

Microwave barrier receiver

Soliwave FDR57

Transceiver for non-contact point level detection and bulk flow monitoring



More information and current pricing:

www.cz.endress.com/FDR57

Benefits:

- Simple assembly with R 1½, 1½ NPT thread or G 1½ (with lock nut)
- Mechanically robust construction 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
- Mechanically compatible to FQR50/FDR50 and FQR56/FDR56 microwave barrier, existing process connections can be used; likewise, accessories such as adapter flanges, installation brackets and sight glasses can be used again
- Increased safety of the point level monitoring by optional integrated bulk flow monitoring
- Measuring principle almost independent of the process properties
- Can also be used in difficult applications, where other measurement methods fail
- Easy operation via the Nivotester FTR525 with graphical display saves time and reduces costs

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 microwave barrier uses a non-contact procedure for detection of point levels and bulk flow (flow / no flow,

trend). The device is also suitable for detecting and counting objects, detection of deposits as well as monitoring of filling processes and material transfer points. It can be installed in containers, conduits, hoppers, filling stations, shafts, filters or on free fall shafts. It is possible to take a measurement through non-metallic container materials from the outside.

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

With optional integrated bulk flow monitoring

Parallel mode with up to 5 channels

Detection range limit: max. 100 m

Detection range flow: max. 10 m, depending on bulk solids

Supply / Communication

Via process transmitter with control unit Nivotester FTR525

Ambient temperature

-40 °C...+70 °C

(-40 °F...+158 °F)

Point Level / Solids**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

Main wetted parts

Non-contact installation:

no wetted parts

Within installation:

316Ti, PTFE or Ceramic

Process connection

Threads:

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

Communication

Via process transmitter with control unit Nivotester FTR525

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: FQR57

Process transmitter: FTR525

Application limits

Solid weight: < 10 g/l

More information www.cz.endress.com/FDR57