

VEGAPULS 61

Modbus and Levelmaster protocol

Radar sensor for continuous level measurement of liquids



Application area

The VEGAPULS 61 is a sensor for continuous level measurement of liquids under simple process conditions. Due to its simple and versatile mounting options, VEGAPULS 61 offers a truly cost-effective solution. The encapsulated antenna system ensures maintenance-free operation.

Your benefit

- Maintenance-free operation thanks to non-contact measuring principle
- High plant availability, because wear and maintenance free
- Exact measuring results independent of process conditions

Function

Extremely short microwave pulses are emitted by the antenna system in the direction of the measured product, reflected by the product surface and received back again by the antenna system. The time from emission to reception of the signals is proportional to the level in the vessel. A special time stretching procedure allows reliable and precise measurement of the extremely short signal running times.

Technical data

Measuring range up to	35 m (114.8 ft)
Deviation	±2 mm
Process fitting	Thread G1½, 1½ NPT, mounting strap, compression flanges from DN 80, 3", adapter flanges from DN 100, 4"
Process pressure	-1 ... +3 bar/-100 ... +300 kPa (-14.5 ... +43.5 psig)
Process temperature	-40 ... +80 °C (-40 ... +176 °F)
Ambient, storage and transport temperature	-40 ... +80 °C (-40 ... +176 °F)
Operating voltage	8 ... 30 V DC
Output signal	Digital output signal according to standard EIA-485
Data protocols	Modbus RTU, Modbus ASCII, Levelmaster

Materials

The wetted parts of the instrument are made of PVDF or PP. The process seal is made of FPM. You will find a complete overview of the available materials and seals in the "Configurator" at www.vega.com and "VEGA Tools".

Housing versions

The housings are available as double chamber version in plastic, stainless steel or Aluminium. They are available in protection class IP 66/ IP 67.

Electronics versions

The instruments are available in different electronics versions. Apart from 4 ... 20 mA/HART in two and four-wire version, there are also digital versions with Profibus PA, Foundation Fieldbus and Modbus protocols. Another HART version is available with integrated accumulator.

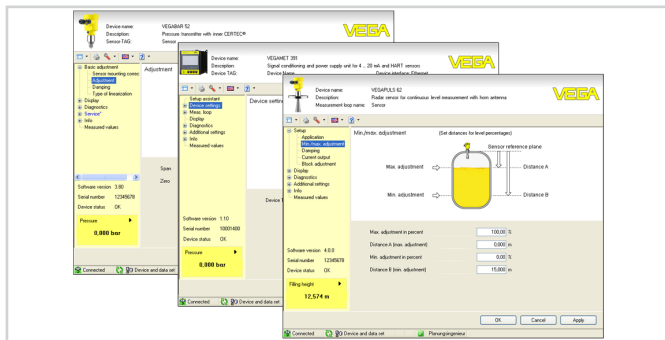
Approvals

The instruments are suitable for use in hazardous areas and are approved according to FM. You can find detailed information at www.vega.com/downloads and "Approvals".

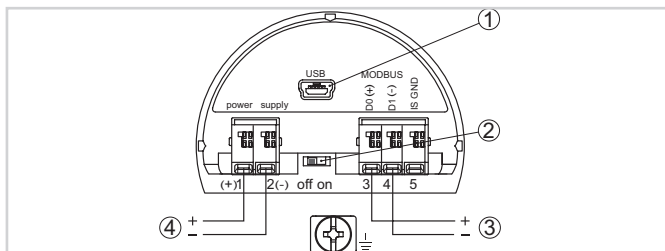
Operation

The adjustment of the instrument is carried out via the optional display and adjustment module PLICSCOM or via a PC with the adjustment software PACTware and corresponding DTM.

The connection of the PC is carried out via USB directly on the instrument or via an interface adapter USB/RS 485 on the signal cable.



Electrical connection

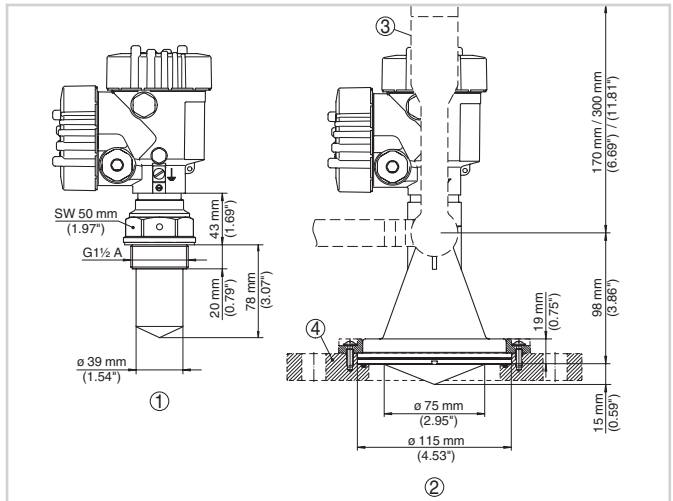


Terminal compartment

- 1 USB interface
- 2 Slide switch for integrated termination resistor (120 Ω)
- 3 Modbus signal
- 4 Voltage supply

You can find details on electrical connection in the instrument operating instructions at www.vega.com/downloads.

Dimensions



Dimensions VEGAPULS 61

- 1 Version with encapsulated antenna system
- 2 Version with plastic horn antenna
- 3 Mounting strap
- 4 Adapter flange

Information

You can find further information about the VEGA product line on www.vega.com.

In the download section at www.vega.com/downloads you'll find operating instructions, product information, brochures, approval documents, instrument drawings and much, much more.

There, you will also find GSD and EDD files for Profibus PA systems as well as DD and CFF files for Foundation Fieldbus systems.

Instrument selection

With the "Finder" at www.vega.com/finder and "VEGA Tools" you can select the most suitable measuring principle for your application. You can find detailed information on the instrument versions in the "Configurator" at www.vega.com/configurator and "VEGA Tools".

Contact

You can find the VEGA agency serving your area on our homepage www.vega.com.