

VEGAPULS 68

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

Radar sensor for continuous level measurement of bulk solids



Application area

The VEGAPULS 68 is a radar sensor for continuous measurement of bulk solids also under difficult process conditions and large measuring ranges. The sensor is ideal for level measurement in high silos, large bunkers, stone crushers and in the furnace. The VEGAPULS 68 with different antenna versions and materials is the optimum solution for virtually all applications and processes. Through the wide temperature and pressure range, the sensor can be used universally and enables a simple planning.

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

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	75 m (246.1 ft)
Deviation	±2 mm
Process fitting	Thread from G1½; 1½ NPT; flanges from DN 40, 1½"
Process pressure	-1 ... +160 bar/-100 ... +16000 kPa (-14.5 ... +2320 psig)
Process temperature	-196 ... +450 °C (-321 ... +842 °F)
Ambient, storage and transport temperature	-40 ... +70 °C (-40 ... +158 °F)
Operating voltage	
– Version for low voltage	9.6 ... 48 V DC, 20 ... 42 V AC, 50/60 Hz
– Version for mains voltage	90 ... 253 V AC, 50/60 Hz
SIL qualification	Optionally up to SIL2

Materials

The wetted parts of the instrument are made of 316L, Alloy C22 (2.4602), Alloy 400 (2.4360), stainless steel precision casting (1.4848) or PTFE, PP, PEEK. The process seal is made of FKM, FFKM or graphite.

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.

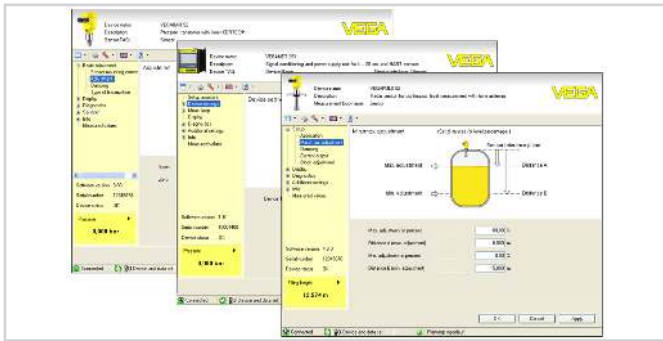
Approvals

The instruments are suitable for use in hazardous areas and are approved e.g. according to ATEX and IEC. The instruments also have various ship approvals such as e.g. GL, LRS or ABS.

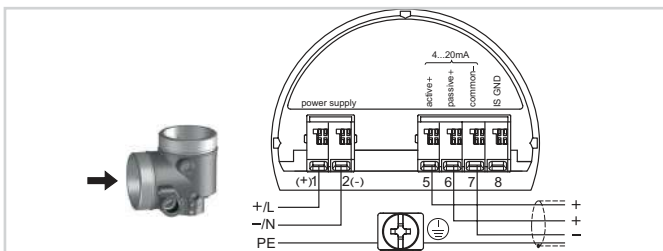
You can find detailed information at www.vega.com/downloads and "Approvals".

Operation

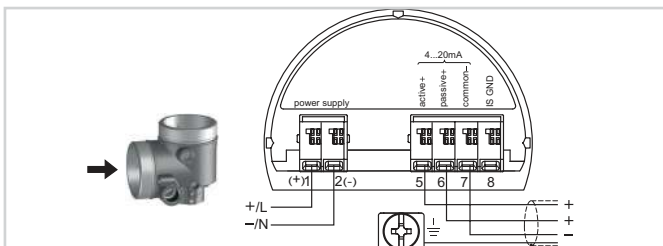
The adjustment of the instrument is carried out via the optional display and adjustment module PLICSCOM or via a PC with the adjustment software PACTware and corresponding DTM. Further adjustment options are possible via a HART Communicator as well as manufacturer-specific programs such as AMS™ or PDM.



Electrical connection



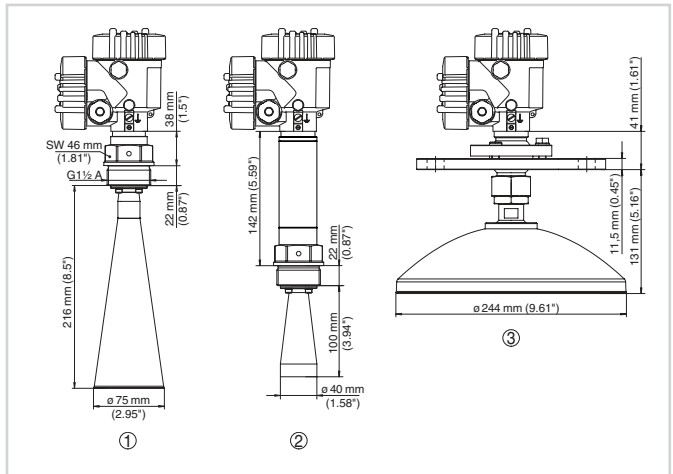
Connection compartment with double chamber housing - mains voltage



Connection compartment with double chamber housing - low voltage

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

Dimensions



Dimensions VEGAPULS 68

- 1 Threaded version with horn antenna
- 2 Threaded version with horn antenna and temperature adapter
- 3 Version with parabolic antenna and swivelling holder

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.



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