



Model 3445
BOURNS® Potentiometer
Single-Turn 3" Diameter Bushing Mount
Wire Wound Element

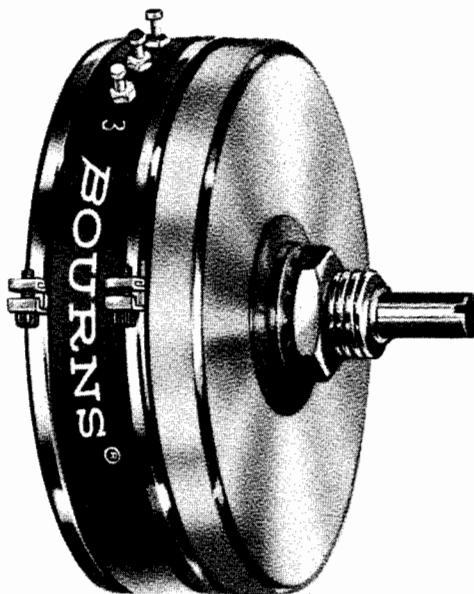
OBSOLETE 1982

FEATURES

- Custom design capability is available to satisfy your most demanding and difficult special requirements.
- Extended Temperature Range: -65°C to $+125^{\circ}\text{C}$
- Outstanding resistance to humidity
Exceeds humidity cycling requirements of MIL-R-12934
- Dual collector pick-off assures outstanding vibration and shock performance
- Shaft supported front and rear by precision sleeve bearings
- Housing: high temperature, moisture resistant, thermosetting plastic

Performance of the Model 3445 is guaranteed by the Bourns Reliability Program, which includes individual inspection to published electrical and physical characteristics.

Actual Size



STANDARD RESISTANCES

Resistance (Ohms)	Part Number*	Resolution (Percent)
100	3445S-1-101	0.123
200	3445S-1-201	0.098
500	3445S-1-501	0.075
1,000	3445S-1-102	0.061
2,000	3445S-1-202	0.049
5,000	3445S-1-502	0.041

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

Resistance (Ohms)	Part Number*	Resolution (Percent)
10,000	3445S-1-103	0.037
20,000	3445S-1-203	0.037
50,000	3445S-1-503	0.026
100,000	3445S-1-104	0.022
150,000	3445S-1-154	0.018
200,000	3445S-1-204	0.017

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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.....	100Ω to 200K ohms
Resistance Tolerance*.....	±3%
Linearity (Independent)*.....	±0.25%
Resolution.....	See Standard Resistance Table
Effective Electrical Angle*.....	350° ±2°
Absolute Minimum Resistance*.....	1Ω or 0.1%, whichever is greater
Noise*.....	100Ω max.
Power Rating	
70°C.....	6 watts
125°C.....	0 watt
Dielectric Strength.....	MIL-R-12934
Sea Level.....	1000 VAC min.
70,000 feet.....	300 VAC min.
Insulation Resistance, 500 VDC*.....	1000 megohms min.

ENVIRONMENTAL CHARACTERISTICS

Operating Temperature Range.....	-65°C to +125°C
Temperature Coefficient of Wire.....	20 PPM/°C max.
Humidity.....	MIL-R-12934, humidity cycling
Vibration.....	MIL-R-12934, 15G
Wiper Bounce.....	0.1 millisecond max.
Wiper Shift.....	1.0% max.
Shock.....	MIL-R-12934, 50G
Wiper Bounce and Wiper Shift.....	Same as vibration

Load Life.....	MIL-R-12934, 1000 hours
Resistance Shift.....	2% max.
Sand and Dust.....	MIL-E-5272
Fungus.....	MIL-E-5272
Salt Spray.....	MIL-R-12934

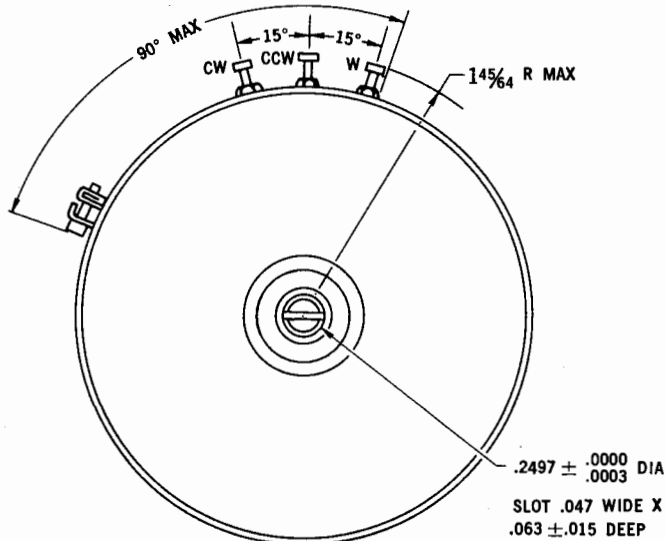
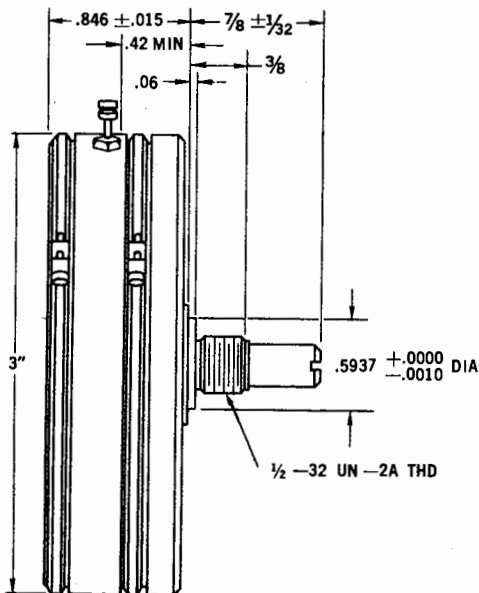
MECHANICAL AND PHYSICAL CHARACTERISTICS

Mechanical Angle*.....	Continuous
Shaft Runout*.....	.001 in. T.I.R.
Shaft End Play*.....	.005 in. T.I.R.
Shaft Radial Play*.....	.004 in. T.I.R.
Rotational Life.....	1,000,000 shaft revolutions
Torque*	
Starting.....	1.75 oz-in. max.
Running.....	1.0 oz-in. max.
	(Add 75% for each additional cup)
Ganging.....	8 cups max.
Weight.....	Approximately 5 oz.
Terminals.....	Gold-plated turrets
Marking*.....	Manufacturer's name and part number, resistance value and tolerance, linearity tolerance, wiring diagram and date code.

NOTES

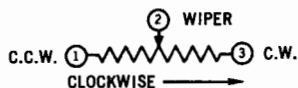
- * 100% or statistical sample inspection performed to insure highest quality.
- Specifications are subject to change without notice.

3 4 4 5



NOTES:

1. ADD .500 TO .846 DIM FOR EACH ADDITIONAL CUP.
2. LOCKWASHER AND HEX NUT TO BE SUPPLIED WITH EACH UNIT.



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



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