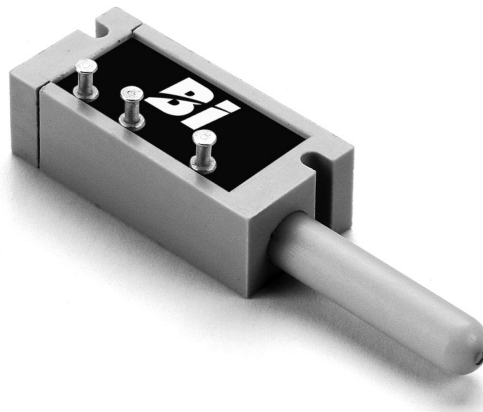


Model 404
Spring Return
Linear Actuation
Conductive Plastic
Position Sensor



For more information about this product, visit our website at: www.potentiometers.com

Applications in Robotics, Automotive, Heavy Equipment, and Industrial Automation

Features

- Short travel (0.5 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 Specifications¹

Resistance Range	1K to 150K Ohms
Standard Resistance Tolerance	±10%
Minimum Practical Resistance Tolerance	±5%
Independent Linearity ²	±1%
Minimum Practical Independent	Linearity ±0.5%
Input Voltage	400 VDC maximum, not to exceed power rating
Power Rating	0.25 Watts at 70°C, derating to 0 at 125°C
Dielectric Strength	1,000 V rms
Insulation Resistance	1,000 Megohms minimum
Output smoothness	0.1% maximum at 10" to 18" per minute
Actual Electrical Travel	0.50" ±0.015" (12.7 mm ±0.38 mm)
Electrical Continuity Travel	within mechanical travel
End Voltage	maximum 0.5% of input voltage
Resolution	essentially infinite
Temperature Coefficient of Resistance ³	-400 ppm/°C typical
Temperature Coefficient of Output Voltage ⁴	±10 ppm/°C typical

¹ Specifications subject to change without notice.
² Linearity is measured between 1% and 99% of input voltage.
³ Special TCR available to ±100 ppm/°C.
⁴ Measured with 10 VDC CW to CCW and slider at 50% of electrical travel.



Model 404

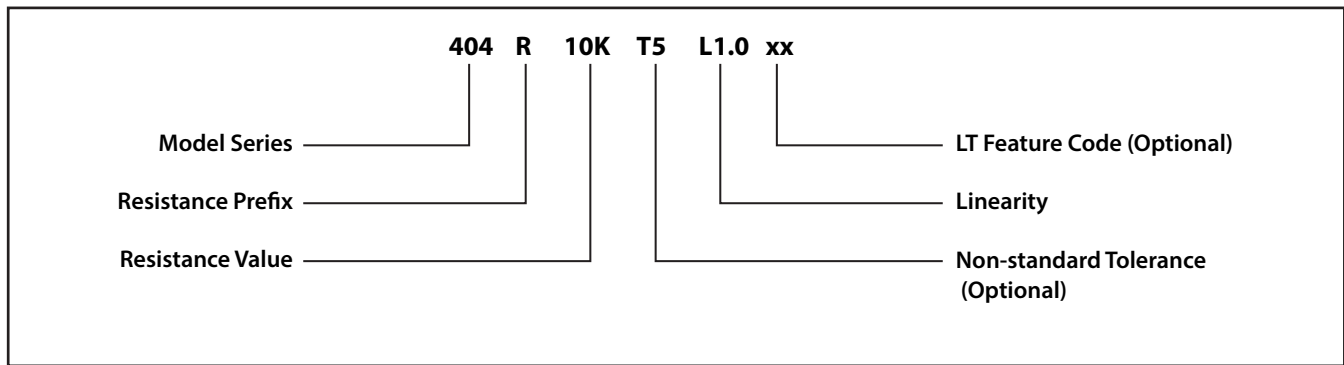
Mechanical Specifications

Total Mechanical Travel	0.56" ±0.015" (14.2 mm ±0.38 mm)
Actuating Force	14 oz. maximum, internal spring to return slider to extended position
Backlash	0.003" maximum
Static Stop Strength	20 lb. minimum
Body Style	rectangular
Termination Style	turret terminations

Environmental (MIL-PRF-39023)

Operating Temperature Range	-40°C to +125°C dynamic, -55°C to +125°C static
Load Life	1 million shaft cycles at 0.25 Watts & 70°C, maximum 10% ΔR

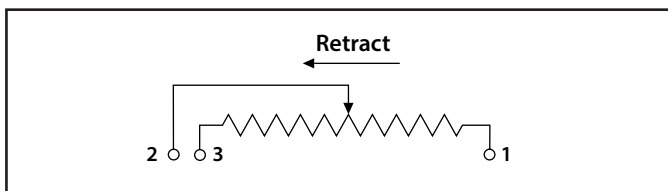
Ordering Information



Optional Feature Code

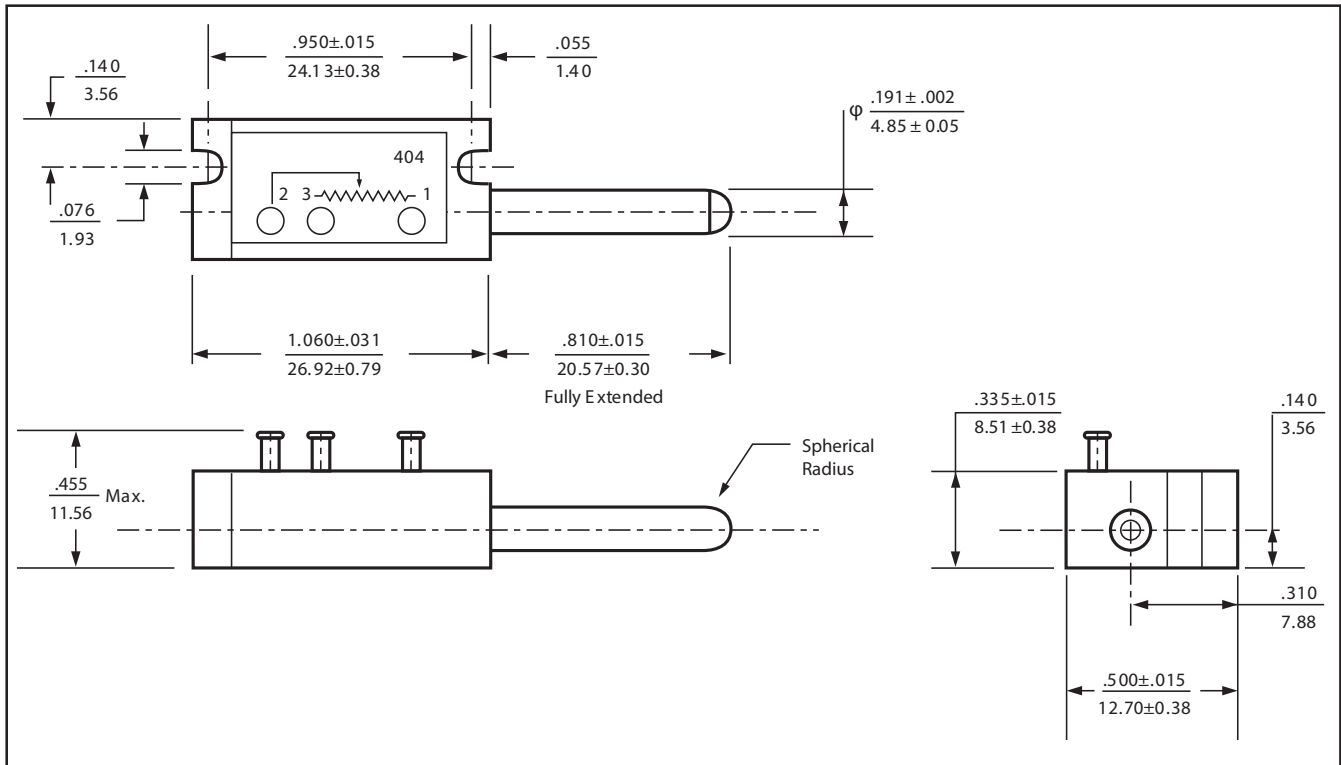
Linearity Tape	LT
----------------	----

Circuit Diagram



Model 404

Outline Drawing



For more information about this product,
visit our website at:
www.potentiometers.com

