# Microwave barrier transceiver Soliwave FQR16

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



More information and current pricing: www.endress.com/FQR16

#### **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:  $-20 \,^{\circ}\text{C} \dots +60 \,^{\circ}\text{C} (-4 \,^{\circ}\text{F} \dots +140 \,^{\circ}\text{F})$  With HT-Adapter: up to +450 °C (+842 °F)
- Process pressure absolute / max. overpressure limit Noncontact 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 q/l

Field of application: The Soliwave FQR16 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 FQR16 is used together with the FDR16. The microwave barrier works with a noncontact detection method and can also be used in applications with difficult-to-access or confined installation conditions due to its ultracompact 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 °F ... +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

FDR16

#### **Application limits**

Solid weight: < 10 g/l

More information www.endress.com/FQR16

