VEGACAP 63
Transistor (NPN/PNP)

Capacitive rod electrode for level detection

Area of application
The VEGACAP 63 point level sensor can be used universally for the measurement of conductive liquids. The rod electrode is fully insulated and the proven construction ensures high functional safety.

Advantages
- Long lifetime and low maintenance requirement through robust mechanical construction
- Savings through simple mounting and setup
- 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 switching signal. The capacitive measuring principle has no special requirements in respect to installation and mounting.

Technical data

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensor length</td>
<td>up to 6 m (19.69 ft)</td>
</tr>
<tr>
<td>Process fitting</td>
<td>Thread from G½, ½ NPT, flanges from DN 20</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>10 … 55 V DC</td>
</tr>
<tr>
<td>Power consumption</td>
<td>max. 0.5 W</td>
</tr>
<tr>
<td>Load current</td>
<td>&lt; 400 mA</td>
</tr>
<tr>
<td>Voltage loss</td>
<td>&lt; 1 V</td>
</tr>
<tr>
<td>Turn-on voltage</td>
<td>&lt; 55 V DC</td>
</tr>
<tr>
<td>Blocking current</td>
<td>&lt; 10 µA</td>
</tr>
<tr>
<td>Switching delay</td>
<td>0.7 s (on/off)</td>
</tr>
</tbody>
</table>

Materials
The wetted parts of the instrument are fully PTFE or PE insulated. 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 in plastic, stainless steel or Aluminium. They are available with protection ratings up to IP 67.

Electronics versions
The instruments are available in different electronics versions. Apart from the versions with transistor output, contactless electronic switch and relay output, a two-wire version for connection to a signal conditioning instrument is available.

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 mode and switching point of the level switch can be adjusted on the electronics module. A signal lamp shows the switching status of the instrument.

**Electrical connection**

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

In the download section under [www.vega.com/downloads](http://www.vega.com/downloads) you'll find free operating instructions, product information, brochures, approval documents, instrument drawings and much, much more.

**Instrument selection**

With the "finder" you can select the most suitable measuring principle for your application: [www.vega.com/finder](http://www.vega.com/finder).

You can find detailed information on the instrument versions in the "configurator" on our homepage under [www.vega.com/configurator](http://www.vega.com/configurator).

**Contact**

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

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**Oscillator - Transistor output**

1. Potentiometer for switching point adaptation
2. DIL switch for measuring range selection (with compensation button)
3. DIL switch for mode adjustment
4. Ground terminal
5. Connection terminals
6. Control lamp

**Wiring plan**

1. Voltage supply

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VEGA Grieshaber KG, Am Hohenstein 113, 77761 Schiltach/Germany, www.vega.com