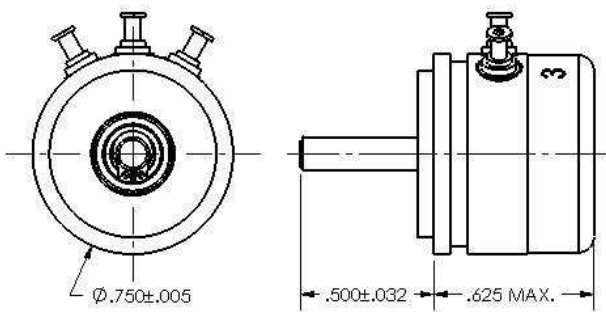
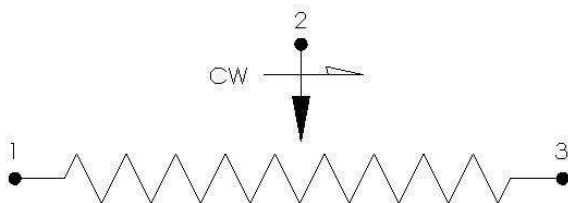


## FEATURES

- Less Space (3/4" Dia. Sizes)
- Greater Reliability
- Resolution
- Output Smoothness
- Special Linearity Options
- Mechanical Stops Option
- Long Life
- Various Non-Linear Tapers, Taps, Multi-sections, Electrical Angles, Special Total Resistance



SCHEMATIC DIAGRAM



VIEWED FROM SHAFT END

## 6008 ROTARY SERIES

1K $\Omega$ , 2K $\Omega$ , 5K $\Omega$ , 10K $\Omega$ , 20K $\Omega$  • Precision Position Potentiometer 3/4" Dia. Servo Mount

### SPECIFICATIONS

**Industrial / Military Grade Rotary Position Sensor**

**Rotational Operating Life 100 x 10<sup>6</sup> 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.

### ELECTRICAL CHARACTERISTICS

<b>RESISTANCE</b>	1K $\Omega$ to 20K $\Omega$ $\pm$ 10%
<b>ACTIVE ELECTRICAL ANGLE</b>	340°
<b>ELECTRICAL CONTINUITY ANGLE</b>	344° MIN
<b>INDEPENDENT LINEARITY</b>	$\pm$ 0.5%
<b>END VOLTAGE</b>	0.5% MAX
<b>VOLTAGE RESOLUTION</b>	VIRTUALLY INFINITE
<b>OUTPUT SMOOTHNESS</b>	0.1% MAX
<b>RESISTANCE TEMP. COEFFICIENT</b>	400PPM/ $^{\circ}$ C MAX
<b>POWER RATING @ 70<math>^{\circ}</math>C</b>	0.75 WATT MAX
<b>WIPER CONTACT CURRENT</b>	10mA MAX
<b>DIELECTRIC STRENGTH</b>	750 VRMS @ 60Hz
<b>INSULATION RESISTANCE</b>	100m $\Omega$ MIN @ 500VDC

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### MECHANICAL CHARACTERISTICS

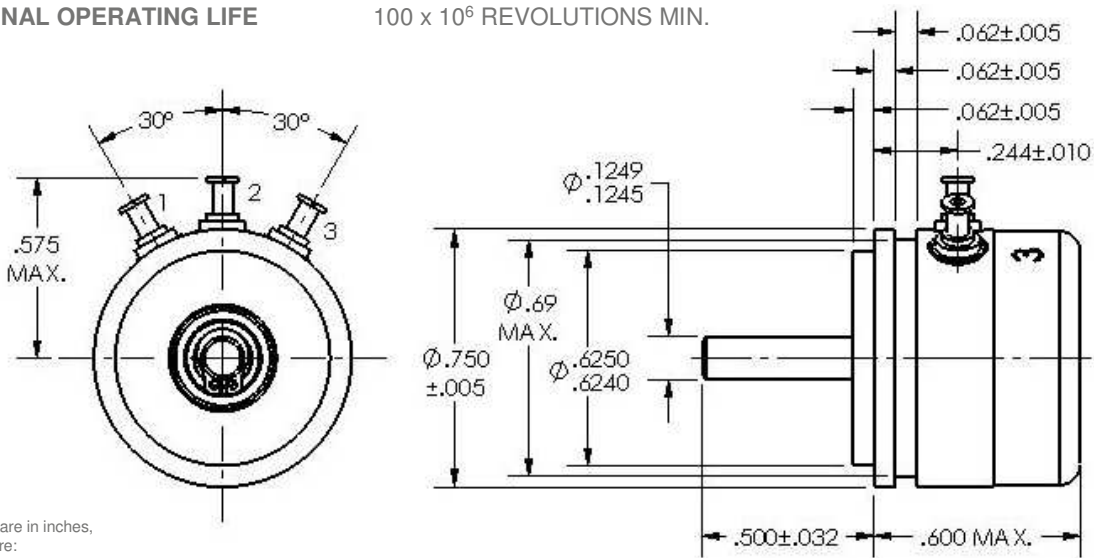
MECHANICAL ROTATION	CONTINUOUS
STARTING TORQUE	0.25 Oz.-In. MAX
RUNNING TORQUE	0.20 Oz.-In. MAX
TOTAL WEIGHT (1-GANG)	0.6 Oz. MAX
PILOT RUNOUT	0.001 In. TIR
SHAFT RUNOUT	0.001 In. TIR
SHAFT ENDPLAY	0.003 MAX
SHAFT RADIAL PLAY	0.001 In. TIR
LATERAL RUNOUT	0.002 In. TIR

### 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 <sup>6</sup> REVOLUTIONS MIN.



Dimensions are in inches,  
tolerances are:  
Angular =  $\pm 2^\circ$   
.XX =  $\pm .01$   
.XXX =  $\pm .005$   
.XXXX =  $\pm .0005$

## 6008 ROTARY SERIES

1K $\Omega$ , 2K $\Omega$ , 5K $\Omega$ , 10K $\Omega$ , 20K $\Omega$ , • Precision Position Potentiometer 3/4" Dia. Servo Mount

### AVAILABLE OPTIONS / CUSTOMIZATION

- ◆ Resistance Values
  - 500 $\Omega$  to 50K $\Omega$
- ◆ Tolerances
  - As low as  $\pm 5\%$
- ◆ Special Linearity
  - As low as 0.2%
  - Absolute (Indexed)
  - Or Independent over specified regions
- ◆ Additional Taps, Current or Voltage
- ◆ 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 (+0.320 Length per gang) or concentric shafting
- ◆ Shaft Modifications
  - Special Shaft Lengths
  - Rear Extensions
  - Flats
  - Slots
  - Steps
- ◆ Special Torque or Detent Requirements
  - As low as 0.015 Oz-In Starting Torque
- ◆ Mounting Dimensions or Features
  - Anti-rotation Pins
  - Bolt Flanges
  - Threaded Holes
- ◆ Rotational Stops
- ◆ Ancillary Devices with added Package Length
  - Spring Returns
  - Clutches
  - Brakes
  - Switches
- ◆ Environmental Capabilities
  - Moisture Seals
  - High Shock & Vibe

### ORDERING INFORMATION

Model Number:	Resistance:
6008-1000-030	1K $\Omega$ $\pm 10\%$
6008-1001-030	2K $\Omega$ $\pm 10\%$
6008-1002-030	5K $\Omega$ $\pm 10\%$
6008-1003-030	10K $\Omega$ $\pm 10\%$
6008-1004-030	20K $\Omega$ $\pm 10\%$

#### NORTH AMERICA

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