

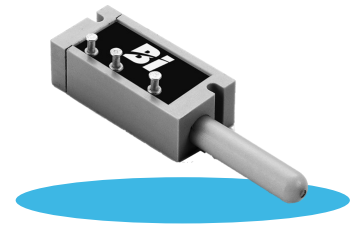
Model 404 Series

Position Sensor



Features:

- Short travel (0.5 inches), linear motion with spring return
- Accurate position feedback
- Compact design for small spaces
- Conductive plastic technology
- Long life (5 million actuations)



Applications:

- Robotics
- Automotive
- Heavy equipment
- Industrial automation
- Wing flap position
- Pedal position
- Satellite dish
- Electro surgical equipment

Electrical

Resistance range	1K to 150K Ohms
Standard resistance tolerance	±10%
Minimum practical resistance tolerance	±5%
Independent linearity	±1%
Minimum practical independent linearity	±0.5%
Input voltage	400 VDC maximum, not to exceed power rating
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	-400 ppm/°C typical
Temperature coefficient of output voltage	±10 ppm/°C typical

Mechanical

Torque 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

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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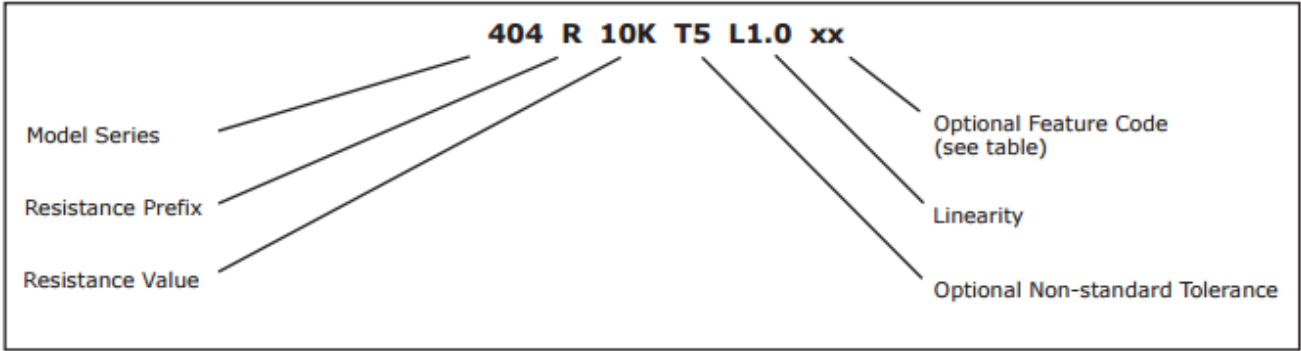
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Environmental (MIL-PRF-39023)

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



Feature Codes

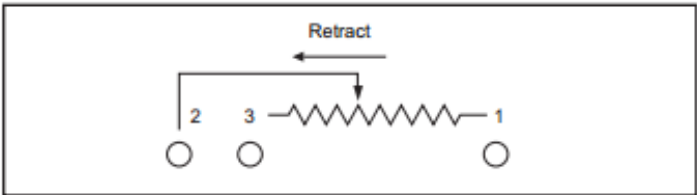
Linearity Tape	LT
Moisture Protection*	MP

*Protective layer applied around the resistive element to reduce impact of a high moisture environment on termination traces.

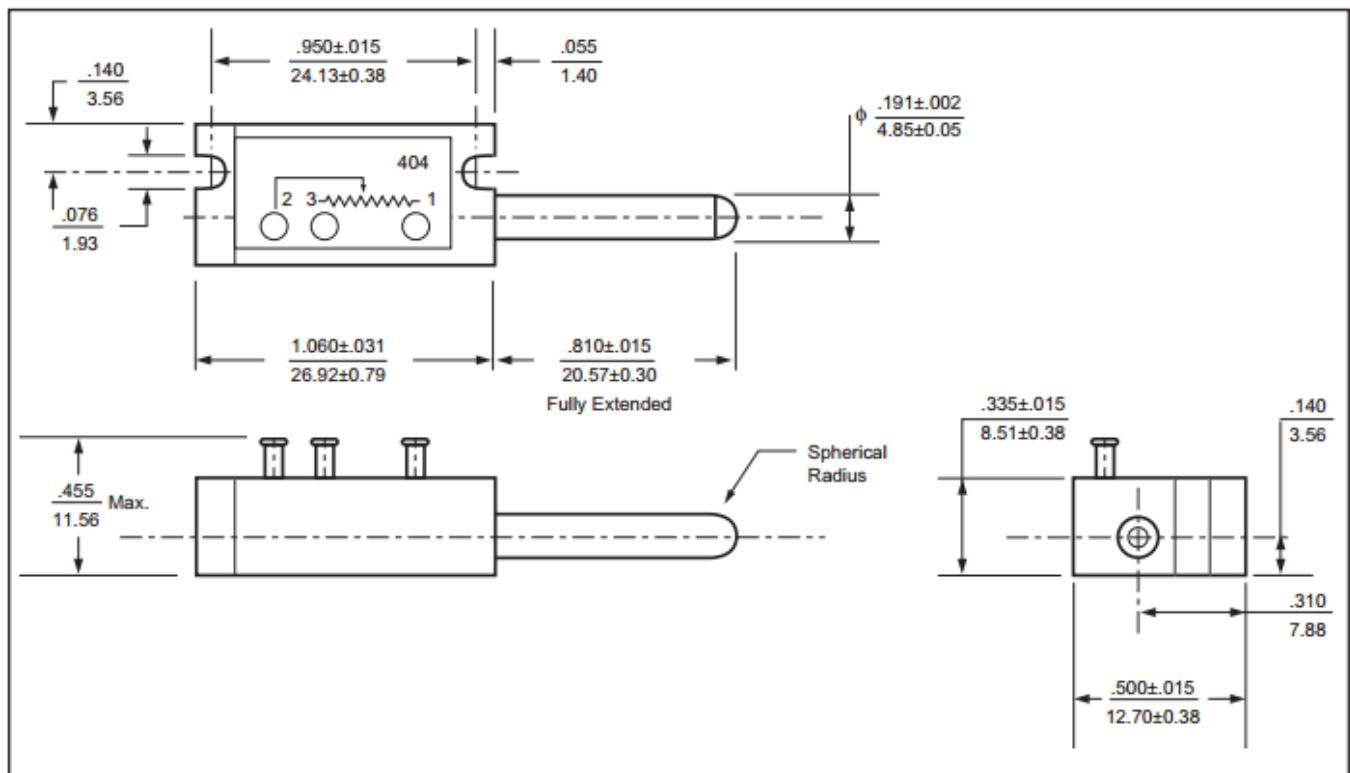
Standard Resistance Values

1K	2K	5K	10K	20K	50K	100K	150K
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Circuit Diagram



Outline Drawing



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