## **Single-Turn Precision Potentiometer**

Model 6130 Series



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### Features:

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





### **Models Available**

6134		6 mm Shaft, 3/8" Bushing
6137		1/4" Shaft, 3/8" Bushing
6138 for heavy side load applic	ations	1/4" Shaft, 3/8" Bushing
6130-XXX	Custom models are available; Contact Customer Service for special features or tolerance	

## Electrical

Resistance Range	1K to 100K Ohms
Standard Resistance Tolerance	±20%
Independent Linearity <sup>2</sup>	$\pm 1\%$ ( $\pm 2\%$ for values greater than 20K Ohms)
Minimum Practical Independent Linearity	±0.5%
Input Voltage	400 VDC maximum, not to exceed power rating
Power Rating	1.0 Watt at 70°C, derating to 0 at 125°C
Dielectric Strength	750 V rms
Insulation Resistance	1,000 Megohms minimum
Output smoothness	0.1% maximum
Actual Electrical Travel	340° ±3° (300° ±3° with stop feature)
Electrical Continuity Travel	350° ±3° (343° ±3° with stop feature)
End Voltage	maximum 0.5% of input voltage
Resolution	essentially infinite
Temperature Coefficient of Resistance	-400 ppm/°C typical
Temperature Coefficient of Output Voltage <sup>3</sup>	±10 ppm/°C typical

## Mechanical

Total Mechanical Travel	360° continuous (343° with stop feature)	
Weight	0.6 oz. typical	
Backlash	1° maximum	
Static Stop Strength	40 inoz. maximum	
Start/Run Torque	0.5 inoz. maximum	
Panel Nut Tightening Torque 25 in. Ib		
Construction	zinc die cast housing, stainless steel shaft, bronze bearing	
Hazardous Materials	Pb free, E.U. RoHS compliant, no REACH SVHC's	

<sup>1</sup> Specifications subject to change without notice.

<sup>2</sup> Linearity is measured between 1% and 99% of input voltage.

<sup>3</sup> 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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# **Single-Turn Precision Potentiometer**

# Model 5311 OBSOLETE



### Environmental

-25°C to +125°C
5 cycles, -40°C to +125°C, maximum 15% ΔR
6 ms sawtooth, 100 G's, 0.1 ms maximum discontinuity
10 G's, 10 to 500 Hz, maximum 5% $\Delta R,$ 0.1 ms maximum discontinuity
five 24 hour cycles, maximum 25% ΔR
1,000 hours at 125°C, maximum 0.5% ΔR
5 million shaft revolutions with no sideload
10 million shaft revolutions with up to 16 oz sideload at 90 RPM
IP50



### FEATURE CODES

Center Tap	СТ
Stop	ST
Flatted Shaft (slotted is standard)	FS

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
2К	10K	50K	

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