

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	: 10kΩ (lengths >300mm = 20kΩ)
Resistance-custom	: 5k to 500kΩ
Resistance tolerance	: ±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*

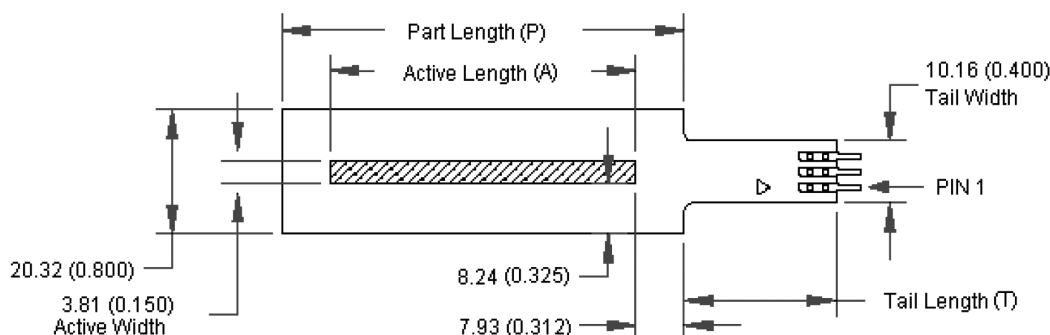
Note : * The hysteresis is directly affected by the drive magnet size, strength, and distance from the internal magnet.

* Requires magnet.

Position Sensor Rectilinear



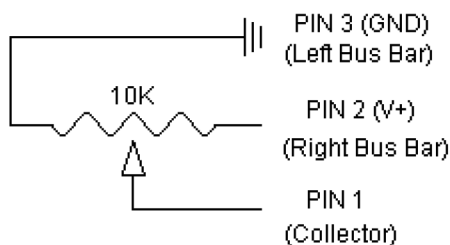
Stock Linear MagnetoPots



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

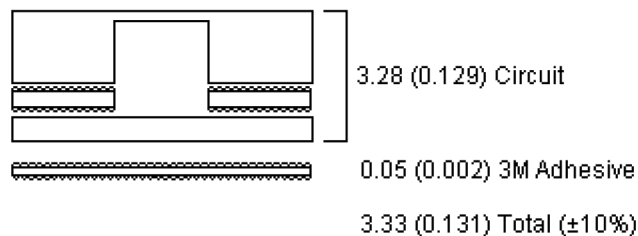
Dimensions : Millimetres (Inches)

Electrical Schematic



Dimensions : Millimetres (Inches)

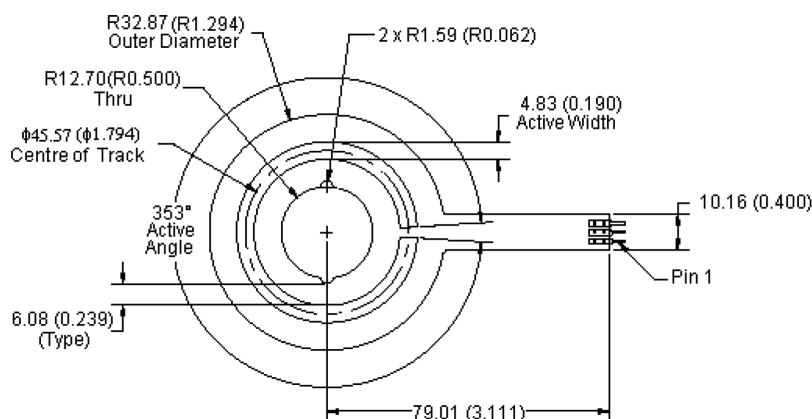
Material Cross-Section



Position Sensor Rectilinear

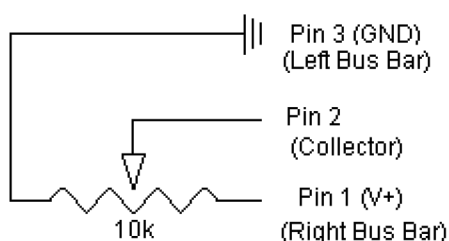


Stock Rotary MagnetoPots



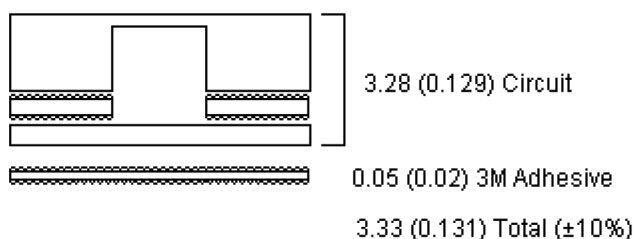
Dimensions : Millimetres (Inches)

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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