Application area

The VEGASON 61 is an ultrasonic sensor for continuous level measurement of liquids or bulk solids. Typical applications are the measurement of liquids in storage vessels or open basins. The sensor is also suitable for the detection of bulk solids in small vessels or open containers. The non-contact measuring principle is independent of product properties and enables a setup without medium.

Advantages

- Non-contact measurement
- Reliable measurement, independent of product properties
- Price-favourable solution for simple applications

Function

Short ultrasonic pulses are emitted by the transducer in the direction of the measured product, reflected by its surface and received back by the transducer. The elapsed time from emission to reception of the signals is proportional to the level in the vessel.

Technical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measuring range</td>
<td>5 m (16.4 ft)</td>
</tr>
<tr>
<td>In liquids up to</td>
<td>2 m (6.562 ft)</td>
</tr>
<tr>
<td>Deviation</td>
<td>±4 mm or &lt; 0.2 %</td>
</tr>
<tr>
<td>Process fitting</td>
<td>Thread G1\½ A, 1\½ NPT</td>
</tr>
<tr>
<td>Ambient, storage and transport temperature</td>
<td>-40 … +80 °C (-40 … +176 °F)</td>
</tr>
<tr>
<td>Process pressure</td>
<td>-0.2 … +2 bar/-20 … +200 kPa (-2.9 … +29 psig)</td>
</tr>
<tr>
<td>Process temperature</td>
<td>-40 … +80 °C (-40 … +176 °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>9 … 32 V DC</td>
</tr>
</tbody>
</table>

Materials

The wetted parts of the instrument are made of PVDF. The process seal is made of EPDM. 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, a four-wire version and two purely digital versions with Profibus PA and Foundation Fieldbus are 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 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

Dimensions VEGASON 61

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 Profinet 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.