

Precision Potentiometer

Model B, D, and E Series



Features:

- 3-5/16" diameter
- Multi-turn
- Wirewound

ELECTRICAL	B / BSP	D / DSP	E / ESP
	15 TURN	25 TURN	40 TURN
Resistance Range, Ohms	40 to 2 Meg	60 to 3.3 Meg	125 to 5.3 Meg
Standard Resistance Tolerance	±5%	±5%	±5%
Minimum Practical Resistance Tolerance	±1%	±1%	±1%
Independent Linearity	±0.50%	±0.50%	±0.50%
Input Voltage, Maximum (Not to Exceed Power Rating)	1,000Vdc	1,000Vdc	1,000Vdc
Power Rating, Watts (Derating to 0 at 85°C)	10 at 40°C	15 at 40°C	20 at 40°C
Dielectric Strength	1,000V rms	1,000V rms	1,000V rms
Insulation Resistance, Minimum	100 Megohms	100 Megohms	100 Megohms
Actual Electrical Travel, Nominal	5,400° +4° -0°	9,000° +4° -0°	14,400° +4° -0°
End Voltage, Maximum	<0.50% of Input Voltage	<0.50% of Input Voltage	<0.50% of Input Voltage
Minimum Practical Independent Linearity:			
<100 Ohms	±0.10%	±0.05%	±0.05%
100 Ohms to 999 Ohms	±0.05%	±0.05%	±0.05%
≥1K Ohms	±0.035%	±0.035%	±0.035%
Noise: 500 Ohms, Maximum, RT =	≤8K	≤13K	≤30K
250 Ohms, Maximum, RT =	>8K	>13K	>30K
Tap Tolerance: ±1.5°, RT =	<70 Ohms	<100 Ohms	<150 Ohms
±1.0°, RT =	≥70 Ohms	≥100 Ohms	≥150 Ohms
Temperature Coefficient: 800ppm/°C, RT =	40 Ohms to 265 Ohms	60 Ohms to 440 Ohms	125 Ohms to 700 Ohms
20ppm/°C, RT =	300 Ohms to 8K, >142K	500 Ohms to 13.5K, >230K	800 Ohms to 30K, >340K
130ppm/°C, RT =	8.6K to 128K	14K to 213K	34K to 340K

ENVIRONMENTAL (MIL-R-12934)	B / BSP	D / DSP	E / ESP
	15 TURN	25 TURN	40 TURN
Temperature Cycling, -65° to +85°C	5% ΔR	5% ΔR	5% ΔR
Low Temperature Exposure, 24 hrs. at -65°C	5% ΔR	5% ΔR	5% ΔR

Specifications subject to change without notice.

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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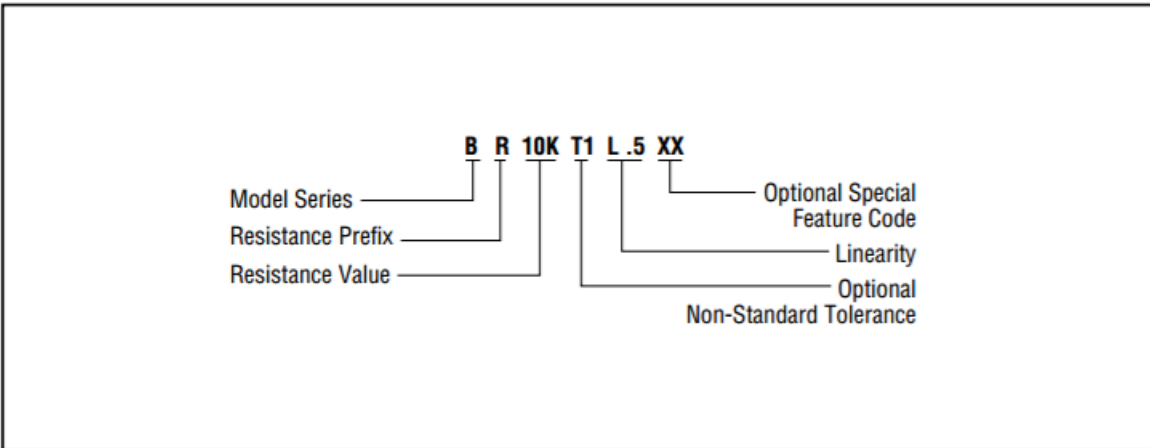


MECHANICAL	B / BSP	D / DSP	E / ESP
	15 TURN	25 TURN	40 TURN
Total Mechanical Travel	5,400° +4° -0°	9,000° +4° -0°	14,400° +4° -0°
Number of Gangs, Maximum	3	1	1
Weight, Nominal Per Gang	13 oz.	17 oz.	21 oz.
Static Stop Strength	1.150 oz.-in.	730 oz.-in.	730 oz.-in.
Backlash, Maximum	0.2°	0.2°	0.2°
Shaft End Play, Maximum	0.007" / 0.005"	0.016" / 0.007"	0.016" / 0.007"
Shaft Runout, T.I.R., Maximum	0.0005" / 0.001"	0.002"	0.002"
Pilot Diameter Runout, T.I.R., Maximum	0.002" / 0.0015"	0.002"	0.002"
Lateral Runout, T.I.R., Maximum	0.003" / 0.0065"	0.003" / 0.004"	0.003" / 0.004"
Start/Run Torque, Maximum	2.7 / 2.0 oz.-in.	3.5 / 2.5 oz.-in.	3.5 / 2.5 oz.-in.

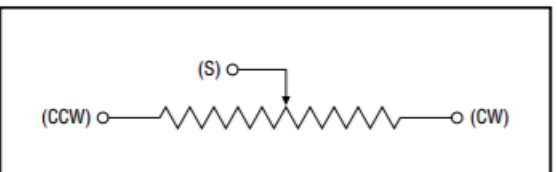
SPECIAL FEATURE CODES

Center Tap	CT
Linearity Tape	LT
Rear Shaft Extension	RS
Flatted Shaft	FS
Slotted Shaft	SS

ORDERING INFORMATION



CIRCUIT DIAGRAM



NOTES

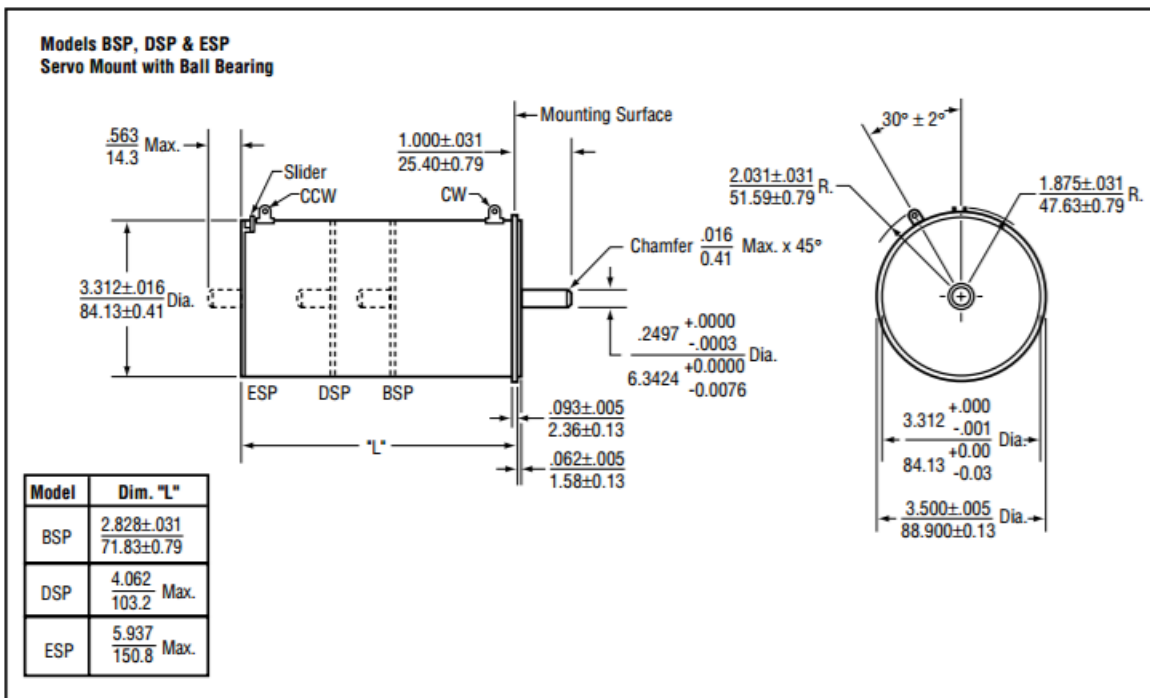
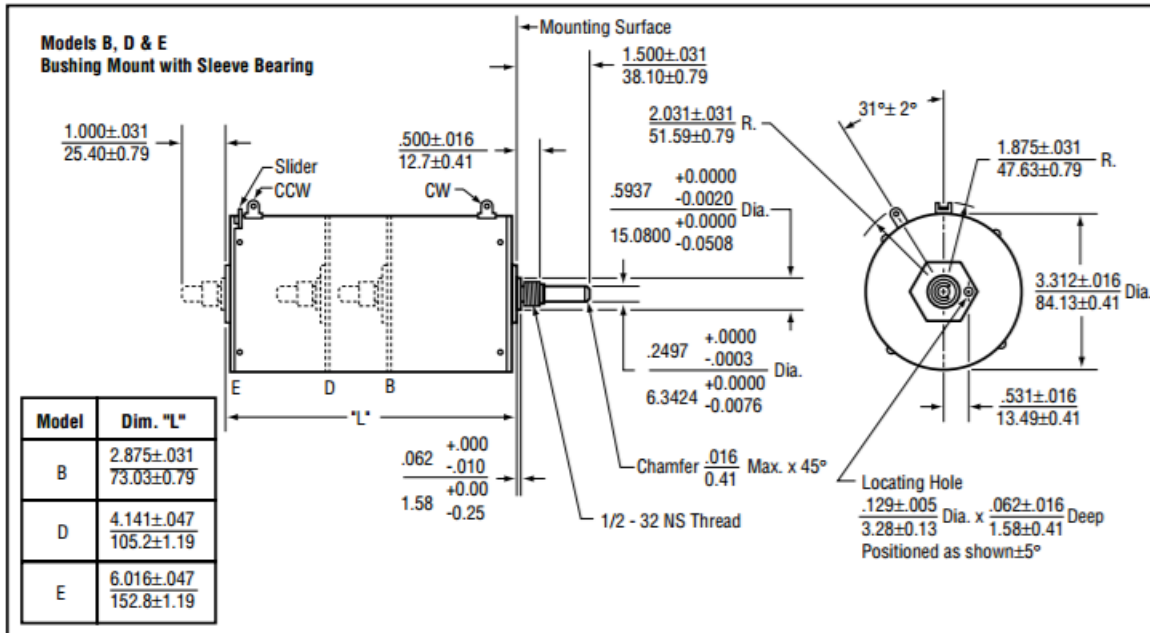
Metric equivalents, based on 1 inch = 25.4mm are rounded to the same number of significant figures as in the original English units and are provided for general information only.

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

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