Potentiometer Linear Position Sensors LSSR-33P Series

Overview

The ProSense LSSR-33P series offers spring loaded slide action. This series is available in 30 to 150mm stroke measurement with an infinite resolution and IP54 protection rating. The LSSR-33P series linear position sensors offer similar form factors as competitors and are available at a less expensive cost.

Features

- 30 to 150mm stroke measurement
- Spring-loaded slide action
- Channel mount
- 8mm DIN 43650 Form C connection
- IP54 protection rating
- Mounting hardware and connectors (LSSR33-ACC-KIT) included

LSSR-33P-0030-A5-C2

Potentiometer Linear Position Sensors LSSR-33P 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]
LSSR-33P-0030-A5-C2	$06dc3:	Spring-loaded slide	5kΩ	30 [1.18]	34 [1.33]	+/- 0.5%	33 x 33 x 127mm body	PDF	0.22 [0.48]
LSSR-33P-0050-A5-C2	$06dc4:			50 [1.97]	54 [2.12]	+/- 0.5%	33 x 33 x 147mm body	PDF	0.25 [0.55]
LSSR-33P-0075-A5-C2	$06dc5:			75 [2.95]	79 [3.11]	+/- 0.5%	33 x 33 x 172mm body	PDF	0.30 [0.66]
LSSR-33P-0100-B5-C2	$06dc6:			100 [3.94]	104 [4.09]	+/- 0.2%	33 x 33 x 197mm body	PDF	0.35 [0.77]
LSSR-33P-0150-C5-C2	$06dc7:			150 [5.91]	154 [6.06]	+/- 0.1%	33 x 33 x 247mm body	PDF	0.45 [0.99]

Potentiometer Linear Position Sensors Accessory Kit

Part Number	Price	Drawing Link	Description
LSSR33-ACC-KIT	$;6gdf:	PDF	ProSense mounting hardware, replacement. For use with ProSense LSSR-33P Linear Potentiometers.

LSSR33-ACC-KIT

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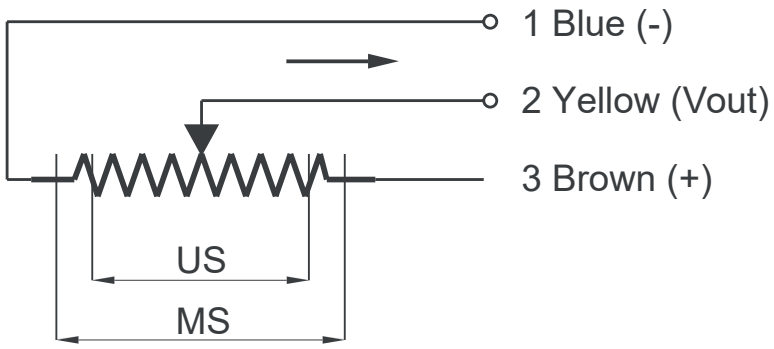
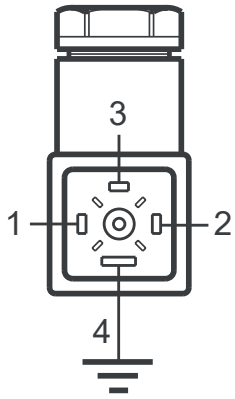
Potentiometer Linear Position Sensors LSSR-33P Series Specifications	
Repeatability	0.01 mm [0.0004 in]
Permissible Applied Voltage	28VDC max.
Displacement Speed	< 5m/s
Mechanical Life	50 million movement
Vibration (According to EN 60068-2-6)	3.5N (typical) IP60 version, 15N (typical) IP65 version
Shock (According to EN 60068-2-2:2007)	5-2000 Hz, 200m/s² (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 AISI 303
Rod Diameter	Ø6 mm
Mechanical Fixing	Variable brackets
Cap Material	ABS plastic
Connection	8mm DIN 43650 Form C
Mounting	Brackets with adjustable distance between centers, or with M5 screw ISO4017-DIN933
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.