# VEGA

# **VEGAPULS 11**

# Two-wire 4 ... 20 mA

# Radar sensor for continuous level measurement



## **Application area**

The VEGAPULS 11 is the ideal radar sensor for non-contact level measurement in easy applications in a number of industrial plants.

It is particularly suitable for level measurement in water treatment, storage tanks with acids and lyes, additives in all industrial areas, or for measuring levels through a plastic tank or IBC container.

The sensor is suitable both for measuring liquids and for use on small bulk solids silos or bulk solids containers.

## Your benefit

- Maintenance-free operation due to non-contact 80 GHz radar technology
- Exact measurement results independent of medium properties and process conditions
- High plant availability because wear and maintenance-free. Maintenance-free operation due to non-contact measuring principle

# **Function**

The device emits a continuous radar signal through its antenna which is modulated in its frequency. The emitted signal is reflected by the medium and received by the antenna as an echo.

The frequency difference between the emitted and received signal is proportional to the distance and depends on the filling height. The determined filling height is converted into a respective output signal and output as measured value.

## Technical data

Measuring range up to 10 m (32.81 ft)Deviation  $\leq 5 \text{ mm}$ Beam angle  $8^{\circ}$ 

Measuring frequency W-band (80 GHz technology)

Output signal 4 ... 20 mA

Process fitting Thread G1½, 1½ NPT, R1½ Process pressure -1 ... 3 bar (-100 ... 200 kPa/-

14.5 ... 43.51 psig)

Process temperature -40 ... +60 °C (-40 ... +140 °F) Ambient temperature -40 ... +60 °C (-40 ... +140 °F)

Bluetooth standard Bluetooth 5.0
Bluetooth range typically 25 m (82 ft)
Operating voltage 12 ... 35 V DC

Protection rating IP66/IP67 acc. to IEC 60529, Type 4X acc.

to UL 50

## **Materials**

The wetted parts of the instrument are made of PVDF. The process seal is made of FKM.

A complete overview of the available materials and seals can be found on our homepage under "Products" and "Configure & Order".

## **Housing versions**

The housing is made of PBT plastic and is available in protection rating IP66/IP67.

## **Electronics versions**

The devices are constructed with two-wire electronics 4 ... 20 mA.

# Approvals

Worldwide approvals are available for VEGA instruments, e.g. for use in hazardous areas, on ships or in hygienic applications.

For approved devices (e.g. with Ex approval) the technical data in the respective safety instructions are applicable.

You can find detailed information in the available approvals on our homepage under "Downloads".



## Adjustment

# Wireless adjustment via Bluetooth

The Bluetooth version of the device enables wireless connection to smartphones/tablets (iOS/Android) or Windows PCs.



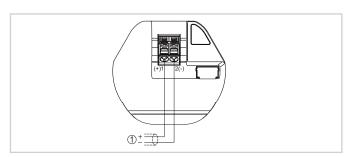
Wireless connection to standard operating devices

Operation is via a free app from the "Apple App Store", the "Google Play Store" or the "Baidu Store". Alternatively, adjustment can also be carried out via PACTware/DTM and a Windows PC.



Adjustment via PACTware or app

# **Electrical connection**



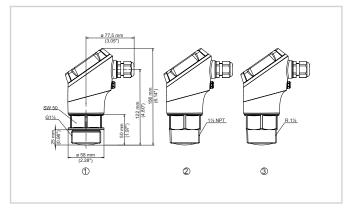
Connection compartment VEGAPULS 11

1 Voltage supply, signal output

You can find details on electrical connection in the instrument operating instructions at <a href="https://www.vega.com/downloads">www.vega.com/downloads</a>.

# Specification sheet

## **Dimensions**



**Dimensions VEGAPULS 11** 

- 1 Thread G11/2
- 2 Thread 1½ NPT
- 3 Thread R11/2

# **Mounting accessories**

For the VEGAPULS 11 the suitable mounting accessories for ceiling or wall mounting is available.



Mounting strap with adjustable sensor holder for sensors with lateral cable outlet - Wall mounting (example)

You can find further information on the mounting accessory on our homepage.

# Information

You can find further information on the VEGA product line on our homepage.

In the download section of our homepage you'll find operating instructions, product information, industry brochures and approval documents as well as device and adjustment software.

# Instrument selection

On our homepage under "Products" you can select the suitable measuring principle and instrument for your application.

There you will also find detailed information on the available device versions.

## Contact

You can find your personal contact person at VEGA on our homepage under "Contact".