

ROHEVEL-RFS22

Radio frequency conductance level sensor for non-corrosive liquid and solid under high temperature



Application

The RF capacitive level sensor is used for level detection in silos, tanks and bunkers, both limit detection and continuous measurement. These instruments are typically used in all industry and are capable of measuring liquids as well as solid with high temperature.

Features and benefit

- Highly suitable for liquid and bulk solid
- Without moving parts
- Good capacity of anti-interference
- Real time display of capacitance value
- Field-selectable failsafe

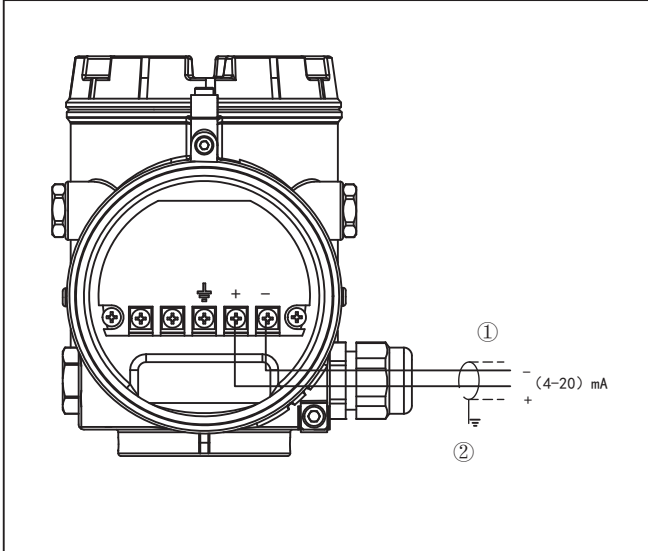
Function

RF Capacitance level sensor operate on the basic principle of the variation of the electrical capacity or capacitance of a capacitor formed by the sensor, vessel wall and dielectric material. A capacitor is made up of two conductive plates which are separated from each other by a dielectric. The storage capability of a capacitor defined constant of the material between the plates: $C = \epsilon A / d$.

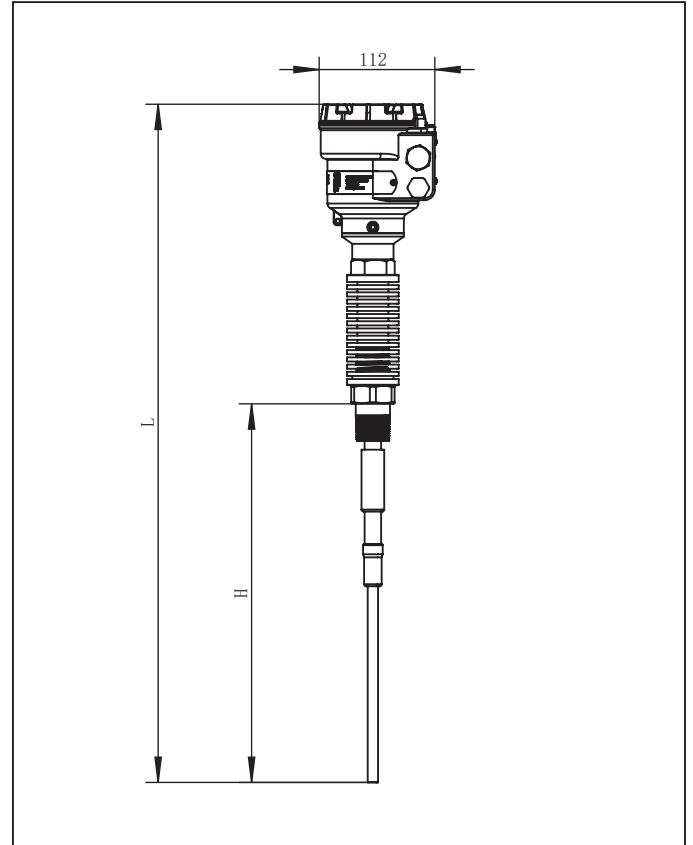
Technical data

Application	Liquid, solid
Power supply	24VDC/220VAC
Output	DPDT 220VAC 3A
Power	<1W
Delay	1~3s
Resolution	0.1PF
Ambient temperature	-40 °C ~ 70 °C
Process temperature	-40 °C ~ 400 °C
Process pressure	-1.0 kgf/cm ² ~ 16 kgf/cm ² <16 kgf/cm ² (400 °C)
Process fitting	Thread or flange
Antenna material	SS316L
Protect level	IP67
Electric entry	2XM20*1.5 (cable diameter 9~13mm)
Explosion proof rate	Exd IIC T6 Gb

Electrical connection

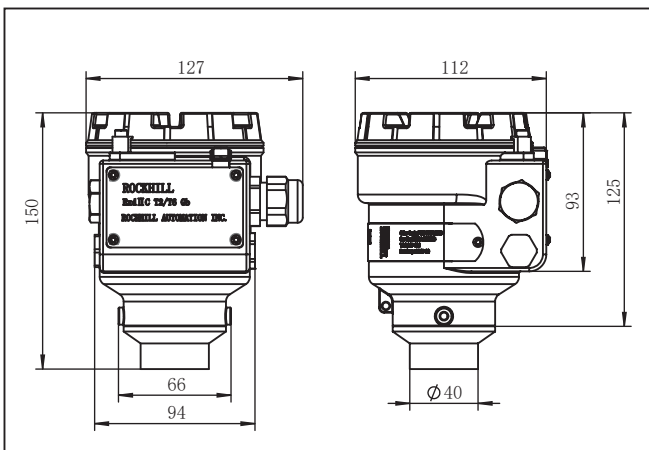


Electronics and terminal compartment, double chamber housing
 1 Voltage supply/Signal output
 2 Ground terminal for connection of the cable screen



Dimensions ROHEVEL-RFS22 with standard probe

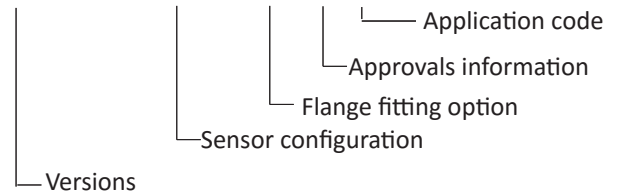
Dimensions



Dimensions ROHEVEL-RFS22 housing

How to order

**ROHEVEL-
RFS22 -A2LA1B50X1AA-3FB3AX-A-01B**



Approval

- A None
- C Ex ia IIC T6 Ga

Sensor configuration

A 2 L A 2 B XXXX X 1 M F

Process fitting

- A Thread G1½"
- Z Special thread order
- F Flange

Process pressure(kgf/cm²)

- L M A B C D Z
- 1 1 2.5 6 16 20 Special order

Process temperature

- 2 -40 ~ 80°C (Process pressure<16kgf/cm²)
- 3 -40 ~ 230°C (Process pressure<10kgf/cm²)
- 4 -40 ~ 400°C (Process pressure<1kgf/cm²)
- Z Special order

Probe protection

- X None
- Z Insulated

Probe length

XXXX in millimeter

Shielded pole length

- A 150mm
- B 250mm
- Z Special order

Probe type

- 1 Flat
- 2 Rope
- 3 Double electrode(for non-metallic vessel or media with low dielectric constant)
- 4 Rod

Probe material

- A SS304
- B SS316L
- Z Sepcial order

Measuring media

- L Liquid
- S Solid

Power supply/Output

- 2 24VDC DPDT output
- 3 220VAC DPDT output

Housing material

- A Cast alminium
- Z Special order

Flange fitting option

3 F B 3 A X

Counter flange

- X None
- A 304
- B 316L
- C Q235
- Z Special order

Flange material

- A 304
- B 316L
- C Q235
- D PP
- E PTFE
- Z Speical order

Flange surface type

- 2 Solid flange
- 3 RF raised face flange
- 4 FM male and female face flanges
- 5 M male face flanges
- 6 TG tongue and groove face flanges
- 7 FF flat face flange
- 8 RJ ring joint face flanges
- 0 Special order

Flange pressure level

- X Solid flange
- A PN2.5
- B PN10
- C PN16
- D PN25
- E PN40
- F Class150
- G Class300
- H Class600
- I Class900
- Z Special order

Flange sizes

- A 2"(DN50)
- B 3"(DN80)
- C 4"(DN100)
- D 5"(DN125)
- E 6"(DN150)
- F 8"(DN200)
- G 10"(DN250)
- Z Special order

Flange standard

- 2 ANSI B16.5
- 3 EN1092-1
- 4 Solid special flange(8mm)
- 0 Special order