LPPS-36B 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-36B 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 swivel rod end installed near the cable gland can be rotated up to 360 degrees, but is not removable.

The LPPS-36B 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: ±0.50% (typical), ±1.0% (max)
Best Fit Straight Line (BFSL)

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: \leq +/- 0.03% of FS / °C

Shock Rating: 50g (single hit) / IEC68-2-29

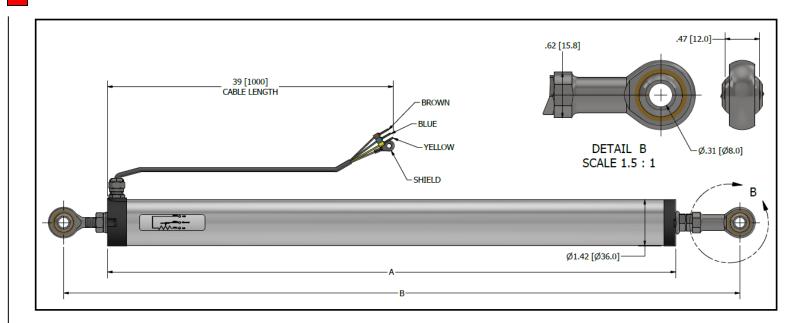
Vibration Rating: 20g / IEC68-2-6

IP Rating: IP61



42690 Woodward Avenue, Suite 200 • Bloomfield Hills, MI 48304 USA Phone: 248-636-1515 • Fax: 248-636-4969 Email: Sales@HGSIND.com • Web: www.HGSIND.com

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Specifications

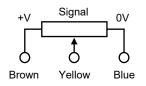
	LPPS-36B- 350	LPPS-36B- 400	LPPS-36B- 450	LPPS-36B- 500	LPPS-36B- 550	LPPS-36B- 600	LPPS-36B- 650	LPPS-36B- 700
Mechanical Stroke Length (inch) [mm]	14.1 [357]	16.0 [407]	18.0 [457]	19.9 [507]	21.9 [557]	23.9 [607]	25.9 [657]	27.8 [707]
Electrical Measuring Range (inch) [mm]	13.8 [350]	15.7 [400]	17.7 [450]	19.7 [500]	21.7 [550]	23.6 [600]	25.6 [650]	27.6 [700]
Resistance ± 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
Dimension 'A' (inch) [mm]	17.4 [442]	19.4 [492]	21.3 [542]	23.3 [592]	25.3 [642]	27.2 [692]	29.2 [742]	31.2 [792]
Dimension 'B' (inch) [mm] - Retracted Min	20.7 [526]	22.7 [576]	24.7 [626]	26.6 [676]	28.6 [726]	30.6 [776]	32.5 [826]	34.5 [876]
Dimension 'B' (inch) [mm] - Extended Max	34.8 [884]	38.7 [983]	42.7 [1085]	46.5 [1181]	50.5 [1283]	54.5 [1384]	58.4 [1486]	62.3 [1582]

Ordering Information

Model	Measuring Range				
LPPS-36B	-000				
	350 400 450 500 550 600 650 700	350 mm 400 mm 450 mm 500 mm 550 mm 600 mm 650 mm 700 mm	[14 inch] [16 inch] [18 inch] [20 inch] [22 inch] [24 inch] [26 inch] [28 inch]		

Wiring Pin Out

	Integral Cable
DC Power In	Brown
Output	Yellow
Ground	Blue



IMPORTANT!

DO NOT CONNECT THE YELLOW WIRE TO POWER SUPPLY THIS WILL CAUSE DAMAGE TO THE SENSOR

Ordering Example

LPPS-36B-500: 0 to 500 mm [20 inch] measuring range



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