Capactive high temperature probe for level measurement of bulk solids

VEGACAL 67 is a universal level sensor for continuous level measurement of bulk solids. The rod electrode is suitable for high temperature applications.

Advantages

- Precise measuring results in virtually all bulk solids and high temperature ranges
- Long lifetime and low maintenance requirement through robust mechanical construction
- High flexibility through shortenable probe

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 a respective output signal. The level measurement is carried out via the complete sensor length without a dead zone.

Technical data

<table>
<thead>
<tr>
<th></th>
<th>Rod version</th>
<th>Cable version</th>
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</thead>
<tbody>
<tr>
<td>Span</td>
<td>up to 6 m (19.69 ft)</td>
<td>up to 40 m (131.23 ft)</td>
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<tr>
<td>Process fitting</td>
<td>Thread from G1½, 1½ NPT; flanges from DN 50, 2&quot;</td>
<td></td>
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<tr>
<td>Process pressure</td>
<td>-1 ... +16 bar/-100 ... +1600 kPa (-14.5 ... +232 psig)</td>
<td></td>
</tr>
<tr>
<td>Process temperature</td>
<td>-50 ... +400 °C (-58 ... +752 °F)</td>
<td></td>
</tr>
<tr>
<td>Ambient, storage and transport temperature</td>
<td>-40 ... +80 °C (-40 ... +176 °F)</td>
<td></td>
</tr>
<tr>
<td>Operating voltage</td>
<td>9 ... 32 V DC</td>
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</table>

Materials

The wetted parts of the instrument are made of stainless steel. The probe insulation is made of ceramic.

You will find a complete overview of the available materials and seals in the "configurator" on our homepage under 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 in 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 have also different ship approvals such as e.g. GL, LRS or ABS.

You can find detailed information on the existing approvals in the "configurator" on our homepage under www.vega.com/configurator.
Operation
The adjustment of the instrument is carried out via the optional indicating and adjustment module PLICSCOM or via a PC with the adjustment software PACTware and respective DTM. An alternative adjustment possibility is the manufacturer-specific adjustment program PDM.

Electrical connection
Electronics and connection 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 voltage supply and signal output
You can find details on the electrical connection in the instrument operating instructions on our homepage at www.vega.com/downloads.

Dimensions

Information
You can find further information about the VEGA product line on our homepage www.vega.com.
In the download section under www.vega.com/downloads you'll find free operating instructions, product information, brochures, approval documents, instrument drawings and much, much more.
There, you will also find GSD and EDD files for Profinbus PA systems as well as DD and CFF files for Foundation Fieldbus systems.

Instrument selection
With the "finder" you can select the most suitable measuring principle for your application: www.vega.com/finder.
You can find detailed information on the instrument versions in the "configurator" on our homepage under www.vega.com/configurator.

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