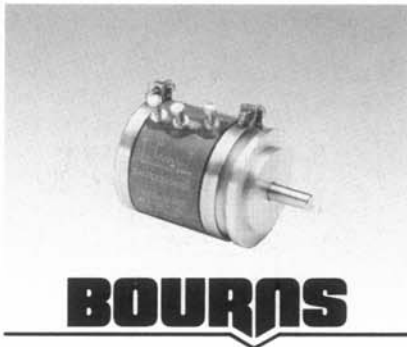




7/8" DIAMETER/3-TURN/WIREWOUND AND HYBRITRON® ELEMENT

- Servo mount
- Shaft supported front and rear by precision ball bearings
- High temperature, moisture resistant, thermosetting plastic housing

- Special rotor and slider design assures excellent wiper stability
- Non-standard features and specifications available
- Gangable

FOR ORDERING INFORMATION SEE PAGES 42

Models 3560/3561

Bourns® Precision Potentiometers

3560 Wirewound Element 3561 Hybritron® Element

Electrical Characteristics¹

Standard Resistance Range	50 to 50KΩ	500 to 20KΩ
Resistance Tolerance	±3%	±10%
Independent Linearity	±0.25%	±0.25%
Resolution	See ordering information	Essentially infinite
Effective Electrical Angle	1080° +10°, -0°	1080° +10°, -0°
Absolute Minimum Resistance/	1Ω or 0.1%	0.1% maximum
Minimum Voltage	(whichever is greater)	
Noise	100Ω ENR maximum	Output smoothness 0.1%
Power Rating (Voltage Limited By Power Dissipation or 325 VAC, Whichever is Less)		
+70°C	1.5 watt	1.5 watt
+125°C	0 watt	0 watt
Dielectric Strength	MIL-R-12934	MIL-R-12934
Sea Level	1,000 VAC minimum	1,000 VAC minimum
80,000 Feet	300 VAC minimum	300 VAC minimum
Insulation Resistance (500 VDC)	1,000 megohms minimum	1,000 megohms minimum

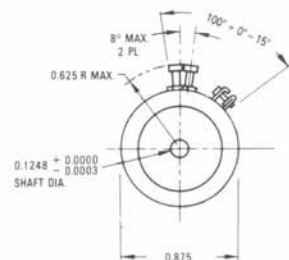
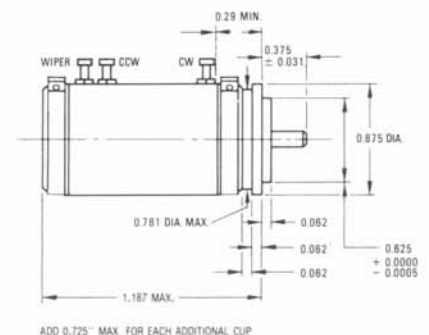
Environmental Characteristics¹

Operating Temperature Range	-65°C to +125°C	-65°C to +125°C
Temp. Coefficient of Wire	20ppm/°C maximum	100ppm/°C maximum
Humidity	MIL-R-12934	MIL-R-39023
	Humidity Cycling	Humidity Cycling
Vibration	MIL-R-12934, 20G	MIL-R-39023, 20G
Wiper Bounce	0.1 millisecond maximum	0.1 millisecond maximum
Wiper Shift	0.2% maximum	0.1% maximum
Shock	MIL-R-12934, 100G	MIL-R-39023, 100G
Wiper Bounce and Wiper Shift	Same as vibration	Same as vibration
Load Life	1,000 hours	1,000 hours
Resistance Shift	2% maximum	5% maximum

Mechanical Characteristics¹

Mechanical Angle	1080° +10°, -0°	1080° +10°, -0°
Shaft Runout	0.001 in. T.I.R.	0.001 in. T.I.R.
Lateral Runout	0.003 in. T.I.R.	0.003 in. T.I.R.
Pilot Diameter Runout	0.0015 in. T.I.R.	0.0015 in. T.I.R.
Shaft End Play	0.003 in. T.I.R.	0.003 in. T.I.R.
Shaft Radial Play	0.002 in. T.I.R.	0.002 in. T.I.R.
Rotational Life, Shaft Revolutions	600,000	4,000,000
Stop Strength	96 oz-in. minimum	96 oz-in. minimum
Torque	0.4 oz-in. maximum starting/0.3 oz-in. maximum running	0.4 oz-in. maximum
Moment of inertia	0.25 g cm ²	0.25 g cm ²
Ganging	3 cups maximum	3 cups maximum
Weight	Approximately 23 g	Approximately 23 g
Terminals	Gold plated turret type	Gold plated turret type
Markings	Manufacturer's name and part number, resistance value and tolerance, linearity tolerance, wiring diagram and date code.	

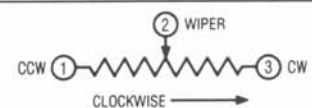
3560/3561



TOLERANCES: EXCEPT WHERE NOTED

DECIMALS: .XX ± .010, .XXX ± .005

DIMENSIONS: IN.



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