# PRINTED VERSION NOT CONTROLLED - VERIFY CURRENT REVISION

# **SPECIFICATIONS**

## **ELECTRICAL**

RESISTANCE: 10KΩ +10% ELECTRICAL ANGLE: 325° CONTINUITY ANGLE: 350°MIN LINEARITY: ±1.0%, INDEPENDENT MINIMUM VOLTAGE: 0.1% MAX **RESOLUTION: VIRTUALLY INFINITE OUTPUT SMOOTHNESS: 0.1% MAX** 

RESISTANCE TEMPERATURE COEFFICIENT: 400 PPM/°C MAX

POWER RATING: 0.5 WATT MAX @ 70°C,

DERATED TO 0.0 WATT @ 125°C WIPER CONTACT CURRENT: 10 MILLIAMPS MAX DIELECTRIC STRENGTH: 500 VRMS @ 60 Hz

INSULATION RESISTANCE: 100 MEG OHMS @ 500 VDC

#### MECHANICAL

ROTATION: CONTINUOUS 360° WEIGHT: (1 GANG) 0.7 OZ MAX MECH BACKLASH: <0.1° START TORQUE: 0.2 OZ-IN MAX, **RUNNING TORQUE: 0.15 OZ-IN MAX** 

PILOT RUNOUT: 0.001 T.I.R. SHAFT RUNOUT: 0.001 T.I.R. SHAFT END PLAY: 0.003 MAX SHAFT RADIAL PLAY: 0.001 T.I.R. LATERAL RUNOUT: 0.002 T.I.R.

### ENVIRONMENTAL

OPERATING TEMPERATURE: -65°C TO +125°C ROTATIONAL LIFE: 50 MILLION REVOLUTIONS MIN DITHER LIFE: 50 MILLION CYCLES @ 60HZ OVER 5° SHOCK: SAWTOOTH 100G PEAK PER MIL-STD-202

METHOD 213, TEST CONDITION I VIBRATION: HIGH FREQ; SWEPT 10 - 2000HZ, 15G PEAK

PER MIL-STD-202 TEST CONDITION B

#### **MATERIALS**

HOUSING: ANODIZED ALUMINUM

SHAFT: PASSIVATED CENTERLESS GROUND SST

BEARINGS: PRECISION MINIATURE BALL

**ROTOR: BERYLLIUM COPPER** 

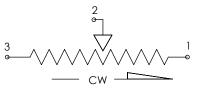
CONTACTS: MULTI-FINGER PRECIOUS METAL ELEMENT: CO-MOLDED CONDUCTIVE PLASTIC

TERMINALS: GOLD PLATED BRASS

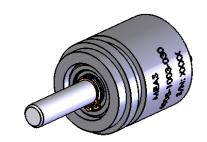
#### **UNLESS OTHERWISE SPECIFIED**

ALL ELECTRICAL, MECHANICAL, AND ENVIRONMENTAL

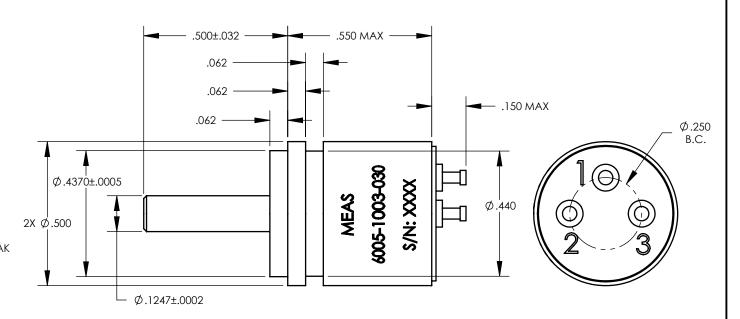
SPECIFICATIONS ARE IAW MIL-PRF-39023



INCREASING FUNCTION VIEWED FROM SHAFT END



CHANGE HISTORY				
REV	DESCRIPTION	DATE	DRAWN	APPROVED
Α	RELEASE	10/12/92		DARB
ВО	ECN 4839-SSC	12/13/13	JDD	BD



#### EAR CONTROL

TECHNICAL INFORMATION SUBJECT TO EXPORT ADMINISTRATION REGULATIONS (EAR). THIS TECHNICAL INFORMATION IS PROHIBITED FROM TRANSFER OR DISCLOSURE IN ANY MANNER TO NON-U.S. PERSONS IN THE UNITED STATES OR ABROAD WITHOUT PRIOR APPROVAL BY THE U.S. COMMERCE DEPARTMENT OR APPLICABLE EAR EXEMPTION

#### PROPRIETARY AND CONFIDENTIAL

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DIMENSIONS ARE IN INCHES **TOLERANCES:** ANGULAR±2° TWO PLACE DECIMAL ±.01

THREE PLACE DECIMAL ±.005 FOUR PLACE DECIMAL ±.0005

DO NOT SCALE DRAWING

MATERIAL NOTED

FINISH NOTED

DATE NAME DRAWN 10/12/92 D. TREE CHECKED ENG APPR MFG APPR.

**Engineering Reference Only** 

Q.A. Information in this box is for measurement S P E C I A L T I E S TM

POTENTIOMETER

5W885

CAGE CODE DWG. NO.

6005-1003-030