



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



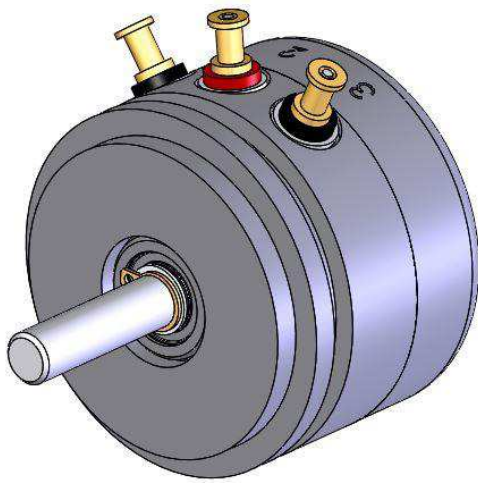
Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





6009 ROTARY SERIES

1K Ω , 2K Ω , 5K Ω , 10K Ω , 20K Ω , • Precision Position Potentiometer 7/8" Dia. Servo Mount

SPECIFICATIONS

Industrial / Military Grade Rotary Position Sensor

Rotational Operating Life 100 x 10⁶ Revolutions Min.

Anodized Aluminum Housing

Stainless Steel Shaft & Ball Bearings

General Requirements IAW MIL-PRF-39023

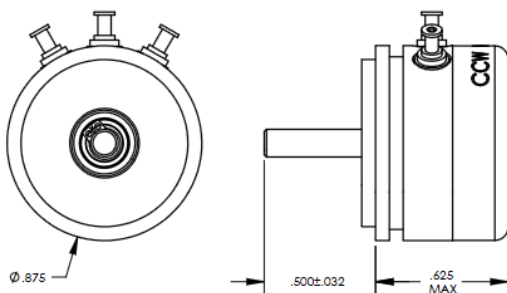
MEAS rotary potentiometer designs provide various non-linear tapers, taps, multi-sections, and electrical angles while maintaining great reliability.

FEATURES

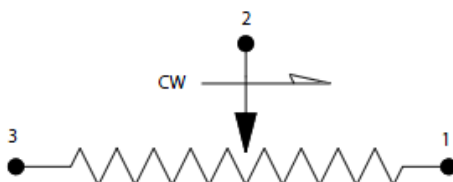
- Less Space (7/8" Dia. Sizes)
- Reliability
- Resolution
- Output Smoothness
- Special Linearity Options
- Mechanical Stops Option
- Long Life
- Various Non-Linear Tapers, Taps, Multi-sections, Electrical Angles, Special Total Resistance

ELECTRICAL CHARACTERISTICS

RESISTANCE	1K Ω to 20K Ω \pm 10%
ACTIVE ELECTRICAL ANGLE	340°
ELECTRICAL CONTINUITY ANGLE	344° MIN
INDEPENDENT LINEARITY	\pm 0.5%
END VOLTAGE	0.5% MAX
VOLTAGE RESOLUTION	VIRTUALLY INFINITE
OUTPUT SMOOTHNESS	0.1% MAX
RESISTANCE TEMP. COEFFICIENT	400PPM/ $^{\circ}$ C MAX
POWER RATING @ 70$^{\circ}$C	1.0 WATT MAX
WIPER CONTACT CURRENT	10mA MAX
DIELECTRIC STRENGTH	750 VRMS @ 60Hz
INSULATION RESISTANCE	100m Ω MIN @ 500VDC



SCHEMATIC DIAGRAM



6009 ROTARY SERIES

1K Ω , 2K Ω , 5K Ω , 10K Ω , 20K Ω , • Precision Position Potentiometer 7/8" Dia. Servo Mount

MECHANICAL CHARACTERISTICS

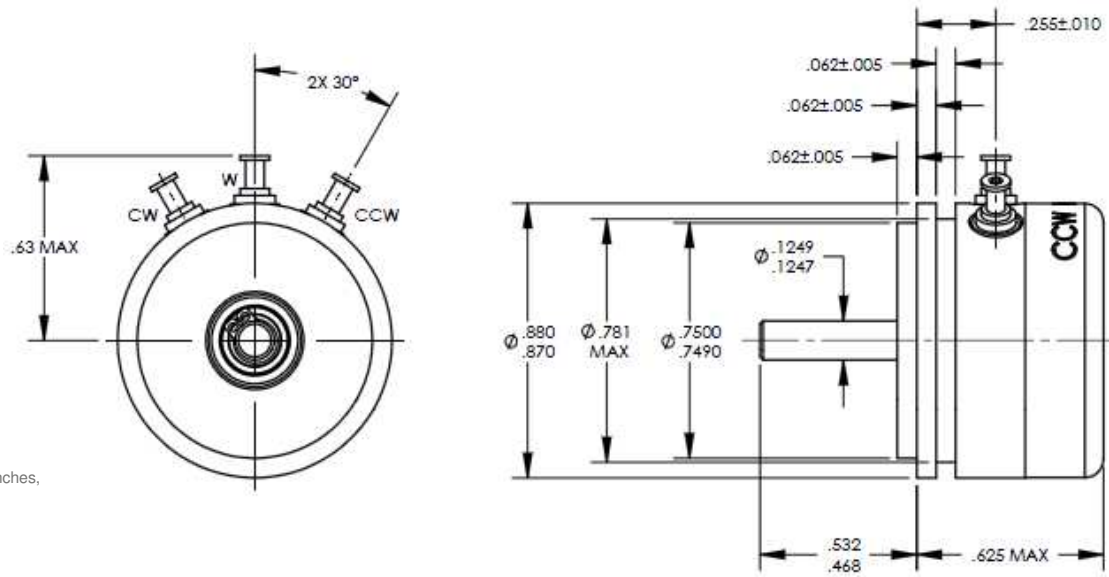
MECHANICAL ROTATION	CONTINUOUS
STARTING TORQUE	0.25 Oz.-In. MAX
RUNNING TORQUE	0.20 Oz.-In. MAX
TOTAL WEIGHT (1-GANG)	0.6 Oz. MAX
PILOT RUNOUT	0.001 In. TIR
SHAFT RUNOUT	0.001 In. TIR
SHAFT ENDPLAY	0.003 MAX
SHAFT RADIAL PLAY	0.001 In. TIR
LATERAL RUNOUT	0.002 In. TIR

STANDARD MATERIALS

HOUSING AND COVER	ANODIZED ALUMINUM
SHAFT & BALL BEARINGS	STAINLESS STEEL
RESISTANCE ELEMENT	CO-MOLDED CONDUCTIVE PLASTIC
ELECTRICAL CONTACTS	MULTI-FINGER PRECIOUS METAL
SOLDER TERMINALS	GOLD PLATED BRASS

ENVIRONMENTAL CHARACTERISTICS

OPERATING TEMP. RANGE	-65°C to +125°C
ROTATIONAL OPERATING LIFE	100 x 10 ⁶ REVOLUTIONS MIN.



6009 ROTARY SERIES

1K Ω , 2K Ω , 5K Ω , 10K Ω , 20K Ω , • Precision Position Potentiometer 7/8" Dia. Servo Mount

AVAILABLE OPTIONS / CUSTOMIZATION

- ◆ Resistance Values
 - 500 Ω to 50K Ω
- ◆ Tolerances
 - As low as $\pm 5\%$
- ◆ Special Linearity
 - As low as $\pm .15\%$
 - Absolute (Indexed)
 - Or Independent over specified regions
- ◆ Additional Taps, Current or Voltage
- ◆ Current Limit Resistors
- ◆ Internal Circuit Components
 - Caps, Diodes, etc.
- ◆ Special Electrical Angles
 - Up to 355° MAX
- ◆ Wire Leads or Cable in place of Terminals
- ◆ Special Transfer Functions
 - Non-Linear Outputs
 - Load Compensation
 - Trig, Log, & Exponential Outputs
- ◆ Multi-gang Construction
 - Up to 6 on a common shaft (+ .320 Length per gang) or concentric shafting
- ◆ Shaft Modifications
 - Rear Extensions
 - Flats
 - Slots
 - Steps
- ◆ Mounting Features
 - Anti-rotation Pins
 - Bolt Flanges
 - Threaded Holes
- ◆ Rotational Stops
- ◆ Ancillary Devices
 - Clutches
 - Brakes
 - Switches
- ◆ Environmental Capabilities
 - Moisture Seals
 - High Shock & Vibe

ORDERING INFORMATION

Model Number:	Resistance:
6009-1000-030	1K Ω $\pm 10\%$
6009-1001-030	2K Ω $\pm 10\%$
6009-1002-030	5K Ω $\pm 10\%$
6009-1003-030	10K Ω $\pm 10\%$
6009-1004-030	20K Ω $\pm 10\%$

NORTH AMERICA

Measurement Specialties, Inc.,
a TE Connectivity Company
Phone +1-800-522-6752
Email: customercare.grsv@te.com

TE.com/sensorsolutions

Measurement Specialties, Inc., a TE Connectivity company.

Accustar, American Sensor Technologies, AST, ATEXIS, DEUTSCH, IdentiCal, TruBlue, KPSI, Krystal Bond, Microfused, UltraStable, Measurement Specialties, MEAS, Schaevitz, TE Connectivity, TE, and the TE connectivity (logo) are trademarks of the TE Connectivity Ltd. family of companies. Other logos, product and company names mentioned herein may be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.