

# **VEGAPULS 69**

4 ... 20 mA/HART - four-wire

Radar sensor for continuous level measurement of bulk solids



# Application area

The VEGAPULS 69 is a sensor for continuous measurement of bulk solids under different process conditions. The sensor is ideal for level measurement in very high silos, large bunkers and segmented vessels. The very good signal focussing ensures a simple setup and a reliable measurement.

The VEGAPULS 69 can be equipped with an encapsulated plastic antenna or a lens antenna integrated in the metal flange. Due to this, an optimum adaptation to different applications is possible.

#### Your benefit

- Maintenance-free operation thanks to non-contact measuring principle
- · High plant availability, because wear and maintenance free
- · Reliable measurement independent of steam, dust and noise

### Function

The sensor emits a continuous radar signal through the antenna. The emitted signal is reflected by the medium and received as echo by the antenna.

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

Technical data	
Measuring range up to	120 m (393.7 ft)
Deviation	±5 mm
Process fitting	Mounting strap, flanges from DN 80, 3"
Process pressure	-1 … 3 bar (-100 … 300 kPa/- 14.5 … 43.5 psig)
Process temperature	-40 +200 °C (-40 +392 °F)
Ambient, storage and transport temperature	-40 +80 °C (-40 +176 °F)

### Operating voltage

- Version for low voltage 9.6 ... 48 V DC, 20 ... 42 V AC, 50/60 Hz
- Version for mains volt- 90 ... 253 V AC, 50/60 Hz

age

#### Materials

The wetted parts of the instrument are made of 316L, PP or PEEK. The process seal is made of FKM or EPDM.

You will find a complete overview of the available materials and seals in the "*Configurator*" at <u>www.vega.com</u> 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, for example, according to ATEX.

You can find detailed information at <u>www.vega.com/downloads</u> and "*Approvals*".





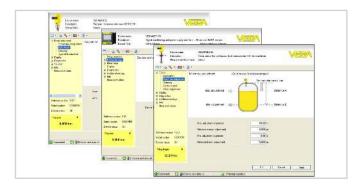
# Specification sheet

#### Operation

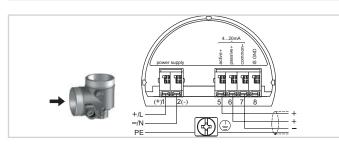
The adjustment of the instrument is carried out via the optional display and adjustment module PLICSCOM or via a PC with the adjustment software PACTware and corresponding DTM.

Further adjustment options are possible via a HART Communicator as well as manufacturer-specific programs such as AMS™ or PDM.

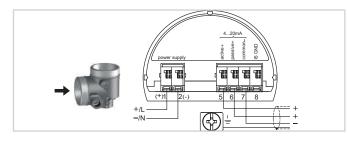




# **Electrical connection**



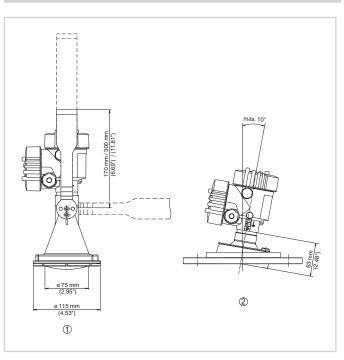
Connection compartment with double chamber housing - mains voltage



Connection compartment with double chamber housing - low voltage You can find details on electrical connection in the instrument operating instructions at <u>www.vega.com/downloads</u>.



# Dimensions



VEGAPULS 69, metal-jacketed lens antenna in flange version

- 1 Plastic horn antenna with mounting strap
- 2 Metal jacketed lens antenna with swivelling holder

# Information

You can find further information about the VEGA product line on <u>www.</u> <u>vega.com</u>.

In the download section at <u>www.vega.com/downloads</u> 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 <u>www.vega.com/finder</u> 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 <u>www.vega.com/configurator</u> and "*VEGA Tools*".

#### Contact

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