# **Operating Instructions**

# **Process module**

**VEGAPULS 6X** 





Document ID: 1008531







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## Safety instructions for Ex areas



Please note the Ex-specific safety information for installation and operation in Ex areas. These safety instructions are part of the operating instructions and come with the Ex-approved instruments.

Editing status: 2022-02-15



### 1 About this document

### 1.1 Function

This instruction provides all the information you need for mounting, connection and setup as well as important instructions for maintenance, fault rectification, the exchange of parts and the safety of the user. Please read this information before putting the instrument into operation and keep this manual accessible in the immediate vicinity of the device.

## 1.2 Target group

This operating instructions manual is directed to trained personnel. The contents of this manual must be made available to the qualified personnel and implemented.

## 1.3 Symbols used



#### Document ID

This symbol on the front page of this instruction refers to the Document ID. By entering the Document ID on <a href="www.vega.com">www.vega.com</a> you will reach the document download.



**Information**, **note**, **tip**: This symbol indicates helpful additional information and tips for successful work.



**Note:** This symbol indicates notes to prevent failures, malfunctions, damage to devices or plants.



**Caution:** Non-observance of the information marked with this symbol may result in personal injury.



**Warning:** Non-observance of the information marked with this symbol may result in serious or fatal personal injury.



**Danger:** Non-observance of the information marked with this symbol results in serious or fatal personal injury.



### Ex applications

This symbol indicates special instructions for Ex applications.

• Lis

The dot set in front indicates a list with no implied sequence.

1 Sequence of actions

Numbers set in front indicate successive steps in a procedure.



#### Disposal

This symbol indicates special instructions for disposal.



# 2 For your safety

## 2.1 Authorised personnel

All operations described in this documentation must be carried out only by trained, qualified personnel authorised by the plant operator.

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

## 2.2 Appropriate use

Electronics module, emitting electronics, housing or process components are replacement components for existing sensors.

### 2.3 Environmental instructions

Protection of the environment is one of our most important duties. That is why we have introduced an environment management system with the goal of continuously improving company environmental protection. The environment management system is certified according to DIN EN ISO 14001.

Please help us fulfil this obligation by observing the environmental instructions in this manual:

- Chapter " Packaging, transport and storage"
- Chapter " Disposal"



# 3 Product description

## 3.1 Configuration

### Scope of delivery

The scope of delivery encompasses:

- Process module
- Documentation
  - This operating instructions manual

## 3.2 Principle of operation

### **Application area**

The process component is suitable as replacement unit for the following sensors:

VEGAPULS 6X

# 3.3 Packaging, transport and storage

### **Packaging**

Your instrument was protected by packaging during transport. Its capacity to handle normal loads during transport is assured by a test based on ISO 4180.

The packaging of standard instruments consists of environment-friendly, recyclable cardboard. For special versions, PE foam or PE foil is also used. Dispose of the packaging material via specialised recycling companies.

### Transport

Transport must be carried out in due consideration of the notes on the transport packaging. Nonobservance of these instructions can cause damage to the device.

### Transport inspection

The delivery must be checked for completeness and possible transit damage immediately at receipt. Ascertained transit damage or concealed defects must be appropriately dealt with.

### Storage

Up to the time of installation, the packages must be left closed and stored according to the orientation and storage markings on the outside.

Unless otherwise indicated, the packages must be stored only under the following conditions:

- Not in the open
- Dry and dust free
- Not exposed to corrosive media
- Protected against solar radiation
- Avoiding mechanical shock and vibration

# Storage and transport temperature

- Storage and transport temperature see chapter " Supplement -Technical data - Ambient conditions"
- Relative humidity 20 ... 85 %

### Lifting and carrying

With instrument weights of more than 18 kg (39.68 lbs) suitable and approved equipment must be used for lifting and carrying.

**Tools** 



# 4 Mounting

## 4.1 Mounting preparations

The following tools are required for dismounting the existing and mounting the spare process component:

- Magnetic screwdriver Torx size T10 or slot 4
- pliers for locking ring (version axle)
- Screwdriver, slot size 1
- Allen wrench size 3 (for stainless steel single chamber housing as well as stainless steel and aluminium double chamber housing)

# 4.2 Dismounting steps previous process component

Dismounting the electronics module

The electronics module is located in the electronics compartment. The below illustrations show the respective position of the electronics compartment in a single or double chamber housing.

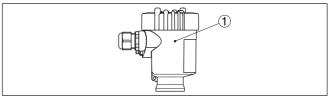


Fig. 1: Single chamber housing

1 Position of the electronics compartment

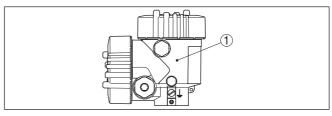


Fig. 2: Double chamber housing

1 Position of the electronics compartment

#### Proceed as follows:

- 1. Switch off voltage supply
- Remove the housing lid from the electronics compartment, or from the terminal compartment of the aluminium double chamber housing, as the case may be
- Disconnect the connection cables according to the operating instructions manual of the respective sensor
- Loosen the two holding screws with a screwdriver (Torx size T 10 or slot size 4)



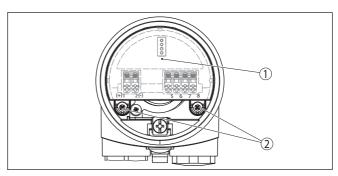


Fig. 3: Loosen the holding screws

- 1 Electronics module
- 2 Screws (2 pcs.)
- 5. Pull the electronics out by holding the opening levers.

## Remove the housing

### Proceed as follows:

- Depending on the housing, loosen the locking screw on the base with an Allen key.
- Loosen the screws of the limit bracket and the locking ring with a Phillips screwdriver size 1

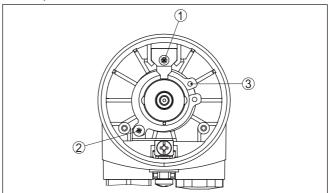


Fig. 4: Position of the screws and locking ring in the example of the plastic housing

- 1 Screw check angle
- 2 Screw locking ring
- 3 Retaining ring
- 3. Open the locking ring with the pliers and remove it
- 4. Depending on the housing, loosen locking screw on the base



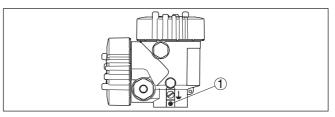


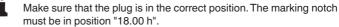
Fig. 5: Double chamber housing

- 1 Position of the screw
- 5. Remove the housing

# 4.3 Mounting steps new process component

- 1. Place the housing onto the new process component.
- Depending on the housing, tighten the locking screw on the base with an Allen key
- 3. Insert the locking ring with the pliers
- 4. Tighten the screws of the limit angle and the locking ring with a Phillips screwdriver size 1
- 5. Insert the electronics module carefully.

### Information:



- Tighten the two holding screws with a screwdriver (Torx size T 10 or slot size 4)
- 7. Connect the connection cables according to the operating instructions manual of the respective sensor
- 8. Screw the housing lid back on

The process component is exchanged.



As a rule, the exchange of the process component must be documented internally when used in Ex applications.



# 5 Setup

# 5.1 Setup

Setup is carried out according to the operating instructions manual of the respective sensor.



### 6 Maintenance

# 6.1 How to proceed if a repair is necessary

You can find an instrument return form as well as detailed information about the procedure in the download area of our homepage. By doing this you help us carry out the repair quickly and without having to call back for needed information.

In case of repair, proceed as follows:

- Print and fill out one form per instrument
- · Clean the instrument and pack it damage-proof
- Attach the completed form and, if need be, also a safety data sheet outside on the packaging
- Ask the agency serving you to get the address for the return shipment. You can find the agency on our homepage.



## 7 Dismount

# 7.1 Dismounting steps

Take note of chapters " *Mounting*" and " *Connecting to voltage supply*" and carry out the listed steps in reverse order.

## 7.2 Disposal



Pass the instrument on to a specialised recycling company and do not use the municipal collecting points.

Remove any batteries in advance, if they can be removed from the device, and dispose of them separately.

If personal data is stored on the old device to be disposed of, delete it before disposal.

If you have no way to dispose of the old instrument properly, please contact us concerning return and disposal.



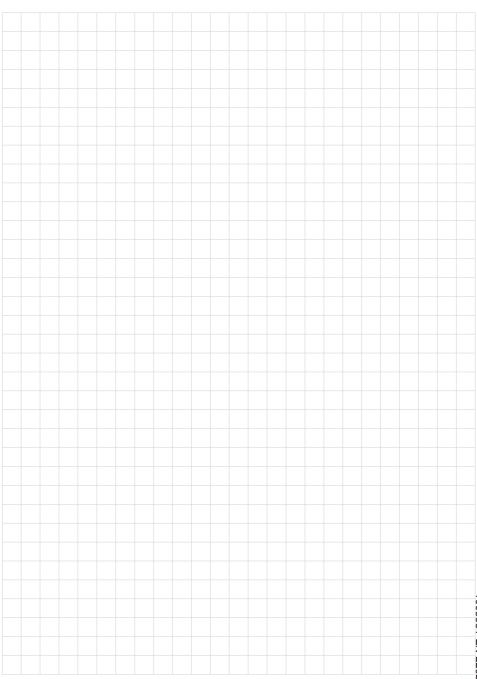
# 8 Supplement

# 8.1 Technical data

# Technical data

are stated in the operating instructions manual of the respective sensor.





# 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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1008531-EN-220215