



VISHAY INTERTECHNOLOGY, INC.

PRODUCT SHEET

## POTENTIOMETERS



Model 534-8872

### 10 Turn, Wirewound Potentiometer - Metric

#### FEATURES

- 22.22mm (0.875 inches) diameter potentiometer
- Special shafts up to 50.8mm (2 inches)
- Rear shaft extensions
- Dual gang versions 36.7mm (1.445 inches) length (bush mount)
- 1 million shaft revolutions

#### APPLICATIONS

- Medical instruments
- Welding machines
- Wire cutting machines
- Almost any industrial control that requires a metric shaft

# 7/8" (22mm) Precision Wirewound Potentiometer

### SPECIAL FEATURES

- Special Resistance Tolerances to 1%
- Rear Shaft Extensions and Support Bearing
- Non Turn Lug
- Insulating Plastic Shaft
- Dual Gang Configuration and Concentric Shafts
- High Torque and Center Tap
- Special Markings and Front Shaft Extensions

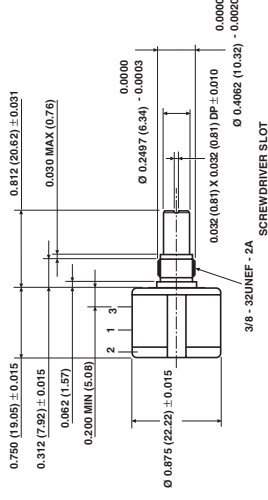


| ELECTRICAL SPECIFICATIONS          |  |
|------------------------------------|--|
| PARAMETER                          | MODEL 534  |
| Resistance Range                   | 100Ω to 100KΩ  |
| Standard Values                    | 100Ω to 200KΩ  |
| Capability Range                   | ± 5%   |
| Standard Tol                       | ± 0.25%  |
| Linearity (Independent)            | 100Ω ENR   |
| Noise                              | 0° + 10°   |
| Rotation (Electrical & Mechanical) | 2.0 watts  |
| Power Rating (@ 70°C)              | 75% of section 1   |
| Additional Sections                | 1000MΩ minimum 500VDC  |
| Insulation Resistance              | 1000V <sub>RMS</sub> minimum 60Hz                                      |
| Dielectric Strength                | Not to exceed linearity x total resistance or 1Ω, whichever is greater |
| Absolute Minimum Resistance        | 20ppm/°C (standard values, wire only)                                  |
| Tempco                             | 0.25% of total applied voltage, maximum                                |
| End Voltage                        | CCW end points - section 2 phased to section 1 within ± 2°             |
| Phasing                            |  |
| Taps                               | Center tap only  |

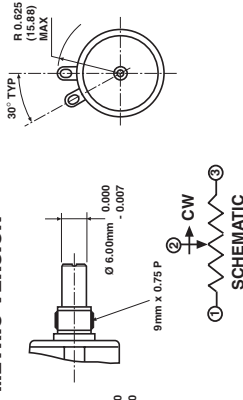
| MARKING             |   |
|---------------------|---|
| Unit Identification | Manufacturer's name and model number, resistance value and tolerance, linearity specification date code and terminal identification |
| Ohms 534:           | 100R, 200R, 500R, 1K, 2K, 5K, 10K, 20K, 50K, 100K   |

| RESISTANCE VALUES    |   |
|----------------------|---|
| Ohms 534:            | 100R, 200R, 500R, 1K, 2K, 5K, 10K, 20K, 50K, 100K |
| ORDERING INFORMATION | Model 534 (10 turn) can be ordered by stating     |
|                      | 534-8872  |
|                      | MODEL   |
|                      | XXX   |
|                      | RESISTANCE EIA CODE                               |
|                      | SECTION #N  |
|                      | (consult factory)                                 |

### DIMENSIONS in millimeters



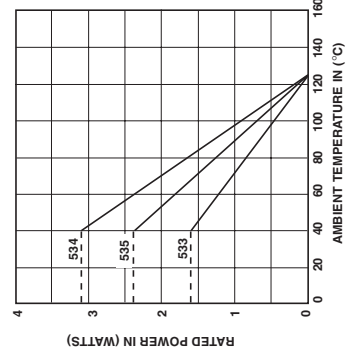
### METRIC VERSION



Mounting hardware, washer and panel nut, nickel plated

| MECHANICAL SPECIFICATIONS   |                                  |
|-----------------------------|----------------------------------|
| PARAMETER                   |                                  |
| Bearing Type Bushing        | Sleeve bearing                   |
| Torque (maximums): starting | 534                              |
| Section 1                   | 0.5 oz - in (36gm - cms)         |
| Section 2                   | 0.9 oz - in (65gm - cms)         |
| Weight (maximums)           |                                  |
| Section 1                   | 0.75 oz (21.26gm)                |
| Section 2                   | 1.25 oz (35.44gm)                |
| Stop Strength               | 75 oz - in (static) (5.4Kg - cm) |
| Ganging                     | 2 sections maximum               |

### POWER RATING CHART



| ENVIRONMENTAL SPECIFICATIONS       |                   |
|------------------------------------|-------------------|
| Vibration                          | 15g 1hru 2000Hz   |
| Shock                              | 50g               |
| Rotational Life (Shaft Revolution) | 1,000,000         |
| 534                                |                   |
| Load Life                          | 900 Hours         |
| Operating Temperature Range        | - 55°C to + 125°C |
| Moisture Resistant Salt Spray      | 96 Hours          |