



BOURNS

7/8" DIAMETER / SINGLE-TURN CONDUCTIVE PLASTIC

- Servo mount
- Shaft supported by front and rear precision ball bearings
- Non-standard features and specifications available
- Gangable up to 10 cups

FOR ORDERING INFORMATION SEE PAGE 44

Model 6534

Bourns® Precision Potentiometer

Electrical Characteristics¹

Standard Resistance Range	1K to 100K Ω
Resistance Tolerance	$\pm 10\%$
Independent Linearity	$\pm 0.5\%$
Effective Electrical Angle	$320^\circ \pm 3^\circ$
Minimum Voltage	0.1% maximum (0.2% at 2K Ω , 0.4% at 1K Ω)
Resolution	Essentially infinite
Power Rating (Voltage Limited By Power Dissipation or 350 VAC, Whichever is Less)	
+ 70°C	1 watt
+ 125°C	0 watt
Output Smoothness	0.1%
Dielectric Withstanding Voltage	MIL-STD-202, Method 301
Sea Level	750 VAC minimum
70,000 Feet	250 VAC minimum
Insulation Resistance (500 VDC)	1,000 megohms minimum

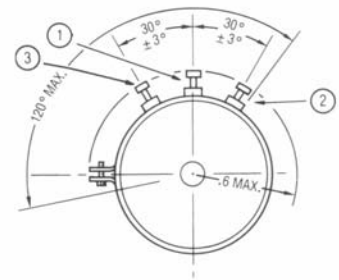
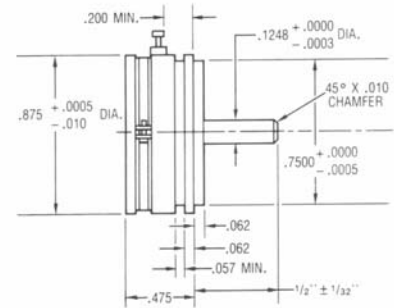
Environmental Characteristics¹

Operating Temperature	
Static Operation Temperature Range	-65°C to +125°C
Dynamic Operation Temperature Range	+1°C to +125°C
Temperature Coefficient	$\pm 500\text{ppm}/^\circ\text{C}$ maximum
Moisture Resistance	MIL-STD-202, Method 103, Condition B
Total Resistance Shift	$\pm 10\%$ maximum
Vibration	15G
Wiper Bounce	0.1 millisecond maximum
Total Resistance Shift	$\pm 2\%$ maximum
Shock	50G
Wiper Bounce	0.1 millisecond maximum
Rotational Life (No Load)	25,000,000 shaft revolutions
Total Resistance Shift	$\pm 10\%$ maximum

Mechanical Characteristics¹

Shaft Runout	0.001 in. T.I.R.
Shaft End Play	0.003 in. T.I.R.
Shaft Radial Play	0.003 in. T.I.R.
Pilot Diameter Runout	0.001 in. T.I.R.
Lateral Runout	0.002 in. T.I.R.
Backlash	0.1° maximum
Mechanical Angle	Continuous
Torque (Starting & Running)	0.25 oz-in. maximum

¹At room ambient: +25°C nominal and 50% relative humidity nominal, except as noted.
Specifications are subject to change without notice.



TOLERANCES: EXCEPT WHERE NOTED

DECIMALS: .XX ± .015, .XXX ± .005

FRACTIONS: $\pm 1/64$ DIMENSIONS: IN.

