

Spindle Operated Potentiometers

Type RW Series

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This high power wire wound potentiometer is a recent addition to the Tyco range. The RW series offers a range of shaft styles, 1 and 3 Watt power ratings, low terminal resistance and excellent linearity. For a rugged high power control potentiometer at a very attractive price - the RW Series will satisfy your requirements.

Key Features

- Wirewound Elements
- Proven Reliability
- Excellent Linearity
- 3W Rating at 40°C in Wirewound
- Robust Construction
- Range of Shaft Styles
- Custom Designs Possible

Characteristics - Electrical

| | RW1 | RW3 |
|-----------------------------------|------------------------------------|---------------------|
| Element Technology: | Wirewound | |
| Resistance Range: | 10R to 100K (Linear) | 10R to 25K (Linear) |
| Resistance Values: | 1, 2 & 5 in each decade | |
| Selection Tolerance: | 10% Standard, ± 5% By Request | |
| Linearity: | 2% maximum | |
| Rated Dissipation at 40°C: | 1W | 3W |
| Maximum Working Voltage: | 250V DC | 500 V DC |
| Electrical Rotation: | 285° nominal | 275° nominal |
| Terminal Resistance: | 0.2R or 0.02% whichever is greater | |
| Noise (E.N.R.): | 100R maximum | |
| Insulation Resistance: | > 5 Gig Ohms | |
| Voltage Proof: | 630V AC peak | |

Characteristics - Mechanical

| | | |
|--------------------------------|----------------------------------|-----------------|
| Starting Torque: | <70 mNm | < 85 mNm |
| Mechanical Rotation: | 295° nominal | 285° nominal |
| End Stop Torque: | 500 mNm minimum | 800 mNm minimum |
| Standard Shaft Lengths: | 25mm - Others By Special Request | |

Characteristics - Environmental

| | |
|-------------------------------------|-----------------------------------|
| Operating Temperature: | -40°C to +70°C |
| Limits of Resistance Change: | 3% (after 1000 hrs) |
| Temperature Coefficient: | 100ppm/°C |
| Bump Severity: | 390 m/s ² , 4000 bumps |
| Vibration Severity: | 10 - 500 Hz, 98m/s ² |
| Climatic Category: | 40/070/21 |
| Mechanical Endurance: | 2000 operations |
| Sealing: | Fully enclosed |

Dimensions RW1



RW3



How to Order

| RW | 3 | 102 | K | A |
|------------------------------|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Common Part | Power Dissipation | Resistance Value | Tolerance | Shaft Style |
| RW - Wirewound Potentiometer | 1 - 1 Watt at 70°C 3 - 3 Watts at 70°C | The first two digits are significant figures of resistance value and the third denotes the number of zeros following. e.g. 100R: 101 1K: 102 10K: 103 100K: 104 | J - ±5% (special) K - ±10% (standard) | A - 6.35 x 25mm Plain B - 6.35 x 68mm Full Flat C - 6.35 x 19mm Slotted D - 6.35 x 38mm Slotted E - 6.35 x 16mm Slotted |