# **MODELS 7274, 7276**

# 7/8" Diameter Plastic 10-Turn Wirewound Precision Potentiometer



# **MODEL STYLES**

7274	6mm Shaft, 3/8" Bushing
7276	1/4" Shaft, 3/8" Bushing

# ELECTRICAL

Resistance Range, Ohms	100 to 100K
Standard Resistance Tolerance	±5%
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
Noise, Maximum	100 Ohms
Actual Electrical Travel	3600° + 10° – 0°
Tap Tolerance	±3°
End Voltage, Maximum (% of input voltage)	0.25%

# 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% $\Delta$ R, 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	500K shaft rev. + 900 hrs. at rated wattage at 25°C (5%ΔR)

Specifications subject to change without notice.

# MECHANICAL

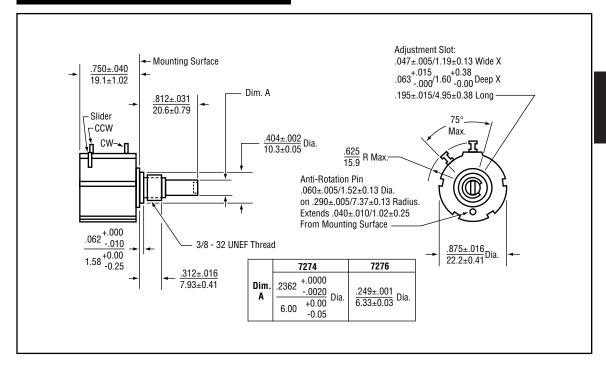
Total Mechanical Travel	3600° + 15° – 0°
Number of Gangs, Maximum	1
Weight, Nominal	0.42 oz.
Static Stop Strength, Maximum	60 ozin.
Backlash, Maximum	2°
Panel Nut Tightening Torque, Maximum	8 lbin.
Shaft End Play, Maximum	.010"
Shaft Radial Play, Maximum	.010"
Start/Run Torque, Maximum	1.5 ozin.

# STANDARD RESISTANCE VALUES, OHMS

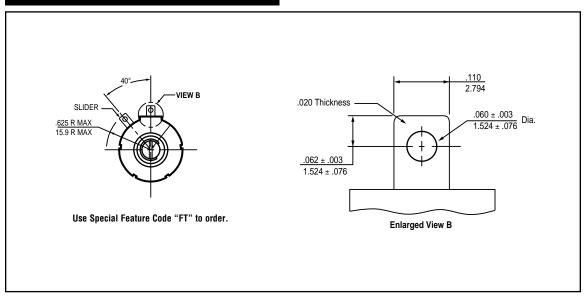
	Theoretical	
Total	Resolution	Tempco
Resistance	(% Nominal)	of Wire
100	0.059	±20 ppm/°C
200	0.037	±20 ppm/°C
500	0.030	±20 ppm/°C
1K	0.024	±20 ppm/°C
2K	0.020	±20 ppm/°C
5K	0.018	±20 ppm/°C
10K	0.017	±20 ppm/°C
20K	0.016	±20 ppm/°C
50K	0.010	±20 ppm/°C
100K	0.009	±20 ppm/°C

# METRIC CONVERSIONS

1 in.	25.4 mm	1 ozin.	0,007 N-m
1 oz.	28.4 gm	1 lbin.	0,113 N-m
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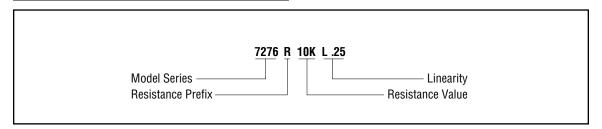
#### OPTIONAL TERMINAL CONFIGURATION



#### SPECIAL FEATURES

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

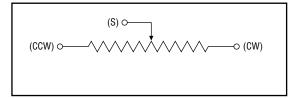
#### ORDERING INFORMATION



# MATCHING TURNS COUNTING DIALS

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

# 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

