

30MM DIAMETER / SINGLE-TURN CONDUCTIVE PLASTIC

- Extended rotational life
- Ball bearings front and rear
- Servo Mount
- Ganging up to 10 cups
- Non-standard features and specifications available

FOR ORDERING INFORMATION SEE PAGE 286.

Model 6544

Bourns® Precision Potentiometer

Electrical Characteristics¹

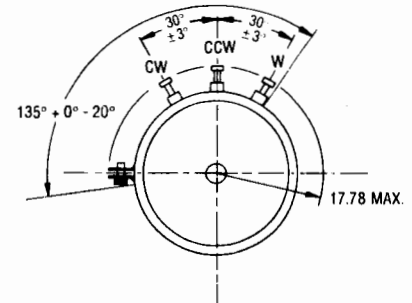
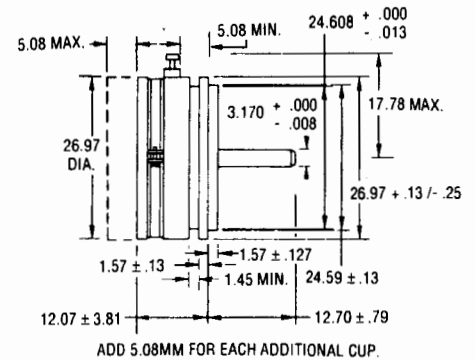
Standard Resistance Range	1K to 100K ohms
Resistance Tolerance	±10%
Independent Linearity	±0.50%
Effective Electrical Angle	350° ±2°
Minimum Voltage	0.1% maximum (0.2% at 2K ohms, 0.4% at 1K ohms)
Resolution	Essentially infinite
Power Rating (Voltage Limited By	
Power Dissipation or 350 VAC, Whichever is Less)	
+70°C	2 watts
+125°C	0 watt
Output Smoothness	0.1%
Dielectric Withstanding Voltage	MIL-STD-202, Method 301
Sea Level	1,000 VAC minimum
70,000 Feet	350 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 ²	±500ppm/°C maximum
Moisture Resistance	MIL-STD-202, Method 103, Condition B
Total Resistance Shift	±10% maximum
Vibration	15G
Wiper Bounce	0.1 millisecond maximum
Total Resistance Shift	±2% maximum
Shock	60G
Wiper Bounce	0.1 millisecond maximum
Rotational Life (No Load)	25,000,000 shaft revolutions
Total Resistance Shift	±10% maximum
Load Life	1,000 hours, 1.5 watts
Total Resistance Shift	±10% maximum

Mechanical Characteristics¹

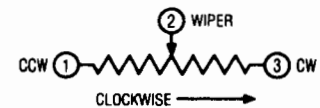
Shaft Runout	0.025mm T.I.R.
Shaft End Play	0.08mm T.I.R.
Shaft Radial Play	0.025mm T.I.R.
Pilot Diameter Runout	0.025mm T.I.R.
Lateral Runout	0.08mm T.I.R.
Backlash	0.1° maximum
Mechanical Angle	Continuous
Torque (Starting & Running)	0.18 Ncm maximum



TOLERANCES: EXCEPT WHERE NOTED

DECIMALS: XX ± .25, XXX ± .13

DIMENSIONS: MM



¹At room ambient: +25°C nominal and 50% relative humidity nominal, except as noted.
²Consult factory for complete specification details.