

## VEGACAL 69

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

Capacitive double rod electrode for level measurement



### Application area

VEGACAL 69 is a level sensor for continuous level measurement of liquids in non-conductive vessels or of corrosive liquids. The double rod electrode is fully insulated and highly resistant.

### Your benefit

- Low mounting efforts due to compact double rod construction
- Long lifetime and low maintenance requirement through highly resistant materials
- 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	
– Double rod	up to 4 m
Process fitting	Flanges DN 50, 2"
Process pressure	-1 ... +2 bar/-100 ... +200 kPa
Process temperature	-40 ... +100 °C
Ambient, storage and transport temperature	-40 ... +80 °C (-40 ... +176 °F)
Operating voltage	12 ... 36 V DC
SIL qualification	Optionally up to SIL2

### Materials

The wetted parts of the instrument are made of FEP. The connection flange of the probe is optionally made of PP or PTFE.

You will find a complete overview of the available materials and seals in the "configurator" on our homepage at [www.vega.com/configurator](http://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](http://www.vega.com/downloads) and "Approvals".

### Adjustment

#### Adjustment on the measurement loop

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.

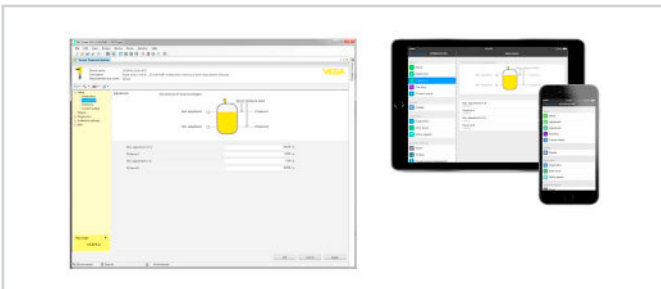
#### Wireless adjustment via Bluetooth

The Bluetooth version of display and adjustment module enables a wireless connection to standard adjustment units. This can be smartphones/tablets with iOS or Android operating system or PCs with PACTware and Bluetooth USB adapter.



Wireless connection to standard operating devices

Adjustment is hence carried out via a free-of-charge app from the Apple App Store or the Google Play Store or via the adjustment software PACTware and respective DTM.

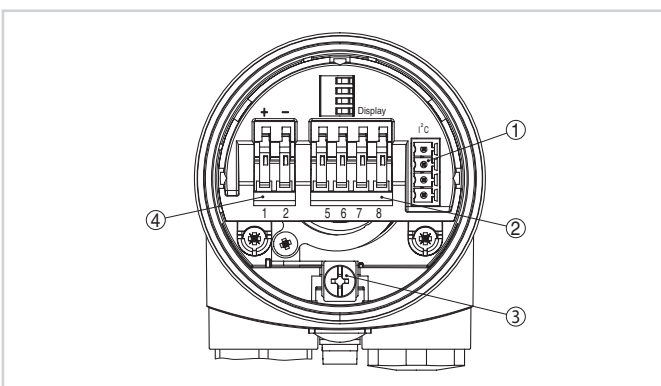


Adjustment via PACTware or app

#### Adjustment via remote systems

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

### Electrical connection

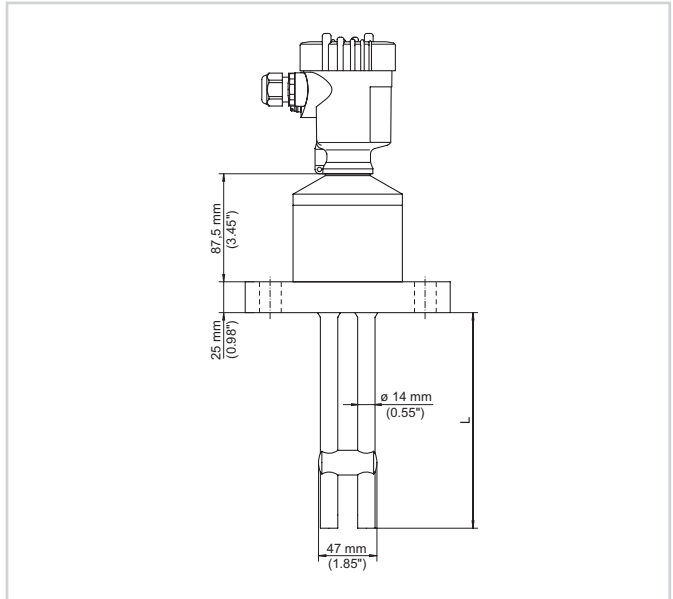


Electronics and terminal compartment, single chamber housing

- 1 Plug connector for VEGACONNECT (I<sup>2</sup>C 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 voltage supply and signal output

You can find details on electrical connection in the instrument operating instructions on our homepage at [www.vega.com/downloads](http://www.vega.com/downloads).

### Dimensions



### Information

You can find further information about the VEGA product line on [www.vega.com](http://www.vega.com).

In the download section at [www.vega.com/downloads](http://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](http://www.vega.com) 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](http://www.vega.com) and "VEGA Tools".

### Contact

You can find the VEGA agency serving your area on our homepage [www.vega.com](http://www.vega.com).