VEGAPULS 65
Profibus PA

Radar sensor for continuous level measurement of liquids

Area of application
The VEGAPULS 65 is a radar sensor for continuous measurement of liquids under simple process conditions. It is particularly suitable for level measurement in vessels with small process fittings and under simple process conditions. The slim rod antenna enables the installation in small vessel openings.

Advantages
• Non-contact measurement
• High plant availability, because wear and maintenance-free
• Exact measuring results independent of process conditions

Function
Extremely short microwave impulses are emitted by the antenna system in the direction of the measured product, reflected by the product surface and received back again by the antenna system. The time from emission to reception of the signals is proportional to the level in the vessel. A special time stretching procedure allows reliable and precise measurement of the extremely short signal running times.

Technical data
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
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</thead>
<tbody>
<tr>
<td>Measuring range up to</td>
<td>35 m (114.8 ft)</td>
</tr>
<tr>
<td>Deviation</td>
<td>±8 mm</td>
</tr>
<tr>
<td>Process fitting</td>
<td>Thread from G1½; 1½ NPT; flanges from DN 50, 2”</td>
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<tr>
<td>Process pressure</td>
<td>-1 … +16 bar/-100 … +1600 kPa (-14.5 … +232 psig)</td>
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<tr>
<td>Process temperature</td>
<td>-40 … +150 °C (-40 … +302 °F)</td>
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<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>
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</tbody>
</table>

Materials
The wetted parts of the instrument are made of PVDF, 316L or PTFE. The process seal is made of FKM.
You can 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 4 … 20 mA/HART in two and four-wire version, there are also digital versions with Profibus PA, Foundation Fieldbus and Modbus RTU/Level-master possible. Another version is available with integrated accumulator.

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.
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. Another adjustment possibility is a configuration tool for Foundation Fieldbus instruments.

Electrical connection

- Electronics and connection compartment, single chamber housing
- 1 Voltage supply, signal output
- 2 For indicating and adjustment module or interface adapter
- 3 Selection switch for bus address
- 4 For external indicating and adjustment unit
- 5 Ground terminal for connection of the cable screen

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

Dimensions

- Dimensions VEGAPULS 65
  1 Threaded version G1½ A
  2 Flange version DN 80

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.