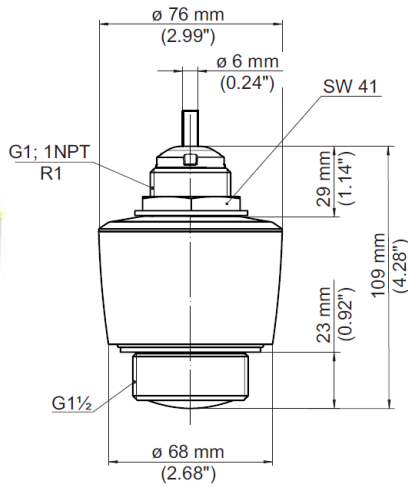


RLS-C21

Radar level measurement in liquids



The RLS-C21 is the ideal sensor for all applications in water and sewage water applications. It is particularly appropriate for applications where high accuracy is required. It achieves excellent signal focusing.

The RLS-C21 radar level sensor is suitable for use in pump stations and storm water overflow tanks, for flow measurement in open flumes as well as for gauge measurement for water processing.

Measurement principle

The RLS-C21 emits extremely short microwave pulses, thanks to the antenna system, in the direction of the measured product, reflected by the product surface and received back again by the antenna system. They propagate at the speed of light. The time from emission to reception of the signals is proportional to the distance between the sensor and the water.

A special time stretching procedure allows reliable and precise measurement of the extremely short signal running times. Maintenance-free operation due to non-contact 80 GHz radar technology.

The IP68 protection rating of the instrument allows outdoor mounting.

The RLS-C21 is compatible with these loggers and monitors:

- IFQ MONITOR
- IFQ LOGGER/RTQ-2000 (with RAV-0090 connector)
- EASYplus-Logger

Technical Specifications

Level measurement

Method

Radar

Measuring range

0,01 to 20 m (0.03 to 65.62 ft)

Accuracy

±2 mm (±0.08") of reading

Resolution

1 mm (0.04")

Frequency range

W-band (80 GHz technology)

Process pressure

-1 ... +3 bar (-100 ... +300 kPa/-
14.5 ... +43.51 psi)

Signal output

4-20 mA two-wire

Material

Housing

Plastic PVDF

Protection class

IP68

Process fitting

Thread G1½

Sensor cable

Material

Polyurethane jacketed

Length

Standard: 10 m (32.81ft)

Optional: 20 m (65.62 ft), 30 m
(98.43 ft) or length as needed up to
100 m (328.08 ft)

Environmental Conditions

Process temperature

-40° to +80° C (-40° to +176° F)

Certifications

ATEX

IEC

CE

Specifications are subject to change without notice

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