

# MODEL 8136

## 7/8" Diameter

## Plastic 10-Turn

## Hybrid

## Precision Potentiometer /

## Position Sensor



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### FEATURES

Plastic Shaft & Bushing

### ELECTRICAL

Resistance Range, Ohms	1K to 100K
Standard Resistance Tolerance	±10%
Independent Linearity	±0.25%
Power Rating, Watts	2.0 at 25°C derating to 0 at 105°C
Dielectric Strength	1,000V rms
Insulation Resistance, Minimum	1,000 Megohms
Output Smoothness, Maximum	100 Ohms
Actual Electrical Travel, Nominal	3600°
Tap Tolerance (Voltage Tap Only)	±0.05% of input voltage
End Voltage, Maximum	0.2% of input voltage
Resolution	Essentially Infinite
Temperature Coefficient	+100ppm/°C, -150ppm/°C

### ENVIRONMENTAL (MIL-R-12934)

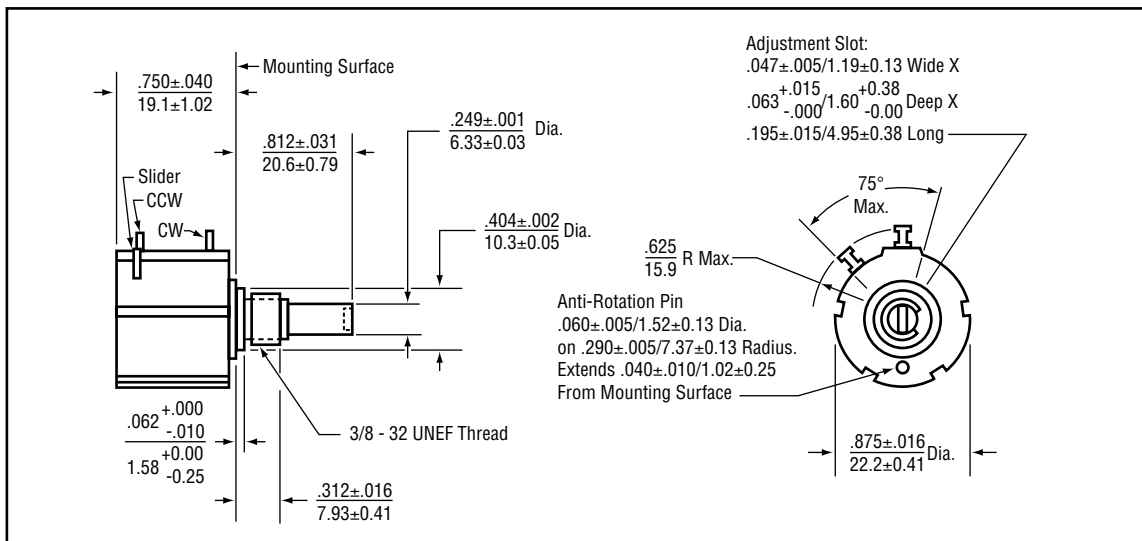
Operating Temperature Range	-25°C to +105°C
Temperature Cycling	5 cycles, -25°C to +105°C (5% ΔR)
Shock, 6ms Sawtooth	100G's (0.1ms discontinuity max.)
Vibration	10G's, 10 to 500 Hz (5% ΔR, 0.1ms discontinuity max.)
Moisture Resistance	Five 24 hour cycles (3% ΔR)
High Temperature Exposure	1,000 hours at 105°C (5% ΔR)
Rotational Load Life	1 mil. shaft rev. + 900 hrs. at rated wattage at 25°C (5% ΔR)

Specifications subject to change without notice.

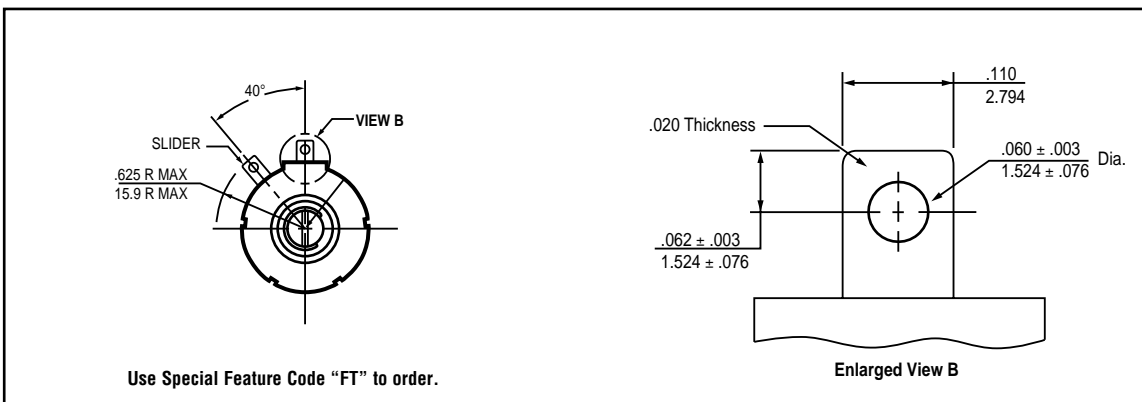
## MECHANICAL

Total Mechanical Travel	3600° + 15° - 0°
Number of Gangs, Maximum	1
Weight, Nominal	0.42 oz.
Static Stop Strength	60 oz.-in.
Backlash, Maximum	2°
Panel Nut Tightening Torque, Maximum	8 lb.-in.
Shaft End Play, Maximum	.010"
Start/Run Torque, Maximum	1.5 oz.-in.

## OUTLINE DIMENSIONS (Inch/mm)



## OPTIONAL TERMINAL CONFIGURATION



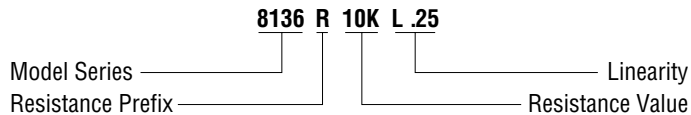
## STANDARD RESISTANCE VALUES, OHMS

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

## SPECIAL FEATURES

Center Tap	CT
Linearity Tape	LT
Flatted Shaft	FS
Shaft Lock	SL
Gold Plated Solder Lug Terminals (see optional terminal configuration)	FT

## ORDERING INFORMATION



## MATCHING TURNS COUNTING DIALS

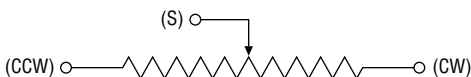
2606, 2606S, 2607, 2607S, 2626, 2627, 2646, 2646S, 2647, 2647S, 2126, RB

## METRIC CONVERSIONS

1 in.                                              25.4 mm  
1 oz.                                              28.4 gm

1 oz.-in.                                              0,007 N-m  
1 lb.-in.                                              0,113 N-m

## CIRCUIT DIAGRAM



## NOTES

Metric equivalents, based on 1 inch = 25.4mm are rounded to the same number of significant figures as in the original English units and are provided for general information only.

Tolerances unless otherwise specified:  
Linear = ± .01 inches  
          (.25mm)  
Angular = ± 2 degrees

