circuit models.

Aside from the standard configurations, we have a wide variety of special designs, which have been customized to meet the particular needs of an individual application.

Features

- 6, 12, 18 and 24 circuit models
- 2 amp / 240 VAC circuits
- Precision ball bearings meet or exceed life requirements for most commercial applications
- Speeds up to 250 rpm
- Compact size: 0.57 inch to 1.38 inch lengths (depending upon number of circuits)
- Gold
- 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
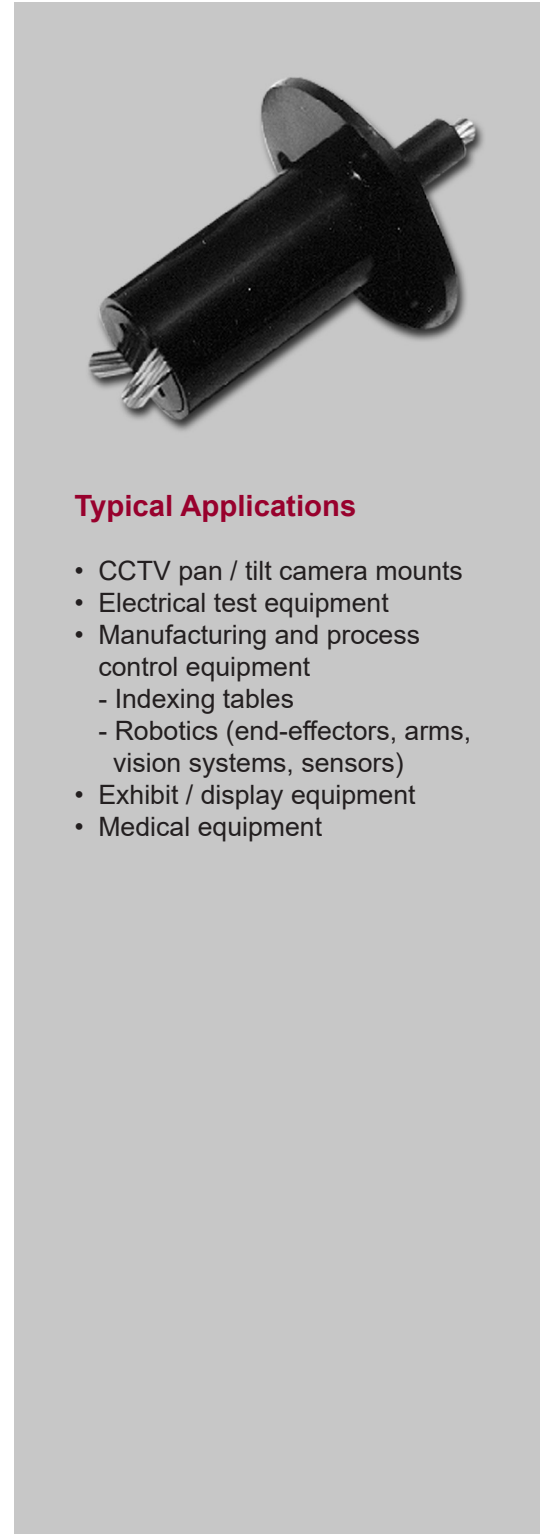
Typical Applications

- 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

AC6023 Specifications		Options
Operating Speed	250 rpm*	• Splash seals for dust and moisture resistance
Number of Circuits	6, 12, 18, or 24	• No flange
Lead Lengths	12, 24, 36, and 48 inches	• Aluminum housing
Lead Size / Type	28 (7 / 36) silver plated copper, type ET Teflon®	
Voltage	240 VAC	
Temperature Range	-40°C to +80°C	
Contact Material	Gold	
Current Rating	2 amps / ckt	
Electrical Noise	60 milliohms max.	

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

AC6023 Dimensions
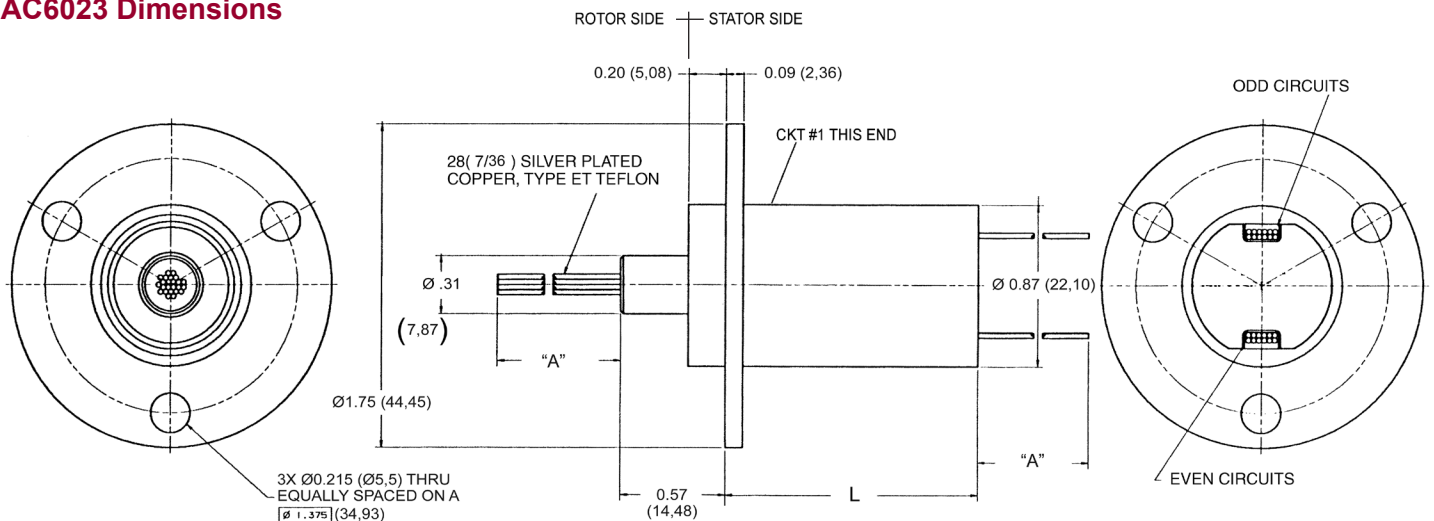
Dimensions in inches (millimeters)

Part Number	"A"
AC6023	12 in (304.8 mm)
AC6023-A	24 in (609.6 mm)
AC6023-B	36 in (914.4 mm)
AC6023-C	48 in (1219.2 mm)

AC7551 Specifications (IP 65 Sealed Versions of AC6023, AC6305/AC6310, AC7188, & AC7203)		Options
Operating Speed	250 rpm	• No Flange
Current Rating	2A, 5A, 10A	• 12, 24, 36, or 48 Inch Leads
Voltage	240 VAC / VDC	• See data sheets for standard circuit options
Contact Material	Gold-on-gold	- AC6023
Temperature Range	-40°C to +80°C	- AC6305/AC6310
Electrical Noise	60 milliohms max.	- AC7188
Video Connections	HD-SDI	- AC7203
Ethernet Connections	10/100BaseT and 1000BaseT	• Custom wiring configurations can be quoted
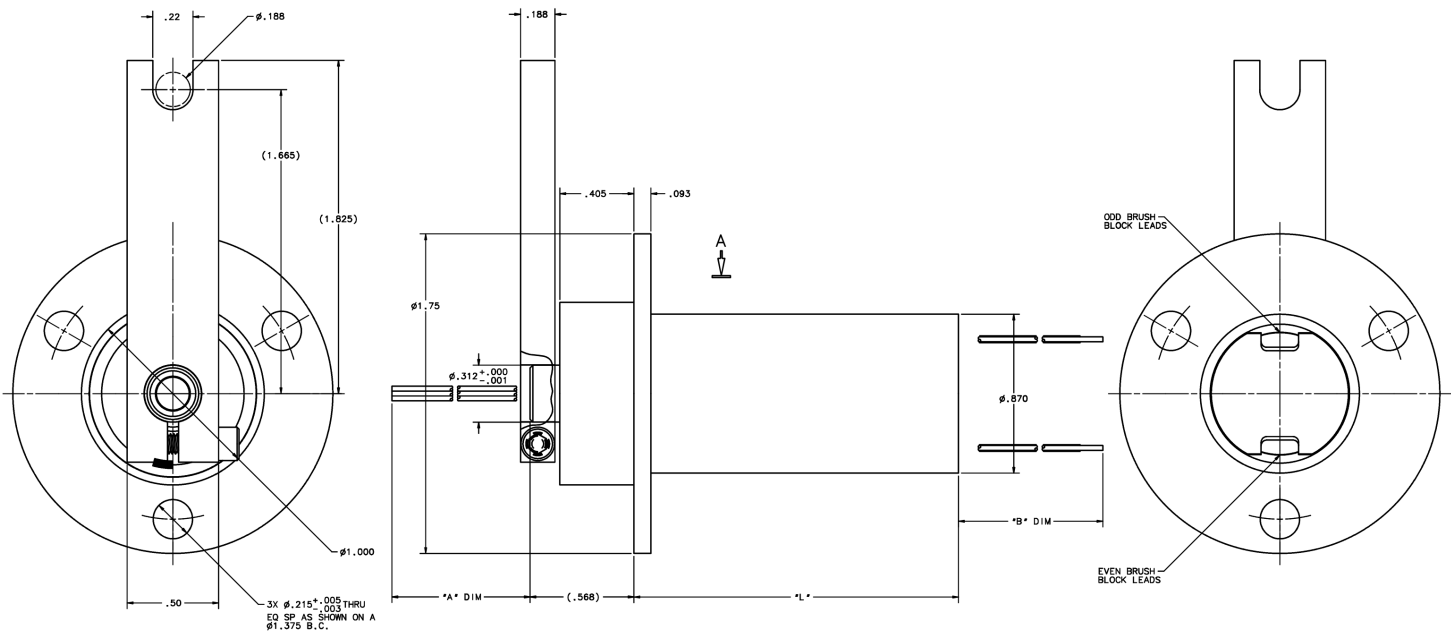
AC7551 Dimensions

Dimensions in inches

Part Number	Capsule Lenght (L)
AC7551-6	.965 in
AC7551-12	1.235 in
AC7551-18	1.505 in
AC7551-24	1.775 in

Dash Number	Dim "A"	Dim "B"
AC7551-*	12.0 in minimum	11.5 in minimum
AC7551-*A	24.0 in minimum	23.5 in minimum
AC7551-*B	36.0 in minimum	35.5 in minimum
AC7551-*C	48.0 in minimum	47.5 in minimum