LENNTECH
WATER TREATMENT SOLUTIONS

Microwave barrier transmitter Soliwave FQR56

Transmitterfor non-contact point level detection in bulk solids

Benefits:

- Highly reliable measurement due to flush-mounted installation and possible non-contact installation as well as indication of the signal strength on the receiver
- Mechanical robust solution ensures cost savings over the whole life cycle of the product: No wear and tear, process-wetted ceramic sensor diaphragm (optional), long serviceable life, maintenance free
- Electronics housing can be rotated by 360°, allowing adjustment into optimum position after installation
- Direct connection of the supply voltage (transmitter and receiver separately or together)
- Mechanically compatible to FQR50/FDR50 microwave barrier, existing process connections can continue to be used; likewise, accessories such as adapter flanges, installation brackets and sight glasses can continue to be used

Specs at a glance

- **Process temperature** Non-contact installation: any Within installation: -40°C...+70°C (-40°F...+158°F) With high temperature adapter: up to +450°C (+842°F)
- **Process pressure / max. overpressure limit** Non-contact installation: any Within installation: 0.5 bar...6.8 bar (7.2 psi...99 psi) abs. With high pressure adapter: up to +21 bar (+305 psi) abs.
- **Min. density of medium** Solid weight: > 10 g/l

Field of application: The Soliwave FQR56 microwave barrier uses a contact-free procedure for detection of point levels. It can be installed in containers, conduits, shafts or on free fall shafts. It is possible to take a

measurement through non-metallic container materials from the outside. Suitable as point level switch for controlling and counting all types of bulk solids. It interacts with the Soliwave FDR56 receiver.

Features and specifications

Point Level / Solids

Measuring principle

Microwave barrier

Characteristic / Application

Transmitter
Non-contact point level detection and flow monitoring
Detecting, counting and positioning of objects
Monitoring of material transfer points
Detection and analysis of deposits and contamination
Installation:
Non-contact installation (transmission window) or front-flush installation (contact)

Specialities

Measurement range: max. 100 m

Supply / Communication

85 ... 253VAC
20 ... 30 VDC/ 20 ... 60 VAC

Ambient temperature

-40°C...+70°C
(-40°F...+158°F)

Process temperature

Non-contact installation: any
Within installation:
-40°C...+70°C (-40°F...+158°F)
With high temperature adapter:
up to +450°C (+842°F)

Point Level / Solids

Process pressure / max. overpressure limit

Non-contact installation: any
Within installation:
0.5 bar...6.8 bar (7.2 psi...99 psi) abs.
With high pressure adapter:
up to +21 bar (+305 psi) abs.

Min. density of medium

Solid weight: > 10 g/l

Main wetted parts

Non-contact installation:
no wetted parts
Within installation:
316Ti or Aluminium;
PTFE or Ceramic

Process connection

1-1/2" R, 1-1/2" G, 1-1/2" NPT

Process connection hygienic

Non-contact installation

Certificates / Approvals

ATEX, IEC Ex, CSA C/US

Design approvals

EN10204-3.1

Options

Sight glass
High temperature adapter
High pressure adapter
Installation bracket
FAR50, FAR51, FAR52, FAR53, FAR54, FAR55

Components

Transceiver: FDR56

Point Level / Solids

Application limits

Solid weight: < 10 g/l

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