

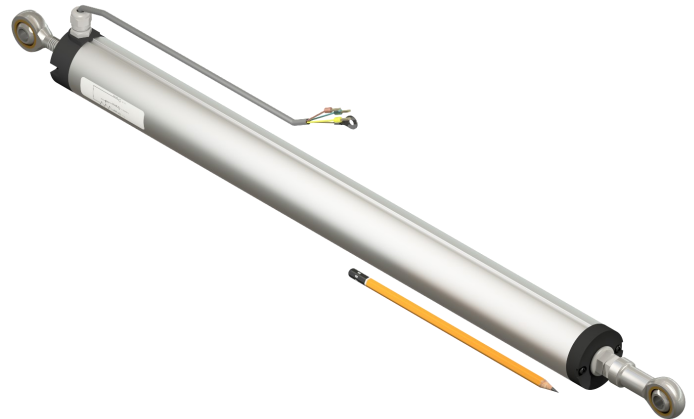
# LPPS-36B Series Linear Potentiometer Position Sensor with Rod Ends

## 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.

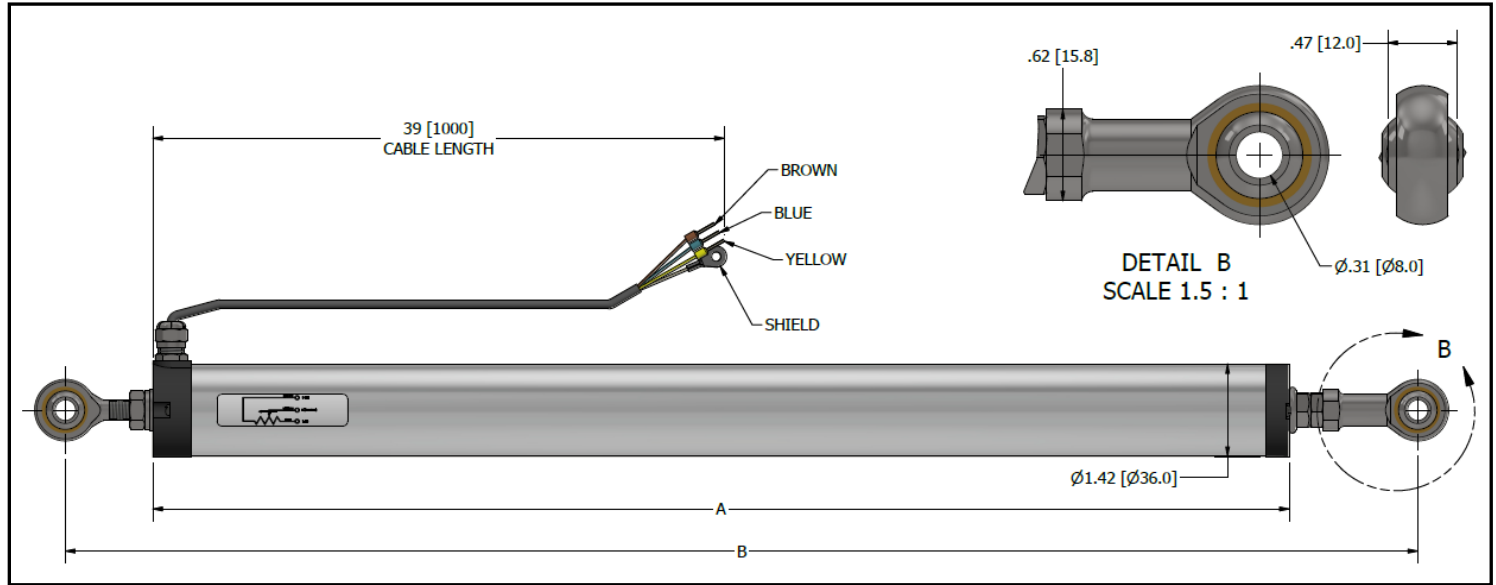
Resistive potentiometric element is made from conductive plastic. The output is ratiometric; from 0% to 100% of excitation voltage. The sensor is provided with swivel rod ends for self-alignment and ease of mounting. The swivel rod end installed near the cable gland can be rotated up to 360 degrees, but is not removable.

The LPPS-36B series sensor is made from industrial duty materials for resistance to dust, temperature, shock, and vibration.

## Specifications

<b>Output:</b>	0 to 100% of Input Voltage (potentiometer circuit)
<b>Non-Linearity, Full Stroke: Best Fit Straight Line (BFSL)</b>	$\leq \pm 2.5\%$ of FSO
<b>Resolution:</b>	Infinite
<b>Repeatability:</b>	0.01 mm (0.0004 inch)
<b>Element Type:</b>	Conductive Plastic
<b>Max Operating Speed:</b>	5 m/S (16 ft/S)
<b>Operating Current:</b>	Input Voltage / Potentiometer Resistance Value (refer to chart on Page 2 for Resistance Value)
<b>Operating Temperature:</b>	-40 to +95°C (-40 to +203°F)
<b>Temperature Coefficient:</b>	$\leq \pm 0.03\%$ of FS / °C
<b>Shock Rating:</b>	50g (single hit) / IEC68-2-29
<b>Vibration Rating:</b>	20g / IEC68-2-6
<b>IP Rating:</b>	IP61

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## Specifications

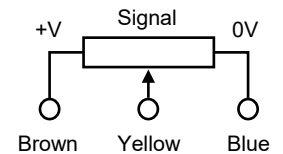
	LPPS-36B-350	LPPS-36B-400	LPPS-36B-450	LPPS-36B-500	LPPS-36B-550	LPPS-36B-600	LPPS-36B-650	LPPS-36B-700
Mechanical Stroke Length (inch) [mm]	14.1 [357]	16.0 [407]	18.0 [457]	19.9 [507]	21.9 [557]	23.9 [607]	25.9 [657]	27.8 [707]
Electrical Measuring Range (inch) [mm]	13.8 [350]	15.7 [400]	17.7 [450]	19.7 [500]	21.7 [550]	23.6 [600]	25.6 [650]	27.6 [700]
Resistance $\pm 20\%$ ( $\Omega$ )	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]
Weight lb. [grams]	1.6 [725]	1.8 [795]	1.9 [865]	2.0 [920]	2.2 [990]	2.3 [1050]	2.5 [1150]	2.6 [1180]

## Ordering Information

Model	Measuring Range
LPPS-36B	- □ □ □
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	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