LP-22 Series
Linear Potentiometer

Factory Automation Robotic Motion Control X/Y Table Position Feedback Mil/Aero Test Stands

For use in:

Linear Potentiometer Designed for the Factory Automation Industry

The LP-22 series linear potentiometer is a cost effect solution for factory automation linear position sensing applications, such as: robotic motion control, X/Y table position feedback, flow control valve position, suspension travel, press and die position, injection molding machines, and mil/aero test stands.

The 3-wire resistive film sensor is available in stroke lengths from 25 to 300 mm (1 to 12 inches), with a maximum linearity error of 1% of full scale. The sensor has swivel rod eyes at each end for self-alignment and easy mounting. A 22 mm diameter anodized aluminum housing rated to IP-61 protects the unit from airborne contaminants, and the sensor is rugged enough to withstand the typical shock and vibration environments of industrial shop floors.

#### Features:

- Full ranges from 25 to 300 mm (1 to 12 inches)
- Self-aligning swivel rod eyes on both ends
- 1 m long, 3-conductor cable
- 22 mm OD anodized aluminum housing

### Specifications:

Input current: ≤12 mA Resolution: Infinite

Output range: 0 to 100% of input Repeatability: 0.01 mm (0.0004 inch)

Max operating speed: 5 m/s

Linearity: ±0.50% of FS (typical) ±1% max.

Operating Temperature: -40 to 95°C (-40 to 203°F)

Temperature Coefficient: ≤±0.03% of FS/°C

Shock Rating: 50 g single hit, IEC68-2-29

Vibration Rating: 20 g, IEC68-2-6

IP Rating: IP-61

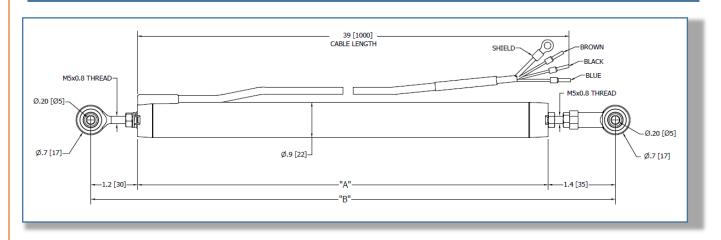
All specifications are subject to change without notice.

### ALLIANCE SENSORS GROUP

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## **LP-22 Series**





#### Configuration Information:

Product	LP-22-025	LP-22-050	LPPS-22-100	LPPS-22-150	LPPS-22-200	LPPS-22-250	LPPS-22-300
Electrical Measuring Range (inch) [mm]	0.9 [25]	1.9 [50]	3.9 [100]	5.9 [150]	7.8 [200]	9.8 [250]	11.8 [300]
Mechanical Stroke Length (inch) [mm]	1.1 [28]	2.0 [53]	4.0 [103]	6.0 [153]	8.0 [203]	9.9 [253]	11.9 [303]
Resistance ± 20% (Ω)	2.0K	5.0K	5.0K	5.0K	5.0K	5.0K	5.0K
Max Input Voltage (VDC)	12	24	24	24	24	24	24
Dimension 'A' (inch) [mm]	3.1 [79]	4.1 [104]	6.1 [154]	8.0 [204]	10.0 [254]	12.0 [304]	13.9 [354]
Dimension 'B' (inch) [mm]	5.7 [144]	6.7 [169]	8.6 [219]	10.6 [269]	12.6 [319]	14.5 [369]	16.5 [419]
Weight (grams)	115	130	165	190	215	245	270

#### Ordering Information:

Series	<b>Body Diameter</b>	Range, Metric
LP-	XX-	XXX-
	<b>22</b> - 22 mm	<b>025</b> - 25 mm
		<b>050</b> - 50 mm
		<b>100</b> - 100 mm
		<b>150</b> - 150 mm
		<b>200</b> - 200 mm
		<b>250</b> - 250 mm
		<b>300</b> - 300 mm

#### Wiring Table:

Function	Cable Color
DC power input	Brown
Ground	Blue
Analog Output	Black

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