

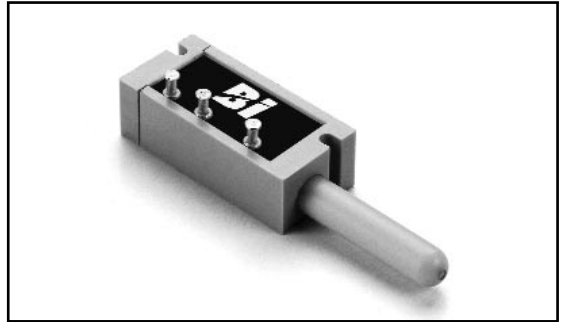
MODEL 404 SERIES

Spring Return

Linear Actuation

Conductive Plastic

Position Sensor



APPLICATIONS

- Robotics
- Automotive/Heavy Equipment
- Industrial Automation

FEATURES & BENEFITS

- Short travel (.5 inches), linear motion with spring return
- Accurate position feedback
- Low cost
- Compact design for small spaces
- Conductive plastic technology
- Long life - 5 million actuations

ELECTRICAL

Resistance Range, Ohms	1K to 150K
Standard Resistance Tolerance	±10%
Minimum Practical Resistance Tolerance	±5%
Independent Linearity	±1.0%
Minimum Practical Independent Linearity	±.5%
Input Voltage, Maximum	400Vdc, but not to exceed power rating
Power Rating, Watts	0.25 at 70°C derating to 0 at 125°C
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	0.50" ± .015" (12.7mm ± 0.38mm)
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.

STATE
ELECTRONICS

Model 404 Series

ENVIRONMENTAL (MIL-R-39023)

Operating Temperature Range

Static: -55°C to +125°C

Dynamic: -40°C to +125°C

Load Life

1 mil. full cycles (10% ΔR)

5 mil. dither cycles

MECHANICAL

Total Mechanical Travel

.56" ± .015" (14.2mm ± 0.38mm)

Actuating Force, Maximum

14 oz., Internal spring to return slider to extended position

Backlash, Maximum

.003"

Static Stop Strength

20 lb.

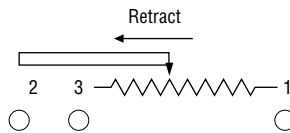
Body Style

Rectangular

Termination Style

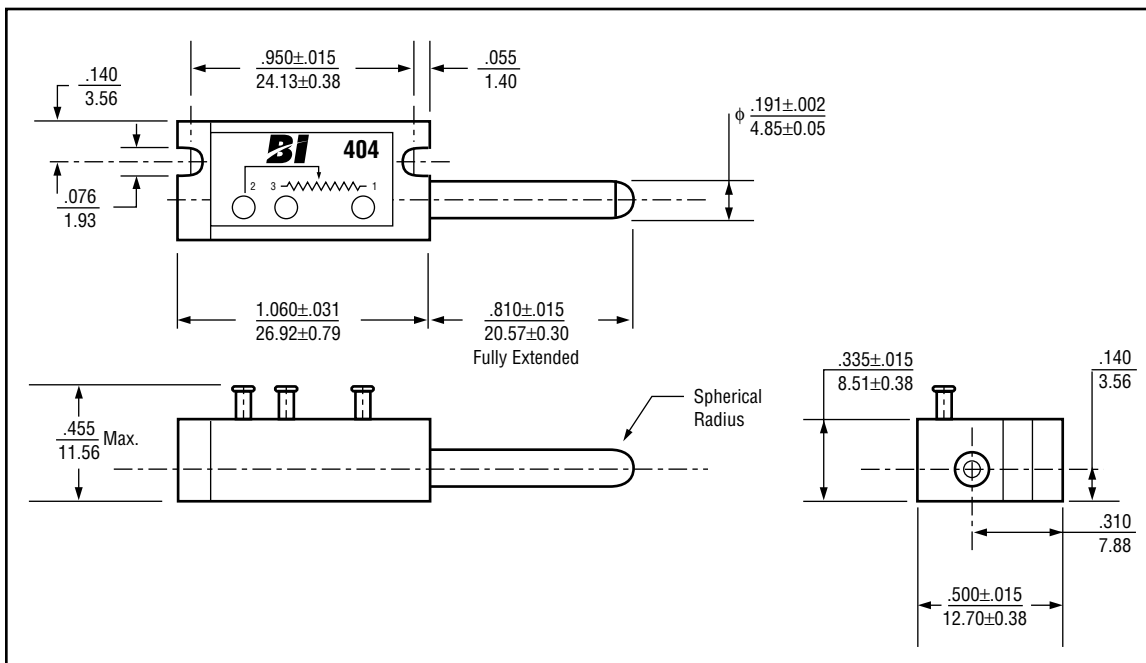
Turret Terminals

SCHEMATIC



Model 404 Series

OUTLINE DIMENSIONS (Inch/mm)



METRIC CONVERSIONS

1 in.	25.4mm
1 oz.	28.4 gm

1 oz.-in.	0,007 N-m
1 lb.-in.	0,113 N-m

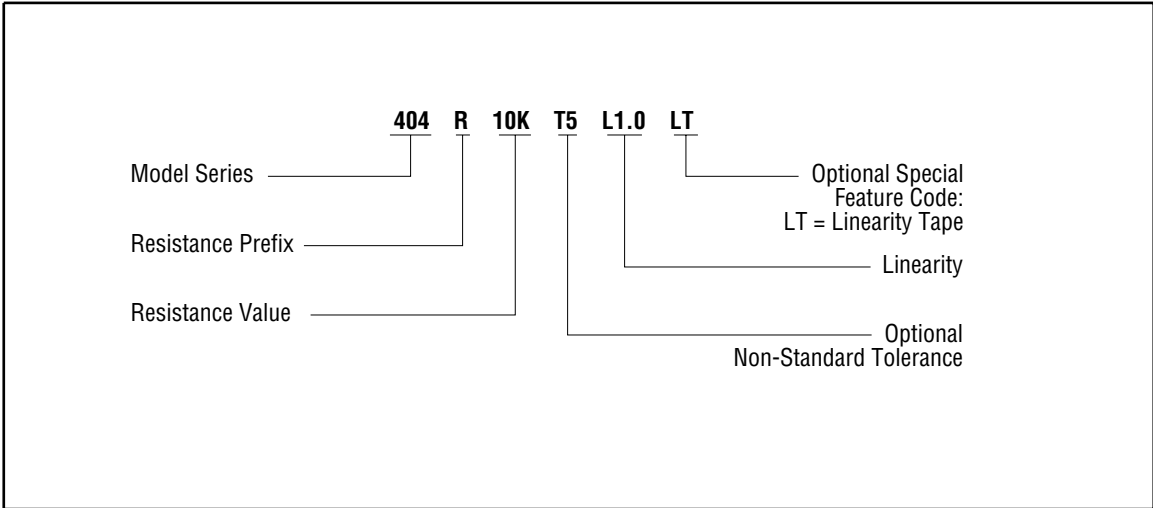
Model 404 Series

SPECIAL FEATURES

Linearity Tape

LT

ORDERING INFORMATION



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<http://www.state-elec.com> <http://www.potentiometers.com>