



Potentiometer Linear Position Sensors LCR-18P Series

Overview

The ProSense LCR-18P series offers pivoting slide action. This series is available in 10 to 400mm stroke measurement with an infinite resolution and IP65 protection rating. The LCR-18P series linear position sensors offer similar form factors as competitors and are available at a less expensive cost.

Features

- Pivoting slide
- 10 to 400mm stroke measurement
- Pigtail connection
- IP65 protection rating



LCR-18P-0010-A2-1A

Potentiometer Linear Position Sensors LCR-18P Series Selection Chart

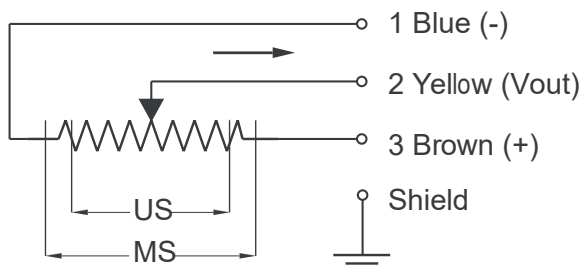
Part Number	Price	Action	Resistance	Useful Stroke (US) mm [in]	Mechanical Stroke (MS) mm [in]	Linearity	Housing Size	Drawing Link	Weight kg [lb]
LCR-18P-0010-A2-1A	\$111.00	Pivoting slide	2kΩ	10 [0.39]	13 [0.51]	+/- 0.5%	18mm diameter x 58mm body	PDF	0.17 [0.37]
LCR-18P-0025-A2-1A	\$113.00			25 [0.98]	28 [1.10]	+/- 0.5%	18mm diameter x 73mm body	PDF	0.19 [0.41]
LCR-18P-0050-A2-1A	\$117.00			50 [1.97]	53 [2.08]	+/- 0.5%	18mm diameter x 98mm body	PDF	0.21 [0.46]
LCR-18P-0075-B5-1A	\$118.00		5kΩ	75 [2.95]	78 [3.07]	+/- 0.2%	18mm diameter x 123mm body	PDF	0.23 [0.50]
LCR-18P-0100-B5-1A	\$121.00			100 [3.94]	103 [4.05]	+/- 0.2%	18mm diameter x 148mm body	PDF	0.25 [0.55]
LCR-18P-0125-B5-1A	\$124.00			125 [4.92]	128 [5.03]	+/- 0.2%	18mm diameter x 173mm body	PDF	0.27 [0.59]
LCR-18P-0150-C5-1A	\$126.00			150 [5.91]	153 [6.02]	+/- 0.1%	18mm diameter x 198mm body	PDF	0.29 [0.63]
LCR-18P-0175-C5-1A	\$127.00			175 [6.88]	178 [7.00]	+/- 0.1%	18mm diameter x 223mm body	PDF	0.31 [0.68]
LCR-18P-0200-C5-1A	\$128.00			200 [7.87]	203 [7.99]	+/- 0.1%	18mm diameter x 248mm body	PDF	0.33 [0.72]
LCR-18P-0250-D5-1A	\$130.00			250 [9.84]	253 [9.97]	+/- 0.05%	18mm diameter x 298mm body	PDF	0.37 [0.81]
LCR-18P-0300-D5-1A	\$133.00			300 [11.81]	303 [11.92]	+/- 0.05%	18mm diameter x 348mm body	PDF	0.41 [0.90]
LCR-18P-0350-D5-1A	\$139.00			350 [13.77]	353 [13.90]	+/- 0.05%	18mm diameter x 398mm body	PDF	0.45 [0.99]
LCR-18P-0400-D5-1A	\$145.00			400 [15.75]	403 [15.87]	+/- 0.05%	18mm diameter x 448mm body	PDF	0.49 [1.07]

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Potentiometer Linear Position Sensors LCR-18P Series Specifications

Repeatability	0.01 mm [0.0004 in]
Permissible Applied Voltage	28VDC max.
Displacement Speed	< 5m/s
Mechanical Life	100 million movement
Vibration (According to EN 60068-2-6)	3.5N (typical) IP60 version, 15N (typical) IP65 version
Shock (According to EN 60068-2-2:2007)	5-2000 Hz, 200m/s ² (20g) 2h 30min each axis (x,y,z)
Resistance Tolerance	±20%
Load Resistance	100KΩ min.
Recommended Wiper Current	<1 μA
Operating Temperature	-20 to 80°C [-4 to 176°F]
Storage Temperature	-30 to 90°C [-22 to 194°F]
Case Material	Anodized aluminum
Rod Material	Stainless steel
Rod Diameter	Ø5 mm
Mechanical Fixing	Ball joints on both sides
Electrical Connections	3.2ft/1m, pigtail
Agency Approval	CE

Electrical Connections



When choosing a transducer, it is important to remember that different strokes exist:

- Mechanical Stroke (MS): The actual shift that the transducer's cursor (wiper) is able to make.
- Useful Electrical Stroke (US): The part of the mechanical stroke in which transducer linearity is guaranteed.
- Therefore, when designing an application, you should choose a transducer with a useful electrical stroke that is equal to or greater than the maximum displacement carried out by the moving part.