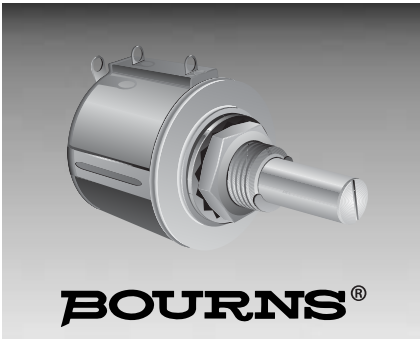


阅读申明

- 1.本站收集的数据手册和产品资料都来自互联网，版权归原作者所有。如读者和版权方有任何异议请及时告之，我们将妥善解决。
- 2.本站提供的中文数据手册是英文数据手册的中文翻译，其目的是协助用户阅读，该译文无法自动跟随原稿更新，同时也可能存在翻译上的不当。建议读者以英文原稿为参考以便获得更精准的信息。
- 3.本站提供的产品资料，来自厂商的技术支持或者使用者的心得体会等，其内容可能存在描述上的差异，建议读者做出适当判断。
- 4.如需与我们联系，请发邮件到marketing@iczoom.com，主题请标有“数据手册”字样。

Read Statement

1. The datasheets and other product information on the site are all from network reference or other public materials, and the copyright belongs to the original author and original published source. If readers and copyright owners have any objections, please contact us and we will deal with it in a timely manner.
2. The Chinese datasheets provided on the website is a Chinese translation of the English datasheets. Its purpose is for reader's learning exchange only and do not involve commercial purposes. The translation cannot be automatically updated with the original manuscript, and there may also be improper translations. Readers are advised to use the English manuscript as a reference for more accurate information.
3. All product information provided on the website refer to solutions from manufacturers' technical support or users the contents may have differences in description, and readers are advised to take the original article as the standard.
4. If you have any questions, please contact us at marketing@iczoom.com and mark the subject with "Datasheets" .



BOURNS®

Features

- Bushing mount
- Optional center tap and rear shaft extension
- Optional AR lug feature
- Gangable with common or concentric shafts

- High torque available
- Optional 0.1 % linearity
- Non-standard features and specifications available

3540/3541 - Precision Potentiometer

Electrical Characteristics¹ 3540 Wirewound Element 3541 Hybritron® Element

| | | |
|------------------------------|------------------------|---------------------------------|
| Standard Resistance Range | 100 to 100 K ohms | 1 K to 100 K ohms |
| Total Resistance Tolerance | ±5 % | ±10 % |
| Independent Linearity | ±0.25 % | ±0.25 % |
| Effective Electrical Angle | 3600° +10°, -0° | 3600° +10°, -0° |
| Absolute Minimum Resistance/ | 1 ohm or 0.1 % maximum | Minimum voltage |
| Minimum Voltage | (whichever is greater) | 0.2 % maximum |
| Noise | 100 ohms ENR maximum | Output smoothness 0.1 % maximum |

| | | |
|---|---------------------------|-----------------------|
| Dielectric Withstanding Voltage (MIL-STD-202, Method 301) | | |
| Sea Level | 1,000 VAC minimum | 1,000 VAC minimum |
| Power Rating (Voltage Limited By Power Dissipation or 447 VAC, Whichever Is Less) | | |
| +70 °C | 2 watts | 2 watts |
| +125 °C | 0 watt | 0 watt |
| Insulation Resistance (500 VDC) | | |
| | 1,000 megohms minimum | 1,000 megohms minimum |
| Resolution | See recommended part nos. | Essentially infinite |

Environmental Characteristics¹

| | | |
|--|--|--|
| Operating Temperature Range | +1 °C to +125 °C | +1 °C to +125 °C |
| Storage Temperature Range | -55 °C to +125 °C | -55 °C to +125 °C |
| Temperature Coefficient Over | | |
| Storage Temperature Range ² | ±50 ppm/°C maximum/unit | ±100 ppm/°C maximum/unit |
| Vibration | 15 G | 15 G |
| Wiper Bounce | 0.1 millisecond maximum | 0.1 millisecond maximum |
| Shock | 50 G | 50 G |
| Wiper Bounce | 0.1 millisecond maximum | 0.1 millisecond maximum |
| Load Life | 1,000 hours, 2 watts | 1,000 hours, 2 watts |
| Total Resistance Shift | ±2 % | ±5 % |
| Rotational Life (No Load) | 1,000,000 shaft revolutions ² | 5,000,000 shaft revolutions ² |
| Total Resistance Shift | ±5 % maximum | ±5 % maximum |
| Moisture Resistance (MIL-STD-202, Method 103, Condition B) | | |
| Total Resistance Shift | ±2 % maximum | ±5 % maximum |
| IP Rating | IP 40 | IP 40 |

Mechanical Characteristics¹

| | |
|----------------------------------|---|
| Stop Strength | 53 N-cm (75 oz-in.) minimum |
| Mechanical Angle | 3600° +10°, -0° |
| Torque (Starting & Running) | 0.35 N-cm (0.5 oz-in.) max. |
| Mounting | 170-200 N-cm (15-18 lb-in.) max. |
| Shaft Runout | 0.08 mm (0.003 in.) T.I.R. |
| Lateral Runout | 0.13 mm (0.005 in.) T.I.R. |
| Shaft End Play | 0.25 mm (0.010 in.) T.I.R. |
| Shaft Radial Play | 0.25 mm (0.010 in.) T.I.R. |
| Pilot Diameter Runout | 0.08 mm (0.003 in.) T.I.R. |
| Backlash | 1.0° maximum |
| Weight | Approximately 21 gm |
| Terminals | Gold-plated solder lugs |
| Soldering Condition | Recommended hand soldering using Sn95/Ag5 no clean solder, 0.025 " wire diameter. Maximum temperature 399 °C (750 °F) for 3 seconds. No wash process to be used with no clean flux. |
| Marking | Manufacturer's name and part number, resistance value and tolerance, linearity tolerance, wiring diagram, and date code |
| Ganging (Multiple Section Pots.) | 2 cups maximum |
| Hardware | One lockwasher (H-37-2) and one mounting unit (H-38-2) is shipped with each potentiometer. |

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

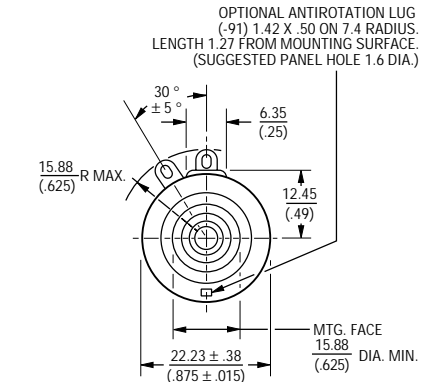
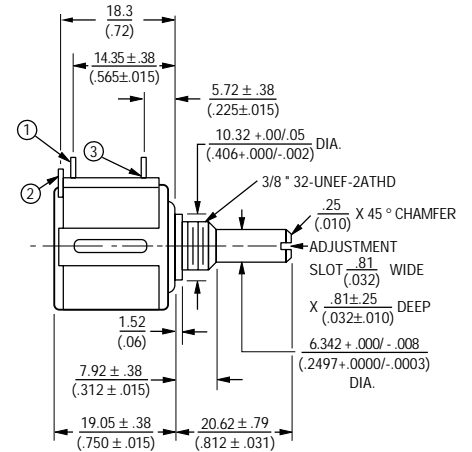
²Consult manufacturer for complete specification details.

Recommended Part Numbers

| Part Number | Resistance | Resolution |
|-------------|------------|------------|
| 3540S-1-201 | 200 | .042 |
| 3540S-1-501 | 500 | .031 |
| 3540S-1-102 | 1,000 | .027 |
| 3540S-1-202 | 2,000 | .021 |
| 3540S-1-502 | 5,000 | .021 |
| 3540S-1-103 | 10,000 | .019 |
| 3540S-1-203 | 20,000 | .014 |
| 3540S-1-503 | 50,000 | .011 |
| 3540S-1-104 | 100,000 | .008 |

| Part Number | Resistance |
|-------------|------------|
| 3541H-1-102 | 1,000 |
| 3541H-1-202 | 2,000 |
| 3541H-1-502 | 5,000 |
| 3541H-1-103 | 10,000 |
| 3541H-1-203 | 20,000 |
| 3541H-1-503 | 50,000 |
| 3541H-1-104 | 100,000 |

3540S-1/3541H-1

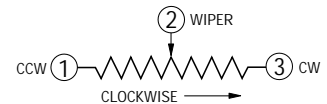


TOLERANCES: EXCEPT WHERE NOTED

DECIMALS: XX ± .25 (010), XXX ± .13 (005)

FRACTIONS: ±1/64

DIMENSIONS: MM (IN.)



BOLDFACE LISTINGS ARE IN STOCK AND READILY AVAILABLE THROUGH DISTRIBUTION.

FOR SERVO MOUNT VERSION AND OTHER OPTIONS CONSULT FACTORY.

REV. 04/03