BOURNS INC

Model 3438

1⅛" Diameter, Single-Turn Bushing Mount

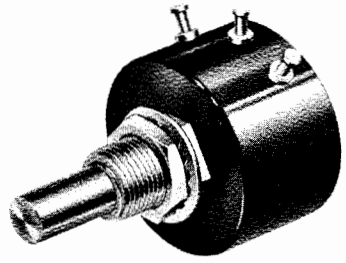
CONDUCTIVE PLASTIC ELEMENT

OBSOLETE

FEATURES

- LOW COST -- Precision design
- Unique INFINITRON® conductive plastic element provides essentially infinite resolution
- Rotational life 20,000,000 shaft revolutions
- Dependable resistance element termination provides low end resistance and definite electrical angle
- Housing: high-temperature, moisture resistant, thermo-setting plastic
- Stainless steel shaft
- 1 watt power rating at 40°C

Actual size



STANDARD RESISTANCES

Resistance (Ohms)	Part Number*
100	3438S-1-101
200	3438S-1-201
500	3438S-1-501
1K	3438S-1-102
2K	3438S-1-202
5K	3438S-1-502
10K	3438S-1-103
20K	3438S-1-203
50K	3438S-1-503
100K	3438S-1-104
200K	3438S-1-204
500K	3438S-1-504
1 Meg	3438S-1-105

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

Model 3438 Conductive Plastic Element Potentiometer

SPECIFICATIONS

ELECTRICAL CHARACTERISTICS

Resistance Range ..... 100 ohms to 1 Megohm
Resistance Tolerance ..... ±20%
Linearity (Independent)* ..... ±1.0% maximum
Electrical Angle ..... 320° (+5°, -5°)
Output Smoothness ..... 0.5% maximum
Power Rating (250V maximum)
40°C ..... 1 watt
105°C ..... 0 watt
Dielectric Strength MIL-R-12934
Sea Level ..... 500 VAC minimum
Insulation Resistance, 500 VDC* 1000 megohms minimum

ENVIRONMENTAL CHARACTERISTICS

Operating Temperature Range ..... -15°C to +105°C
Temperature Coefficient:

Specific temperature coefficient limits vary depending on the resistance value of the potentiometer and the temperature range in which it will be used. In general, the temperature coefficient value of Bourns' INFINITRON conductive plastic potentiometers is within ±200 PPM/°C.

When requesting exact values, please specify the resistance value of the potentiometer to be used and the temperature range required for your application.

(When potentiometers are used as voltage dividers, the resistance change due to temperature coefficient does not affect the wiper output as a ratio of the total applied voltage. Therefore, temperature coefficient should not be considered a major or significant specification in this type application.)

Vibration ..... 10 G
Shock ..... 15 G
Load Life ..... 1000 Hours
Resistance Shift ..... 5% maximum

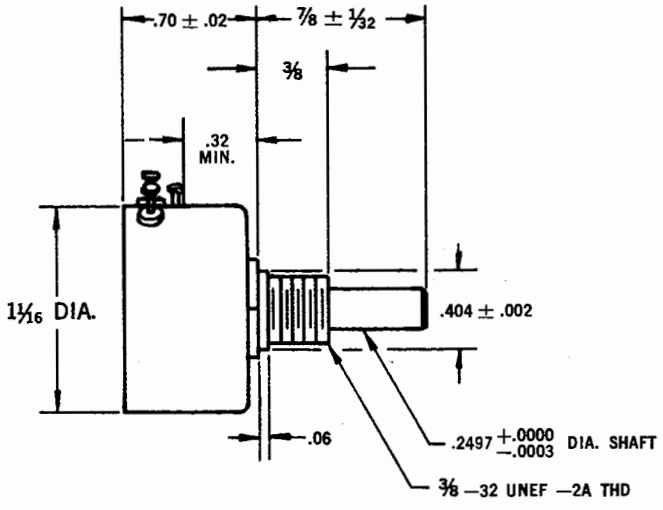
MECHANICAL AND PHYSICAL CHARACTERISTICS

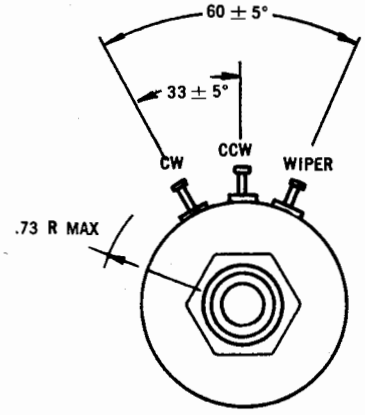
Mechanical Angle ..... Continuous
Rotational Life ..... 20,000,000 shaft revolutions
Torque
Starting ..... 2.0 oz.-in. maximum
Running ..... 2.0 oz.-in. maximum
Weight ..... Approximately 1 oz.
Terminals ..... Gold-plated turrets
Marking Manufacturer's name and part number, resistance value and tolerance, linearity tolerance, wiring diagram and date code.

*Linearity from 1% to 99% VR output.

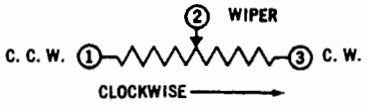
Specifications are subject to change without notice.

3438





NOTE:
LOCKWASHER & HEX NUT TO BE SUPPLIED WITH UNIT.



TOLERANCES: .XX=±.010
.XXX=±.005 EXCEPT WHERE NOTED

BOURNS

BOURNS, INC., TRIMPOT PRODUCTS DIVISION
1200 COLUMBIA AVENUE, RIVERSIDE, CALIFORNIA 92507

LITHO IN U.S.A.