

LPPS-SL SPRING LOADED LINEAR POTENTIOMETER POSITION SENSOR

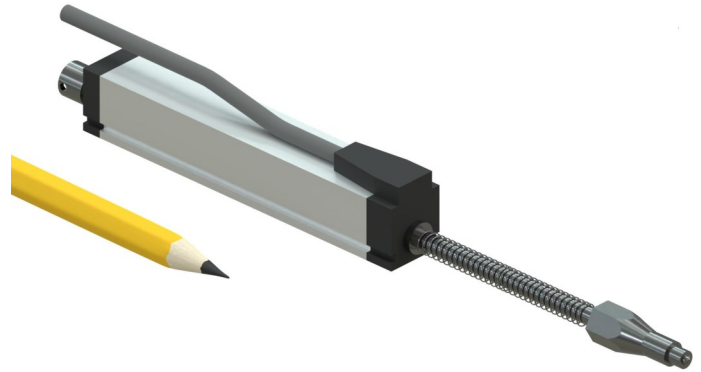
Spring Loaded Linear Position Sensor

FEATURES

- Compact lightweight design
- Cost-effective measuring system
- Stroke lengths from 10 to 100 mm (0.4 to 4 inches)
- Industrial duty, liquid and corrosion resistant
- Spring extend design for ease of mounting

APPLICATIONS

- Motorsport and Automotive R&D Testing
- Industrial Test Stands
- Factory Automation



OVERVIEW

The Sensor Connection LPPS-SL series spring loaded Linear Potentiometer Position Sensors are used to monitor and track the linear motion or position of a target. These ruggedized sensors are ideal for use in industrial and laboratory applications including automotive R&D, motorsports, industrial, motion control, medical, military and aerospace.

Resistive potentiometric element is made from conductive plastic. The output is ratiometric; from 0% to 100% of excitation voltage.

The LPPS-SL series sensor is made from industrial duty materials for resistance to dust, temperature, shock, and vibration.

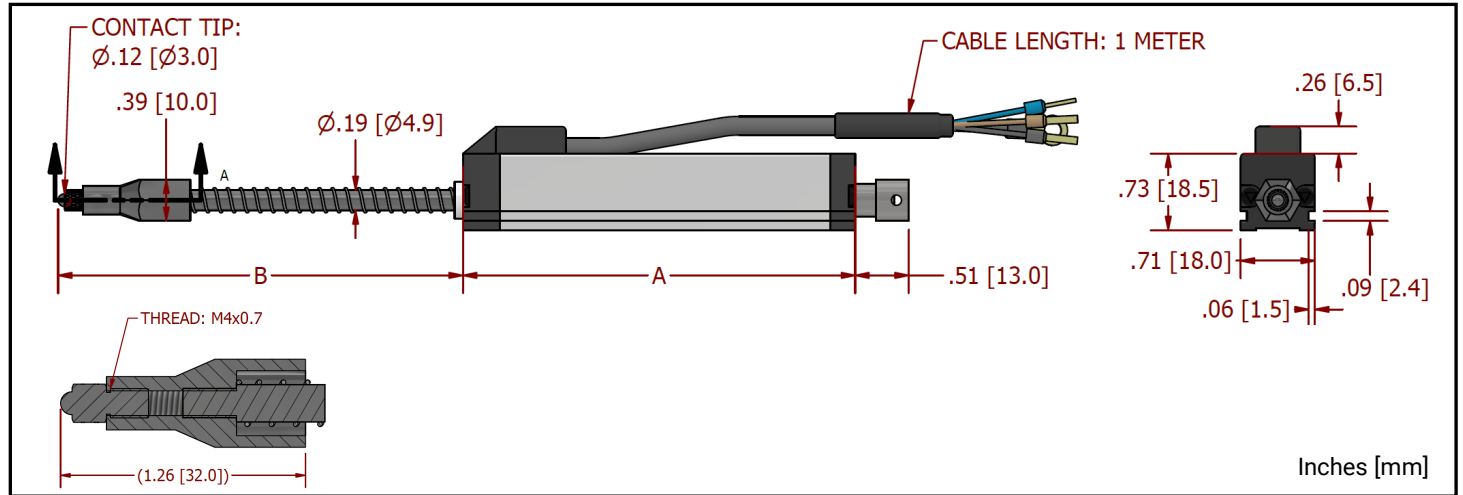
SPECIFICATIONS

Output:	0 to 100% of Input Voltage (potentiometer circuit)
Non-Linearity, Full Stroke: Best Fit Straight Line (BFSL)	$\leq \pm 2.5\%$ of FSO
Resolution:	Infinite
Repeatability:	0.01 mm (0.0004 inch)
Element Type:	Conductive Plastic
Operating Current:	Input Voltage / Potentiometer Resistance Value (refer to chart on Page 2 for Resistance Value)
Signal Cable:	3 conductor, 24 AWG, braided shield, PVC jacket, 3 foot long
Operating Temperature:	-40 to +95°C (-40 to +203°F)
Temperature Coefficient:	$\leq \pm 0.03\%$ of FS / °C
Shock Rating:	30g; 14ms half sine wave (single hit) / IEC60068-2-27
Vibration Rating:	10g; 5 to 200 Hz sine wave / IEC60068-2-6
IP Rating:	IP61

LINEAR POSITION SENSOR

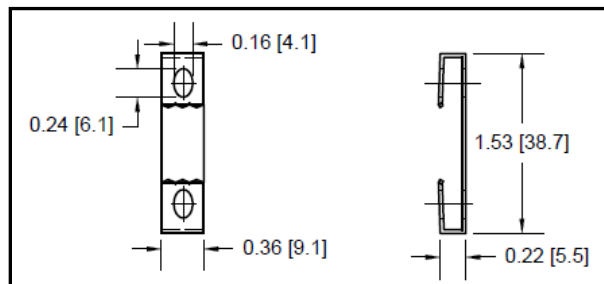
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Spring Loaded Linear Position Sensor



SPECIFICATIONS

	LPPS-SL-010	LPPS-SL-025	LPPS-SL-050	LPPS-SL-075	LPPS-SL-100
Stroke Length (inch) [mm]	0.4 [10]	1 [25]	2 [50]	3 [75]	4 [105]
Mechanical Stroke Length (inch) [mm]	0.5 [13]	1.1 [28]	2.1 [53]	3.1 [78]	4.1 [103]
Resistance $\pm 20\%$ (Ω)	1.5K	3.0K	5.0K	5.0K	5.0K
Max Input Voltage (VDC)	12	24	36	36	36
Dimension 'A' (inch) [mm]	2.1 [54]	2.8 [70]	3.8 [96]	4.8 [121]	5.7 [146]
Dimension 'B' (inch) [mm]	2.2 [55]	2.6 [66]	3.9 [99]	5.2 [131]	6.4 [163]
Spring Rate (lbf/in) [kgf/cm] (nominal)	1.5 [0.27]	2.0 [0.36]	1.7 [0.31]	1.5 [0.27]	1.7 [0.31]
Weight (grams)	95	105	125	140	165



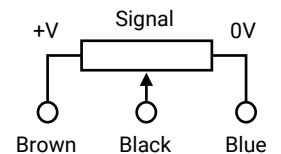
Mounting brackets included

ORDERING INFORMATION

Model	Measuring Range
LPPS - SL	-□□□
010	10 mm [0.4 inch]
025	25 mm [1 inch]
050	50 mm [2 inch]
075	75 mm [3 inch]
100	100 mm [4 inch]

WIRING PIN OUT

	Integral Cable
DC Power In	Brown
Output	Black
Ground	Blue



IMPORTANT !
 DO NOT CONNECT THE BLACK WIRE TO POWER SUPPLY
 THIS WILL CAUSE DAMAGE TO THE SENSOR

ORDERING EXAMPLE

LPPS-SL-100: 0 to 100 mm [4 inch] measuring range