

DATASHEET

PS-I00-M4

KEY FEATURES

The ultra-low weight PS-I00-M4 offers a versatile position (range: 0...100 mm) or strain (0...100%) measurement. Its flexibility balances misalignments and makes it the ideal sensor for retrofitting or when an easy mounting process is needed. It comes with adaptable electronics, offering an analog output and digital communication IOs. It allows for the mimicking of multiple reed contacts, whose positions can be changed by teaching and without mechanical adjustments.

- ◆ Rubberlike sensor tolerating misalignments
- ◆ Perfect for retrofitting and/ or easy mounting
- ◆ Mimic of multiple reed contacts possible
- ◆ Ideal for price sensitive applications
- ◆ Smart electronic with digital IOs
- ◆ Compact design



APPLICATIONS

Position measurement at, e.g., pneumatic cylinders or linear axes

Replacement of reed contacts

Measurement of joint position/angle in
industry, agricultural, or construction machinery

Strain measurement at any flat or irregular surface

Soft robotics

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TECHNICAL SPECIFICATIONS

Dimensions	122x16mm ²	w/o electronic
Weight	12 g	Weight of sensor and electronic
Range	0...100 mm	Maximum displacement
Elongation force	<6 N	Force when stretched 100 mm
Resolution	0.2 mm	Smallest detectable output under consideration of noise
Linearity error	<1.5% of F.S.	Maximum difference between output and ideal linear curve
Repeatability	0.1%	Maximum error when stretched to same value
Hysteresis	<2% F.S.	Maximum measured width of hysteresis
Communication	UART	Others on request
Digital IOs	up to 8	Upon definition
Analog output	0...10V or 4...20mA	Proportional to sensor signal
Sampling frequency	≤2 kHz*	Maximum refreshing rate of analog output
Operating temperature	-55 to 80°C	Higher without electronic
Supply voltage	5V, 12V, 24V or 9...36V	5V reduces analog output to 0...5V

* specification performed at 1 kHz

MECHANICAL DIMENSIONS

Mounting hole size:

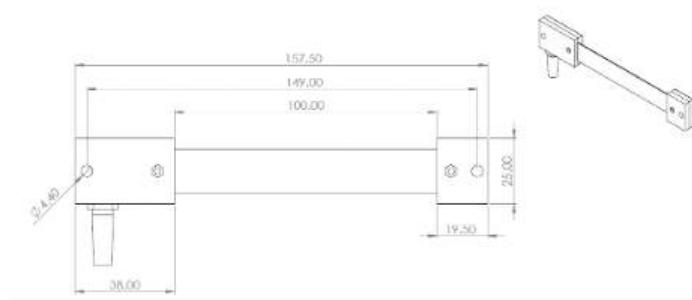
Ø4,4 mm

Mounting hole distance:

149 mm

Active length:

100 mm



Other configurations are available or on request!