

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, $\pm 5\%$ 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                       |                     |

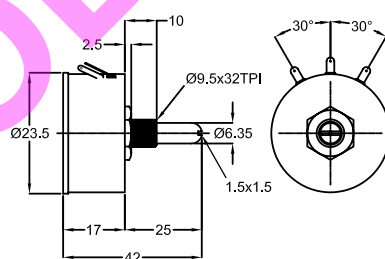
Characteristics - Mechanical

|                         |                                  |                 |
|-------------------------|----------------------------------|-----------------|
| 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 |                 |

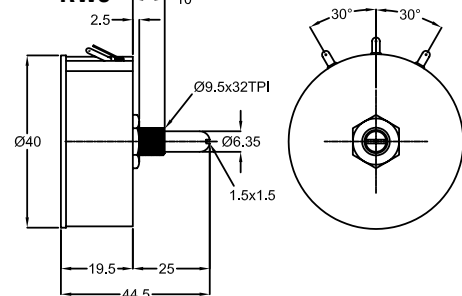
Characteristics - Environmental

|                              |                                   |
|------------------------------|-----------------------------------|
| Operating Temperature:       | -40°C to +70°C                    |
| Limits of Resistance Change: | 3% (after 1000 hrs)               |
| Temperature Coefficient:     | 100ppm/°C                         |
| Bump Severity:               | 390 m/s <sup>2</sup> , 4000 bumps |
| Vibration Severity:          | 10 - 500 Hz, 98m/s <sup>2</sup>   |
| 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<br>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.<br><br>e.g. 100R: 101<br>1K0: 102<br>10K: 103<br>100K: 104 | J - $\pm 5\%$ (special)<br>K - $\pm 10\%$ (standard) | A - 6.35 x 25mm Plain<br>B - 6.35 x 68mm Full Flat<br>C - 6.35 x 19mm Slotted<br>D - 6.35 x 38mm Slotted<br>E - 6.35 x 16mm Slotted |