

LPPS-36 Series Linear Potentiometer Position Sensor with Rod Ends

Features

- Robust design
- Cost-effective measuring system
- Stroke lengths from 350 to 700 mm (14 to 28 inches)
- Industrial duty, liquid and corrosion resistant
- Rod end joints for ease of mounting

Applications

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



Overview

LPPS-36 series Linear Potentiometer Position Sensor with Rod End Joints 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.

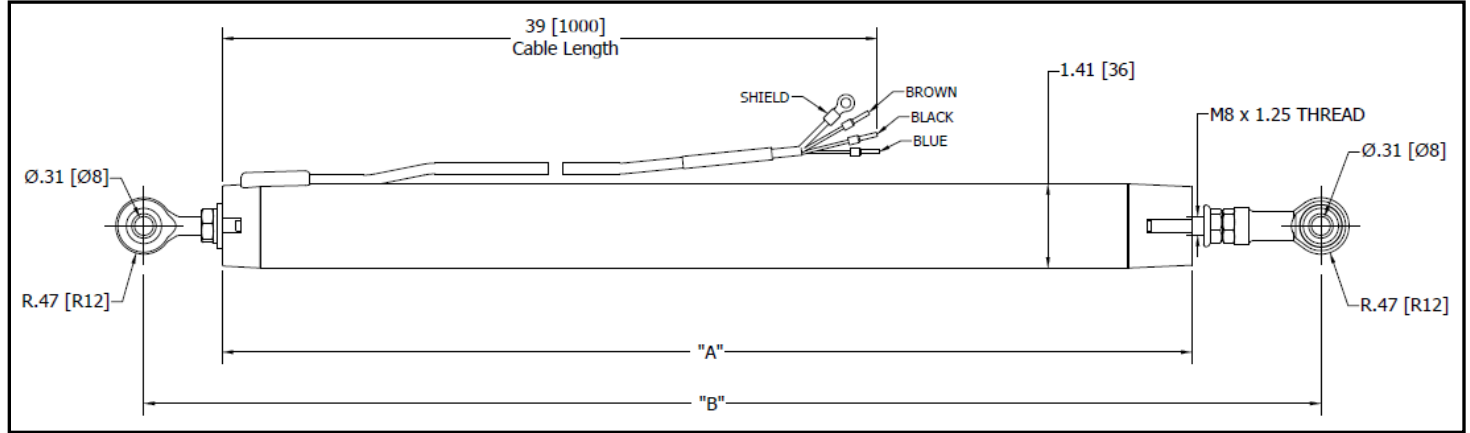
Resistive potentiometric element is made from conductive plastic. The output is ratiometric; from 0% to 100% of excitation voltage. The sensor is provided with swivel rod ends for self-alignment and ease of mounting.

The LPPS-36 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)
Linearity Error:	(refer to chart on Page 2 for Linearity Error)
Resolution:	Infinite
Repeatability:	0.01 mm (0.0004 inch)
Element Type:	Conductive Plastic
Max Operating Speed:	5 m/S (16 ft/S)
Operating Current:	Input Voltage / Potentiometer Resistance Value (refer to chart on Page 2 for Resistance Value)
Operating Temperature:	-40 to +95°C (-40 to +203°F)
Temperature Coefficient:	≤ +/- 0.03% of FS / °C
Shock Rating:	50g (single hit) / IEC68-2-29
Vibration Rating:	20g / IEC68-2-6
IP Rating:	IP64

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Specifications

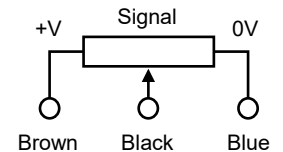
	LPPS-36-350	LPPS-36-400	LPPS-36-450	LPPS-36-500	LPPS-36-550	LPPS-36-600	LPPS-36-650	LPPS-36-700
Nominal Stroke Length (inch) [mm]	14 [350]	16 [400]	18 [450]	20 [500]	22 [550]	24 [600]	26 [650]	28 [700]
Mechanical Stroke Length (inch) [mm]	14.1 [357]	16.0 [407]	18.0 [457]	19.9 [507]	21.9 [557]	23.6 [607]	25.6 [657]	27.5 [707]
Resistance $\pm 20\%$ (Ω)	5.0K	5.0K	5.0K	5.0K	5.0K	10.0K	10.0K	10.0K
Max Input Voltage (VDC)	36	36	36	36	36	36	36	36
Non-Linearity, Full Stroke	$\pm 0.08\%$	$\pm 0.08\%$	$\pm 0.08\%$	$\pm 0.08\%$	$\pm 0.08\%$	$\pm 0.08\%$	$\pm 0.08\%$	$\pm 0.08\%$
Dimension 'A' (inch) [mm]	17.2 [438]	19.2 [488]	21.1 [538]	23.2 [588]	25.1 [638]	27.1 [688]	29.1 [738]	31.0 [788]
Dimension 'B' (inch) [mm]	20.5 [522]	22.5 [572]	24.5 [622]	26.4 [672]	28.4 [722]	30.4 [772]	32.3 [822]	34.3 [872]

Ordering Information

Model	Measuring Range
LPPS-36	- □ □ □
350	350 mm [14 inch]
400	400 mm [16 inch]
450	450 mm [18 inch]
500	500 mm [20 inch]
550	550 mm [22 inch]
600	600 mm [24 inch]
650	650 mm [26 inch]
700	700 mm [28 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-36-500: 0 to 500 mm [20 inch] measuring range