

Rotary Position Sensor RP 86

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- ▶ Rotational movement measurement
- ▶ Measurement range: 0 to 86°
- ▶ Compact design

This sensor is designed to measure rotational movement, e.g. throttle angle or spring travel. 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 main benefit of this sensor is the combination of a high quality production part and extremely short dimensions

Application

Application	0 to 86°
Angle between internal mechanical stops	95°
Operating temperature range	-40 to 130°C
Max. vibration	700 m/s ²

Technical Specifications

Mechanical Data

Weight w/o wire	26 g
Mounting	2 x M4

Lifetime	2 x 10 ⁶ rotations
Housing	Synthetic material

Electrical Data

Power supply U _s	5 V
Max. power supply	42 V
Total resistance	2 kΩ ± 20 %
Current I _s	18 µA

Characteristic

Max. rotation speed	120 min ⁻¹
Direction of rotation	Anti-clockwise
Both rotation directions are available on request.	
Redundancy	No

Connectors and Wires

Connector	Bosch Compact
Mating connector	D 261 205 334-01
3-pole Compact	
Pin 1 (A)	U _s

Pin 2 (B)	Gnd
Pin 3 (C)	Sig
Pin 4 (D)	-
Pin 5 (E)	-

Installation Notes

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

The sensor has an internal mechanical stop and a $\varnothing 14.65 \times 2$ sealing.

Each mounting orientation is possible.

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

Both rotation directions and other rotation angles available on request.

Please find further application hints in the offer drawing and free download of the sensor configuration file (*.sdf) for the Bosch Data Logging System at our homepage.

Safety Note

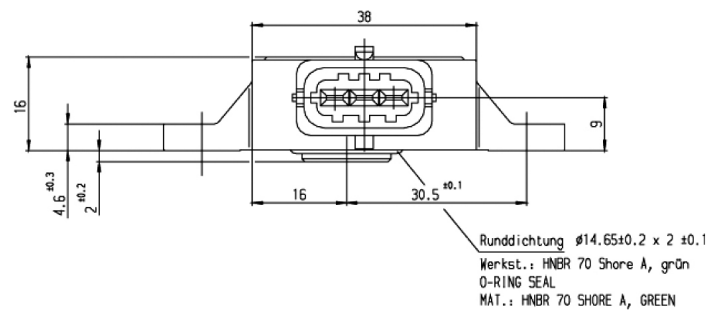
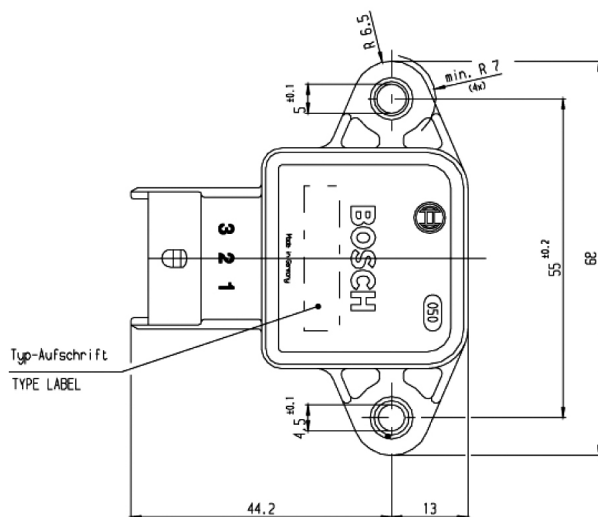
The Sensor is not intended to be used for safety related applications without appropriate measures for signal validation in the application system.

Ordering Information

Rotary Position Sensor RP 86

Order number **0 280 122 016**

Dimensions



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