VEGASON 65
4 … 20 mA/HART four-wire

Ultrasonic sensor for continuous level measurement

Application area
The VEGASON 65 is an ultrasonic sensor for continuous level measurement of bulk solids. Typical applications are the measurement of bulk solids in silos or bunkers. The VEGASON 65 is characterized by manifold mounting options and a simple setup.

Advantages
• Non-contact measurement
• Reliable measurement, independent of product properties
• Proven measurement technique for standard 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>Measuring range</th>
<th>In liquids up to</th>
<th>45 m (147.6 ft)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>In bulk solids up to</td>
<td>25 m (82.02 ft)</td>
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<tr>
<td>Deviation</td>
<td>±6 mm or &lt; 0.2 %</td>
<td></td>
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<tr>
<td>Process fitting</td>
<td>Thread G1 A, swivelling holder from DN 50, flange DN 250, flange 10&quot;</td>
<td></td>
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<tr>
<td>Process pressure</td>
<td>-0.2 … +0.5 bar/-20 … +50 kPa (-2.9 … +7.3 psig)</td>
<td></td>
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<tr>
<td>Process temperature</td>
<td>-40 … +80 °C (-40 … +176 °F)</td>
<td></td>
</tr>
<tr>
<td>Ambient, storage and transport temperature</td>
<td>-40 … +70 °C (-40 … +158 °F)</td>
<td></td>
</tr>
<tr>
<td>Operating voltage</td>
<td>20 … 72 V DC, 20 … 253 V AC, 50/60 Hz</td>
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</tbody>
</table>

Materials
The wetted parts of the instruments are manufactured from UP or Aluminium with PE foam rubber coating. 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 double chamber version in plastic, stainless steel or Aluminium. They are available in protection class IP 66/IP 67.

Electronics versions
The instruments are available in different electronics versions. Apart from the four-wire electronics with 4 … 20 mA/HART, also two purely digital versions with Profibus PA and Foundation Fieldbus are possible.

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. Further adjustment options are available via HART communicator as well as manufacturer-specific programs such as AMS™ or PDM.

**Dimensions**

![Diagram of the instrument](image)

**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 Profield 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.

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**Electrical connection**

Connection compartment double chamber housing

1. Spring-loaded terminals for signal output
2. Ground terminal for connection of the ground conductor and screen
3. 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.