

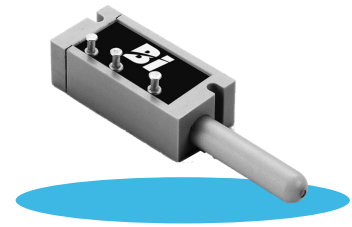
Model 404 Series

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 |

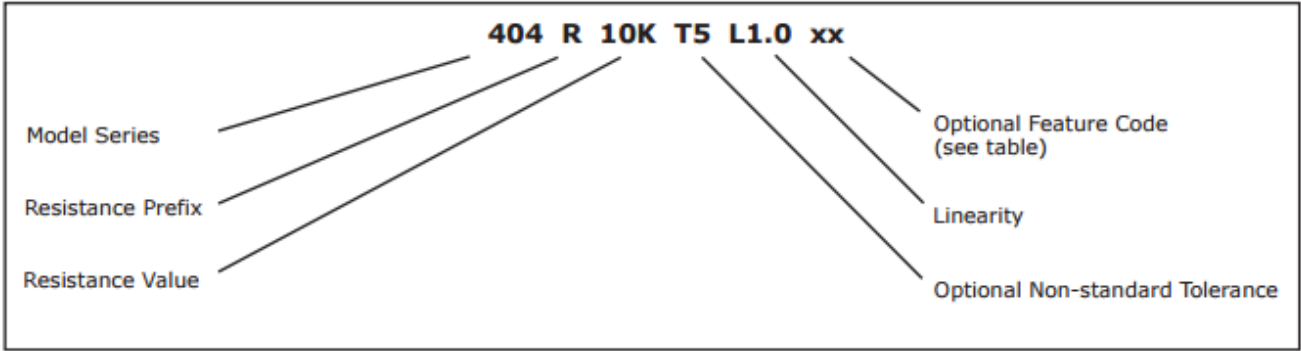
General Note
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Environmental (MIL-PRF-39023)

| | |
|-----------------------------|---|
| 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

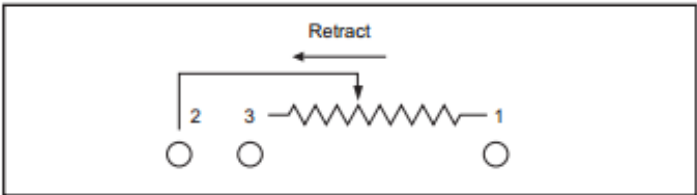
| | |
|----------------------|----|
| Linearity Tape | LT |
| Moisture Protection* | MP |

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

Standard Resistance Values

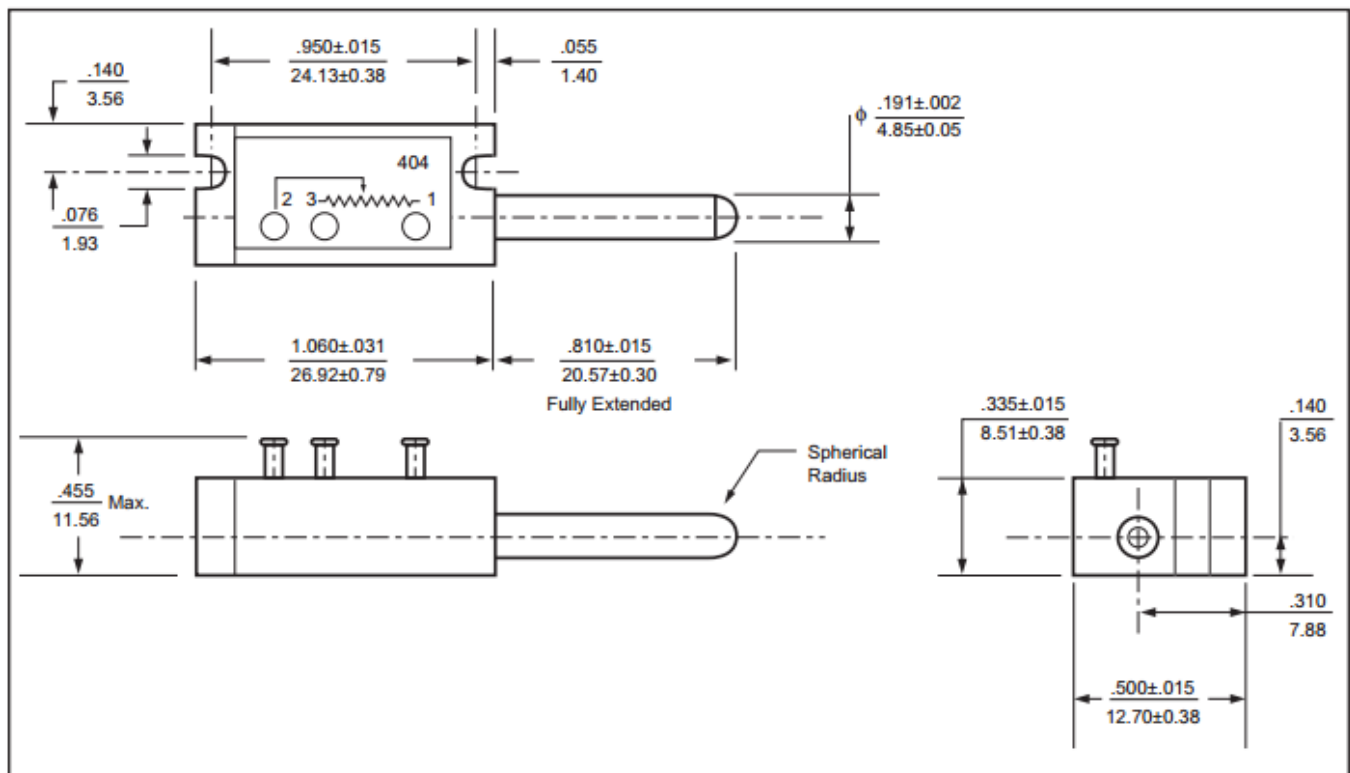
| | | | | | | | |
|----|----|----|-----|-----|-----|------|------|
| 1K | 2K | 5K | 10K | 20K | 50K | 100K | 150K |
|----|----|----|-----|-----|-----|------|------|

Circuit Diagram



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Outline Drawing



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Position Sensor

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