

Linear Position Sensor LP 100-H

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- ▶ Linear movement measurement
- ▶ Measurement range up to 100 mm
- ▶ Operating temperature -40 to 125°C

The sensor is designed to measure linear movement, e.g. the stabilizer bar movement. The electronic is designed with a stainless steel magnetic shaft with Hall element. The Hall element is disposed between two magnets in association with a movable specially formed ferromagnetic part. This is used to control flux in the sensor in order to produce a linearly varying output voltage dependent on the position. The main benefit of this sensor is its contactless Hall effect technology and its robust design for motorsport applications.

Application

Application	Up to 100 mm
Operating temperature range	-40 to 125°C
Max. vibration	Vibration Profile 1 (see www.bosch-motorsport.com)

Technical Specifications

Mechanical Data

Weight	35 g
Protection class	IP68 & IP69K
Mounting	2 x M4
Shaft bearing life	25 million cycles

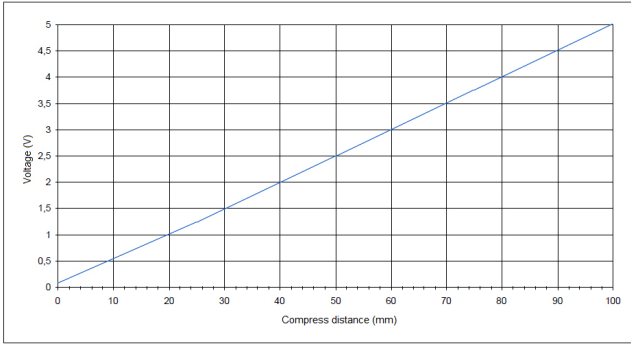
Housing	Aluminum sulphur anodised
Shaft	Stainless steel 303

Electrical Data

Power supply U_s	5 V \pm 0.25 V
Current I_S , during power on settlement	< 100 mA
Current I_S , normal operation	< 45 mA
Resolution	0.025 % of measurement range

Characteristic

Temperature coefficient	< \pm 0.003 % FS/°C
Sensitivity tolerance	< \pm 2.5 % FS
Non-Linearity	< \pm 0.5 % FS



Connectors and Wires

Connector	ASU 6-03-03 PA-HE
Connector loom ASU 0-03-03SA	F 02U 000 194-01
Pin 1	Power 5 V
Pin 2	Ground
Pin 3	Signal 0.05 to 4.95 V
Sleeve	FDR-25
Wire size	AWG 26
Wire length L	15 to 50 cm

Various motorsport and automotive connectors on request.

Please specify the requested wire length with your order.

Installation Notes

The sensor can be connected directly to most control units.

The sensor is designed with contactless Hall effect technology.

Each mounting orientation is possible.

The sensor is also ferromagnetic sensitive. Please make sure the mounting material is not ferromagnetism. This can lead to inaccurate measurement.

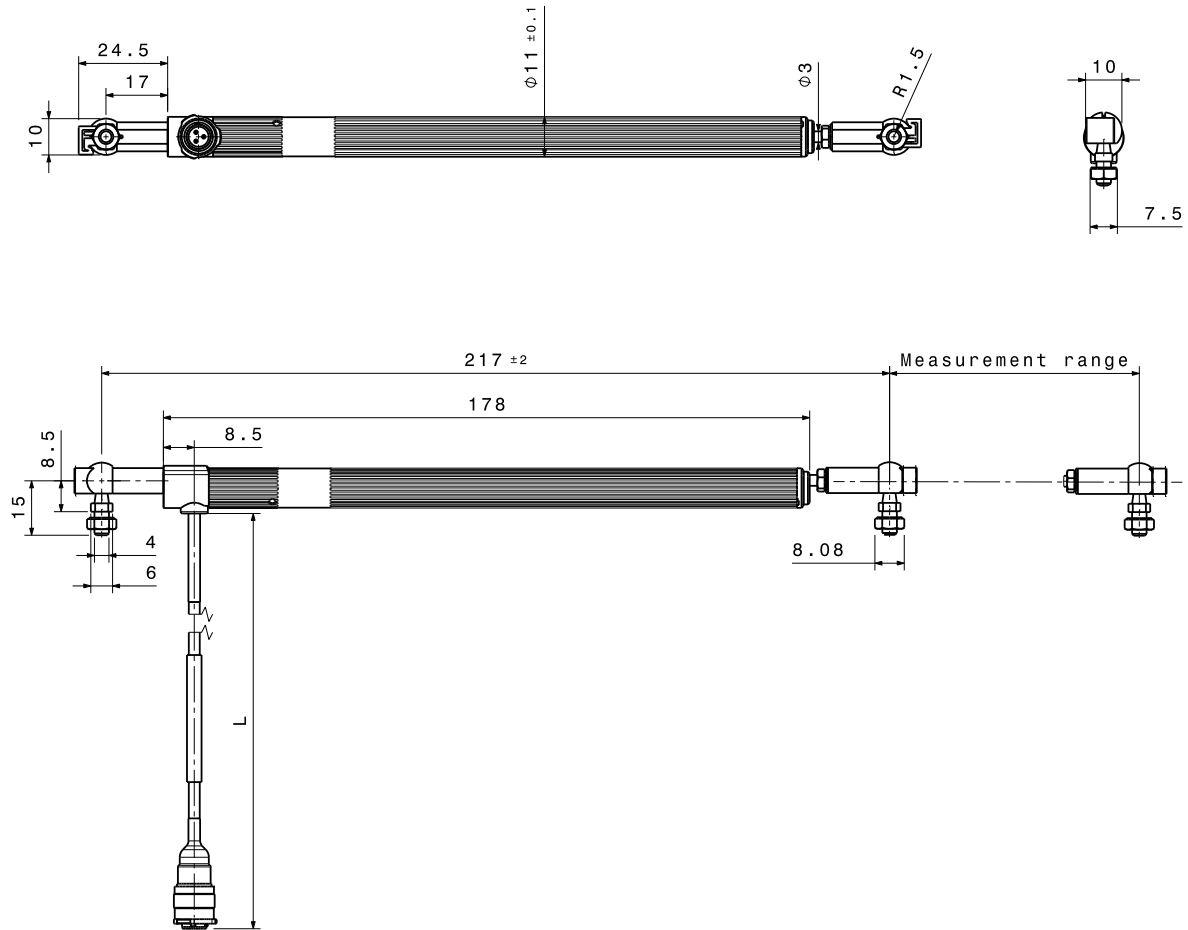
Safety Note

The sensor is not intended to be used for safety related applications without appropriate measures for signal validation in the application system.

Ordering Information

Linear Position Sensor LP 100-H
 Order number **F 02U V02 061-01**

Dimensions



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