



BOURNS

1-1/16" DIAMETER/SINGLE-TURN WIREWOUND AND HYBRITRON® ELEMENT

- Moisture resistant, thermosetting plastic housing; stainless steel shaft
- 1 watt power rating at 40°C
- Rotational life up to 4,000,000 shaft revolutions (Model 3437S-HYB)
- Non-standard features and specifications available

FOR ORDERING INFORMATION SEE PAGE 40 .

Models 3437/3437S-HYB

Bourns® Precision Potentiometers

Model 3437 Wirewound Element	Model 3437S-HYB Hybritron® Element
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Electrical Characteristics¹

Standard Resistance Range.....	50 to 50KΩ	200 to 20KΩ
Resistance Tolerance.....	±5%	±10%
Independent Linearity.....	±0.5%	±0.5%
Effective Electrical Angle.....	320° ± 5°	320° ± 5°
Noise.....	100Ω ENR maximum	
Output Smoothness.....		0.5% maximum
Power Rating		
+ 40°C.....	1 watt	1 watt
+ 80°C.....	0 watt	0 watt
Resolution.....	See ordering information	Essentially infinite
Dielectric Strength.....	MIL-R-12934	MIL-R-12934
Sea Level.....	500 VAC minimum	500 VAC minimum
Insulation Resistance		
(500 VDC).....	1,000 megohms minimum	1,000 megohms minimum

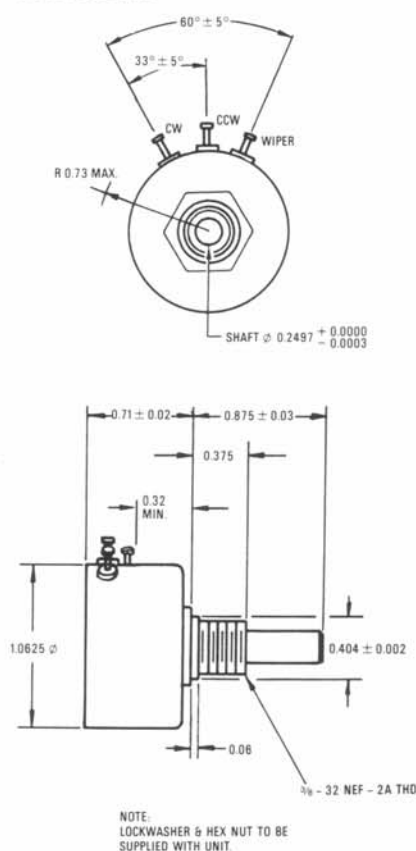
Environmental Characteristics¹

Operating Temperature Range.....	- 15°C to + 80°C	- 15°C to + 80°C
Temperature Coefficient ²	± 20ppm/°C maximum	± 100ppm/°C maximum
Vibration		
Resistance Shift.....	10G, 10-500 CPS	10G, 10-500 CPS
Wiper Bounce.....	0.1 millisecond maximum	0.1 millisecond maximum
Wiper Shift.....	1% maximum	1% maximum
Shock.....	15¼G	15G
Wiper Bounce.....	0.1 millisecond maximum	0.1 millisecond maximum
Resistance & Wiper Shift.....	Same as Vibration	Same as Vibration
Load Life.....	1,000 hours	1,000 hours
Total Resistance Shift.....	± 5% maximum	± 5% maximum

Mechanical Characteristics¹

Mechanical Angle.....	Continuous	Continuous
Rotational Life.....	200,000 shaft revolutions	4,000,000 shaft revolutions
Torque (Starting & Running).....	2.0 oz-in. maximum	2.0 oz-in. maximum
Weight.....	Approximately 30g	Approximately 30g
Terminals.....	Gold-plated turrets	Gold-plated turrets
Markings.....	Manufacturer's name and part number, resistance value and tolerance, linearity tolerance, wiring diagram, date code	

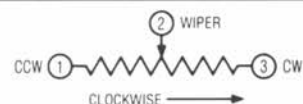
3437/3437S-HYB



TOLERANCES: EXCEPT WHERE NOTED

DECIMALS: .XX ± .010, .XXX ± .005

FRACTIONS: ± 1/64 DIMENSIONS: IN.



¹At room ambient: +25°C nominal and 50% relative humidity nominal, except as noted.

²Consult factory for complete specification details.

Specifications are subject to change without notice.