VEGABAR 54
4 … 20 mA/HART

Pressure transmitter with MINI-CERTEC® measuring cell

Area of application
The VEGABAR 54 pressure transmitter with very small, front-flush process fittings is used universally for measurement of gases, vapours and liquids. Substances such as sand are also no problem for the abrasion-resistant ceramic measuring cell. The VEGABAR 54 is an economical solution for a multitude of applications in all areas of industry.

Advantages
- High plant availability through maximum overload and vacuum resistance of the ceramic measuring cell
- Measurement down to the last drop through extremely small measuring ranges with high accuracy.
- Low costs for maintenance thanks to wear-free ceramic measuring cell

Function
The heart of the pressure transmitter is the pressure measuring cell that transforms pressure into an electrical signal. This pressure-dependent signal is converted into a standard output signal by the integrated electronics. The sensor element is the CERTEC® measuring cell with excellent long-term stability and high overload resistance. 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>
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<tr>
<th>Feature</th>
<th>Specification</th>
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<tr>
<td>Measuring ranges</td>
<td>-1 … +72 bar/-100 kPa … +7200 kPa (-14.5 … +1044 psig)</td>
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<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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<td>Process fitting</td>
<td>Thread from G½ (ISO 228-1) front-flush, flanges from DN 15 or ANSI 1&quot;, fittings for the process and paper industry</td>
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<td>Process temperature</td>
<td>-40 … +120 °C (-40 … +248 °F)</td>
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<td>Ambient, storage and transport temperature</td>
<td>-40 … +80 °C (-40 … +176 °F)</td>
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<tr>
<td>Operating voltage</td>
<td>12 … 36 V DC</td>
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<tr>
<td>SIL rating</td>
<td>up to SIL2</td>
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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 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 (25 bar) with external electronics.

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 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
Dimensions VEGABAR 54
1  Threaded version G 1/4 A, manometer connection EN 837
2  Threaded version G 1 A, absolutely front-flush
3  Threaded version 1” suitable for PASVE

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 Proﬁbus 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.

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.