

## Supplementary instructions

### VEGADIS adapter

For connection of an external display and adjustment unit or a slave sensor



Document ID: 45250



**VEGA**

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## **1 For your safety**

### **1.1 Appropriate use**

VEGADIS-Adapter is an accessory part for plics® sensors. It is used for connection of an external display and adjustment unit or a slave sensor.

### **1.2 General safety instructions**

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

### **1.3 Safety instructions for Ex areas**

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

## 2 Product description

### 2.1 Configuration

#### Scope of delivery

The scope of delivery encompasses:

- VEGADIS-Adapter
- Ready-made connection cable (optional)
- Documentation
  - This operating instructions manual

#### Versions

The VEGADIS-Adapter consists of a contact plate, a connection cable with mini plug connector and an M12 x 1 plug. It is available in two different versions:

- For 4 ... 20 mA/HART sensors
- For PA/FF sensors

The optional, ready-made connection cable with M12 x 1 socket is available in different lengths and materials.

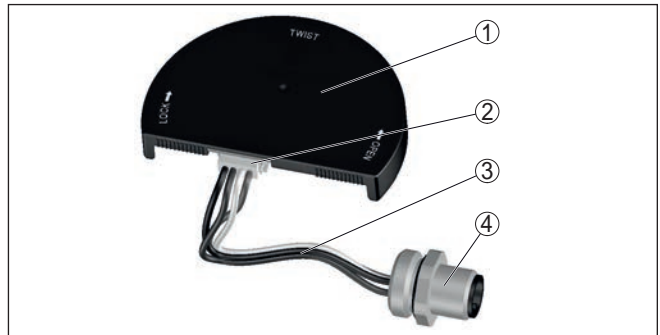


Fig. 1: Configuration VEGADIS-Adapter

- 1 Contact plate
- 2 Mini plug connector
- 3 Connection cable
- 4 M12 x 1 plug

### 2.2 Principle of operation

The VEGADIS-Adapter uses the contact pins of the electronics module for the display and adjustment module PLICSCOM. Thus it is possible to connect external instruments to the sensor, even if the terminals of the electronics module are already occupied by the connection cables to the second housing chamber.

#### Connection external display and adjustment unit

The VEGADIS-Adapter enables the connection of an external display and adjustment unit VEGADIS 61 or VEGADIS 81 to the following plics® sensors with double chamber housing:

- VEGAPULS series 60 (hardware from 2.0.0, software from 4.0.0)
- VEGAPULS 64, 69
- VEGAFLEX 80 series
- VEGABAR series 80

- VEGADIF 85

**Connection slave sensor** The VEGADIS-Adapter enables also the connection of a slave sensor to a VEGABAR series 80 sensor with double chamber housing in the versions:

- Additional current output
- Modbus and Levelmaster protocol



**Note:**

The previously mentioned versions of the master sensor are absolutely necessary for operation of a slave sensor via the VEGADIS-Adapter. The other versions of the VEGABAR 80 series with double chamber housing are not supported.

**Installation**

The VEGADIS-Adapter is inserted into the electronics compartment of the double chamber housing. The M12 x 1 plug is screwed into the housing wall instead of the blind plug.



**Note:**

The housing cover without inspection window still fits on the electronics compartment when the adapter is mounted in place.

Parallel use of the PLICSCOM display and adjustment module in the sensor and in the external display and adjustment unit is supported. However, simultaneous adjustment is not possible.

**Sensor parameter adjustment**

While using a VEGADIS-Adapter the sensor parameter adjustment is carried out exclusively via VEGACONNECT and PACTware/DTM through:

- HART signal (with 4 ... 20 mA/HART sensors)
- USB interface (with Modbus sensors)

## 3 Mounting

### 3.1 Mounting preparations

#### Tools

The following tools are required for mounting:

- Wrench SW 19 or Allen key size 8
- Wrench SW 17

#### Installation

### 3.2 Installation procedure

Proceed as follows to mount the adapter:

1. Unscrew lid of the electronics compartment, turn out blind plug

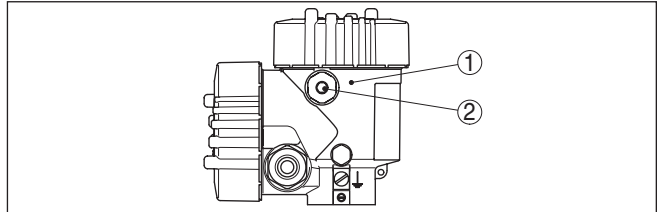


Fig. 2: Position of the electronics compartment and the blind plug on the double chamber housing

- 1 Electronics compartment
- 2 Blind plug

2. Loosen the mini plug connector on the adapter
3. Insert the plug through the free opening and screw the M12 x 1 plug connector into the housing
4. Connect mini plug connection to the adapter<sup>1)</sup>
5. Place the adapter onto the electronics (1), turn it to the right (2)

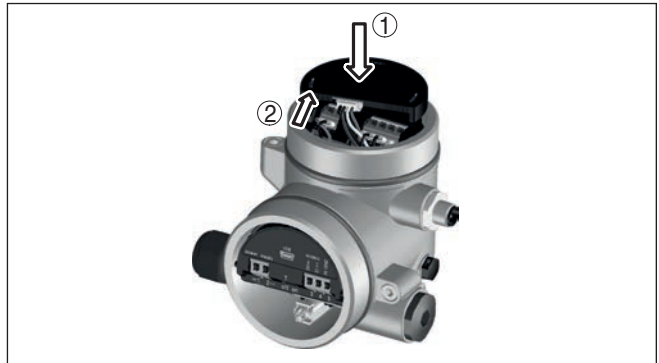


Fig. 3: Attach the adapter

The mounting of the adapter is finished.

<sup>1)</sup> With PA/FF version you have to connection in addition the green/yellow cable of the plug to the ground terminal

## 4 Connection

### 4.1 Overview

#### Electronics compartment

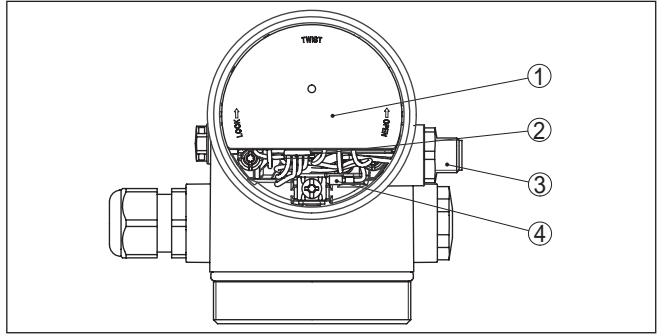


Fig. 4: View to the electronics compartment with mounted adapter

- 1 VEGADIS adapter
- 2 Connection cable
- 3 Plug connector M12 x 1
- 4 Green/yellow cable for ground terminal

#### Wiring plan - 4 ... 20 mA/ HART sensors

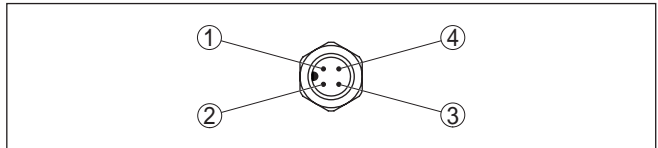


Fig. 5: Top view of the plug connector

Contact pin	Colour, connection cable	Terminal, external display and adjustment unit or Slave sensor
1	Brown	Terminal 5
2	White	Terminal 6
3	Blue	Terminal 7
4	Black	Terminal 8

#### Wiring plan - PA/FF sensors

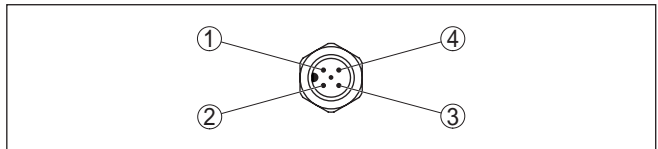



Fig. 6: Top view of the plug connector

Contact pin	Colour, connection cable	Terminal, external display and adjustment unit or Slave sensor
1	Brown	Terminal 5
2	White	Terminal 6
3	Blue	Terminal 7
4	Black	Terminal 8
5	Yellow/green	

## 4.2 External display and adjustment unit

### Connection example

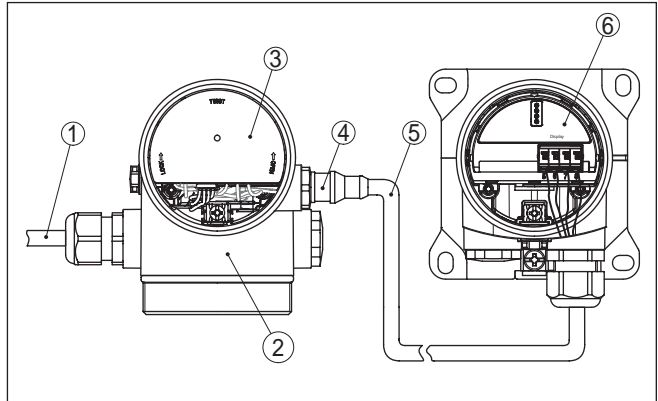


Fig. 8: Connection example for VEGADIS-Adapter with external display and adjustment unit

- 1 Signal cable
- 2 Sensor
- 3 VEGADIS-Adapter
- 4 Plug connector M12 x 1
- 5 Ready-made connection cable (optional)
- 6 External display and adjustment unit



#### Note:

The shown installation position is permitted for VEGADIS-Adapter.



### 4.3 Slave sensor

#### Connection example

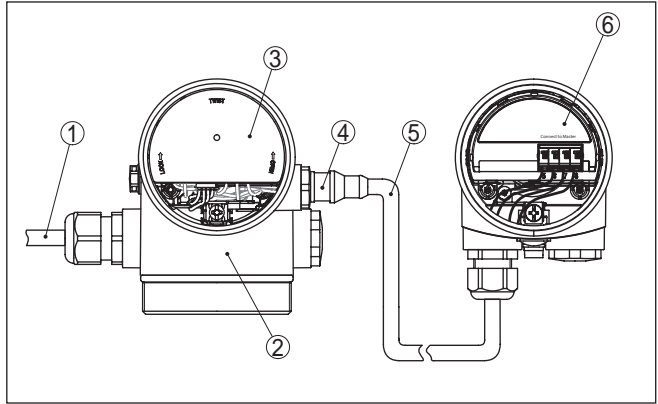


Fig. 9: Connection example for VEGADIS-Adapter with slave sensor

- 1 Signal cable
- 2 Sensor
- 3 VEGADIS-Adapter
- 4 Plug connector M12 x 1
- 5 Ready-made connection cable (optional)
- 6 Slave sensor



**Note:**

The shown installation position is permitted for VEGADIS-Adapter.

## 5 Supplement

### 5.1 Technical data

#### Materials

Contact plate	Plastic (PBT)
M12 x 1 plug	316L
Seal	FKM

#### Interface to the external display and adjustment unit, slave sensor

Data transmission	Digital (I <sup>2</sup> C-Bus)
Connection cable	Four-wire

Sensor version	Configuration, connection cable			
	Cable length	Standard cable	Special cable	Screened
4 ... 20 mA, 4 ... 20 mA/HART	50 m <sup>2)</sup>	●	–	–
Profibus PA, Foundation Fieldbus	25 m	–	●	●

#### Electromechanical data - Connection cable for 4 ... 20 mA/HART sensors

Configuration	Four cores, insulation, cable jacket
Material	PUR
Wire cross-section	0.34 mm <sup>2</sup> (AWG 22)
Length	max. 50 m (84.04 ft)
Min. bending radius at 25 °C/77 °F	25 mm (0.985 in)
Diameter approx.	5 mm (0.315 in)

#### Electromechanical data - Special cable for PA/FF sensors

Configuration	three cores, inner screen as fourth core, insulation, outer screen, jacket
Material	PUR
Wire cross-section	0.34 mm <sup>2</sup> (AWG 22)
Length	max. 25 m (82.021 ft)
Min. bending radius at 25 °C/77 °F	25 mm (0.985 in)
Diameter approx.	8 mm (0.197 in)

#### Protection rating

Sensor with connected cable	
– Pressure transmitter	IP 66/IP 67
– Other sensors	IP 66/IP 68 (0.2 bar)

<sup>2)</sup> Slave sensor 25 m

## 5.2 Dimensions

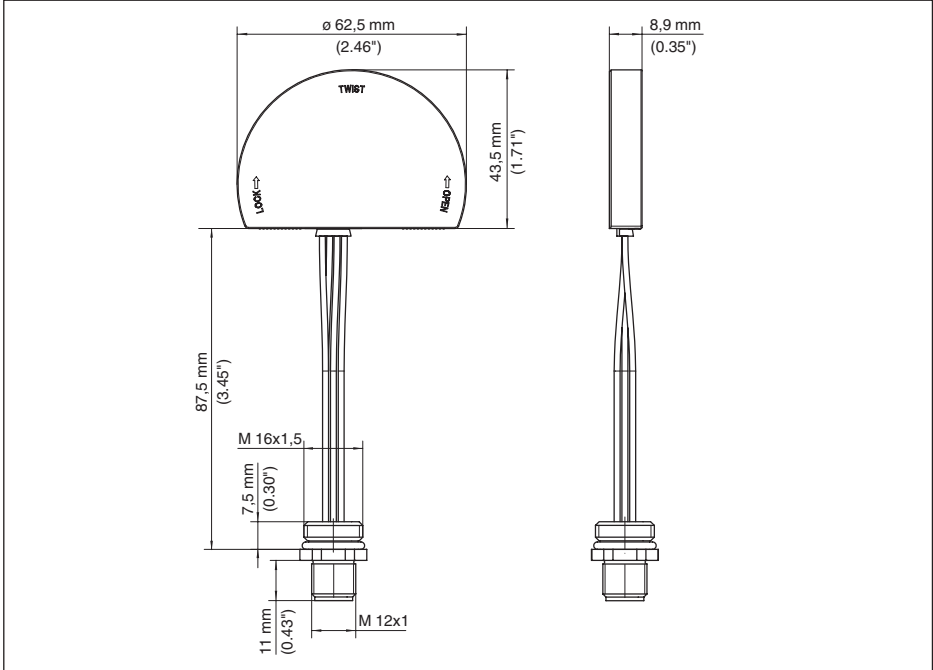


Fig. 10: Dimensions VEGADIS-Adapter

Printing date:

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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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VEGA Grieshaber KG  
Am Hohenstein 113  
77761 Schiltach  
Germany

Phone +49 7836 50-0  
Fax +49 7836 50-201  
E-mail: [info.de@vega.com](mailto:info.de@vega.com)  
[www.vega.com](http://www.vega.com)