

MODEL 7280 SERIES**7/8" Diameter****10-Turn****Wirewound****Precision Potentiometer****2****MODEL STYLES**

7281	1/8" Shaft, 1/4" Bushing
7283	1/8" Shaft, Servo
7284	6mm Shaft, 3/8" Bushing
7286	1/4" Shaft, 3/8" Bushing

ELECTRICAL

Resistance Range, Ohms	100 to 100K
Standard Resistance Tolerance	±5%
Minimum Practical Resistance Tolerance	±1%
Independent Linearity	±0.25%
Minimum Practical Independent Linearity	±0.15%, < 300 Ohms ±0.075%, ≥ 300 Ohms
Power Rating, Watts	2.0 at 70°C derating to 0 at 125°C
Dielectric Strength	1,000V rms
Insulation Resistance, Minimum	1,000 Megohms
Noise, Maximum	100 Ohms
Actual Electrical Travel	3600° + 10° - 0°, > 100 Ohms 3600° + 10° - 5°, ≤ 100 Ohms
Tap Tolerance	±3°
End Voltage, Maximum	0.25% of input voltage

Specifications subject to change without notice.

ENVIRONMENTAL (MIL-R-12934)

Operating Temperature Range	Static: -55°C to +125°C Dynamic: -40°C to +125°C
Temperature Cycling	5 cycles, -55°C to +125°C (5% ΔR)
Shock, 6ms Sawtooth	100G's (0.1ms discontinuity max.)
Vibration	15G's, 10 to 2,000 Hz (5% ΔR, 0.1ms discontinuity max.)
Moisture Resistance	Five 24 hour cycles (3% ΔR)
High Temperature Exposure	1,000 hours at 125°C (5% ΔR)
Rotational Load Life	1 mil. shaft rev. + 900 hrs. at rated wattage at 70°C (5% ΔR)

MECHANICAL

Total Mechanical Travel	3600° + 15° - 0°	
Number of Gangs, Maximum	2	
Weight, Nominal (single gang)	0.75 oz.	
Backlash, Maximum	1°	
	7281, 7284, 7286	7283
Static Stop Strength	60 oz.-in.	36 oz.-in.
Panel Nut Tightening Torque, Maximum	25 lb.-in.	N/A
Shaft End Play, Maximum	.010"	.005"
Shaft Runout, T.I.R., Maximum	.003"	.002"
Pilot Diameter Runout, T.I.R., Maximum	.004"	.002"
Lateral Runout, T.I.R., Maximum	.005"	.004"
Shaft Radial Play, Maximum	.003"	.002"
Start/Run Torque, Maximum (per gang)	0.8 oz.-in.	0.6 oz.-in.

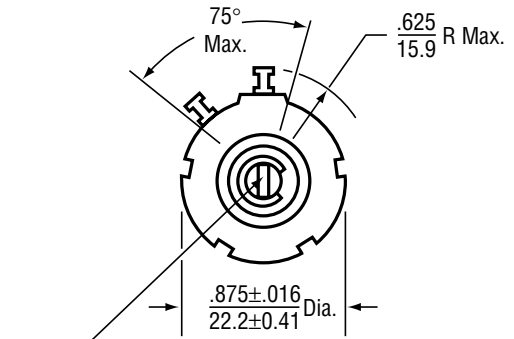
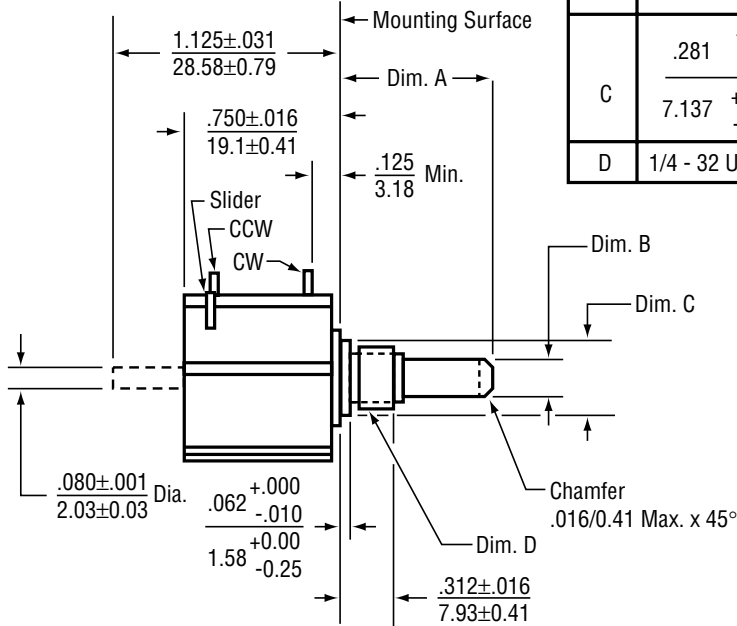
STANDARD RESISTANCE VALUES, OHMS

Total Resistance	Theoretical Resolution (% Nominal)	Tempco 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	0.008	±20 ppm/°C

OUTLINE DIMENSIONS (Inch/mm)

Models 7281, 7284 and 7286
Bushing Mount with Sleeve Bearing

Dim.	7281	7284	7286
A	$\frac{.688 \pm .031}{17.475 \pm 0.787}$	$\frac{.812 \pm .031}{20.625 \pm 0.787}$	$\frac{.812 \pm .031}{20.625 \pm 0.787}$
B	$\frac{.1248 \begin{smallmatrix} +0.0000 \\ -0.0003 \end{smallmatrix}}{3.1699 \begin{smallmatrix} +0.0000 \\ -0.0076 \end{smallmatrix}}$ Dia.	$\frac{.2362 \begin{smallmatrix} +0.0000 \\ -0.0005 \end{smallmatrix}}{6.0000 \begin{smallmatrix} +0.0000 \\ -0.0127 \end{smallmatrix}}$ Dia.	$\frac{.2500 \begin{smallmatrix} +0.0000 \\ -0.0005 \end{smallmatrix}}{6.3500 \begin{smallmatrix} +0.0000 \\ -0.0127 \end{smallmatrix}}$ Dia.
C	$\frac{.281 \begin{smallmatrix} +0.000 \\ -0.002 \end{smallmatrix}}{7.137 \begin{smallmatrix} +0.000 \\ -0.051 \end{smallmatrix}}$ Dia.	$\frac{.406 \begin{smallmatrix} +0.000 \\ -0.002 \end{smallmatrix}}{10.312 \begin{smallmatrix} +0.000 \\ -0.051 \end{smallmatrix}}$ Dia.	$\frac{.406 \begin{smallmatrix} +0.000 \\ -0.002 \end{smallmatrix}}{10.312 \begin{smallmatrix} +0.000 \\ -0.051 \end{smallmatrix}}$ Dia.
D	1/4 - 32 UNEF Thread	3/8 - 32 UNEF Thread	3/8 - 32 UNEF Thread

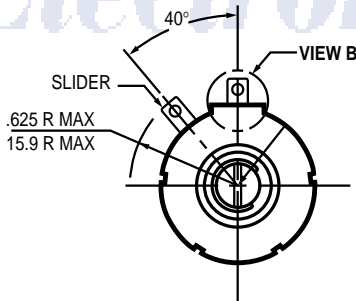


Slot: .032±.005/0.813±0.127 Wide X
.032+.010-.000/0.813+0.254-0.000 Deep
(Not on Rear Shaft Models)

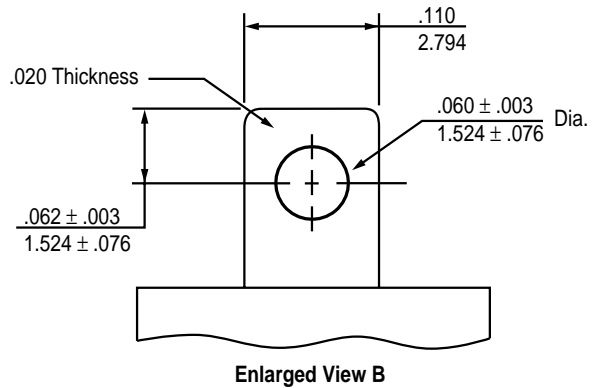


OPTIONAL TERMINAL CONFIGURATION

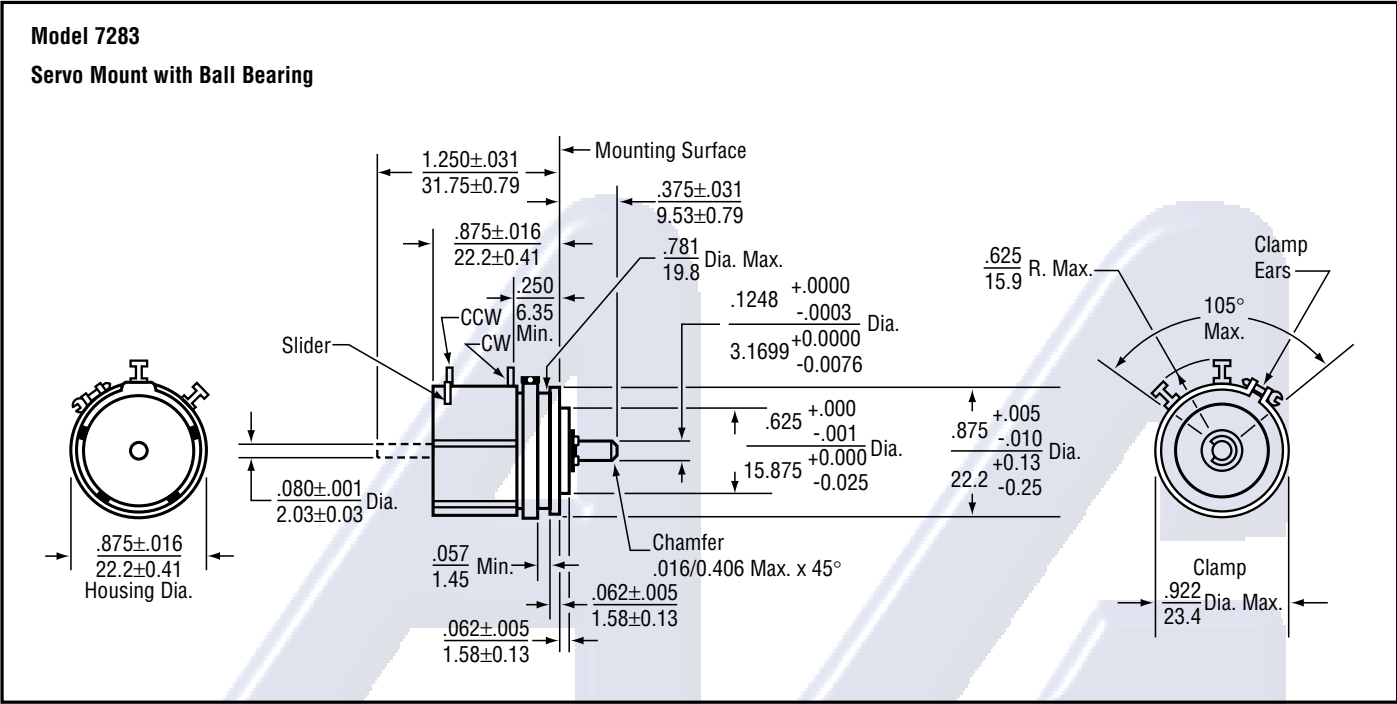
Electrónica S.A. de C.V.



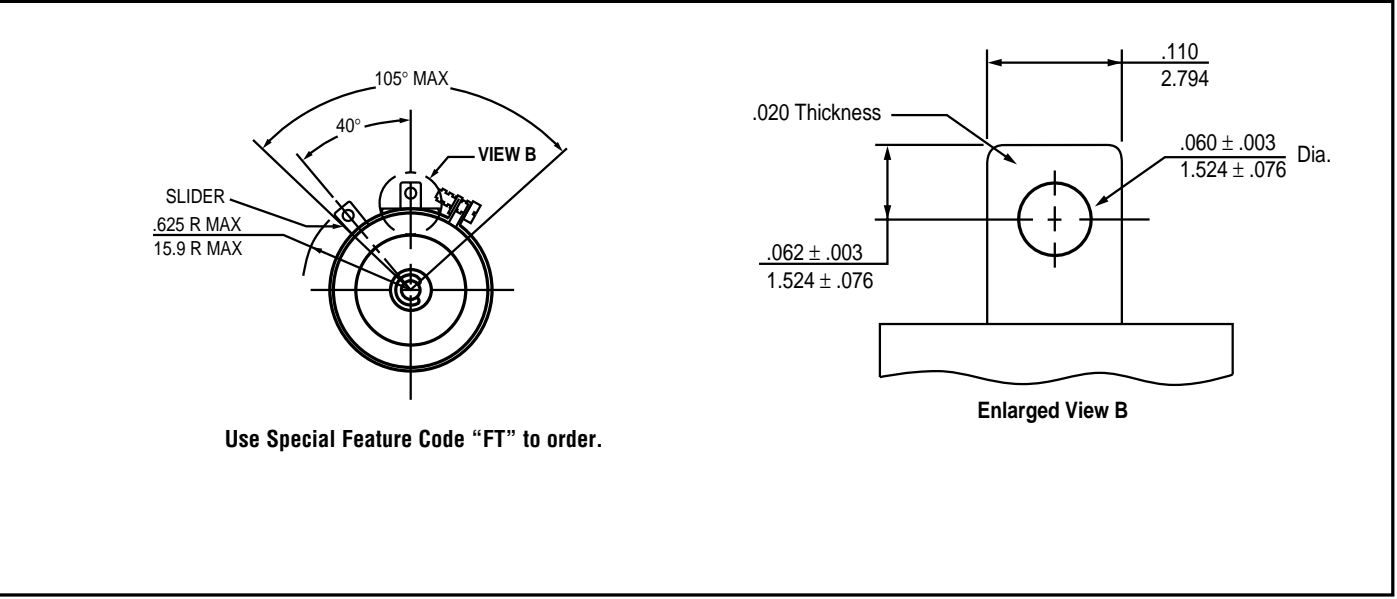
Use Special Feature Code "FT" to order.



OUTLINE DIMENSIONS (Inch/mm)



OPTIONAL TERMINAL CONFIGURATION



METRIC CONVERSIONS

1 in.	25.4 mm	1 oz.-in.	0,007 N-m
1 oz.	28.4 gm	1 lb.-in.	0,113 N-m

