

Rotary Position Sensor RP 100/130/308

www.bosch-motorsport.com



- ▶ Rotational movement measurement
- ▶ Measurement range: 0 to 100°, 0 to 130° or 0 to 308°
- ▶ Wide operating temperature range

This sensor is designed to measure rotational movement, e.g. throttle angle, spring travel, gearbox position or steering angle. A throttle rotation moves an internal slider (wiper) on a resistive element which is supplied with voltage. Thus voltage proportional to the angle can be measured. The housing and the bearings are made of high temperature resistant plastic. The mounting plate is protected with a metal cover to ensure a good fixation. The sensor is fitted in a shrink down boot for additional protection. The main benefit of this sensor is the combination of both high accuracy and motorsport spec connection.

Application

Application	Please see variations
Operating temperature range	-40 to 150°C
Max. vibration	200 m/s ² at 5 to 2,000 Hz

Technical Specifications

Variations

	RP 100	RP 130	RP 308
Application	0 to 100°	0 to 130°	0 to 308°
Total resistance	3 kOhm ± 20 %	3 kOhm ± 20 %	5 kOhm ± 20 %

Mechanical Data

Weight w/o wire	32 g
Protection class	IP65
Mounting	2 x M4
Lifetime	50 x 10 ⁶ rotations
Housing	Synthetic material

Electrical Data

Power supply U _s	5 V
Max. power supply	42 V
Total resistance	Please see variations

Current I _s	1 µA
Max. allowable contact current	10 mA

Characteristic

Max. rotation speed	120 min ⁻¹
Temp. coefficient	5 ppm/°K
Direction of rotation	Anti-clockwise

Both rotation directions are available on request

Connectors and Wires

Connector	ASL 6-06-05PA-HE
Connector loom ASL 0-06-05SA-HE	F 02U 000 226-01
Pin 1 (A)	U _s
Pin 2 (B)	Gnd
Pin 3 (C)	Sig
Pin 4 (D)	-
Pin 5 (E)	-
Sleeve	DR-25
Wire size	AWG 24
Wire length L	16 to 30 cm

Various motorsport and automotive connectors are available on request.

Please specify the required wire length with your order.

Installation Notes

The products of the RP series can be connected directly to most control units.

The sensor has no internal mechanical stops.

Each mounting orientation is possible.

The sensor meets all EMV, EMC and ESD automotive standards.

Please find further application hints in the offer drawing. www.bosch-motorsport.com

Both rotation directions and other rotation angles available on request.

Free download of the sensor configuration file (*.sdf) for the Bosch Data Logging System at our homepage.

Safety Note

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

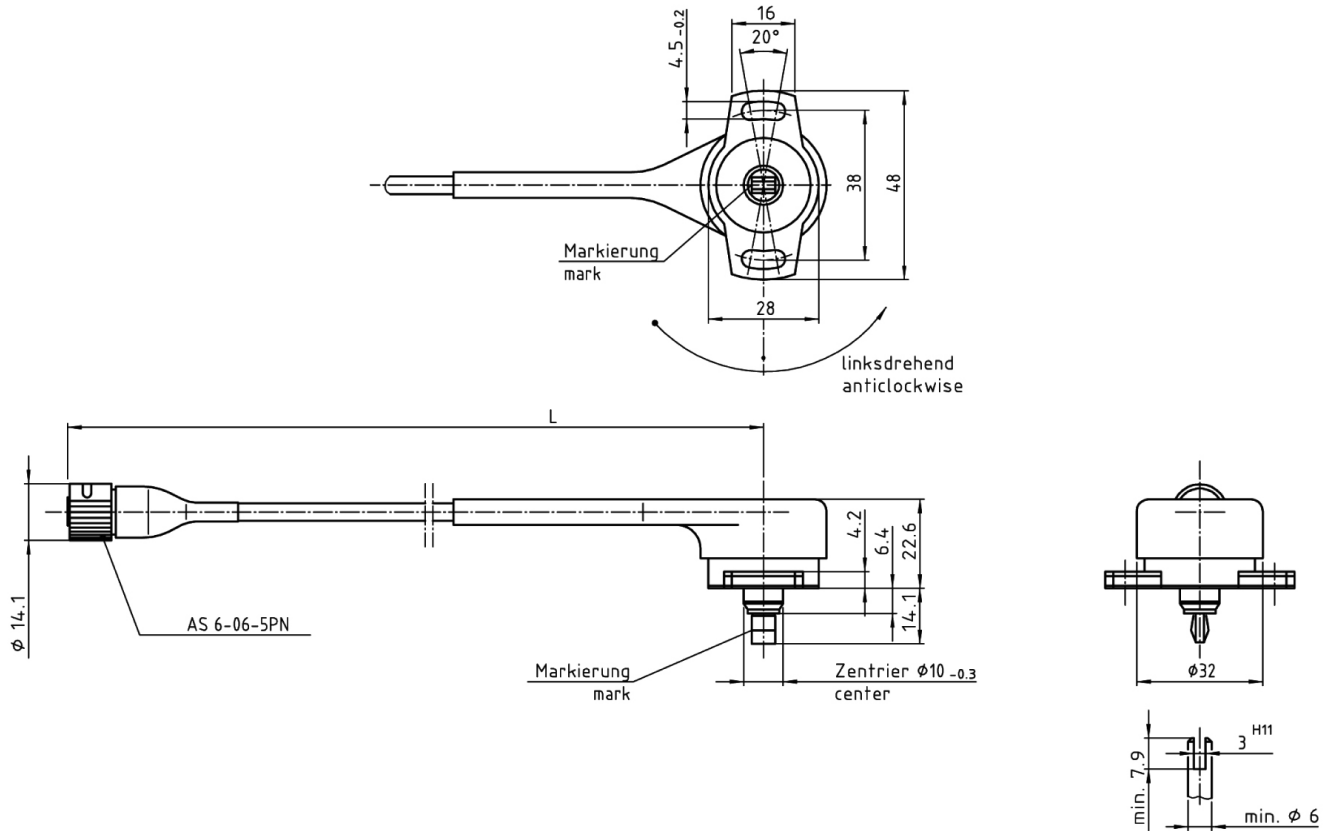
Ordering Information

Rotary Position Sensor RP 100
Order number **B 261 209 127-01**

Rotary Position Sensor RP 130
Order number **B 261 209 128-02**

Rotary Position Sensor RP 308
Order number **B 261 209 570-01**

Dimensions



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