

LPPS 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

The Sensor Connection LPPS 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.

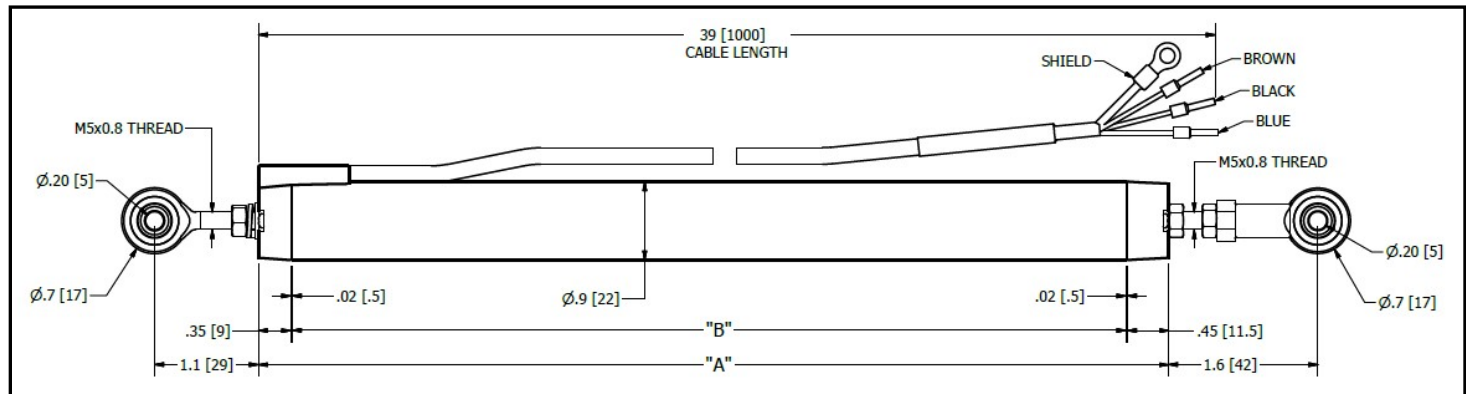
Resistive potentiometric element is made from carbon. The output is ratiometric; from 0% to 100% of excitation voltage. The sensor is provided with swivel rod ends for self-alignment and ease of mounting.

The LPPS 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:	Carbon
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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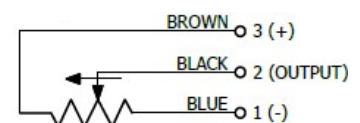
	LPPS-025	LPPS-050	LPPS-075	LPPS-100	LPPS-125	LPPS-150	LPPS-175	LPPS-200	LPPS-250	LPPS-300
Stroke Length (inch) [mm]	1 [25]	2 [50]	3 [75]	4 [100]	5 [125]	6 [150]	7 [175]	8 [200]	10 [250]	12 [300]
Mechanical Stroke Length (inch) [mm]	1.1 [28]	2.1 [53]	3.1 [78]	4.1 [103]	5.1 [128]	6.1 [153]	7.1 [178]	8.1 [203]	10.1 [253]	12.1 [303]
Resistance $\pm 10\%$ (Ω)	1.0K	2.0K	3.0K	4.0K	5.0K	5.0K	5.0K	5.0K	5.0K	5.0K
Max Input Voltage (VDC)	12	24	24	24	36	36	36	36	36	36
Non-Linearity, Full Stroke, Typical	$\pm 0.10\%$	$\pm 0.10\%$	$\pm 0.10\%$	$\pm 0.08\%$	$\pm 0.08\%$	$\pm 0.08\%$	$\pm 0.08\%$	$\pm 0.06\%$	$\pm 0.06\%$	$\pm 0.06\%$
Dimension 'A' (inch) [mm]	3.1 [79]	4.1 [104]	5.1 [129]	6.1 [154]	7.1 [179]	8.1 [204]	9.1 [229]	10.1 [254]	12.1 [304]	14.1 [354]
Dimension 'B' (inch) [mm]	2.2 [58]	3.2 [83]	4.2 [108]	5.2 [133]	6.2 [158]	7.2 [183]	8.2 [208]	9.2 [233]	11.2 [283]	13.2 [333]
Weight (grams)	115	130	145	165	180	190	205	215	245	270

Ordering Information

Model	Measuring Range
LPPS -	- □ □ □
025	25 mm [1 inch]
050	50 mm [2 inch]
075	75 mm [3 inch]
100	100 mm [4 inch]
150	150 mm [6 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
Output	Black
Ground	Blue



Ordering Example

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