Single-Turn Precision Potentiometer

Model 6173

Features:

- Low profile 7/8" diameter
- Conductive plastic technology







Electrical

1K to 100K Ohms		
±10%		
±5%		
±1%		
±0.25%		
400 VDC maximum, not to exceed power rating		
1.0 Watt at 70°C, derating to 0 at 125°C		
1,000 V rms		
1,000 Megohms minimum		
0.1% maximum		
335° nominal		
346° minimum		
maximum 0.5% of input voltage		
essentially infinite		
-400 ppm/°C typical		
±10 ppm/°C typical		

Mechanical

Total Mechanical Travel	360° continuous
Number of Gangs	4 maximum
Weight	0.92 oz. single gang nominal, 0.6 oz. each added gang
Shaft Runout	maximum T.I.R. 0.001"
Pilot Diameter Runout	maximum T.I.R. 0.001"
Lateral Runout	maximum T.I.R. 0.002"
Shaft Radial Play	maximum 0.001"
Start/Run Torque	maximum 0.5 ozin. per gang

¹ Specifications subject to change without notice.

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

³ Special TCR available to ±100 ppm/°C.

⁴ Measured with 10 VDC CW to CCW and slider at 50% of electrical travel.

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.

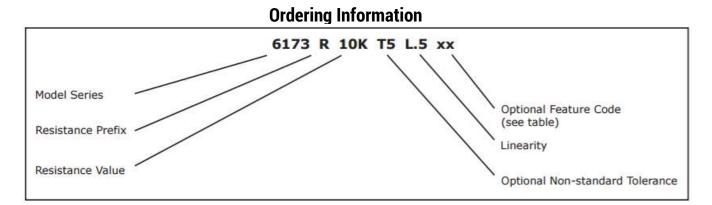
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Environmental

Operating Temperature Range	-40°C to +125°C dynamic, -65°C to +125°C static
Temperature Cycling	5 cycles, -65°C to +125°C, maximum 10% ΔR
Shock	6 ms Saw-tooth, 100 G's, 0.1 ms maximum discontinuity
Vibration	15 G's, 10 to 500 Hz, maximum 2% ΔR, 0.1 ms maximum discontinuity
Moisture Resistance	ten 24 hour cycles, maximum 10% ΔR
High Temperature Exposure	1,000 hours at 125°C, maximum 0.5% ΔR
Rotational Life	25 million shaft revolutions
Rotational Load Life	5 million shaft revolutions at 1.0 Watt & 70°C plus 900 hours at 1.0 Watt, maximum 10% ΔR
Ingress Protection Rating (IP	Code) IP50

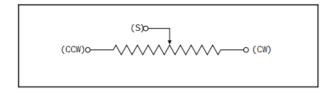


FEATURE CODES

Center Tap	СТ
Linearity Tape	LT
Flatted Shaft	FS
Slotted Shaft	SS
Rear Shaft Extension	RS
Additional Gangs	2G, 3G, or 4G

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

2K	5K	10K	20K	50K
	2К	2К 5К	2K 5K 10K	2K 5K 10K 20K

General Note

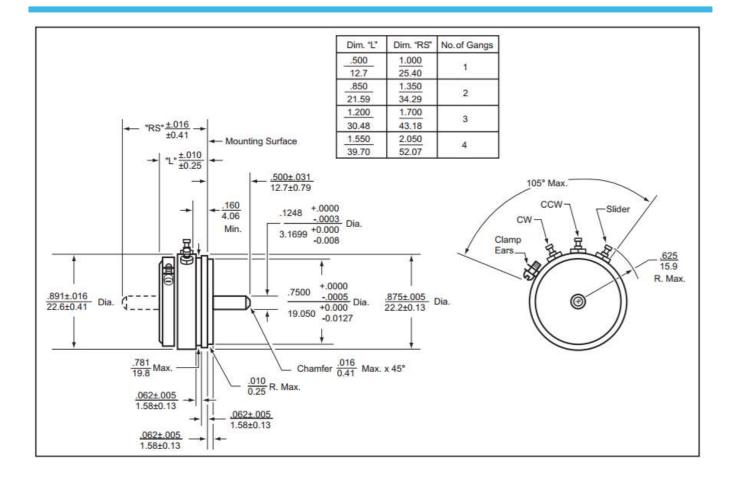
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