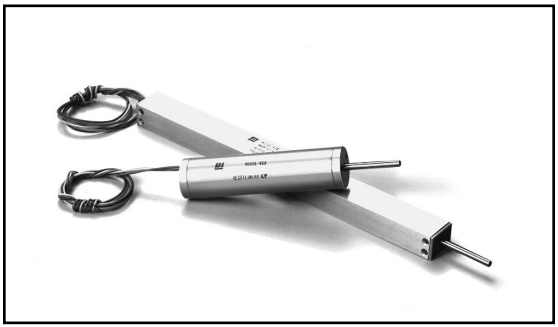
MODEL 400 SERIES

Linear Actuation
Conductive Plastic
Precision Potentiometer / Position Sensor



MODEL STYLES

Model #	Body Style	Termination Style	Weight (grams)
423	Round	Wire Leads	28 + (16 x mechanical travel)
424	Round	Gold Plated Terminals	28 + (16 x mechanical travel)
432	Round with Mounting Flange	Wire Leads	38 + (16 x mechanical travel)
434	Round with Mounting Flange	Gold Plated Terminals	38 + (16 x mechanical travel)
472	Rectangular	Wire Leads	21 + (12 x mechanical travel)
474	Rectangular	Gold Plated Terminals	21 + (12 x mechanical travel)
482	Rectangular with Mounting Flange	Wire Leads	23 + (12 x mechanical travel)
484	Rectangular with Mounting Flange	Gold Plated Terminals	23 + (12 x mechanical travel)

ELECTRICAL

Resistance Range, Ohms	See Table 1
Standard Resistance Tolerance	±10%
Minimum Practical Resistance Tolerance	±5%
Independent Linearity	See Table 1
Minimum Practical Independent Linearity	See Table 1
Input Voltage, Maximum	400Vdc, but not to exceed power rating
Power Rating, Watts	See Table 1
Dielectric Strength	1,000V rms
Insulation Resistance, Minimum	1,000 Megohms
Output Smoothness, Maximum	0.1% at 10" to 18"/ Minute
Actual Electrical Travel, Nominal	See Table 1
Electrical Continuity Travel, Minimum	Within Mechanical Travel
Resolution	Essentially infinite
Temperature Coefficient*	–800 ppm/°C

Specifications subject to change without notice.
*Special tempco available to ±100ppm/°C.

ENVIRONMENTAL (MIL-R-39023)

Operating Temperature Range	Static: –55°C to +125°C Dynamic: –40°C to +125°C
Load Life	10 mil. shaft actuations (10% ΔR)

MECHANICAL

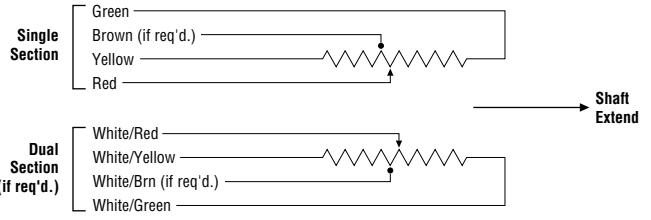
Total Mechanical Travel	See Table 1
Actuating Force, Maximum	10 oz.
Shaft Rotation	Continuous
Backlash, Maximum	.003"
Static Stop Strength	10 lb.

TABLE 1

Electrical Travel, Inches (Ordering #)	**0.5" (-050)**	**1.0" (-100)**	**2.0" (-200)**	**3.0" (-300)**
Standard Resistance Range, Ohms	1K to 150K	2K to 300K	4K to 600K	8K to 900K
Standard Independent Linearity	±1.0%	±0.75%	±0.5%	±0.5%
Minimum Practical Independent Linearity	0.5%	0.25%	0.25%	0.25%
Power Rating, Watts	0.5	0.75	1.0	1.5
Mechanical Travel, Inches	0.6"	1.1"	2.1"	3.1"

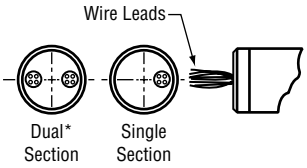
Electrical Travel, Inches (Ordering #)	**4.0" (-400)**	**5.0" (-500)**	**6.0" (-600)**
Standard Resistance Range, Ohms	1.2K to 1Meg	1.5K to 1.3Meg	2K to 1.5Meg
Standard Independent Linearity	±0.5%	±0.5%	±0.25%
Minimum Practical Independent Linearity	0.25%	0.25%	0.15%
Power Rating, Watts	2.0	2.5	3.0
Mechanical Travel, Inches	4.1"	5.1"	6.1"

CIRCUIT DIAGRAM

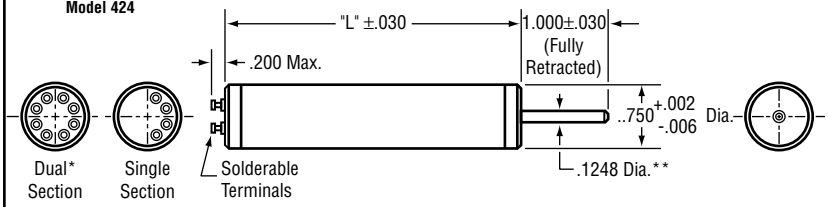


OUTLINE DIMENSIONS (Inch)

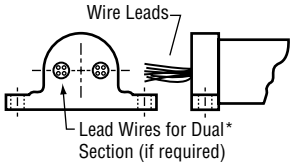
WIRE LEAD MODEL
Model 423



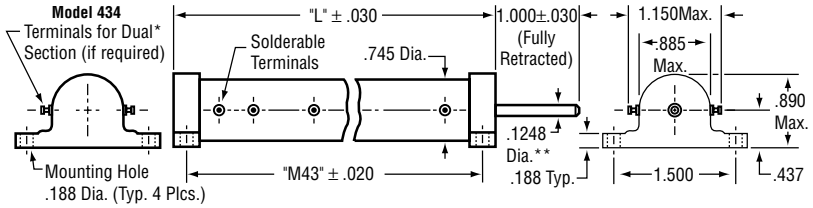
TERMINAL MODEL
Model 424



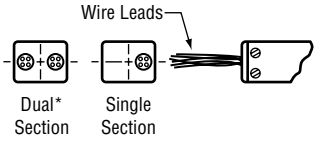
WIRE LEAD MODEL
Model 432



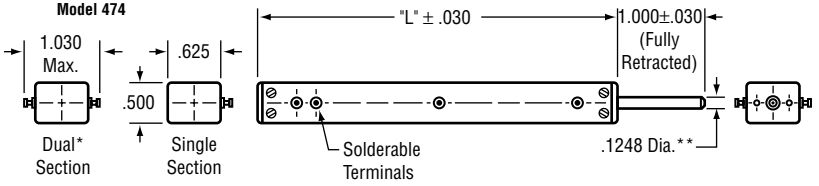
TERMINAL MODEL
Model 434



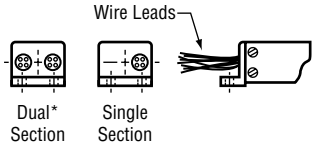
WIRE LEAD MODEL
Model 472



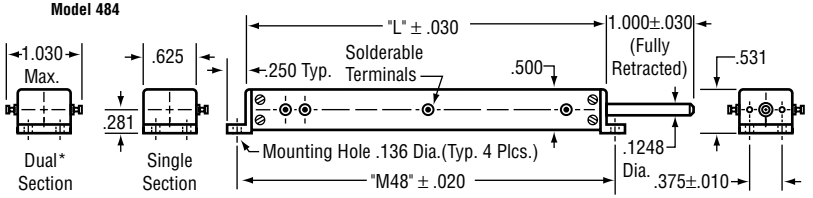
TERMINAL MODEL
Model 474



WIRE LEAD MODEL
Model 482



TERMINAL MODEL
Model 484



Model Number	Elect. Travel Inch ±.015	Mech. Travel Inch ±.030	Dim "L" Inch ±.030	Dim "M43" Inch ±.020	Dim "M48" Inch ±.020
4XX-050	.500	.560	1.500	1.188	1.750
4XX-100	1.000	1.060	2.000	1.688	2.250
4XX-200	2.000	2.060	3.000	2.688	3.250
4XX-300	3.000	3.060	4.000	3.688	4.250
4XX-400	4.000	4.100	5.000	4.688	5.250
4XX-500	5.000	5.100	6.000	5.688	6.250
4XX-600	6.000	6.100	7.000	6.688	7.250

Notes:

- The dimensions for "Wire Lead" models are the same as the "Terminal" models, except as indicated.
- Housing, Brackets and Caps: Aluminum (Anodized).
- Wire Leads: #26 lead wire, 12 inch minimum length (Meets MIL-W-16878C).
- * Dual Sections and Center Tap are available on special order only.
- Shafts: Stainless Steel (Passivated). Chamfer is .015 x 45°.

  ** Diameter is .1248 $^{+.0000}_{-.0003}$
- Unspecified Tolerance: ± .005.

SPECIAL FEATURE CODES

Center Tap	CT
Linearity Tape	LT
Two Gangs (Dual Section)	2G

ORDERING INFORMATION