



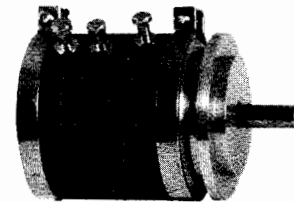
Model 3560  
BOURNS Potentiometer  
7/8" Diameter 3-Turn Servo Mount  
WIREWOUND ELEMENT

**OBSOLETE** 2002

## FEATURES

- Outstanding resistance to humidity. Exceeds humidity cycling requirements of MIL-R-12934.
- Shaft supported by front and rear lid precision ball bearings.
- High temperature, moisture resistant thermosetting plastic housing.
- SILVERWELD® termination eliminates vulnerable single wire termination.
- Performance of the Model 3560 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 special requirements.

Actual Size



## STANDARD RESISTANCES

Resistance (Ohms)	Part Number**	Resolution (Percent)
25	3560S-1-250	0.187
50	3560S-1-500	0.149
100	3560S-1-101	0.121
200	3560S-1-201	0.102
500	3560S-1-501	0.076
1,000	3560S-1-102	0.065

\* Sleeve type bearings available at reduced cost Model 3560S-92-RC.

Resistance (Ohms)	Part Number**	Resolution (Percent)
2,000	3560S-1-202	0.063
5,000	3560S-1-502	0.047
10,000	3560S-1-103	0.041
20,000	3560S-1-203	0.031
50,000	3560S-1-503	0.024
100,000	3560S-1-104	0.019

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

# BOURNS Potentiometer Model 3560

## STANDARD SPECIFICATIONS

THE SPECIFICATIONS LISTED BELOW ARE FOR THE STANDARD MODEL. MODIFICATIONS OF ALL TYPES (MECHANICAL, ELECTRICAL AND ENVIRONMENTAL) CAN BE CUSTOM ENGINEERED TO YOUR SPECIFIC REQUIREMENTS.

### ELECTRICAL CHARACTERISTICS

Resistance Range .....	25 ohms to 100K
Resistance Tolerance* .....	±3%
Linearity (Independent)* .....	±0.25%
Resolution .....	See standard resistance chart
Effective Electrical Angle* .....	1080° (+10°/-0°)
Absolute Minimum Resistance .....	1 ohm or 0.1%, whichever is greater
Noise* .....	100 ohms ENR maximum
Power Ratings:	
70°C .....	1.5 watt
125°C .....	0 watt
Dielectric Strength .....	MIL-R-12934
Room Conditions .....	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 Resistance Wire① .....	20 ppm/°C maximum
Humidity .....	MIL-R-12934, humidity cycling
Vibration .....	MIL-R-12934, 20G
Discontinuity .....	0.1 millisecond maximum
Wiper Shift, maximum .....	0.2%
Shock .....	MIL-R-12934, 100G
Discontinuity and Wiper Shift .....	Same as Vibration
Load Life .....	1000 hours MIL-R-12934
Resistance Shift .....	2.0% maximum

Sand and Dust .....	MIL-E-5272
Fungus .....	MIL-E-5272
Salt Spray .....	MIL-R-12934

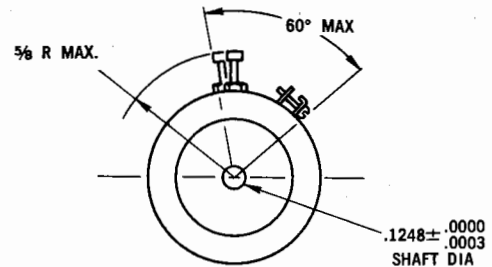
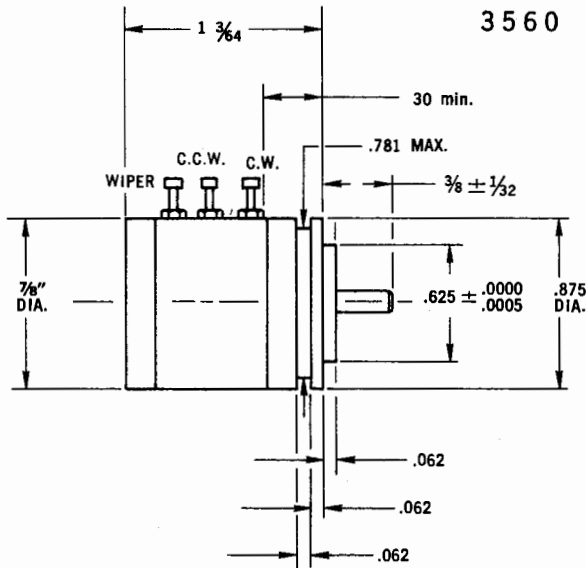
### MECHANICAL AND PHYSICAL CHARACTERISTICS

Mechanical Angle* .....	1080° (+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.
Stop Strength .....	96 oz./In.
Torque* .....	0.4 oz.-in. maximum (starting) 0.3 oz.-in. maximum (running)
Ganging .....	3 cups maximum (add 75% for each additional cup)
Rotational Life① .....	600,000 shaft revolutions
Moment of Inertia .....	0.25 gm cm <sup>2</sup>
Weight .....	Approximately 0.8 oz.
Terminals .....	Gold-plated turret type
Markings* .....	Manufacturer's name and part number, resistance value and tolerance, linearity, tolerance, wiring diagram, and date code.

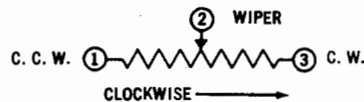
\* 100% or statistical sampling inspection performed to insure highest quality.

① Consult manufacturer for complete specification details for resistance below 100 ohms.

Specifications are subject to change without notice.



TOLERANCES: EXCEPT WHERE NOTED  
DECIMALS: .XX ± .010, .XXX ± .005  
FRACTIONS: ± 1/64



NOTE:  
ADD .725 to 1 3/64" DIMENSION FOR EACH ADDITIONAL CUP

