VEGAWELL 52
4 … 20 mA/HART Pt 100

Suspension pressure transmitter with CERTEC® measuring cell

Area of application
VEGAWELL 52 is suitable for continuous level measurement of liquids. Typical applications are measurements in water/waste water facilities, deep wells and in the shipbuilding industry.

Advantages
- High reliability through maximum overload and vacuum resistance of the ceramic measuring cell
- High plant availability through integrated overvoltage protection
- Versatile use thanks to robust housing and cable version

Function
The ceramic CERTEC® measuring cell is the heart of VEGAWELL 52. The hydrostatic pressure of the liquid column causes a capacitance change in the measuring cell via the ceramic diaphragm. This change is converted into a standard 4 … 20 mA signal. The entire measuring cell consists of high purity ceramic and is characterised, apart from its excellent long-term stability, by very high overload resistance.

Technical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measuring ranges</td>
<td>+0.1 ... +25 bar/+10 ... +2500 kPa (+1.45 ... +363 psig)</td>
</tr>
<tr>
<td>Smallest measuring range</td>
<td>+0.1 bar/+10 kPa (+1.45 psig)</td>
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<tr>
<td>Deviation</td>
<td>&lt; 0.1 %</td>
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<tr>
<td>Process fitting</td>
<td>Straining clamp, threaded fitting unassembled from G1 (ISO 228-1) or from 1 NPT, thread G1½ (ISO 228-1) or from 1½ NPT on the housing</td>
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<tr>
<td>Process temperature</td>
<td>-20 ... +80 °C (-4 ... +176 °F)</td>
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<tr>
<td>Ambient, storage and transport</td>
<td>-40 ... +80 °C (-40 ... +176 °F)</td>
</tr>
<tr>
<td>Operating voltage</td>
<td>9.6 ... 36 V DC</td>
</tr>
</tbody>
</table>

Materials
The transmitter of the instrument is made of 316L, Duplex, Titanium or PVDF. The process seal consists of FKM, FFKM or EPDM, the suspension cable of PE, PUR or FEP. 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 housing is available as single chamber version of plastic or stainless steel precision casting. It is available with protection rating up to IP 66/IP 67.

Electronics versions
The instruments are available in different electronics versions. Apart from the analogue/digital two-wire electronics 4 ... 20 mA/HART Pt 100, a pure analogue version 4 ... 20 mA is also 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 external indicating and adjustment module VEGADIS 62 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.

Electrical connection

Wire assignment connection cable

1 Brown (+): to power supply or to the processing system
2 Blue (-): to power supply or to the processing system
3 White: for processing of the integrated Pt 100 (power supply)
4 Yellow: for processing of the integrated Pt 100 (measurement)
5 Red: for processing of the integrated Pt 100 (measurement)
6 Black: for processing of the integrated Pt 100 (power supply)
7 Shielding
8 Breather capillaries with filter element

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

Dimensions

Dimensions VEGAWELL 52

1 Version with straining clamp
2 Version with threaded fitting unassembled G1½ A, for deep wells
3 Standard version

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 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.