VEGACAL 65
For connection to a signal conditioning instrument

Capacitive cable electrode for continuous level measurement

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

Advantages
- Long lifetime and low maintenance requirement through robust mechanical construction
- High flexibility through shortenable probe
- Maximum use of the vessel, because measurement over the complete 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 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>Parameter</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Span</td>
<td>up to 32 m (105 ft)</td>
</tr>
<tr>
<td>Process fitting</td>
<td>Thread from G1, 1 NPT, flanges from DN 50, 2&quot;</td>
</tr>
<tr>
<td>Process pressure</td>
<td>-1 … +64 bar/-100 … +6400 kPa (-14.5 … +928 psig)</td>
</tr>
<tr>
<td>Process temperature</td>
<td>-50 … +200 °C (-58 … +392 °F)</td>
</tr>
<tr>
<td>Ambient, storage and transport temperature</td>
<td>-40 … +80 °C (-40 … +176 °F)</td>
</tr>
<tr>
<td>Operating voltage</td>
<td>12 … 36 V DC</td>
</tr>
</tbody>
</table>

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 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 operation of the instrument is carried out via a VEGAMET signal conditioning instrument.

**Electrical connection**
Electronics and connection compartment, single chamber housing

1. Ground terminal for connection of the cable screen
2. Spring-loaded terminals for voltage supply

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

**Dimensions**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW 36 mm (1.42&quot;)</td>
<td>6.0 mm (0.24&quot;)</td>
</tr>
<tr>
<td>ø 30 mm</td>
<td>0.8 mm (0.03&quot;)</td>
</tr>
<tr>
<td>ø 40 mm</td>
<td>0.8 mm (0.03&quot;)</td>
</tr>
<tr>
<td>ø 6 mm</td>
<td>0.8 mm (0.03&quot;)</td>
</tr>
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</table>

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

**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 Proibus 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.