LPPS-22 Series Linear Potentiometer Position Sensor with Rod Ends

Features

- **Compact lightweight design**
- **Cost-effective measuring system**
- **Stroke lengths from 25 to 300 mm (1 to 12 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-22 series Linear Potentiometer Position Sensors 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-22 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)**	±0.50% (typical), ±1.0% (max)
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:	IP61

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The Sensor Connection

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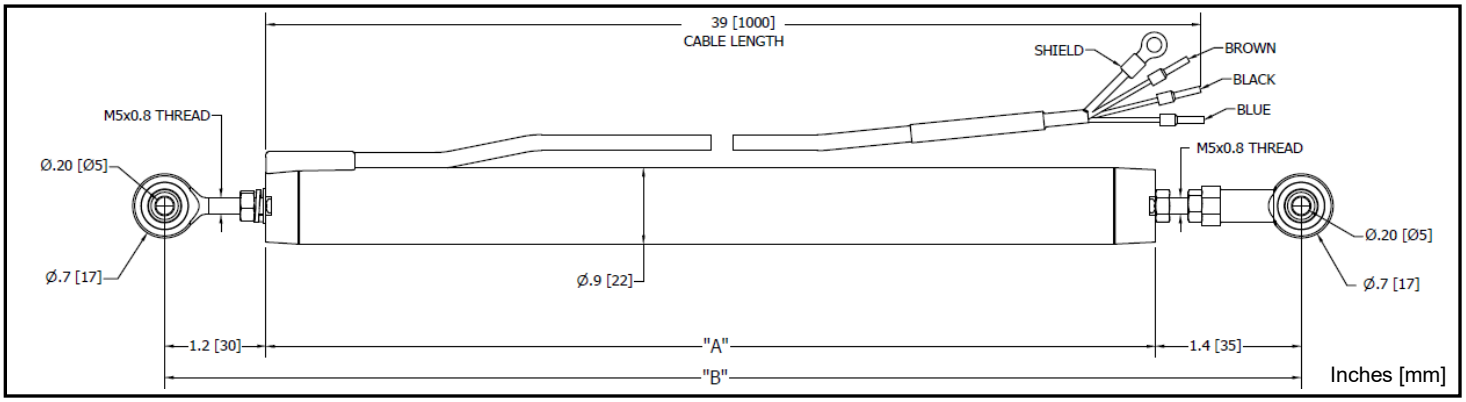


Specifications

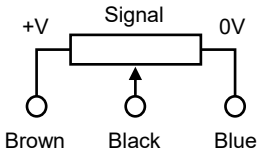
	LPPS-22-025	LPPS-22-050	LPPS-22-075	LPPS-22-100	LPPS-22-125	LPPS-22-150	LPPS-22-175	LPPS-22-200	LPPS-22-250	LPPS-22-300
Mechanical Stroke Length (inch) [mm]	1.1 [28]	2.0 [53]	3.0 [78]	4.0 [103]	5.0 [128]	6.0 [153]	7.0 [178]	8.0 [203]	9.9 [253]	11.9 [303]
Electrical Measuring Range (inch) [mm]	0.9 [25]	1.9 [50]	2.9 [75]	3.9 [100]	4.9 [125]	5.9 [150]	6.8 [175]	7.8 [200]	9.8 [250]	11.8 [300]
Resistance ± 20% (Ω)	2.0K	5.0K	5.0K	5.0K	5.0K	5.0K	5.0K	5.0K	5.0K	5.0K
Max Input Voltage (VDC)	12	24	24	24	24	24	24	24	24	24
Dimension 'A' (inch) [mm]	3.1 [79]	4.1 [104]	5.1 [129]	6.1 [154]	7.1 [179]	8.0 [204]	9.0 [229]	10.0 [254]	12.0 [304]	13.9 [354]
Dimension 'B' (inch) [mm] - Retracted Min	5.7 [144]	6.7 [169]	7.6 [194]	8.6 [219]	9.6 [244]	10.6 [269]	11.6 [294]	12.6 [319]	14.5 [369]	16.5 [419]
Dimension 'B' (inch) [mm] - Extended Max	6.8 [173]	8.7 [221]	10.6 [269]	12.6 [320]	14.6 [371]	16.6 [422]	18.6 [472]	20.6 [523]	24.4 [620]	28.4 [721]
Weight (grams)	115	130	145	165	180	190	205	215	245	270

Ordering Information

Model	Measuring Range
LPPS-22	**-□□□**
	025 25 mm [1 inch] **050** 50 mm [2 inch] **075** 75 mm [3 inch] **100** 100 mm [4 inch] **125** 125 mm [5 inch] **150** 150 mm [6 inch] **175** 175 mm [7 inch] **200** 200 mm [8 inch] **250** 250 mm [10 inch] **300** 300 mm [12 inch]

Wiring Pin Out

	Integral Cable
DC Power In	Brown
Signal Output	Black
Ground	Blue



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

Ordering Example

LPPS-22-100: 0 to 100 mm [4 inch] measuring range

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