



Potentiometer Linear Position Sensors LCR-38P Series

Overview

The ProSense LCR-38P series offers pivoting slide action. This series is available in 50 to 375mm stroke measurement with an infinite resolution and IP65 protection rating. The LCR-38P series linear position sensors offer similar form factors as competitors and are available at a less expensive cost.

Features

- 50 to 375mm stroke measurement
- Pivoting slide action
- IP65 protection rating
- Mounting hardware and connectors (LCR38-ACC-KIT) included



LCR-38P-0050-A5-C1

Potentiometer Linear Position Sensors LCR-38P 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-38P-0050-A5-C1	\$06dbv:	Pivoting slide	5kΩ	50 [1.97]	54 [2.12]	+/- 0.5%	38mm diameter x 153mm body	PDF	0.4 [0.88]
LCR-38P-0100-B5-C1	\$06dbx:			100 [3.94]	104 [4.09]	+/- 0.2%	38mm diameter x 203mm body	PDF	0.5 [1.1]
LCR-38P-0125-B5-C1	\$06dby:			125 [4.92]	129 [5.07]	+/- 0.2%	38mm diameter x 228mm body	PDF	0.55 [1.21]
LCR-38P-0130-C5-C1	\$06dbz:			130 [5.12]	134 [5.27]	+/- 0.1%	38mm diameter x 233mm body	PDF	0.58 [1.27]
LCR-38P-0150-C5-C1	\$;06db]:			150 [5.91]	154 [6.06]	+/- 0.1%	38mm diameter x 253mm body	PDF	0.6 [1.32]
LCR-38P-0175-C5-C1	\$;06db[:			175 [6.88]	179 [7.04]	+/- 0.1%	38mm diameter x 278mm body	PDF	0.65 [1.43]
LCR-38P-0200-C5-C1	\$06db_:			200 [7.87]	204 [8.03]	+/- 0.1%	38mm diameter x 303mm body	PDF	0.7 [1.54]
LCR-38P-0225-D5-C1	\$06db#:			225 [8.85]	229 [9.01]	+/- 0.05%	38mm diameter x 328mm body	PDF	0.76 [1.67]
LCR-38P-0250-D5-C1	\$;06dbl:			250 [9.84]	254 [10.00]	+/- 0.05%	38mm diameter x 353mm body	PDF	0.8 [1.76]
LCR-38P-0275-D5-C1	\$06db?:			275 [10.82]	279 [10.98]	+/- 0.05%	38mm diameter x 378mm body	PDF	0.85 [1.87]
LCR-38P-0300-D5-C1	\$;06db,:			300 [11.81]	304 [11.97]	+/- 0.05%	38mm diameter x 403mm body	PDF	0.9 [1.98]
LCR-38P-0325-D5-C1	\$06dc0:			325 [12.79]	329 [12.95]	+/- 0.05%	38mm diameter x 428mm body	PDF	0.95 [2.09]
LCR-38P-0350-D5-C1	\$06dc1:			350 [13.77]	354 [13.93]	+/- 0.05%	38mm diameter x 453mm body	PDF	1.0 [2.2]
LCR-38P-0375-D5-C1	\$06dc2:			375 [14.76]	379 [14.92]	+/- 0.05%	38mm diameter x 478mm body	PDF	1.05 [2.31]

Potentiometer Linear Position Sensors Accessory Kit

Part Number	Price	Drawing Link	Description
LCR38-ACC-KIT	\$6gde:	PDF	ProSense mounting hardware, replacement. For use with ProSense LCR-38P Linear Potentiometers.



LCR38-ACC-KIT

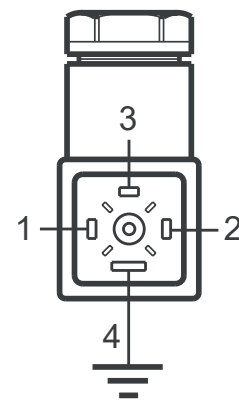
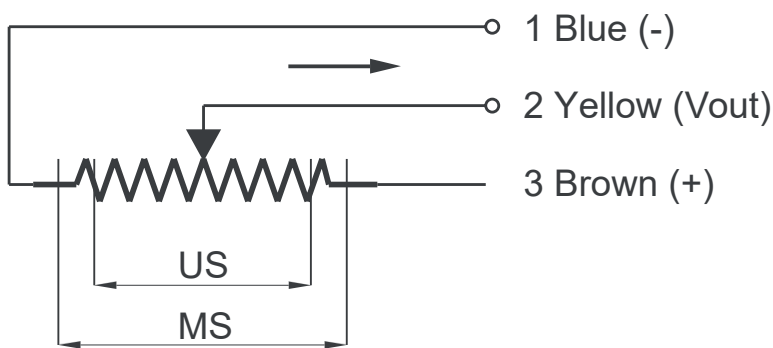


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Potentiometer Linear Position Sensors LCR-38P Series Specifications

Repeatability	0.01 mm [0.0004 in]
Permissible Applied Voltage	28VDC max.
Mechanical Life	100 million movement
Displacement Speed	<5m/s
Vibration (According to EN 60068-2-6)	5-2000 Hz, 200m/s ² (20g) 2h 30min each axis (x,y,z)
Shock (According to EN 60068-2-2:2007)	500m/s ² (50g), 11ms. (x,y,z axis)
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	Ø10 mm
Mechanical Fixing	Ball joints on both sides
Cap Material	ABS plastic
Connection	8mm DIN 43650 Form C
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.