

**FEATURES**

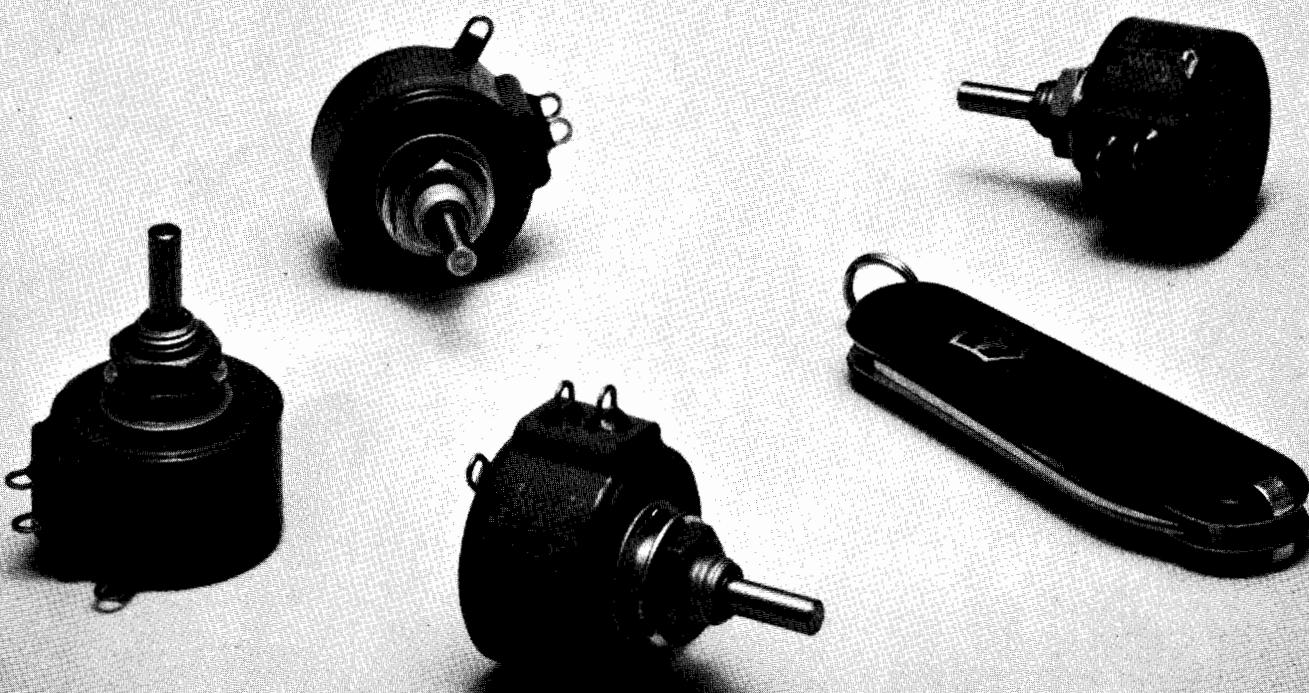
- SILVERWELD® termination eliminates vulnerable single wire termination.
- High temperature performance +125°C.
- Outstanding resistance to humidity. Exceeds humidity cycling requirements of MIL-R-12934.
- Space saving housing depth.
- Housing: high temperature, moisture resistant, thermo-setting plastic.
- Performance of the Model 3510 is guaranteed by Bourns Reliability Program, which includes individual inspection to published electrical and physical characteristics.
- Custom design capability to satisfy your most demanding and difficult special requirements.

STANDARD RESISTANCES

Resistance (Ohms)	Part Number*	Maximum Resolution (Percent)
25	3510S-1-250	0.150
50	3510S-1-500	0.140
100	3510S-1-101	0.113
200	3510S-1-201	0.092
500	3510S-1-501	0.071
1,000	3510S-1-102	0.059

Resistance (Ohms)	Part Number*	Maximum Resolution (Percent)
2,000	3510S-1-202	0.059
5,000	3510S-1-502	0.047
10,000	3510S-1-103	0.037
20,000	3510S-1-203	0.028
50,000	3510S-1-503	0.022
100,000	3510S-1-104	0.018

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



ELECTRICAL CHARACTERISTICS

Resistance Range	25 to 100,000 ohms
Resistance Tolerance*	$\pm 3\%$
Linearity (Independent)*	$\pm 0.30\%$ maximum
Resolution	See standard resistance table
Effective Electrical Angle*	$1080^\circ (+10^\circ, -0^\circ)$
Absolute Minimum Resistance*	1Ω or 0.1%, whichever is greater
Noise*	100Ω maximum
Power Rating	
70°C	1.0 watt
125°C	0 watt
Dielectric Strength	MIL-R-12934
Sea Level	1,500 volts AC minimum
80,000 feet	400 volts AC minimum
Insulation Resistance, 500 volts DC*	1,000 megohms minimum

ENVIRONMENTAL CHARACTERISTICS

Operating Temperature Range	-65°C to $+125^\circ\text{C}$
Temperature Coefficient of wire**	20 ppm/ $^\circ\text{C}$ maximum
Humidity	MIL-R-12934, Humidity Cycling
Vibration	MIL-R-12934, 20Gs
Wiper Bounce	0.1 millisecond maximum
Wiper Shift	0.1% maximum
Shock	MIL-R-12934, 100Gs
Wiper Bounce and Wiper Shift	Same as vibration
Load Life	MIL-R-12934, 1,000 hours
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*	$1080^\circ (+10^\circ, -0^\circ)$
Shaft Runout*002 in. T.I.R.
Shaft End Play*005 in. T.I.R.
Shaft Radial Play*003 in. T.I.R.
Rotational Life**	600,000 shaft revolutions
Stop Strength	48 oz.-in. minimum
Torque*	
Starting	0.6 oz.-in. maximum
Running	0.6 oz.-in. maximum
Weight	Approximately 0.7 oz.
Terminals	Gold plated solder lugs
Markings*	Manufacturer's name and part number, resistance value and tolerance, linearity tolerance, wiring diagram, and date code.

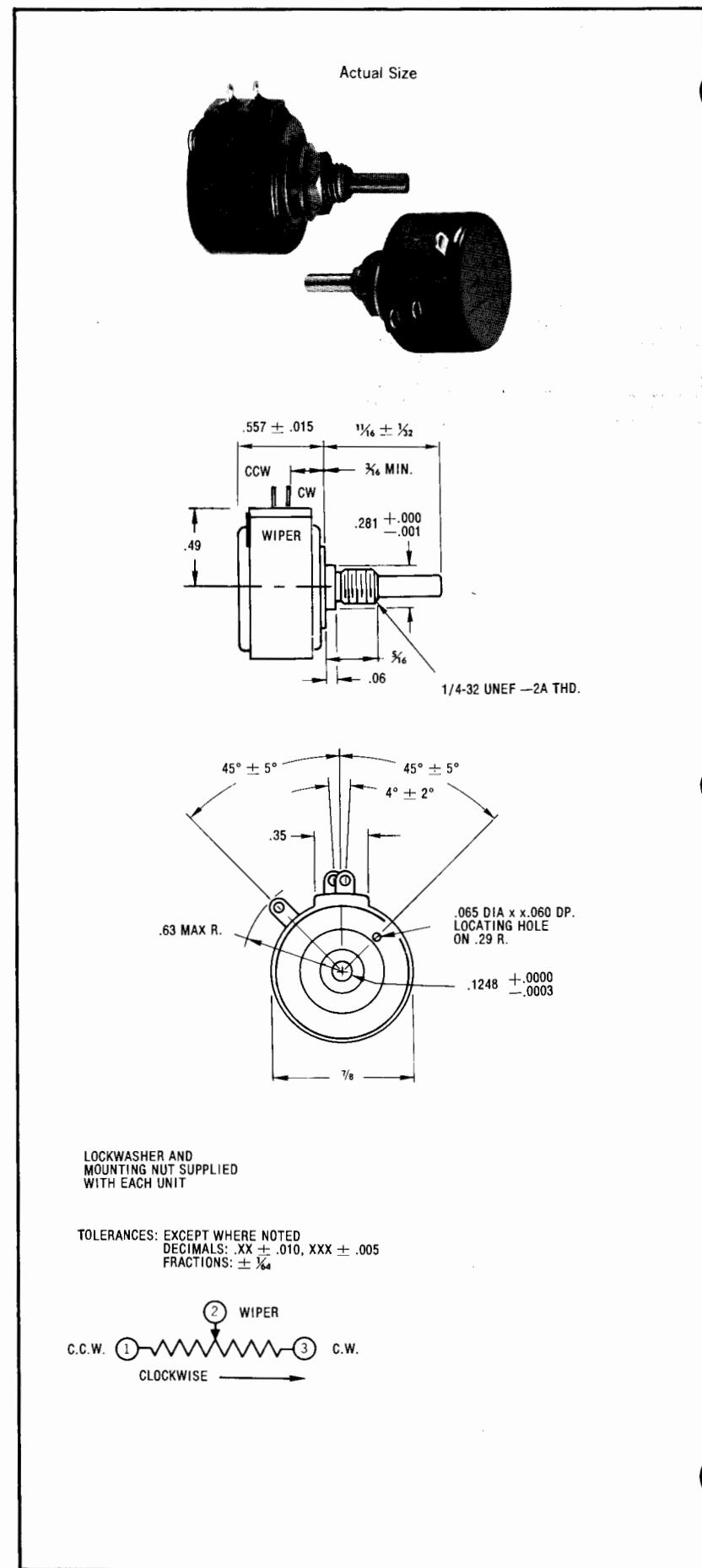
NOTES

**Consult manufacturer for complete specification details for resistance below 200Ω and above $50K\Omega$.

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

Specifications are subject to change without notice.

$\frac{7}{8}$ " DIAMETER, 3-TURN BUSHING MOUNT MODEL 3510 WIREWOUND ELEMENT



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