Position Sensor Rectilinear







Features:

- · Contactless linear sensor
- IP64 debris proof, splash proof
- · Ideal for hydraulic and pneumatic position sensing
- · Liquid level capability
- Upon request
- Male or female nicomatic connectors
- · Corresponding exterior magnet

Specifications:

Mechanical:

Life cycle : >1 million

Height : ≤3.50mm (0.138")

Actuation force : 0.09 to 0.11 lbs pull force at desired distance (pull force rating is for the exterior magnet using a

test plate of cold rolled steel)

Environmental:

Operating temperature : up to +85°C IP rating of active area : IP64

Electrical:

Resistance-standard : $10k\Omega$ (lengths >300mm = $20k\Omega$)

Resistance custom : 5k to $500k\Omega$ Resistance tolerance : $\pm 20\%$

Effective electrical travel : 8 to 1,200mm

Resolution : Depends on the exterior magnet strength and distance to the magnetoPot

Power rating : 0.5W continuous, 1W peak
Dielectric value : No affect at 500V AC for 1 minute

Independent linearity : ±5% (±1% available)

Hysteresis : 3mm*

Note: * The hysteresis is directly affected by the drive magnet size, strength, and distance from the internal magnet.

* Requires magnet.

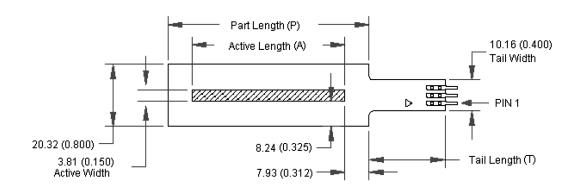




Position Sensor Rectilinear



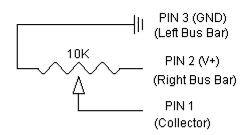
Stock Linear MagnetoPots



| A | 12.5 | 25 | 50 | 100 | 150 | 171.189 | 200 | 300 | 400 | 500 | 750 | 1,000 | |
|---|---------|---------------|---------|-----------------|---------|---------|---------|----------|----------|----------|----------|----------|--|
| | (0.492) | (0.984) | (1.969) | (3.937) | (5.906) | (6.768) | (7.874) | (11.811) | (15.748) | (19.685) | (29.528) | (39.37) | |
| Р | 28.36 | 40.86 | 65.86 | 115.86 | 165.86 | 185.86 | 215.86 | 315.86 | 415.86 | 515.86 | 765.86 | 1015.86 | |
| | (1.117) | (1.609) | (2.593) | (4.562) | (6.531) | (7.318) | (8.499) | (12.436) | (16.373) | (20.31) | (30.153) | (39.995) | |
| Т | 1 | 12.7 (0.5) | | 24.89 (0.98) | | | | | | | | | |

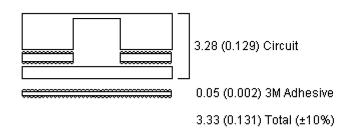
Dimensions: Millimetres (Inches)

Electrical Schematic



Dimensions: Millimetres (Inches)

Material Cross-Section



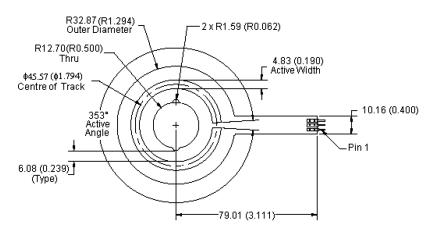
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Position Sensor Rectilinear

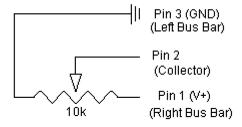


Stock Rotary MagnetoPots



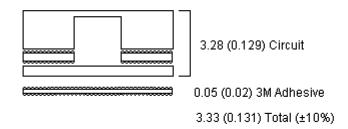
Dimensions: Millimetres (Inches)

Electrical Schematic



Dimensions: Millimetres (Inches)

Material Cross-Section



Part Number Table

| Description | Part Number | | | | |
|---------------------------------|--------------------------|--|--|--|--|
| Sensor, Linear, Magneto, 25mm | MP1-L-0025-103-5%-ST | | | | |
| Sensor, Linear, Magneto, 50mm | MP1-L-0050-103-5%-ST | | | | |
| Sensor, Linear, Magneto, 100mm | MP1-L-0100-103-5%-ST | | | | |
| Sensor, Linear, Magneto, 150mm | MP1-L-0150-103-5%-ST | | | | |
| Sensor, Linear, Magneto, 300mm | MP1-L-0300-103-5%-ST | | | | |
| Sensor, Linear, Magneto, 500mm | MP1-L-0500-103-5%-ST | | | | |
| Sensor, Linear, Magneto, Rotary | MP1-R-0046-353-103-5%-ST | | | | |

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