

Microwave barrier transceiver

Soliwave FDR56

Transceiver for non-contact point level detection in bulk solids



More information and current pricing:

www.casc.endress.com/FDR56

Benefits:

- Highly reliable measurement due to flush-mounted installation and possible non-contact installation as well as indication of the signal strength on the transceiver
- 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 (emitter 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 HT-Adapter: up to +450 °C (+842 °F)
- **Process pressure absolute / max. overpressure limit** Non-contact installation: any Within installation: 0.5 bar ... 6.8 bar (7.2 psi ... 99 psi) abs. With HD-Adapter: up to +21 bar (+305 psi) abs.
- **Min. density of medium** Solid weight: > 10 g/l

Field of application: The Soliwave FDR56 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 FQR56 emitter.

Features and specifications

Point Level / Solids

Measuring principle

Microwave barrier

Characteristic / Application

Transceiver

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 ... 253 VAC

20 ... 60 VDC/ 20 ... 30 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 HT-Adapter:

up to +450 °C (+842 °F)

Point Level / Solids**Process pressure absolute / max. overpressure limit**

Non-contact installation: any

Within installation:

0.5 bar ... 6.8 bar (7.2 psi ... 99 psi) abs.

With HD-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

Communication

Relays SPDT

Solid-State-Relay

4 ... 20 mA

Certificates / Approvals

ATEX, CSA C/US, IEC Ex

Design approvals

EN10204-3.1

Point Level / Solids

Options

Sight glass

High temperature adapter

High pressure adapter

Installation bracket

FAR50, FAR51, FAR52, FAR53, FAR54, FAR55

Components

Transmitter: FQR56

Application limits

Solid weight: < 10 g/l

More information www.casc.endress.com/FDR56