

# Microwave barrier receiver

## Soliwave FDR57

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



More information and current pricing:

[www.be.endress.com/FDR57](http://www.be.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)

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**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)

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**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.

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**Min. density of medium**

Solid weight: &gt; 10 g/l

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**Main wetted parts**

Non-contact installation:

no wetted parts

Within installation:

316Ti, PTFE or Ceramic

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**Process connection**

Threads:

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

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**Communication**

Via process transmitter with control unit Nivotester FTR525

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**Certificates / Approvals**

ATEX, CSA C/US, IEC Ex

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**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

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### Components

Transmitter: FQR57

Process transmitter: FTR525

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### Application limits

Solid weight: < 10 g/l

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