

## Specification sheet

# ROHEVEL-PRT3203

4 ... 20 mA/HART - 2wire

Radar sensor for continuous level measurement of liquids



## Application area

The ROHEVEL-PRT3203 is a radar sensor for continuous level measurement of aggressive liquids under difficult process conditions. It is suitable for applications in storage tanks, dosing vessels or reactors. The encapsulated antenna system protects against pollution and ensures a maintenance-free permanent operation.

## 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 independent of process conditions

## 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

Measuring range	0 ~ 70m
Sample frequency	54Hz
Response time	<2s
Resolution	1mm
Deviation	±10mm
Repeatability	±5mm
Frequency	6.3GHz
Ambient temperature	-40 °C ~ 70 °C
Process temperature	-40 °C ~ 150 °C
Process pressure	-1.0 kgf/cm <sup>2</sup> ~ 2 kgf/cm <sup>2</sup>
Protect level	IP67

## Material

The wetted parts of the instrument are made of 316L and 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).

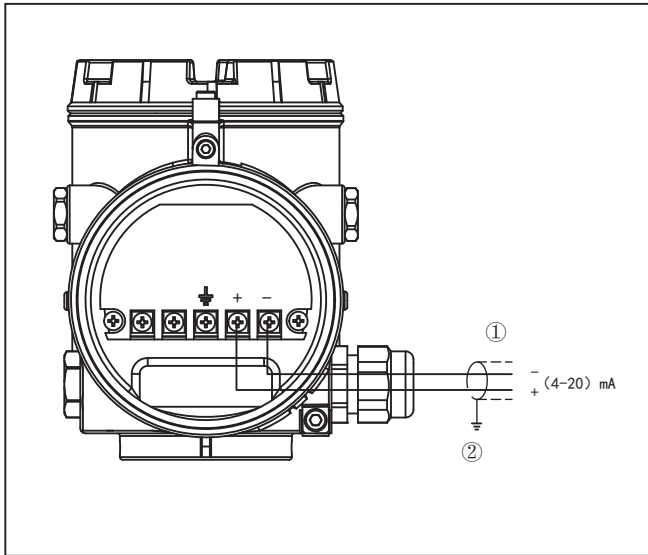
## Electronic versions

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

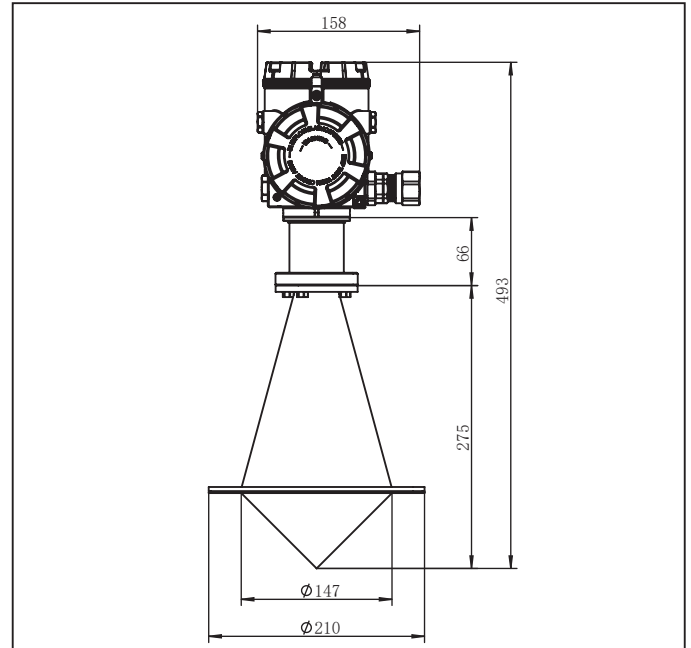


Electronics and terminal compartment, double chamber housing

1 Voltage supply/Signal output

2 Ground terminal for connection of the cable screen

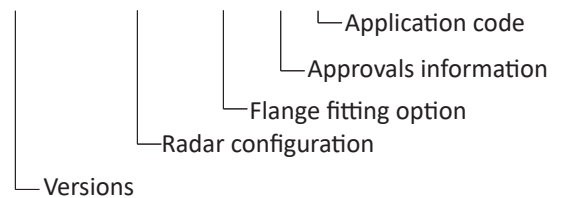
## Dimensions



Dimensions ROHEVEL-PRT3203

## How to order

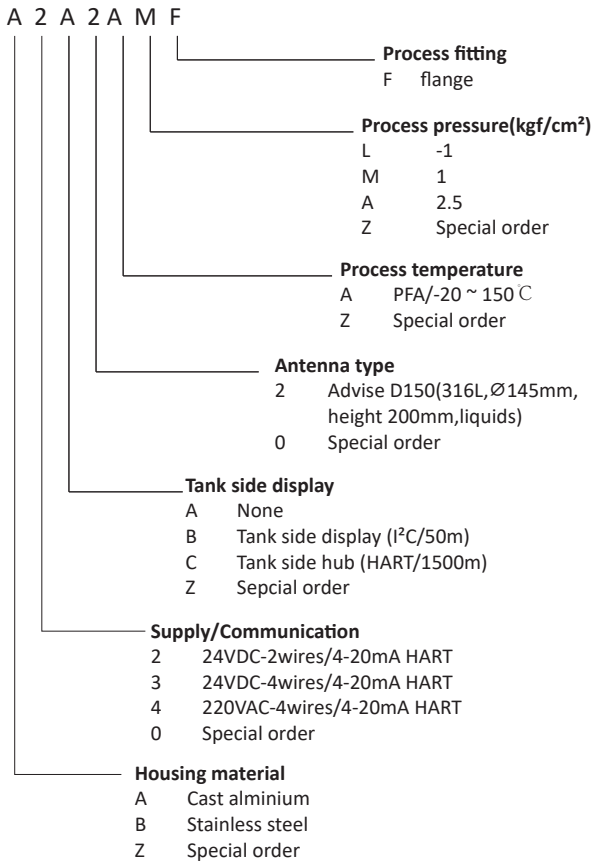
ROHEVEL-PRT3203-A2A2AMF-3FB3AX-A-01B



## 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

## Radar configuration



## Flange fitting option

