

VEGABAR 82

4 ... 20 mA/HART

Pressure transmitter with ceramic measuring cell



Application area

The VEGABAR 82 pressure transmitter can be used universally for measurement of gases, vapours and liquids. Also substances such as sand are not problem for the abrasion-resistant ceramic measuring cell. The VEGABAR 82 is an economical solution for a multitude of applications in all areas of industry.

In conjunction with a Slave sensor the VEGABAR 82 is also suitable for the electronic differential pressure measurement.

Your benefit

- 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 transforming the pressure into an electrical signal. This pressure-dependent signal is converted by the integrated electronics into a standardized output signal.

The sensor element with VEGABAR 82 is the CERTEC® measuring cell with excellent long-term stability and high overload resistance. The 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

Measuring ranges	-1 ... +100 bar/-100 kPa ... +10 MPa (-14.5 ... +1450 psig)
Smallest measuring range	+0.025 bar/+2.5 kPa (+0.363 psig)
Deviation	< 0.05 %; < 0.1 %; < 0.2 %
Process fitting	Threads from G $\frac{1}{2}$, flanges from DN 15, $\frac{3}{4}$ ", hygienic fittings
Process temperature	-40 ... +150 °C (-40 ... +302 °F)
Ambient, storage and transport temperature	-40 ... +80 °C (-40 ... +176 °F)
Operating voltage	9.6 ... 35 V DC
SIL qualification	Optionally up to SIL2 (with homogeneous redundancy up to SIL3)

Materials

The wetted parts of the instrument are made of 316L, PVDF, Alloy, C4-plated 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" at www.vega.com and "VEGA Tools".

Housing versions

The housings are available as single chamber or double chamber version in plastic, aluminium or stainless steel.

They are available in protection ratings up to IP 68 (25 bar) with external electronics as well as in IP 69K.

Electronics versions

Apart from the two-wire electronics with 4 ... 20 mA or 4 ... 20 mA/HART, also purely digital versions with Profibus PA, Foundation Fieldbus and are available. In addition a version as Slave sensor is available for the electronic differential pressure measurement.

Supplementary electronics

For instruments with double chamber housing two supplementary electronics such as radio module, a second current output or a power pack 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 at www.vega.com/downloads and "Approvals".

Operation

Adjustment on the measurement loop

The adjustment of the instrument is carried out via the optional display and adjustment module PLICSCOM or via a PC with the adjustment software PACTware and corresponding DTM.

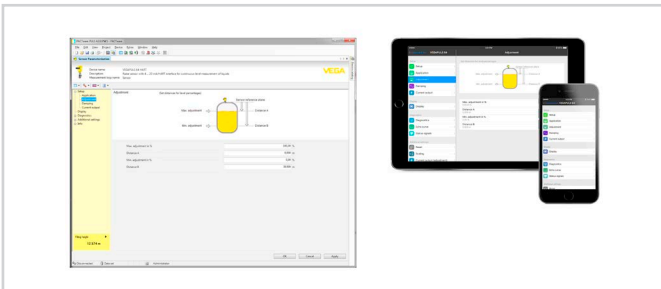
Wireless adjustment via Bluetooth

The Bluetooth version of display and adjustment module enables a wireless connection to standard adjustment units. This can be smartphones/tablets with iOS or Android operating system or PCs with PACTware and Bluetooth USB adapter.



Wireless connection to standard operating devices

Adjustment is hence carried out via a free-of-charge app from the Apple App Store or the Google Play Store or the adjustment software PACTware and respective DTM.

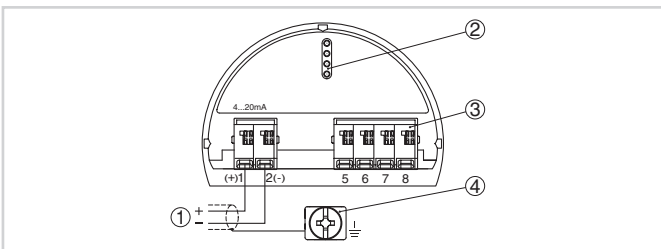


Adjustment via PACTware or app

Adjustment via remote systems

Further adjustment options are possible via a HART Communicator as well as manufacturer-specific programs such as AMS™ or PDM.

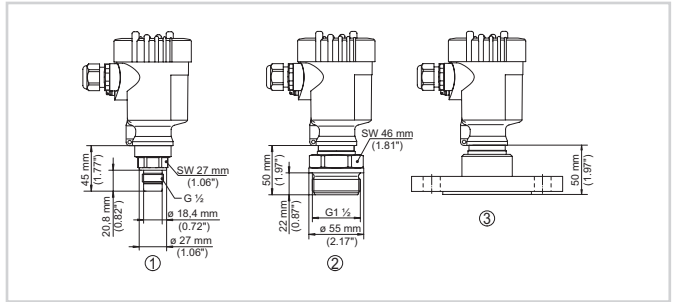
Electrical connection



Electronics and terminal compartment, single chamber housing

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

Dimensions



Dimensions VEGABAR 82

- 1 Threaded version G $\frac{1}{2}$ (front-flush according to ISO 228-1)
- 2 Threaded version G $\frac{1}{2}$
- 3 Flange version DN 50

Information

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

In the download section at 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" at www.vega.com 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" at www.vega.com and "VEGA Tools".

Contact

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