

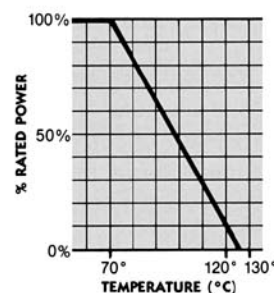


# CONDUCTIVE PLASTIC SINGLE-TURN PRECISION POTENTIOMETERS

## SERVO MOUNT/BALL BEARING MODEL 1721

SERVO MODEL	1721
<b>ELECTRICAL</b>	
Theoretical Electrical Travel	350°
Normal Resistance Range	1.2K to 75K
Extended Resistance Range <sup>(1)</sup>	600Ω to 200K
Resistance Tolerance: Standard %	± 10
Best Practical %	± 5
Power Rating At 70°C, Derating To 0 At 125°C (Watts)	2.0
Linearity, Independent, Tolerance, Standard %	± 0.2
Best Practical %	± 0.06
Output Smoothness Max. (% Of Applied Voltage)	0.1
End Voltage Max. (% Of Total Applied Voltage)	0.5
Insulation Resistance At 500 VDC, Min. (Megohms)	1000
Dielectric Withstanding Voltage (Volts RMS)	1000
Max. Applied Voltage (Volts DC) <sup>(2)</sup>	400
Temperature Coefficient Of Potentiometer, Max. %/°C	-.07
<b>MECHANICAL</b>	
Total Mechanical Travel	360° Continuous
Mechanical Life, Shaft Revolutions	50 million
Ganged Cups, Max. (Number)	8
Taps, Max., Excluding End Terminations	26
Moment Of Inertia, Per Cup (gm-cm²)	5.0
Weight: Single Cup (oz.)	3.3
Each Additional Cup (oz.)	1.0
Torque, Max. Per Cup (oz.-in)	0.8
Pilot Diameter Runout, Max.	.0015
Lateral Runout, Max.	.002
Shaft Runout, Max.	.001
Shaft Radial Play, Max.	.002
Shaft End Play, Max.	.0015
Dimension For Each Additional Cup	.562 ± .002
<b>ENVIRONMENTAL</b>	
Temperature Range (°C) Standard	-55 to +125

- (1) All specifications listed apply to units with a total resistance within the normal resistance range. Higher or lower resistances may require some degradation of listed specifications because of resistance material composition.
- (2) Not to exceed specified power rating.

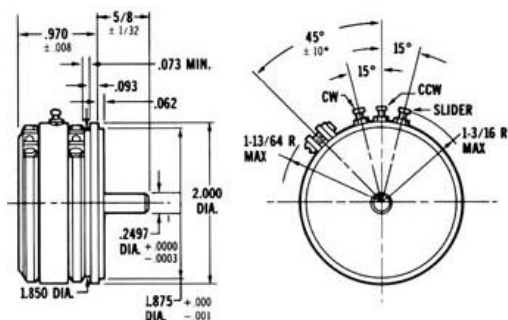


ALL MODELS are manufactured to meet or exceed applicable characteristics of MIL-R-39023. For MILITARY-APPROVED (QPL) Listings, see page 52.

### TOLERANCES UNLESS OTHERWISE SPECIFIED:

FRACTIONAL: ± 1/64" DECIMAL: ± .005" ANGULAR: ± 1°

## 1721



# BEI SENSORS

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