### Application area

VEGABAR 54 is a pressure transmitter for use in the paper, food processing and pharmaceutical industries as well as in water/sewage water plants. Depending on the version, it is used for level, gauge, absolute pressure or vacuum measurement. Measured products are gases, vapours and liquids, also those containing abrasive substances.

### Advantages
- Dry, ceramic-capacitive sensor element
- High abrasion and overload resistance
- Deviation < 0.1 %

### Function

The sensor element is the CERTEC® measuring cell with flush, abrasion resistant ceramic diaphragm. The hydrostatic pressure of the medium or the process pressure causes a capacitance change in the measuring cell via the diaphragm. This change is converted into an appropriate output signal and outputted as measured value. The CERTEC® measuring cell is also equipped with a temperature sensor. The temperature value can be displayed via the indicating and adjustment module or processed via the signal output.

### Technical data

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measuring ranges</td>
<td>1 … 72 bar (-14.5 … 1044 psig)</td>
</tr>
<tr>
<td>Smallest measuring range</td>
<td>0.1 bar (1.45 psig)</td>
</tr>
<tr>
<td>Deviation</td>
<td>&lt; 0.2 %, optionally &lt; 0.1 %</td>
</tr>
<tr>
<td>Process fitting</td>
<td>Thread from ½&quot;, flanges from DN 25, fittings for the food processing and paper industry</td>
</tr>
<tr>
<td>Process temperature</td>
<td>-40 … +120 °C (-40 … +248 °F)</td>
</tr>
<tr>
<td>Ambient, storage and transport temperature</td>
<td>-40 … +80 °C (-40 … +176 °F)</td>
</tr>
</tbody>
</table>

### Materials

The wetted parts of the instrument are made of 316L, PVDF or sapphire-ceramic®. The process seal is available in FKM, FFKM as well as EPDM. You can find a complete overview of the available materials and seals in the "configurator" on our homepage at [www.vega.com/configurator](http://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 classes up to IP 68 (25 bar).

### Electronics versions

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

### Approvals

The instruments are suitable for use in hazardous areas and are approved e.g. according to ATEX, FM, CSA and IEC. The instruments have also different ship approvals such as e.g. GL, LR5 or ABS. You can find detailed information on the existing approvals in the "configurator" on our homepage under [www.vega.com/configurator](http://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. Another adjustment possibility is a configuration tool for Foundation Fieldbus instruments.

Dimensions

Dimensions VEGABAR 54
1. Thread G¾ A front-flush
2. Thread G1 A front-flush
3. Thread G1 A for PASVE

Information

You can find further information about the VEGA product line on our homepage www.vega.com.

You can find free-of-charge operating instructions, product information, brochures, approval documents, instrument drawings, etc. in the download section under www.vega.com/downloads.

There, you will also find GSD and EDD files for Profinet PA systems as well as DD and CFF files for Foundation Fieldbus systems.

Device selection

With the "finder" you can select the measuring principle best suiting 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.

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
5. Simulation switch ("on" – mode for simulation release)

You can find details on the electrical connection in chapter "Connecting to power supply" in the operating instructions of the instrument. You can download the operating instructions from our homepage at www.vega.com/downloads.