

# MODEL 6130 SERIES

Low Profile 7/8" Diameter  
Single Turn Conductive Plastic  
Bronze Bearing  
Position Sensor  
Precision Potentiometer

**New Product**



RoHS Compliant

## MODEL STYLES

6137	1/4" Shaft, 3/8" Bushing
6138 (For heavy side load applications)	1/4" Shaft, 3/8" Bushing
Special features and tolerances available on request	

## ELECTRICAL<sup>1</sup>

Resistance Range, Ohms	1K to 100K
Standard Resistance Tolerance	± 20%
Independent Linearity <sup>2</sup>	± 1% (2% for values greater than 20K Ohms)
Input Voltage, Maximum	400 Vdc, not to exceed power rating
Power Rating, Watts	1.0 @ 70°C, derating to 0 @ 125°C
Dielectric Strength	750 V rms
Insulation Resistance, Minimum	1,000 Megohms
Output Smoothness, Maximum	0.1%
Actual Electrical Travel, Nominal	340° (300° with stop feature) ± 3°
Electrical Continuity Travel, Nominal	350° (343° with stop feature) ± 3°
End Voltage, Maximum	0.5% of input voltage
Resolution	Essentially Infinite

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

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

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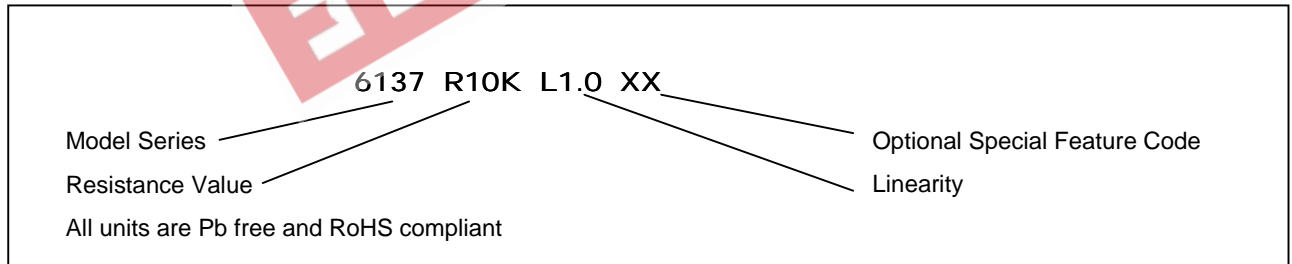
## MECHANICAL

Total Mechanical Travel	360° Continuous (343° with stop feature)
Weight, Nominal	.6 oz
Backlash, Maximum	1°
Static Stop Strength, Maximum	40 in.-oz.
Panel Nut Tightening Torque, Maximum	15 in. lb.
Start/Run Torque, Maximum	0.5 in. oz.
Construction	zinc die cast housing, stainless steel shaft, bronze bearing
Hazardous Materials	Pb free, RoHS compliant

## ENVIRONMENTAL (MIL-R-39023)

Operating Temperature Range	-40°C to +125°C
Temperature Cycling (Static) 5 cycles, -40°C to +125°C	15% ΔR max.
Shock, 6 ms Sawtooth 100G's	0.1 ms discontinuity max.
Vibration, 10G's, 100 to 500 Hz	5% ΔR max., 0.1 ms discontinuity max.
Moisture Resistance, Five 24 hour cycles	25% ΔR max.
Rotational Life (6137)	5 million shaft rev.
Rotational Life (6138)	10 million shaft rev.

## ORDERING INFORMATION<sup>3</sup>



## SPECIAL FEATURE CODES

Center Tap	CT
Stop	ST
Flatted Shaft (Slotted Shaft is Standard)	FS

## STANDARD RESISTANCE VALUES, OHMS

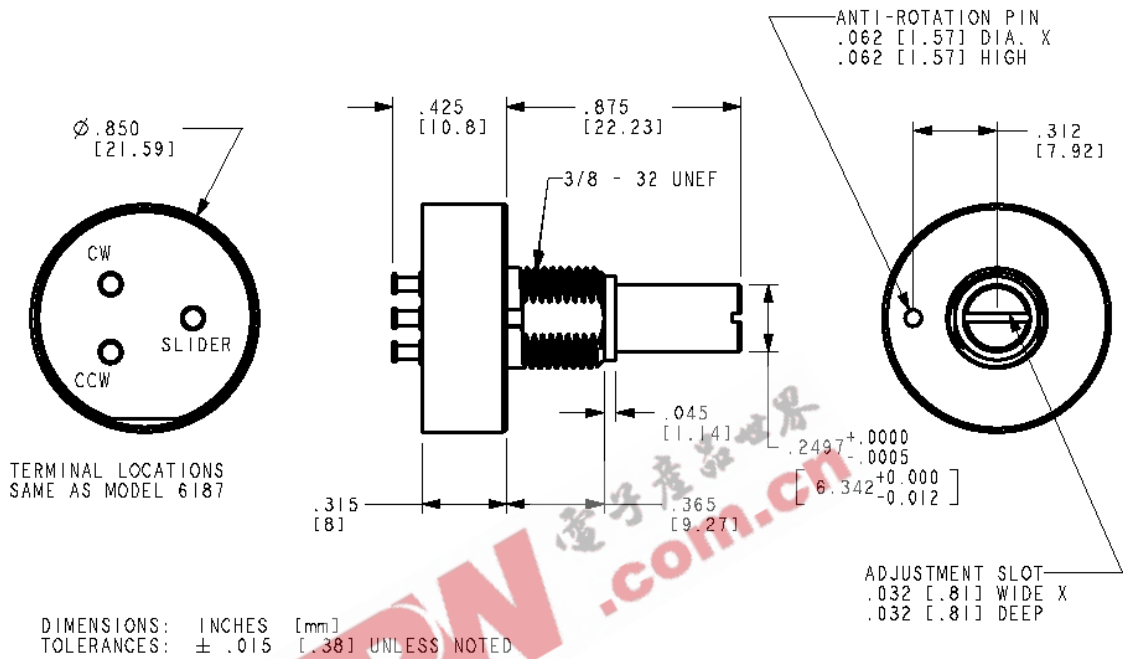
1K	2K	5K	10K	20K	50K	100K
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<sup>3</sup> Contact our customer service for custom designs and features.

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## OUTLINE DRAWING

### MODEL 6137



## CIRCUIT DIAGRAM

