

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

#### Characteristics - Mechanical

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

#### Characteristics - Environmental

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