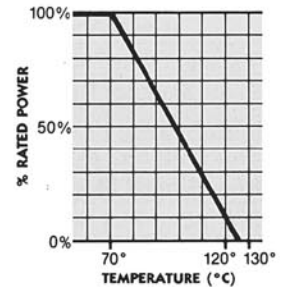


**BUSHING MOUNT/SLEEVE BEARING  
MODEL 1502**

**WIREWOUND SINGLE-TURN  
PRECISION POTENTIOMETERS**

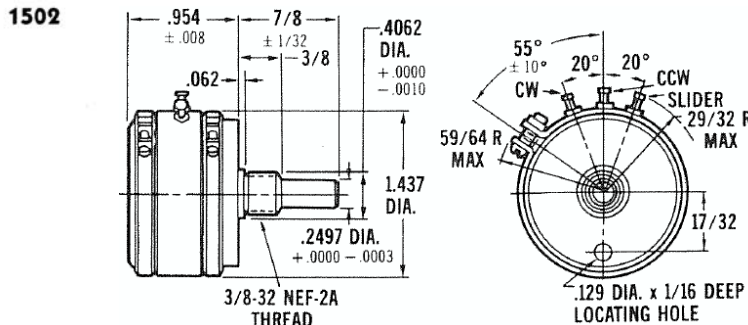
BUSHING MODEL	1502
<b>ELECTRICAL</b>	
Actual Electrical Travel	354° ± 2°
Normal Resistance Range	100Ω to 50K
Extended Resistance Range (1)	25Ω to 125K
Resistance Tolerance: Standard %	± 3
Best Practical %	± 1
Power Rating At 70°C, Derating To 0 At 125°C (Watts)	3.0
Linearity, Independent, Tolerance, Standard %	± 0.3
Best Practical %	± 0.12
Equivalent Noise Resistance (ENR) Max. (Ohms)	100
End Voltage Max. (% Of Total Applied Voltage)	Within linearity tolerance
Insulation Resistance At 500 VDC, Min. (Megohms)	1000
Dielectric Withstanding Voltage (Volts RMS)	1000
Max. Applied Voltage (Volts DC)(2)	400
Temperature Coefficient Of Potentiometer, Max. % / °C	± .007
<b>MECHANICAL</b>	
Total Mechanical Travel	360° Continuous
Mechanical Life, Shaft Revolutions	2 million
Ganged Cups, Max (Number)	8
Taps, Max., Excluding End Terminations	19
Moment Of Inertia, Per Cup (gm-cm <sup>2</sup> )	4.0
Weight: Single Cup (oz)	2.2
Each Additional Cup (oz)	0.7
Torque, Max. Per Cup (oz.-in)	1.3
Pilot Diameter Runout, Max.	.0015
Lateral Runout, Max.	.003
Shaft Runout, Max.	.001
Shaft Radial Play, Max.	.003
Shaft End Play, Max.	.005
Dimension For Each Additional Cup	.537 ± .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 wire composition or size.
- (2) Not to exceed specified power rating.



**THEORETICAL RESOLUTION**—For typical coil characteristics by model number and resistance value, see Resolution Tables, page 52.  
**ALL MODELS** are manufactured to meet or exceed applicable characteristics of MIL-R-12934. For MILITARY-APPROVED (QPL) Listings, see page 52.

**TOLERANCES UNLESS OTHERWISE SPECIFIED:**  
 FRACTIONAL: ± 1/64" DECIMAL: ± .005" ANGULAR: ± 1°



Tel: 805-968-0782 / 800-350-2727 | Fax: 805-968-3154 / 800-960-2726  
 7230 Hollister Ave., Goleta, CA 93117-2807 | [www.beisensors.com](http://www.beisensors.com)