Specification sheet

VEGACAL 65

Foundation Fieldbus

Capacitive cable electrode for continuous level measurement

Application area

The VEGACAL 65 is a level sensor for use in all areas of industry. The partly insulated probe is ideal for measurement of bulk solids and can be used in non-conductive liquids such as for example oil. The proven mechanical construction ensures a high functional safety.

Your benefit

- Long lifetime and low maintenance requirement through robust mechanical construction
- High flexibility through shortenable probe
- Maximum utilisation of vessel, because measurement over entire probe length

Function

Sensor and vessel form the two electrodes of a capacitor. A capacitance change caused by a level change is evaluated by the integrated electronics and converted into an appropriate output signal. The level measurement is carried out over the entire sensor length without a blocking distance.

Technical data

Measuring range	up to 32 m (105 ft)
Process fitting	Thread from G1, 1 NPT, flanges from DN 50, 2"
Process pressure	-1 … +64 bar/-100 … +6400 kPa (-14.5 … +928 psig)
Process temperature	-50 … +200 °C (-58 … +392 °F)
Ambient, storage and transport temperature	-40 … +80 °C (-40 … +176 °F)
Operating voltage	9 … 32 V DC

Materials

The wetted parts of the instrument are made of stainless steel. The probe insulation is made of PTFE.
You will find a complete overview of the available materials and seals in the "configurator" on our homepage at www.vega.com/configurator.

Housing versions

The housings are available as single chamber or double chamber version in plastic, stainless steel or aluminium.
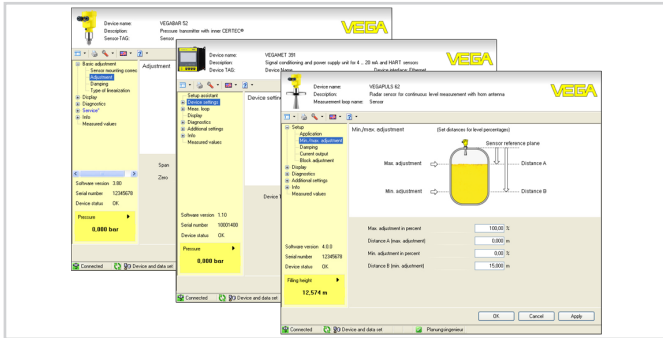They are available with protection ratings up to IP 68 (1 bar).

Electronics versions

The instruments are available in different electronics versions. Apart from the two-wire electronics with 4 … 20 mA/HART, there are two pure digital versions with Profibus PA and Foundation Fieldbus possible as well as one version for connection to a signal conditioning instrument.
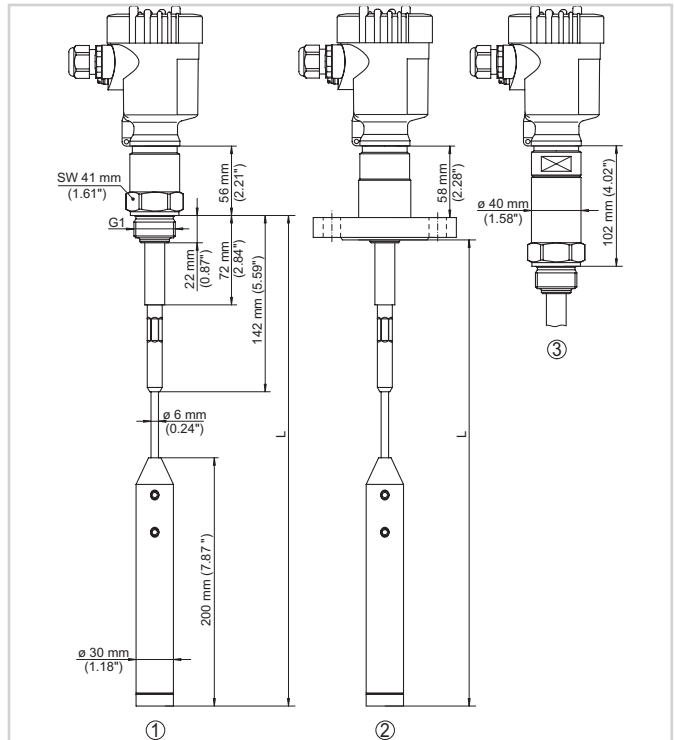
Approvals

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 respective DTM. Another adjustment possibility is a configuration tool for Foundation Fieldbus instruments.
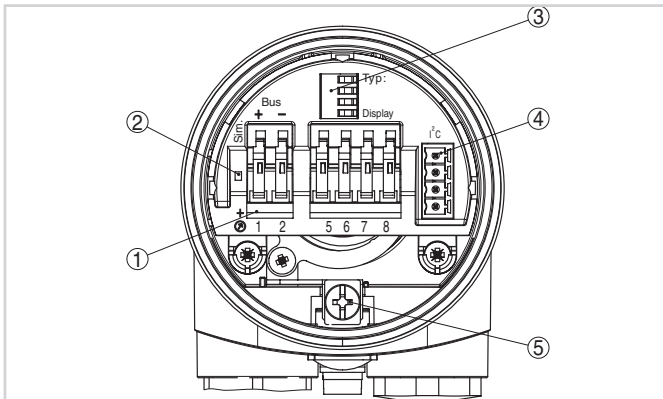

Electrical connection

Electronics and terminal compartment, single chamber housing

1   *Plug connector for VEGACONNECT (I²C interface)*
2   *Spring-loaded terminals for connection of the external indication VEGADIS 61*
3   *Ground terminal for connection of the cable screen*
4   *Spring-loaded terminals for Foundation Fieldbus connection*
5   *Simulation switch ("on" = simulation mode)*

You can find details on the electrical connection in chapter "*Connecting to power supply*" in the operating instructions of the instrument. You can download the operating instructions from our homepage at www.vega. com/downloads.

Dimensions

1   *Threaded version*
2   *Flange version*
3   *Threaded version with temperature adapter*

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.