



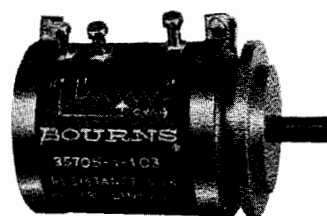
Model 3570
BOURNS® Potentiometer
 7/8" Diameter 5-Turn Servo Mount
 Wirewound Element

OBSOLETE 1995

FEATURES

- 0.25% linearity (standard).
- SILVERWELD® termination eliminates vulnerable single-wire termination.
- Shaft supported front and rear by precision ball bearings.**
- Outstanding resistance to humidity. Exceeds Humidity Cycling requirements of MIL-R-12934.
- Performance of Model 3570 is guaranteed by the Bourns Reliability Assurance Program which includes Individual Inspection to published electrical and physical characteristics.
- Custom design capability is available to satisfy your most demanding and difficult special requirements.

Actual Size



STANDARD RESISTANCES

Resistance (Ohms)	Part Number**	Max. Resolution (Percent)
25	3570S-1-250	0.112
50	3570S-1-500	0.105
100	3570S-1-101	0.086
200	3570S-1-201	0.068
500	3570S-1-501	0.053
1,000	3570S-1-102	0.043
2,000	3570S-1-202	0.042

**Sleeve type insert bearings available at reduced cost (Model 3570S-92-RC)

Resistance (Ohms)	Part Number**	Max. Resolution (Percent)
5,000	3570S-1-502	0.032
10,000	3570S-1-103	0.029
20,000	3570S-1-203	0.021
50,000	3570S-1-503	0.016
100,000	3570S-1-104	0.013
200,000	3570S-1-204	0.011

*The last three digits of the part number represent the resistance in standard code.

BOURNS® Potentiometer Model 3570

SPECIFICATIONS

ELECTRICAL CHARACTERISTICS

Resistance Range	25 ohms - 200K ohms
Resistance Tolerance*	±3% standard
Linearity (Independent)*	±0.25% standard
Resolution	See Standard Resistance Table
Effective Electrical Angle*	1800° (+10° - 0°)
Absolute Minimum Resistance*	1 ohm or 0.1%, whichever is greater
Noise*	100 ohms ENR maximum
Power Ratings:	
70°C	2.0 watts
125°C Ambient	0 watt
Dielectric Strength	
Room Conditions	MIL-R-12934 1000 volts AC
80,000 feet (0.8" Hg.)	300 volts AC
Insulation Resistance, 500 volts DC*	1000 megohms minimum

ENVIRONMENTAL CHARACTERISTICS

Operating Temperature Range	- 65 to +125°C
Temperature Coefficient of Wire ^①	20 ppm/°C maximum
Humidity	MIL-R-12934, humidity cycling
Vibration	MIL-R-12934, 20G
Wiper Bounce	0.1 millisecond maximum
Wiper Shift, Maximum	0.2%
Shock	Exceeds MIL-R-12934, 100G
Wiper Bounce and Wiper Shift	Same as Vibration
Load Life	MIL-R-12934, 1000 hours
Resistance Shift, Maximum	2.0%

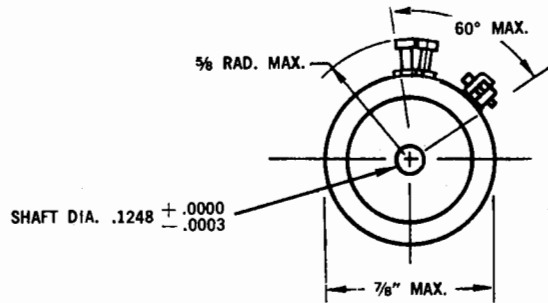
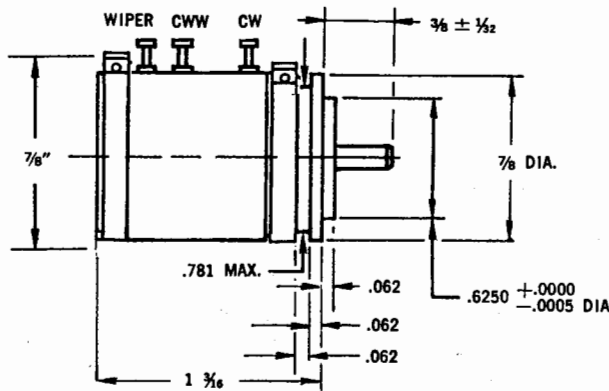
Sand and Dust	MIL-E-527
Fungus	MIL-E-527
Salt Spray	Meets MIL-STD-202, Method 101A

MECHANICAL AND PHYSICAL CHARACTERISTICS

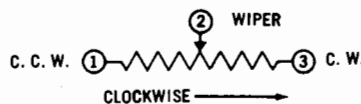
Mechanical Rotation*	1800° (+10° - 0°)
Shaft Runout*	.001 in. T.I.R.
Shaft End Play*	.003 in. T.I.R.
Shaft Radial Play*	.002 in. T.I.R.
Pilot Diameter Runout*	.0015 in. T.I.R.
Lateral Runout*	.003 in. T.I.R.
Rotational Life ^①	1,000,000 shaft revolutions
Moment of Inertia	0.28 gm cm ²
Stop Strength	96 oz./in.
Shaft Torque*	0.4 oz.-in. maximum (starting) 0.3 oz.-in. maximum (running) (add .75% for each additional cup)
Ganging	3 cups maximum
Weight	Approximately 0.9 oz.
Terminals	Gold plated turret type
Markings*	Manufacturer's name and part number, resistance and tolerance, linearity tolerance, wiring diagram and date code.

*Notes 100% or statistical sampling performed to insure highest quality.
^① Consult manufacturer for complete specification details for resistances below 200 ohms and above 100K ohms.
 Specifications are subject to change without notice.

3570



TOLERANCES: EXCEPT WHERE NOTED
 DECIMALS: .XX ± .010, XXX ± .005
 FRACTIONS: ± $\frac{1}{4}$



NOTE:
 1. ADD .868 TO $1 \frac{3}{16}$ FOR EACH ADDITIONAL CUP.

