Single-Turn Precision Potentiometer

Model 3371



Features:

- 1-5/16" diameter
- Conductive plastic
- Low noise
- Excellent output smoothness





Electrical

Resistance Range	1K to 900K Ohms		
Standard Resistance Tolerance	±10%		
Minimum Practical Resistance Tolerance	±5%		
Independent Linearity ²	±0.5%		
Minimum Practical Independent Linearity	±0.25%		
Input Voltage	400 VDC maximum, not to exceed power rating		
Power Rating	0.75 Watt at 65°C, derating to 0 at 105°C		
Dielectric Strength	1,000 V rms		
Insulation Resistance	1,000 Megohms minimum		
Output smoothness	0.1% maximum		
Actual Electrical Travel	348° nominal		
Electrical Continuity Travel	350° minimum		
End Voltage	maximum 0.5% of input voltage		
Tap Tolerance	maximum 0.5% of input voltage		
Resolution	essentially infinite		
Temperature Coefficient of Resistance ³	-400 ppm/°C typical		
Temperature Coefficient of Output Voltage ⁴	±10 ppm/°C typical		

Mechanical

Total Mechanical Travel	360° Continuous (350° ±2° with stop feature)	
Number of Gangs	1 maximum	
Weight	1.5 oz. nomina	
Shaft Runout	0.0025" maximum T.I.R	
Pilot Diameter Runout	0.0025" maximum T.I.R.	
Lateral Runout	0.003"maximum T.I.R.	
Shaft Radial Play	0.004" maximum	
Shaft End Play	0.007" maximum	
Start/Run Torque	1.0 ozin. maximum, ES option adds 0.5 ozin.	

Specifications subject to change without notice.

² Linearity is measured between 1% and 99% of input voltage.

Special TCR available to ±100 ppm/°C.

Measured with 10 VDC CW to CCW and slider at 50% of electrical travel

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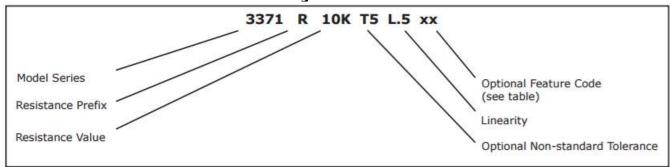
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Environmental

Operating Temperature Range	-25°C to +105°C		
Temperature Cycling	5 cycles, -65°C to +105°C, maximum 10% ΔR		
Shock	6 ms sawtooth, 100 G's, 0.1 ms maximum discontinuity		
Vibration	10 G's, 10 to 500 Hz, maximum 2% ΔR, 0.1 ms maximum discontinuity		
Moisture Resistance	five 24 hour cycles, maximum 25% ΔR		
High Temperature Exposure	1,000 hours at 105°C, maximum 0.5% ΔR		
Rotational Life	2 million shaft revolutions		
Rotational Load Life	2 million shaft revolutions, maximum 10% ΔR		
Ingress Protection Rating (IP Code)	IP50, IP66 available as option (feature code ES)		

Ordering Information

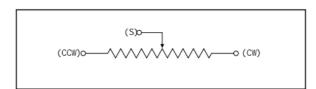


FEATURE CODES

Center Tap	СТ	
Linearity Tape	LT	
Flatted Shaft	FS	
Slotted Shaft	SS	
Shaft Lock	SL	
Stop	ST	
Seal (IP66)	ES	

When multiple Optional Feature codes are used the P/N shall be in the same sequence as listed in this table (top to bottom).

CIRCUIT DIAGRAM



STANDARD RESISTANCE VALUES

1K	5K	20K	100K
2K	10K	50K	

General Note

TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

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