

6005 ROTARY SERIES

1KΩ, 2KΩ, 5KΩ, 10KΩ, 20KΩ • Precision Position Potentiometer 1/2" 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

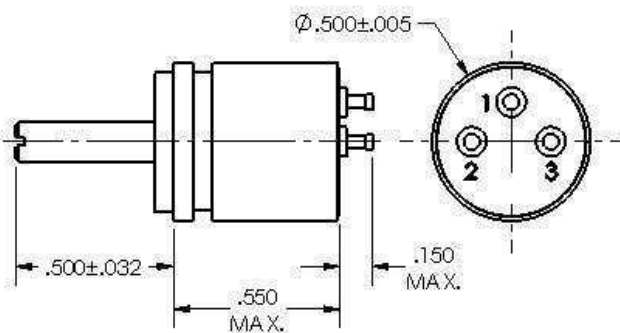
MEAS rotary potentiometer designs provide various non-linear tapers, taps, multi-sections, and electrical angles while maintaining great reliability.

FEATURES

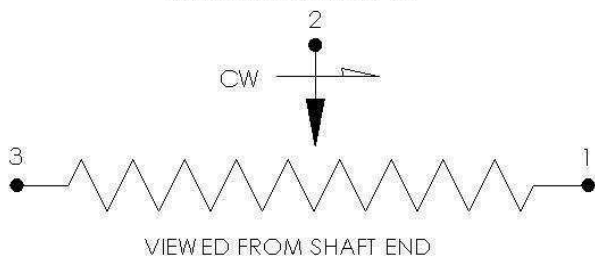
- Less Space (1/2" Dia. Sizes)
- Greater Reliability
- Resolution
- Output Smoothness
- Long Life
- Taps, Multi-sections, Electrical Angles, Special Total Resistance

ELECTRICAL CHARACTERISTICS

RESISTANCE	1KΩ to 20KΩ ±10%
ACTIVE ELECTRICAL ANGLE	325°
ELECTRICAL CONTINUITY ANGLE	330° MIN
INDEPENDENT LINEARITY	±1.0%
END VOLTAGE	1.0% MAX
VOLTAGE RESOLUTION	VIRTUALLY INFINITE
OUTPUT SMOOTHNESS	0.1% MAX
RESISTANCE TEMP. COEFFICIENT	400PPM/°C MAX
POWER RATING @ 70°C	0.5 WATT MAX @ 70°C
WIPER CONTACT CURRENT	10mA MAX
DIELECTRIC STRENGTH	500 VRMS @ 60Hz
INSULATION RESISTANCE	100mΩ MIN @ 500VDC



SCHEMATIC DIAGRAM



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MECHANICAL CHARACTERISTICS

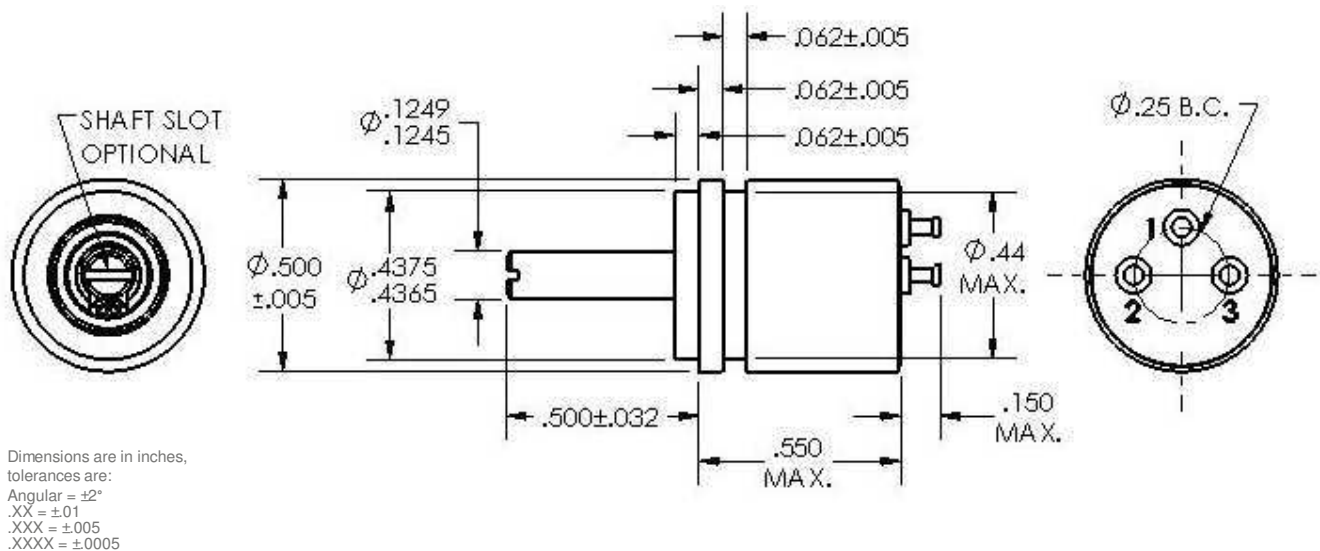
MECHANICAL ROTATION	CONTINUOUS
STARTING TORQUE	0.20 Oz.-In. MAX
RUNNING TORQUE	0.15 Oz.-In. MAX
TOTAL WEIGHT (1-GANG)	0.7 Oz. MAX
PILOT RUNOUT	0.001 In. TIR
SHAFT RUNOUT	0.001 In. TIR
SHAFT ENDPLAY	0.003 MAX
SHAFT RADIAL PLAY	0.001 In. TIR
LATERAL RUNOUT	0.002 In. TIR

STANDARD MATERIALS

HOUSING	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.



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AVAILABLE OPTIONS / CUSTOMIZATION

- ◆ Resistance Values
 - 500 Ω to 30K Ω
- ◆ Tolerances
 - As low as $\pm 5\%$
- ◆ Special Linearity
 - As low as 0.25%
 - Absolute (Indexed)
 - Or Independent over specified regions
- ◆ Additional Taps, Current or Voltage
- ◆ Special Electrical Angles
 - Up to 340° MAX
- ◆ Wire Leads in place of Terminals
- ◆ Shaft Modifications
 - Flats
 - Slots
 - Steps
- ◆ Mounting Features
 - Anti-rotation Pins
 - Bolt Flanges
 - Threaded Holes
- ◆ Environmental Capabilities
 - Moisture Seals
 - High Shock & Vibe

ORDERING INFORMATION

Standard Part Number:	Resistance:
6005-1003-030	10K Ω $\pm 10\%$

NOTE: For additional configuration options, please contact customer care tesensors-ccamericas@te.com

NORTH AMERICA

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