VEGABAR 53

Profibus PA

Pressure transmitter with metallic measuring cell

Application area

The VEGABAR 53 is a pressure transmitter for measurement of gases, vapours and liquids. The VEGABAR 53 offers special advantages when small process fittings are required.

Your benefit

- Universal use thanks to completely welded measuring cell
- High measurement certainty through vacuum resistant version
- Maximum reliability and safety through proven technology

Function

The heart of the pressure transmitter is the pressure measuring cell transforming the pressure into an electrical signal. This pressure-dependent signal is convereted by the integrated electronics into a standardized output signal.
The metallic measuring cell allows fully welded versions and also covers higher measuring ranges. With measuring ranges up to 16 bar, a piezoresistive sensor element with internal transmission liquid is used. From 25 bar upwards, a strain gauge sensor element is used on the back side of the stainless steel diaphragm. This dry system works without additional isolating liquid.

Technical data

Measuring ranges	-1 … +1000 bar/-100 … +100000 kPa (-14.5 … +14503 psig)
Smallest measuring range	0.1 bar/10 kPa (1.45 psig)
Deviation in characteristics	0.2 %; 0.1 %; 0.075 %
Process fitting	Threads from G½, ½ NPT, flanges from DN 40, hygienic fittings
Process temperature	-40 … +150 °C (-40 … +302 °F)
Ambient, storage and transport temperature	-40 … +80 °C (-40 … +176 °F)
Operating voltage	9 … 32 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 will find a complete overview of the available materials and seals in the "*Configurator*" at www.vega.com and "*VEGA Tools*".

Housing versions

The housings are available as single chamber or double chamber version in plastic, stainless steel or aluminium.
They are available with protection ratings up to IP 68 (1 bar).

Electronics versions

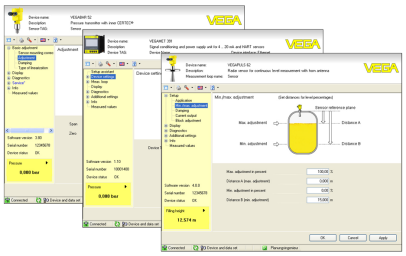
The instruments are available in different electronics versions. Apart from the two-wire electronics with 4 … 20 mA or 4 … 20 mA/HART, two purely digital versions with Profibus PA and Foundation Fieldbus are available.

Approvals

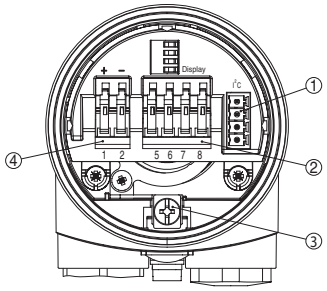
The instruments are suitable for use in hazardous areas and are approved e.g. according to ATEX and IEC. The instruments also have various ship approvals such as e.g. GL, LRS or ABS.
You can find detailed information on www.vega.com/downloads and "*Approvals*".

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. An alternative adjustment possibility is the manufacturer-specific adjustment program PDM.



Electrical connection

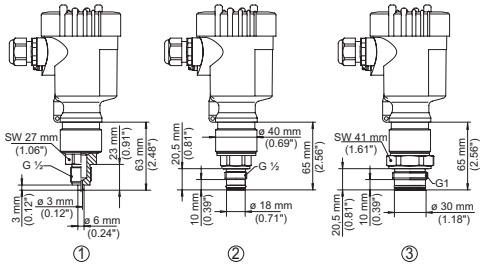


Electronics and connection compartment, single chamber housing

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

Dimensions



Dimensions VEGABAR 53

1 *Threaded version G½, manometer connection EN 837*
2 *Threaded version G½, front-flush*
3 *Threaded version G1, front-flush*

Info

You can find further information about the VEGA product line on www.vega.com.
In the download section under www.vega.com/downloads you'll find 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*" on www.vega.com/finder and "*VEGA Tools*" you can select the most suitable measuring principle for your application.
You can find detailed information on the instrument versions in the "*Configurator*" on www.vega.com/configurator and "*VEGA Tools*".

Contact

You can find the VEGA agency serving your area on our homepage www.vega.com.

For more VEGA product please visit: www.ainstru.com
Mail: Sales@ainstru.com