

## 51MM DIAMETER / SINGLE-TURN CONDUCTIVE PLASTIC

- Servo mount style
- 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 286.

### Model 6575

Bourns® Precision Potentiometer

#### Electrical Characteristics<sup>1</sup>

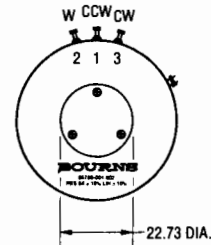
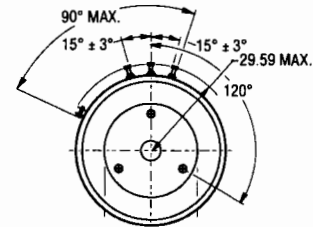
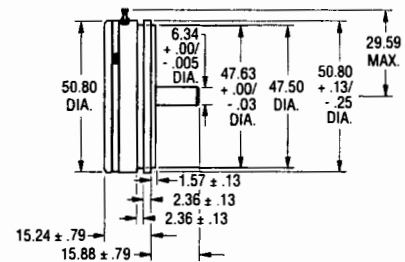
Standard Resistance Range .....	1K to 100K ohms
Resistance Tolerance .....	±10%
Independent Linearity .....	±0.1%
Effective Electrical Angle .....	350° ±2°
End Voltage .....	MIL-R-39023
Total Resistance	
1K ohms .....	0.4%
2K ohms .....	0.2%
5K ohms .....	0.1%
Power Rating	
+70°C .....	2 watts
+125°C .....	0 watt
Output Smoothness .....	0.1%
Dielectric Strength	
Sea Level .....	1,000 VAC minimum
70,000 Feet .....	350 VAC minimum
Insulation Resistance (500 VDC) .....	1,000 megohms minimum

#### Environmental Characteristics<sup>1</sup>

Operating Temperature	
Static Operation Temperature Range .....	-65°C to +125°C
Dynamic Operation Temperature Range .....	+1°C to +125°C
Temperature Coefficient <sup>2</sup>	
Total Resistance ≤ 1K ohm .....	600 PPM/°C
Total Resistance >1K ohm .....	400 PPM/°C
Humidity .....	MIL-R-39023, Delta R = <10%
Vibration .....	MIL-R-39023, 15G, 10-2000Hz
Wiper Bounce .....	0.1 millisecond discontinuity
Wiper Shift .....	Delta Vr = <1%, Delta R = <2%
Shock .....	MIL-R-39023, 60G
Wiper Bounce and Wiper Shift .....	0.1 millisecond discontinuity, Delta Vr = <1%
Load Life (MIL-R-39023) .....	1,000 hours, 1.5 watts
Total Resistance Shift .....	±10% maximum

#### Mechanical Characteristics<sup>1</sup>

Mechanical Angle .....	Continuous
Shaft Runout .....	0.025mm or 0.05mm shaft length
Lateral Runout .....	0.05mm T.I.R.
Pilot Diameter Runout .....	0.025mm T.I.R.
Shaft End Play .....	0.025mm T.I.R.
Shaft Radial Play .....	0.025mm T.I.R.
Rotational Life, Shaft Revolutions .....	MIL-R-39023
	100 X 10 to power 6 revolutions (100 million)
	resistance change 10% max, symbol 4
Torque (Starting & Running) .....	0.25 oz-in. maximum



DIMENSIONS: MM

<sup>1</sup> At room ambient: +25°C nominal and 50% relative humidity nominal, except as noted.

<sup>2</sup> Consult factory for complete specification details.

Specifications are subject to change without notice.