

VEGABAR 53

4 ... 20 mA/HART

Pressure transmitter with metallic measuring cell



Application area

VEGABAR 53 is a pressure transmitter for measurement of gauge pressure, absolute pressure or vacuum. Measured products are gases, vapours and liquids.

Advantages

- Completely welded metal measuring cell
- High accuracy
- Overload and vacuum resistant

Function

The process pressure causes a resistance change in the sensor element via the stainless steel diaphragm. This change is converted into a respective output signal and outputted as measured value. For measuring ranges up to 16 bar, a piezoresistive sensor element with internal transmission liquid is used. With higher measuring ranges, a strain gauge sensor element on the rear of the stainless steel diaphragm is used.

Technical data

Measuring ranges	-1 ... 1000 bar (-14.5 ... 14503 psig)
Smallest measuring range	0.1 bar (1.45 psig)
Deviation	< 0.2 %, optionally < 0.075 %
Process fitting	Manometer connection G½ A or ½ NPT, connection G1 A or G½ A front-flush, hygienic fittings
Process temperature	-40 ... +150 °C (-40 ... +302 °F)
Ambient, storage and transport temperature	-40 ... +80 °C (-40 ... +176 °F)
Operating voltage	14 ... 36 V DC

Materials

The process fitting of the instrument is made of 316Ti or Hastelloy C4, the process diaphragm of 316Ti or Elgiloy 2.4711. The process seal is available in FKM, FFKM, EPDM and NBR.

You can find a complete overview of the available materials and seals in the "configurator" on our homepage at 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 the two-wire electronics with 4 ... 20 mA or 4 ... 20 mA/HART, two purely digital versions with Profibus PA and Foundation Fieldbus are available.

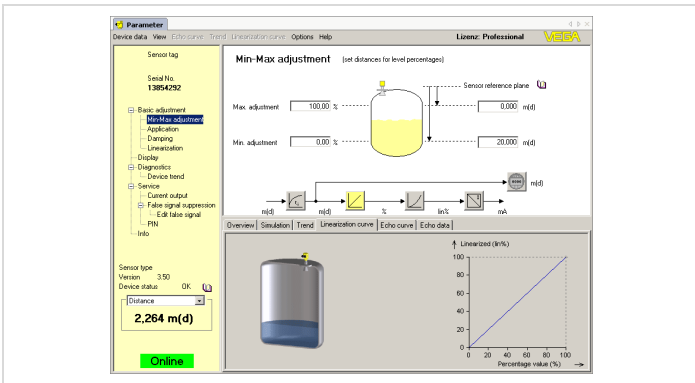
Approvals

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.

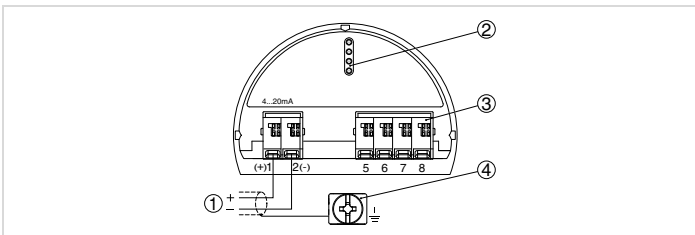
You can find detailed information on the existing approvals in the "configurator" on our homepage under www.vega.com/configurator.

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.



Electrical connection

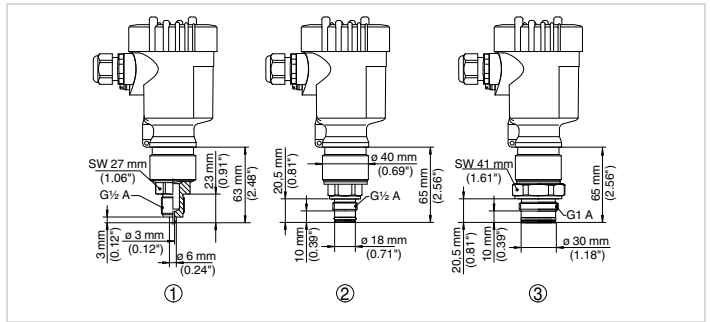


Electronics and connection compartment, single chamber housing

- 1 Voltage supply/Signal output
- 2 For indicating and adjustment module or interface adapter
- 3 For external indicating and adjustment unit
- 4 Ground terminal for connection of the cable screen

You can find details on the electrical connection in the operating instructions of the instruments on our homepage under www.vega.com/downloads.

Dimensions



Dimensions VEGABAR 53

- 1 Threaded version G 1/2 A, manometer connection EN 837
- 2 Threaded version G 1/2 A, front-flush
- 3 Threaded version G 1 A, front-flush

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.

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.