



Model 3520
7/8" Diameter 5-Turn Bushing Mount
WIREWOUND ELEMENT

OBSOLETE 1995

FEATURES

- SILVERWELD® termination eliminates vulnerable single wire termination
- High temperature performance $+125^{\circ}\text{C}$
- Outstanding resistance to humidity. Exceeds humidity cycling requirements of MIL-R-12934
- Housing: high temperature, moisture resistant, thermosetting plastic
- 100% contact pressure control assures low noise and long rotational life
- Performance of the Model 3520 is guaranteed by 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*	Resolution (percent)
25	3520S-1-250	0.077
50	3520S-1-500	0.072
100	3520S-1-101	0.072
200	3520S-1-201	0.063
500	3520S-1-501	0.045
1,000	3520S-1-102	0.036
2,000	3520S-1-202	0.028

Resistance (ohms)	Part Number*	Resolution (percent)
5,000	3520S-1-502	0.032
10,000	3520S-1-103	0.027
20,000	3520S-1-203	0.023
50,000	3520S-1-503	0.018
75,000	3520S-1-753	0.014
100,000	3520S-1-104	0.014
250,000	3520S-1-254	0.012

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

Model 3520 Wirewound Potentiometer

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	25Ω to 250K ohms
Resistance Tolerance*	±3.0%
Linearity (Independent)*	±0.3%
Resolution	See Standard Resistance Table
Effective Electrical Angle*	1800° (+10°, -0°)
Absolute Minimum Resistance*	1Ω or 0.1%, whichever is greater
Noise*	100Ω maximum
Power Rating:	
70°C	1.5 watt
125°C	0 watt
Dielectric Strength	MIL-R-12934
Sea Level	1500 volts AC minimum
80,000	400 volts AC minimum
Insulation Resistance, 500 Volts DC*	1000 megohms minimum

ENVIRONMENTAL CHARACTERISTICS

Operating Temperature Range	-65°C to +125°C
Temperature Coefficient of Wire**	20 PPM/°C maximum
Humidity	MIL-R-12934, Humidity Cycling
Vibration	MIL-R-12934, 20G
Wiper Bounce	0.1 millisecond maximum
Wiper Shift	0.1% maximum
Shock	MIL-R-12934, 100G
Wiper Bounce and Wiper Shift	Same as vibration
Load Life	MIL-R-12934, 1000 hours
Resistance Shift	2.0% maximum

Sand and Dust	MIL-E-5272
Fungus	MIL-E-5272
Salt Spray	MIL-STD-202, Method 101A

MECHANICAL AND PHYSICAL CHARACTERISTICS

Mechanical Angle*	1800° (+10°, -0°)
Shaft Runout*	.002 in. T.I.R.
Shaft End Play*	.005 in. T.I.R.
Shaft Radial Play*	.002 in. T.I.R.
Rotational Life**	1,000,000 shaft revolutions
Stop Strength	48 oz.-in. minimum
Torque*	
Starting	0.6 oz.-in. maximum
Running	0.6 oz.-in. maximum
Ganging	2 cups maximum
Weight	Approximately 0.7 oz.
Terminals	Gold plated solder lugs
Marking*	Manufacturer's name and part number, resistance value and tolerance, linearity tolerance, wiring diagram and date code.

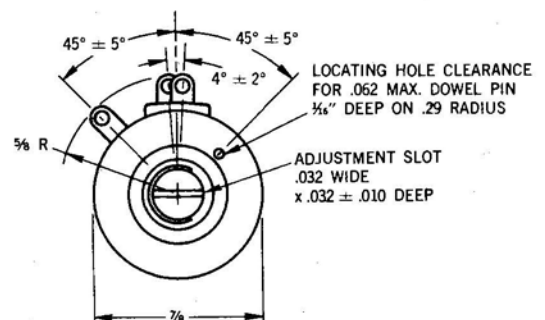
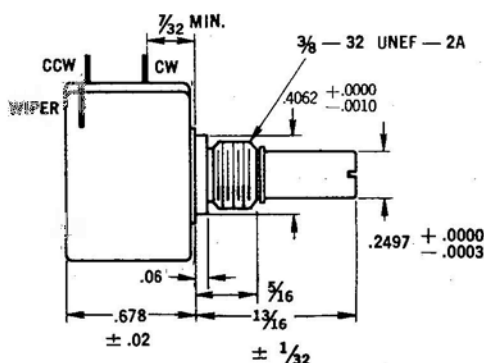
NOTES

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

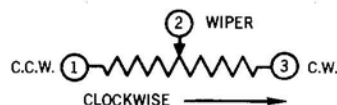
**Consult manufacturer for complete specifications for resistances below 200Ω and above 75KΩ.

Specifications are subject to change without notice.

3520



LOCKWASHER AND
MOUNTING NUT SUPPLIED
WITH EACH UNIT



TOLERANCES: EXCEPT WHERE NOTED
DECIMALS: XX ± .010, XXX ± .005
FRACTIONS: ± 1/4



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