Model 405 Series

Linear Actuation, Low Cost Conductive Plastic Precision Potentiometer / Position Sensor



MODEL STYLES AVAILABLE

Model #	Shaft	Termination Style	Weight (grams)
405	1/8" plain	Wire Leads	28 + (16 x mechanical travel)

ELECTRICAL¹

see Table 1
±20%
±10%
see Table 1
see Table 1
400 VDC maximum, not to exceed power rating
see Table 1 for Watts at 85°C, derating to 0 at 125°C
1,000 V rms
1,000 Megohms minimum at 500 VDC
0.1% maximum at 10" to 18" per minute
see Table 1
within mechanical travel
maximum 0.5% of input voltage
essentially infinite
-400 +/-400 ppm/°C typical
±10 ppm/°C typical

MECHANICAL

Total Mechanical Travel	see Table 1
Actuating Force	10 oz. maximum
Shaft Rotation	continuous
Backlash	0.003" maximum
Static Stop Strength	10 lb. minimum

¹ Specifications subject to change without notice.





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² Linearity is measured between 1% and 99% of input voltage.

³ Special hybrid TCR available to ±100 ppm/°C for narrower range of resistance. ⁴ Measured with 10 VDC CW to CCW and slider at 50% of electrical travel.

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ENVIRONMENTAL (MIL-PRF-39023)

 $\frac{\text{Operating Temperature Range}}{\text{Load Life}} - 40^{\circ}\text{C to } + 125^{\circ}\text{C dynamic, } -55^{\circ}\text{C to } + 125^{\circ}\text{C static}}{\text{5 million shaft actuations at rated power & 70°C, maximum 10% } \Delta R}$

ORDERING INFORMATION

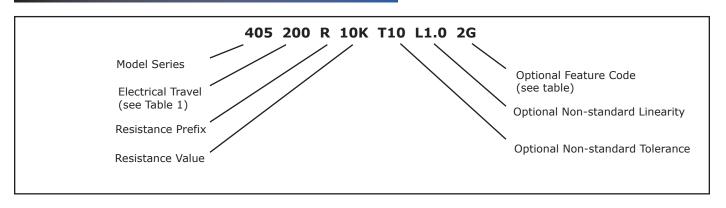


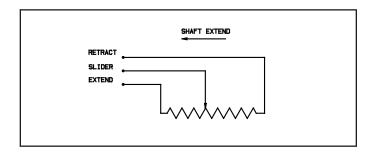
Table 1

Electrical Travel (Inches)	1"	2"	3″
Ordering #	100	200	300
Standard Resistance Range (Ohms)	1K to 300K	2K to 600K	3K to 900K
Hybrid (low TCR) resistance range (Ohms)	400 to 30K	700 to 60K	1K to 90K
Standard Independent Linearity	±1.5%	±1.5%	±1.0
Minimum Practical Independent Linearity	1.0	1.0	0.75
Power Rating (Watts)	0.75	1.0	1.5
Mechanical Travel (Inches)	1.060"	2.060"	3.060"

FEATURE CODES

Linearity Tape	LT
Two Gangs (dual section)	2G
Threaded shaft (5-40 UNC-3A)	TS

CIRCUIT DIAGRAM



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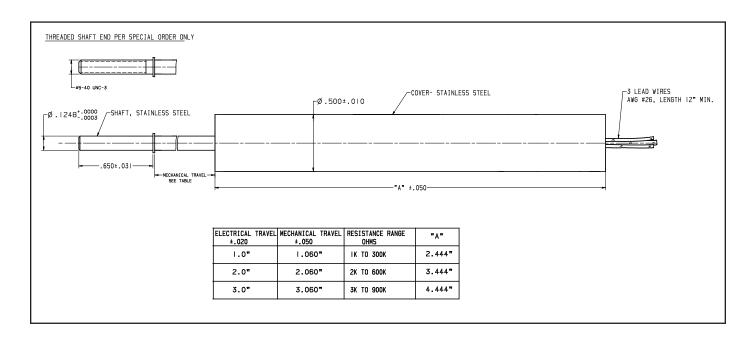
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OUTLINE DRAWING



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