



7/8" (22mm) Precision Wirewound Potentiometer



ADDITIONAL FEATURES

- Special Resistance Tolerances to 1%
- Rear Shaft Extensions and Support Bearing
- Non Turn Lug
- Dual Gang Configuration and Concentric Shafts
- High Torque and Center Tap
- Special Markings and Front Shaft Extensions
- Servo Unit available and Slipping Clutch

Note: The color of this product is changing to blue, during the internal period you may receive either black or blue.

| ELECTRICAL SPECIFICATIONS | | | |
|-------------------------------------|--|---------------|-------------|
| PARAMETER | MODEL 533 | MODEL 534 | MODEL 535 |
| Resistance Range Standard Values | 50Ω to 20KΩ | 100Ω to 100KΩ | 50Ω to 50KΩ |
| Capability Range | 5Ω to 60KΩ | 10Ω to 200KΩ | 5Ω to 100KΩ |
| Standard Tol | ± 5% | ± 5% | ± 5% |
| Linearity (Independent) | ± 0.25% | 0.20% | ± 0.25% |
| Noise | 100Ω ENR | 100Ω ENR | 100Ω ENR |
| Rotation (Electrical & Mechanical) | 1080° + 10% | 3600° + 10% | 1800° ± 10° |
| Power Rating (@ 70°C) | 1.0 watts | 2.0 watts | 1.5 watts |
| Insulation Resistance | 1000MΩ minimum 500VDC | | |
| Dielectric Strength | 1000V _{RMS} minimum 60Hz | | |
| Absolute Minimum Resistance | Not to exceed linearity x total resistance or 1Ω, whichever is greater | | |
| Tempco | 20ppm/°C (standard values, wire only) | | |
| End Voltage | 0.25% of total applied voltage, maximum | | |
| Phasing | CCW end points - section 2 phased to section 1 within ± 2° | | |
| Taps | Center tap only | | |

| MARKING | |
|---------------------|---|
| Unit Identification | Manufacturer's name and model number, resistance value and tolerance, linearity specification date code and terminal identification |

| RESISTANCE VALUES | |
|-------------------|---|
| Ohms | |
| 533: | 50R, 100R, 200R, 500R, 1K, 2K, 5K, 10K, 20K |
| 534: | 100R, 200R, 500R, 1K, 2K, 5K, 10K, 20K, 50K, 100K |
| 535: | 50R, 100R, 200R, 500R, 1K, 2K, 5K, 10K, 20K, 50K |

| ORDERING INFORMATION | | | |
|---|------------------------|--------------------------------------|---------------------|
| The Models 533 (3 turn), 534 (10 turn) and 535 (5 turn) can be ordered by stating | | | |
| 534 | 1 | 2 | XXX |
| MODEL | MOUNTING | NUMBER OF SECTIONS | RESISTANCE EIA CODE |
| | 1. Bushing 2. Servo | 1. Single section 2. Dual section | |

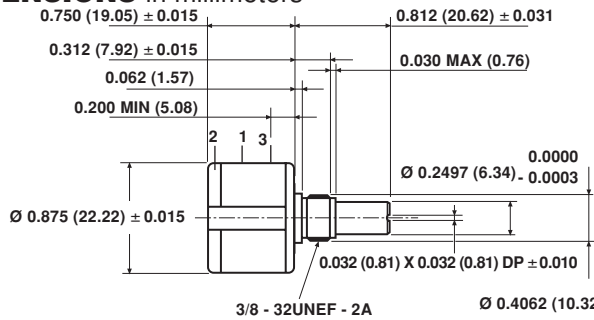
Model 533, 534, 535

Vishay Spectrol

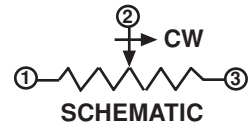
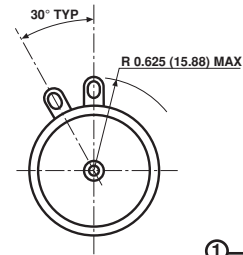
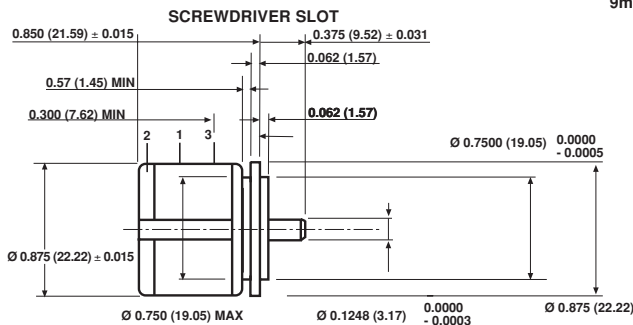
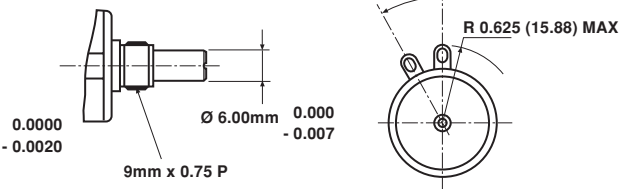
7/8" (22mm) Precision
Wirewound Potentiometer



SINGLE SECTION DIMENSIONS in millimeters



METRIC

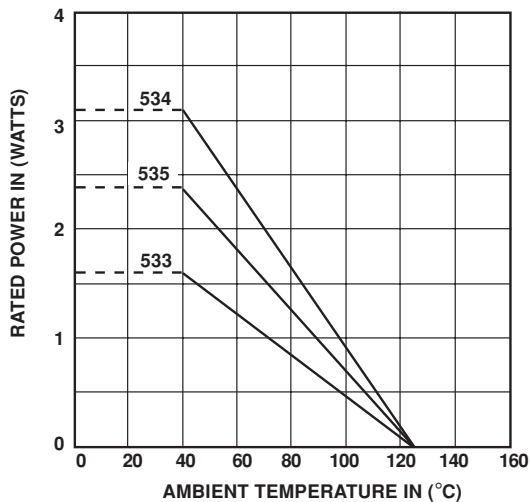


Mounting hardware, washer and panel nut, nickel plated

MECHANICAL SPECIFICATIONS

| PARAMETER | | |
|-----------------------------|-------------------------------------|-----------------------------|
| Bearing Type | Bushing: Sleeve bearing Servo: Ball | |
| Torque (maximums): starting | 534 | 533/535 |
| Section 1 | 0.5 oz - in (36gm - cms) | 0.7 oz - in (50gm - cms) |
| Section 2 | 0.9 oz - in (65gm - cms) | 1.1 oz - in (79gm - cms) |
| Torque (maximums): running | 534 | 533/535 |
| Section 1 | 0.4 oz - in (28.80gm - cms) | 0.6 oz - in (43.20gm - cms) |
| Section 2 | 0.7 oz - in (50.40gm - cms) | 0.9 oz - in (64.8gm - cms) |
| Weight (maximums) | 0.75 oz (21.26gm) | |
| Section 1 | 1.25 oz (35.44gm) | |
| Section 2 | | |
| Stop Strength | 75 oz - in (static) (5.4Kg - cm) | |
| Ganging | 2 sections maximum | |

POWER RATING CHART



ENVIRONMENTAL SPECIFICATIONS

| | |
|------------------------------------|-------------------|
| Vibration | 15g thru 2000Hz |
| Shock | 50g |
| Rotational Life (Shaft Revolution) | |
| 533 | 300,000 |
| 534 | 1,000,000 |
| 534 (Servo) | > 1,000,000 |
| 535 | 500,000 |
| Load Life | 900 Hours |
| Temperature Range | - 55°C to + 125°C |



| RESISTANCE ELEMENT DATA | | | | | | | | | | | | | | |
|--------------------------------|------|-----|--------------|-------|-------|---------------|--------|--------|----------------------------------|-------|-------|-----------------------------|-------|-------|
| RESISTANCE VALUE (Ω) | | | RESOLUTION % | | | OHMS PER TURN | | | MAX CURRENT AT 70°C AMBIENT (mA) | | | MAX VOLTAGE ACROSS COIL (V) | | |
| 533 | 534 | 535 | 533 | 534 | 535 | 533 | 534 | 535 | 533 | 534 | 535 | 533 | 534 | 535 |
| 50 | – | 50 | 0.149 | – | 0.120 | 0.0746 | – | 0.0603 | 141.0 | – | 173.0 | 7.07 | – | 8.66 |
| 100 | 100 | 100 | 0.111 | 0.060 | 0.075 | 0.1114 | 0.0603 | 0.0746 | 100.0 | 141.0 | 122.0 | 10.0 | 14.1 | 12.2 |
| 200 | 200 | 200 | 0.097 | 0.037 | 0.061 | 0.1954 | 0.0746 | 0.1220 | 70.7 | 100.0 | 86.6 | 14.1 | 20.0 | 17.3 |
| 500 | 500 | 500 | 0.069 | 0.031 | 0.049 | 0.3424 | 0.1520 | 0.2459 | 44.7 | 63.2 | 54.7 | 22.4 | 31.6 | 27.4 |
| 1K | 1K | 1K | 0.063 | 0.025 | 0.041 | 0.6331 | 0.2459 | 0.4113 | 31.6 | 44.7 | 38.7 | 31.6 | 44.7 | 38.7 |
| 2K | 2K | 2K | 0.041 | 0.021 | 0.031 | 0.8206 | 0.4113 | 0.6331 | 22.4 | 31.6 | 27.4 | 44.7 | 63.2 | 54.8 |
| 5K | 5K | 5K | 0.044 | 0.016 | 0.034 | 2.2330 | 0.8206 | 1.7230 | 14.1 | 20.0 | 17.3 | 70.7 | 100.0 | 86.6 |
| 10K | 10K | 10K | 0.034 | 0.017 | 0.030 | 3.4510 | 1.7230 | 3.0160 | 10.0 | 14.1 | 12.2 | 100.0 | 141.0 | 122.0 |
| 20K | 20K | 20K | 0.031 | 0.015 | 0.020 | 6.1790 | 3.0160 | 3.9910 | 7.07 | 10.0 | 8.66 | 141.0 | 200.0 | 173.0 |
| – | 50K | 50K | – | 0.009 | 0.015 | – | 4.6690 | 7.4560 | – | 6.32 | 5.47 | – | 316.0 | 274.0 |
| – | 100K | – | – | 0.007 | – | – | 7.4560 | – | – | 4.47 | – | – | 447.0 | – |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |



Notice

Specifications of the products displayed herein are subject to change without notice. Vishay Intertechnology, Inc., or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Vishay's terms and conditions of sale for such products, Vishay assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of Vishay products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Vishay for any damages resulting from such improper use or sale.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.