Microwave barrier transceiver Soliwave FDR16

Ultra-compact microwave barrier for non-contact point level detection, piece goods counting and object detection

More information and current pricing:
www.endress.com/FDR16

Benefits:

- Non-contact measuring principle - detection almost independent of process properties
- High security - permanent self-diagnosis and full self-test
- First microwave barrier with IP69 protection classification
- Meets the requirements of EU 1935/2004
- Very simple and cost-effective commissioning
- Safe detection - non-contact measuring method guarantees wear-free and maintenance-free continuous operation
  Robust design - housing made of stainless steel

Specs at a glance

- **Process temperature** Non-contact installation: any Within installation: −20 °C ... +60 °C (−4 °F ... +140 °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 HP-Adapter: up to +21 bar (+305 psi) abs.
- **Min. density of medium** Solid weight: > 10 g/l

Field of application: The Soliwave FDR16 is an ultra-compact transceiver for non-contact point level detection of bulk solids and liquids, as well as piece goods counting and object detection. The Soliwave FDR16 is used together with the FQR16. The microwave barrier works with a non-contact detection method and can also be used in applications with difficult-to-access or confined installation conditions due to its ultra-

compact design. For non-metallic container materials, measurement from the outside is possible.

Features and specifications

Point Level / Solids

Measuring principle
Microwave barrier

Characteristic / Application
Microwave barrier
Non-contact point level detection
(min/max, e.g. full and empty detection for overflow and dry run protection) for all types of bulk solids (from powdery to lumpy) and liquids, also in potentially
explosive atmospheres (dust Ex).
Detection, counting, and positioning of objects
Object detection on conveyor belts

Specialities
Detection range: max. 20 m

Supply / Communication
18 V ... 30 V DC,
Plug M12

Ambient temperature
-20 °C ... +60 °C (-4 ... +140 °F)

Process temperature
Non-contact installation: any
Within installation:
–20 °C ... +60 °C (–4 °F ... +140 °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 HP-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
Contact installation:
316L, PTFE

Process connection
ISO228-1: G1", G1-1/2"
ASME: NPT1-1/2"

Process connection hygienic
Non-contact installation

Communication
3-wire-DC-PNP,
2 DC-PNP-outputs

Certificates / Approvals
ATEX, IEC Ex

Design approvals
EN10204-3.1

Hygienic approvals
EG1935/2004

Point Level / Solids

Options

Mounting bracket
Counternut
Welding sleeve
Connection cable
Connecting cable
High-pressure adapter
High-temperature adapter
Extension for HT-adapter
Mounting flange
Sight glass fitting
FAR50, FAR51, FAR52, FAR54

Components

FQR16

Application limits

Solid weight: < 10 g/l

More information **www.endress.com/FDR16**

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