

**SPECIFICATIONS**

**ELECTRICAL**

RESISTANCE: 5KΩ ±10%  
 ELECTRICAL ANGLE: 350° ± 1°  
 CONTINUITY ANGLE: 357°MIN  
 LINEARITY: INDEPENDENT, ± 0.5%  
 MINIMUM VOLTAGE: 0.1% MAX  
 RESOLUTION: VIRTUALLY INFINITE  
 OUTPUT SMOOTHNESS: 0.1% MAX  
 RESISTANCE TEMPERATURE COEFFICIENT: 400 PPM/°C MAX  
 POWER RATING: 2.0 WATT MAX @ 70°C,  
 DERATED TO 0.0 WATT @ 125°C  
 WIPER CONTACT CURRENT: 10 MILLIAMPS MAX  
 DIELECTRIC STRENGTH: 1000VRMS @ 60 Hz  
 INSULATION RESISTANCE: 100 MEG OHMS @ 500 VDC

**MECHANICAL**

ROTATION: CONTINUOUS 360°  
 WEIGHT, (1 GANG): 0.6 OZ MAX  
 MECH BACKLASH: <0.1°  
 START TORQUE: 0.5 OZ-IN MAX,  
 RUNNING TORQUE: 0.5 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 CYCLES 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

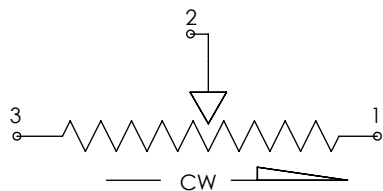
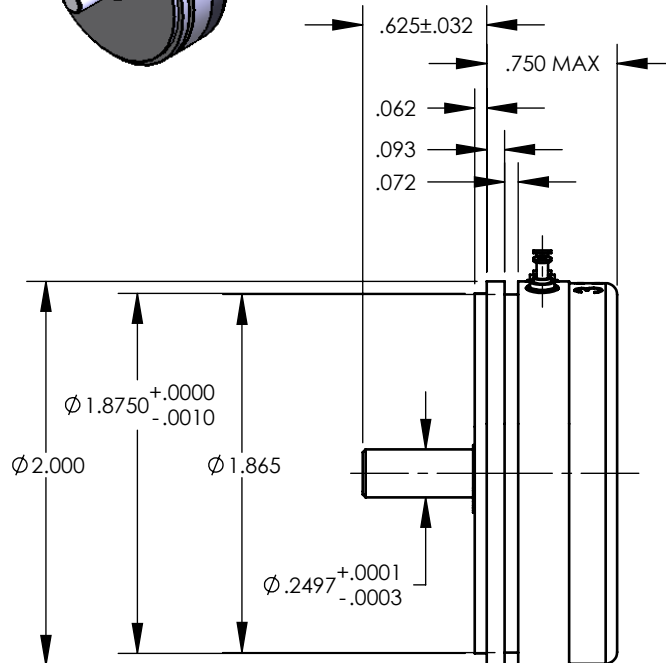
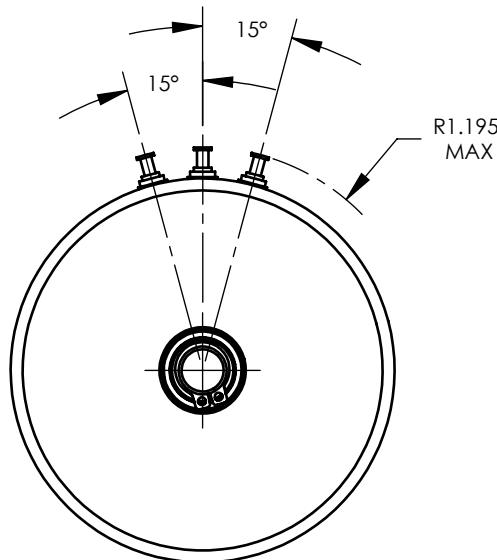
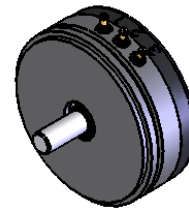
**MATERIALS**

HOUSING AND COVER: ANODIZED ALUMINUM  
 SHAFT: PASSIVATED CENTERLESS GROUND SST  
 BEARINGS: PRECISION 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

CUSTOMER:	N/A	
CUSTOMER DWG/REV	N/A	N/A

CHANGE HISTORY				
REV	DESCRIPTION	DATE	DRAWN	APPROVD
A	RELEASE	10/12/92		DARB
B0	ECN 2386-SSC	11/4/09	JDD	PDC



INCREASING FUNCTION VIEWED FROM SHAFT END

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DIMENSIONS ARE IN INCHES TOLERANCES: ANGULAR ±2° TWO PLACE DECIMAL ± .01 THREE PLACE DECIMAL ± .005 FOUR PLACE DECIMAL ± .0005		NAME	DATE
DRAWN	D. TREE		10/12/92
CHECKED			
ENG APPR.			
MFG APPR.			
		Q.A.	
MATERIAL		Information in this box is for Engineering Reference Only	
FINISH			
DO NOT SCALE DRAWING			

SPECTRUM SENSORS & CONTROLS GRASS VALLEY, CALIFORNIA		
<b>POTENTIOMETER</b>		
SIZE	CAGE CODE	DWG. NO.
A	5W885	6020-1002-030
SHEET 1 OF 1		