

Rotary Position Sensor Mini-RP 100-M

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- ▶ Rotational movement measurement
- ▶ Measurement range: 0 to 100°
- ▶ Compact design
- ▶ Robust housing

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 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 high accuracy, motorsport spec connection and a very small and robust aluminum housing.

Application

Application	0 to 100°
Operating temperature range	-55 to 125°C
Storage temperature range	0 to 100°C
Max. vibration	200 m/s ² at 5 to 2,000 Hz

Technical Specifications

Mechanical Data

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

Electrical Data

Power supply U _s	5 V
Max. power supply	<15 V
Total resistance	1.5 kOhm ± 20%
Current I _s	1 µA
Max. allowable contact current	1 mA

Characteristic

Max. rotation speed	120 min ⁻¹
Temp. coefficient	5 ppm/°K

Direction of rotation	Anti-clockwise
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Both rotation directions are available on request.

Connectors and Wires

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

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

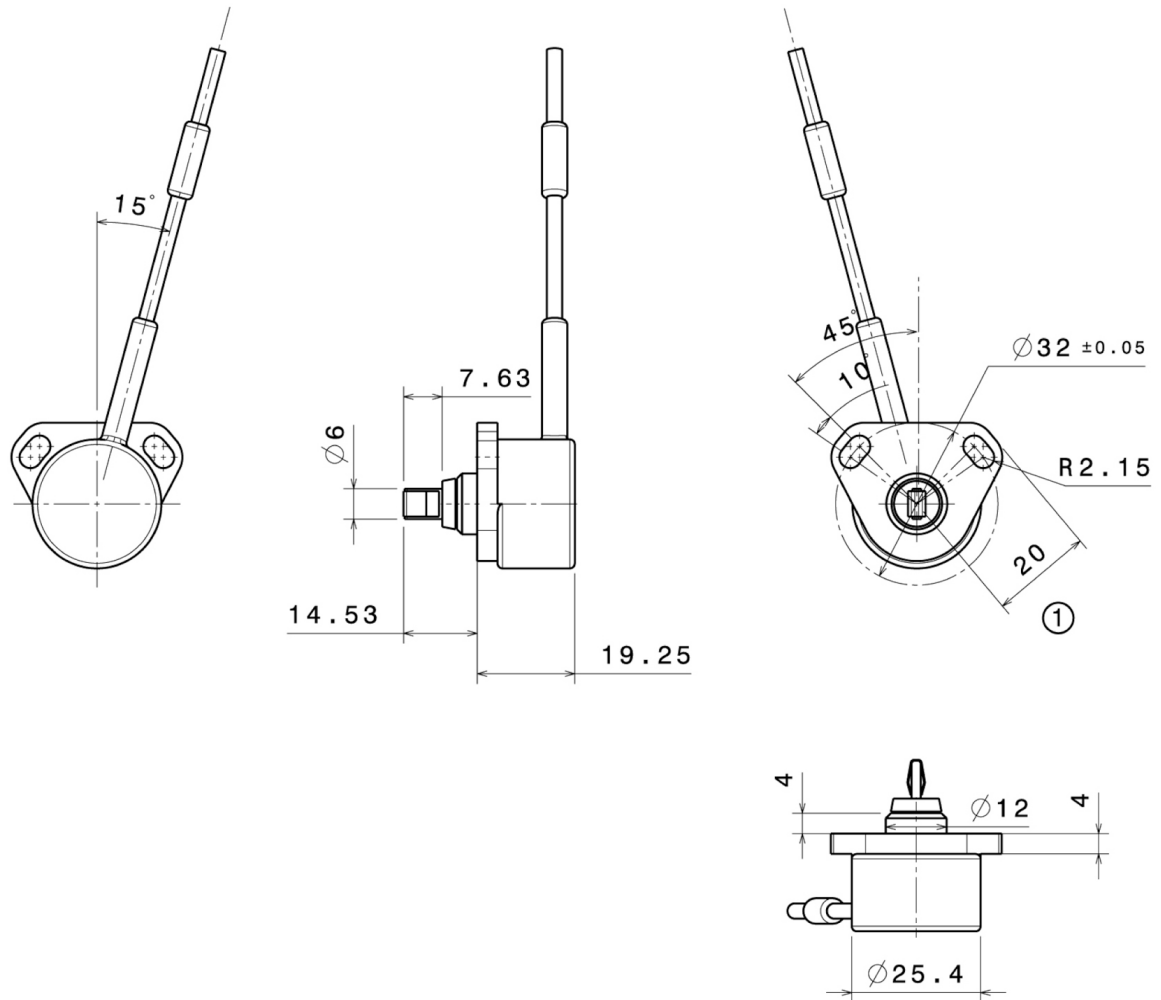
The sensor is not intended to be used for safety related applications without appropriate measures for signal validation in the application system.

Ordering Information

Rotary Position Sensor Mini-RP 100-M

Order number **B 261 209 587-01**

Dimensions



Represented by:

Europe:
 Bosch Engineering GmbH
 Motorsport
 Robert-Bosch-Allee 1
 74232 Abstatt
 Germany
 Tel.: +49 7062 911 9101
 Fax: +49 7062 911 79104
 motorsport@bosch.com
 www.bosch-motorsport.de

North America:
 Bosch Engineering North America
 Motorsport
 38000 Hills Tech Drive
 Farmington Hills, MI 48331-3417
 United States of America
 Tel.: +1 248 876 2977
 Fax: +1 248 876 7373
 motorsport@bosch.com
 www.bosch-motorsport.com

Latin America:
 Robert Bosch Ltda
 Motorsport
 Av Juscelino Kubitschek de
 Oliveira 11800
 Zip code 81460-900
 Curitiba - Parana
 Brasilia
 Tel.: +55 41 3341 2057
 Fax: +55 41 3341 2779

Asia-Pacific:
 Bosch Engineering Japan K.K.
 Motorsport
 18F Queen's Tower C, 2-3-5 Minato Mirai
 Nishi-ku, Yokohama-shi
 Kanagawa 220-6218
 Japan
 Tel.: +81 45 650 5610
 Fax: +81 45 650 5611
 www.bosch-motorsport.jp

Australia, New Zealand and South Africa:
 Robert Bosch Pty. Ltd
 Motorsport
 1555 Centre Road
 Clayton, Victoria, 3168
 Australia
 Tel.: +61 (3) 9541 3901
 motor.sport@au.bosch.com