

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.

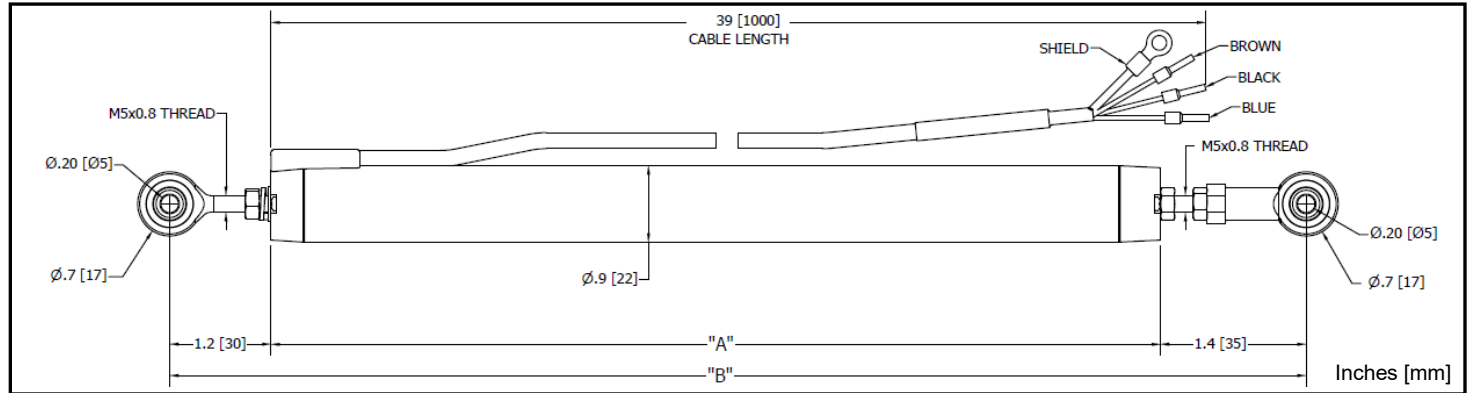
Resistive potentiometric element is made from conductive plastic. The output is ratiometric; from 0% to 100% of excitation voltage. The sensor is provided with swivel rod ends for self-alignment and ease of mounting.

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)	$\leq \pm 2.5\%$ of FSO
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:	$\leq \pm 0.03\%$ of FS / °C
Shock Rating:	50g (single hit) / IEC68-2-29
Vibration Rating:	20g / IEC68-2-6
IP Rating:	IP61

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Specifications

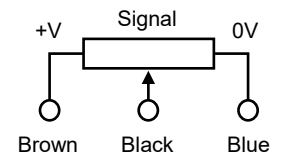
	LPPS-22-025	LPPS-22-050	LPPS-22-075	LPPS-22-100	LPPS-22-125	LPPS-22-150	LPPS-22-175	LPPS-22-200	LPPS-22-250	LPPS-22-300
Mechanical Stroke Length (inch) [mm]	1.1 [28]	2.0 [53]	3.0 [78]	4.0 [103]	5.0 [128]	6.0 [153]	7.0 [178]	8.0 [203]	9.9 [253]	11.9 [303]
Electrical Measuring Range (inch) [mm]	0.9 [25]	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 $\pm 20\%$ (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