



Rotary Potentiometer RP 345-M



- ▶ Rotational movement measurement
- ▶ Measurement range: 0 to 345°
- ▶ Robust aluminum housing
- ▶ 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 is made of shock resistant aluminum. The internal is made of high temperature resistant synthetic material. 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 very tough aluminum housing.

Application

Application	0 to 345°
Operating temperature range	-40 to 150°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
Maximal power supply	42 W
Total resistance	5 k Ω \pm 20 %
Current I_S	1 μ A
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.	
Redundancy	No

Connectors and Wires

Connector	ASL 6-06-05PA-HE
Mating connector	ASL 0-06-05SA-HE
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.

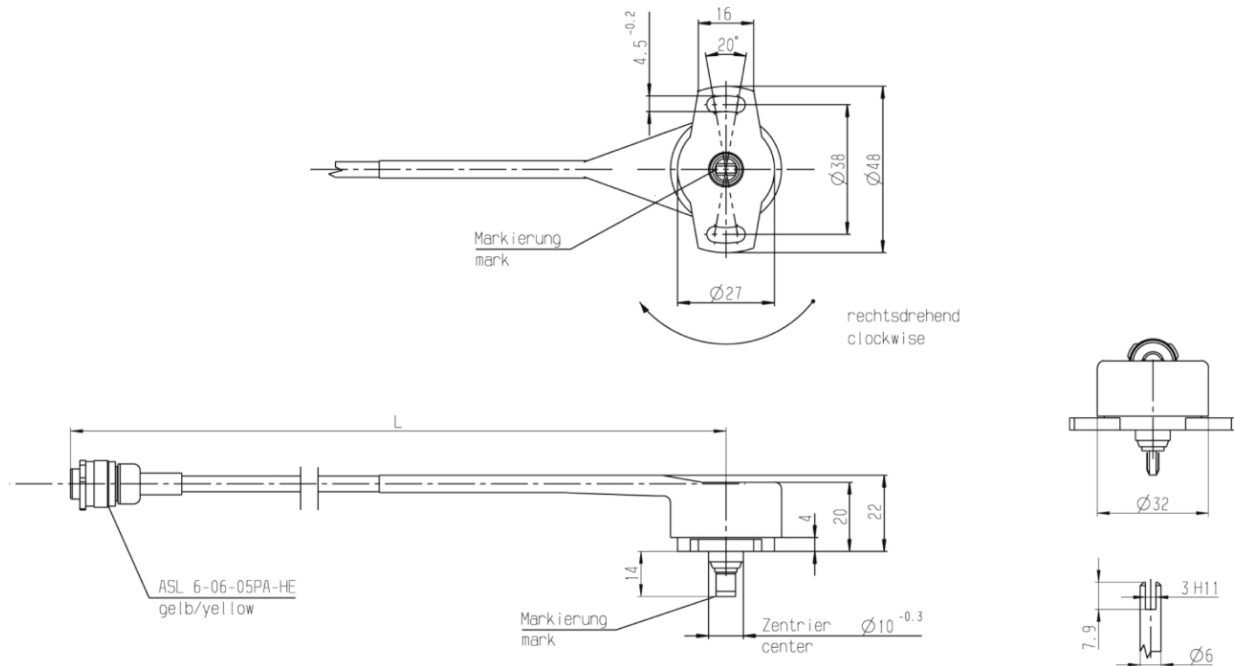
Each mounting orientation is possible.

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

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.

Dimensions



Ordering Information

Rotary Potentiometer RP 345-M

F 01T A21 400

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