0802-0100-01MSN18041110

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Specification sheet

ROHEVEL-PRT3201

4 ... 20 mA/HART - 2wire

Radar sensor for continuous level measurement of liquids



Application area

The ROHEVEL-PRT3201 is a radar sensor for continuous level measurement of aggressive liquids. It is particularly suitable for level measurement in vessels with small process fitting and under simple process conditions. The slim rod antenna enables the installation in small vessel openings.

Feature and benefit

Maintenance-free

Maintenance-free operation thanks to non-contact measuring principle

Availability

High plant availability, because wear and maintenance free

Reliability

Reliable measurement even for changing product and process condition

Function

Measuring system operates based on the time-of-flight method (ToF). It measures the distance from the reference point (process connection) to the product surface. Radar impulses are emitted by an antenna, reflected off the product surface and received again by the radar system. The time from emission to reception of the signals is proportional to the level in the vessels. A special time stretching procedure allows reliable and precise measurement of the extremely short signal running times.

Technical data

0~35m Measuring range Sample frequency 54Hz Response time <2s Resolution 1mm Deviation ±10mm Repeatability ±5mm 6.3GHz Frequency -40 °C ~ 70 °C Ambient temperature -40 °C ~ 150 °C Process temperature

Process pressure -1.0 kgf/cm² ~ 3 kgf/cm²

Protect level IP67

Material

The wetted parts of the instrument are made of PTFE. The process seal is made of FKM.

Housing versions

The housings are available as double chamber version in plastic, stainless steel or aluminium. They are available with protection ratings up to IP 67 (1 bar).

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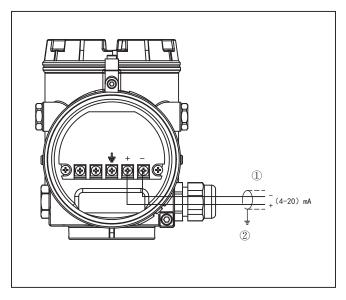
Electronic versions

The instruments are available in different electronics versions. 4 ... 20 mA/HART in two and four-wire version with 24VDC and four-wire with 220VAC.

Operation

The adjustment of the instrument is carried out via the Lcd display, Tank side display and Tank side hub.

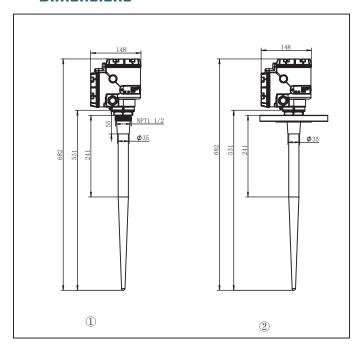
Electrical connection



Electronics and terminal compartment, double chamber housing

- 1 Voltage supply/Signal output
- 2 Ground terminal for connection of the cable screen

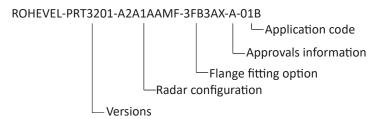
Dimensions



Dimensions ROHEVEL-PRT3201

- 1 Threaded version G11/2
- 2 Flange version DN 80

How to order



Approval

- A None
- B Ex ia IIC T6 Ga
- C Ex d ia [ia Ga] IIC T6 Gb
- D ATEX II 1/2G Ex ia IIC T6
- E ATEX II 1/2G Ex d (ia) IIC T6

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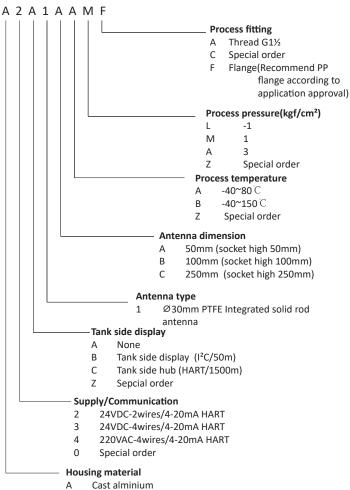
Radar configuration

В

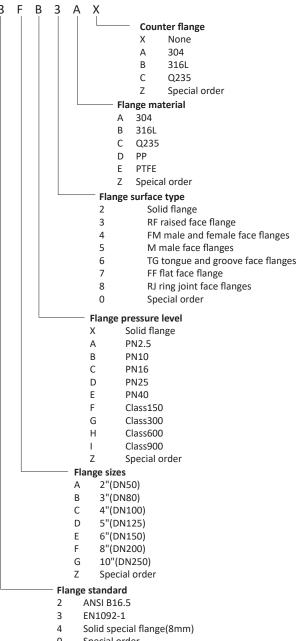
Ζ

Stainless steel

Special order



Flange fitting option



Special order