# **Supplementary instructions**

# **Mounting bracket**

with 45° reflector for VEGAPULS WL 61





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# 1 For your safety

#### 1.1 Authorised personnel

All operations described in this operating instructions manual must be carried out only by trained specialist personnel authorised by the plant operator.

During work on and with the device the required personal protective equipment must always be worn.

#### 1.2 Appropriate use

The mounting bracket with 45° reflector is an accessory part for the VFGAPULS WI 61 radar sensor.

#### 1.3 Warning about incorrect use

Inappropriate or incorrect use of the instrument can give rise to application-specific hazards, e.g. vessel overfill or damage to system components through incorrect mounting or adjustment.

#### 1.4 General safety instructions

The safety information in the operating instructions manual of the respective sensor must be noted.

#### 1.5 Safety instructions for Ex areas

Take note of the Ex specific safety instructions for Ex applications. These instructions are attached as documents to the respective sensor with Ex approval and are part of its operating instructions manual.



# 2 Product description

# Scope of delivery

### 2.1 Configuration

The scope of delivery encompasses:

- Mounting bracket
- Fixing screws
- Documentation
  - This supplementary instructions manual

#### 2.2 Principle of operation

#### Area of application

Closed overflow basins often have only a narrow space between ceiling and water surface. The usual type of measurement setup for level measurement is difficult to apply in such cases.

In such cases, horizontal mounting of the sensor is recommended. The radar impulses must then be deflected via a 45° reflector to the water surface. This can be done with a simple reflector provided by the customer on site - e.g. a stainless steel sheet - or a mounting bracket with 45° reflector from VEGA's line of accessories.

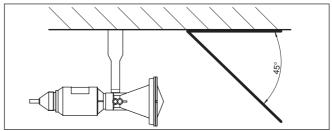


Fig. 1: Horizontal mounting via mounting strap and reflector provided by customer on site

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#### Note:

The reference plane mentioned in chapter "Technical data" of the operating instructions manual of VEGAPULS WL 61 (see following graphic) does not apply to this measurement setup.



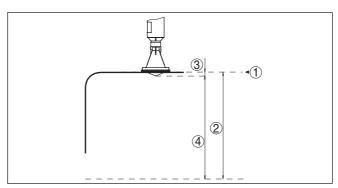


Fig. 2: Data of the input variable

- 1 Reference plane
- 2 Measured variable, max. measuring range
- 3 Antenna length
- 4 Utilisable measuring range

An offset value depending on the distance to the reflector has to be taken into account during adjustment.

The procedure is described in the following chapter of this supplementary instructions.



# 3 Setup

# 3.1 Mounting bracket with 45° reflector from the line of VEGA accessories

With this combination, the underside of the ceiling is the reference plane.

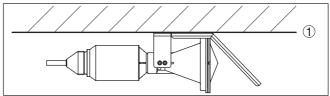


Fig. 3: Horizontal mounting via the mounting bracket with 45° reflector

1 Reference plane

Adjustment is carried out as described in the operating instructions of VEGAPULS WL 61.

### 3.2 Reflector provided by customer

To include the offset value during adjustment, proceed as follows:

 Mount sensor with reflector according to chapter "Principle of operation"

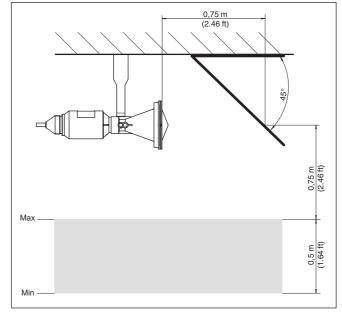


Fig. 4: Consideration of the offset value



- Enter measured distance for min. level as min. adjustment, e.g. 2.0 m
- 3. Determine distance between min. and max. level, e.g. 0.5 m
- 4. Calculate distance for the max. adjustment. In this example: 2.0 m 0.5 m = 1.5 m
- 5. Enter value as max. adjustment



# 4 Supplement

# 4.1 Technical data

#### **Materials**

Mounting bracket	316L
Fixing screws	316

### 4.2 Dimensions

### VEGAPULS WL 61, mounting bracket with 45° reflector

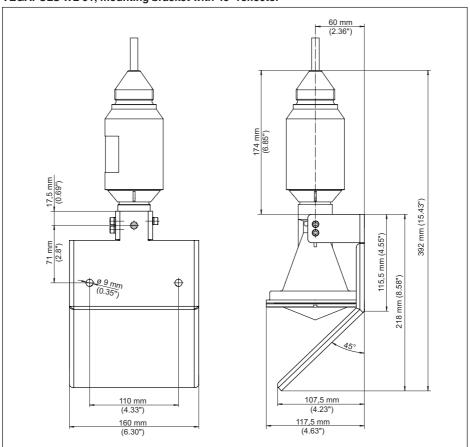
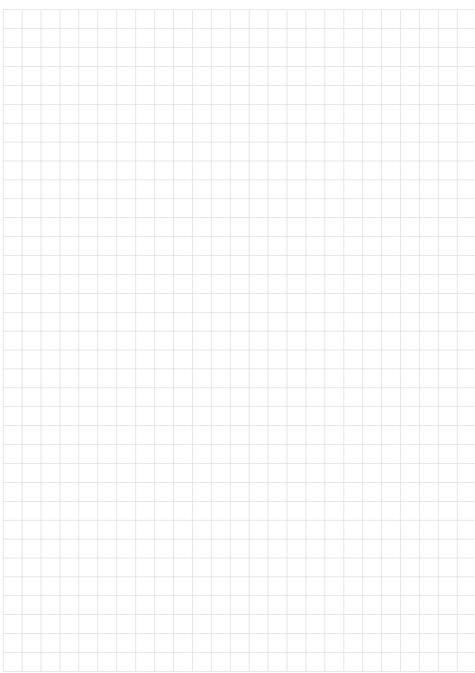


Fig. 5: VEGAPULS WL 61, mounting bracket with 45° reflector





# Printing date:



All statements concerning scope of delivery, application, practical use and operating conditions of the sensors and processing systems correspond to the information available at the time of printing.

Subject to change without prior notice

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