

#### **Features:**

- 1-5/16" diameter
- Conductive plastic technology
- Anodized aluminum housing
- Front and rear ball bearings





# **Models Available**

6371	1/4" Shaft, 3/8" Bushing
6373	1/4" Shaft, Servo

# **Electrical**

esistance Range 1K to 300K				
Standard Resistance Tolerance	±10%			
Minimum Practical Resistance Tolerance	±5%			
Independent Linearity <sup>2</sup>	±0.5%			
Minimum Practical Independent Linearity	±0.1%			
Input Voltage	400 VDC maximum, not to exceed power rating			
Power Rating	2.0 Watts at 70°C, derating to 0 at 125°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 0.35% of input voltage			
Tap Tolerance	maximum 0.5% of input voltage			
Resolution	essentially infinite			
Temperature Coefficient of Resistance <sup>3</sup>	-400 ppm/°C typical			
Temperature Coefficient of Output Voltage <sup>4</sup>	±10 ppm/°C typical			

## Mechanical

Total Mechanical Travel	360° continuous
Number of Gangs	1 maximum
Weight	2.0 oz. nominal
Shaft Runout	maximum T.I.R. 0.001"
Pilot Diameter Runout	maximum T.I.R. 0.0015"
Lateral Runout	maximum T.I.R. 0.002"
Shaft Radial Play	maximum 0.002"
Start/Run Torque	maximum 0.7 / 0.5 ozin., ES option adds 0.5 ozin.

#### 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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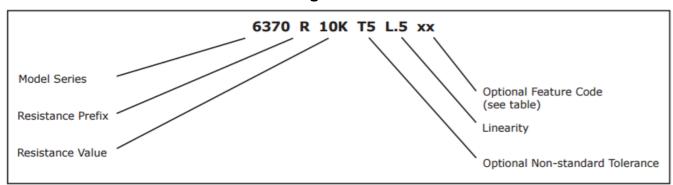
Specifications subject to change without notice.
Linearity is measured between 1% and 99% of input voltage.
Special TCR available to ±100 ppm/°C.
Measured with 10 VDC CW to CCW and slider at 50% of electrical travel.



## **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 2,000 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 Load Life	5 million shaft revolutions plus 900 hours at 2.0 Watts & 70°C, maximum 10% ΔR
Ingress Protection Rating (IP Code)	IP50, IP66 available as option for 6371 (feature code ES)

# **Ordering Information**

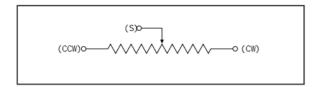


# **FEATURE CODES**

Center Tap	СТ
Linearity Tape	LT
Flatted Shaft	FS
Slotted Shaft	SS
Rear Shaft Extension	RS
Shaft Lock, 6371 only	SL
Seal (IP66), 6371 only	ES

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

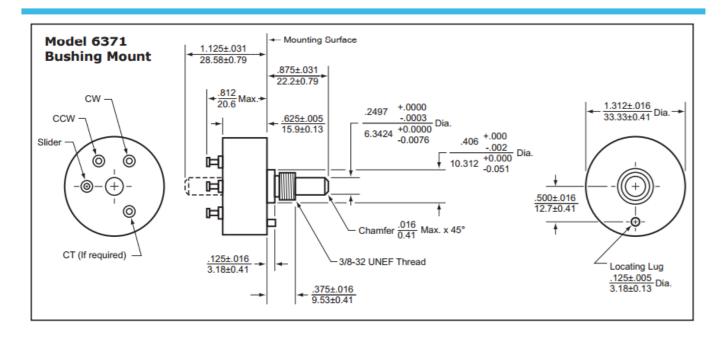
#### **CIRCUIT DIAGRAM**

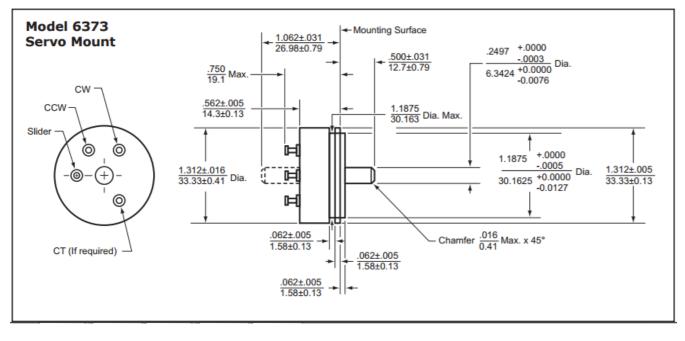


## STANDARD RESISTANCE VALUES

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







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