

VEGABAR 81

4 ... 20 mA/HART

Pressure transmitter with chemical seal



Application area

The VEGABAR 81 is a pressure transmitter with chemical seal for pressure and level measurement. The chemical seals of the VEGABAR 81 adapted to the process ensure a reliable measurement even in highly corrosive and hot products.

In conjunction with a Slave sensor the VEGABAR 81 is also suitable for the electronic differential pressure measurement.

Your benefit

- Simple adaptation, thanks to versatile configuration
- Reliable measurement up to temperatures of 400 °C
- Reliable measurement independent of foam generation and tank installations

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.

For this reason, the VEGABAR 81 is provided with a completely welded chemical seal system with internal transmission liquid. For measuring ranges up to 40 bar, a piezoresistive sensor element is used, from 100 bar a strain gauge sensor element.

Technical data

Measuring ranges	-1 ... +1000 bar/-0.1 ... +100 MPa (-14.5 ... +15000 psig)
Smallest measuring range	+0.4 bar/+40 kPa (+5 psig)
Deviation	< 0.2 %
Process fitting	Threads from G $\frac{1}{2}$, flanges from DN 15, $\frac{1}{2}$ ", hygienic fittings
Process temperature	-90 ... +400 °C (-130 ... +752 °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 process fitting is made of stainless steel 316L. The process diaphragm is available in 316L and in the high resistance materials Alloy C276, Tantalum as well as PTFE on 316Ti.

You will find a complete overview of the available materials and seals in the "Configurator" at www.vega.com and "Products".

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 on www.vega.com/downloads with the respective product under "Approval".

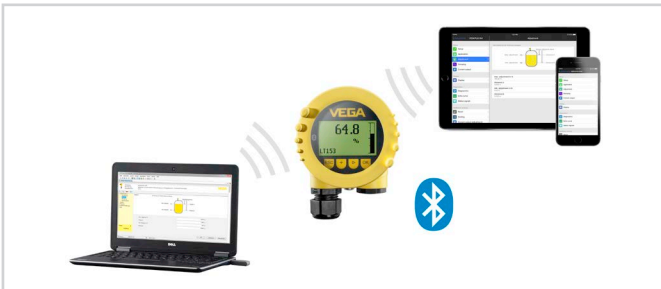
Adjustment

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.

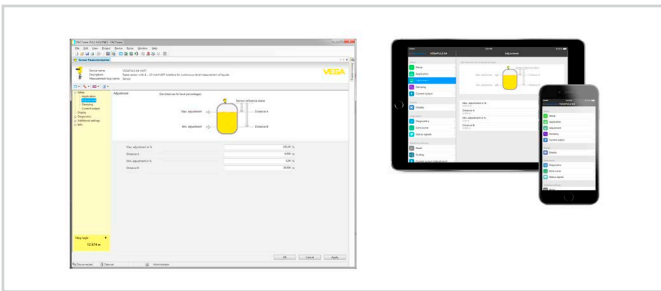
Wireless adjustment via Bluetooth

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.

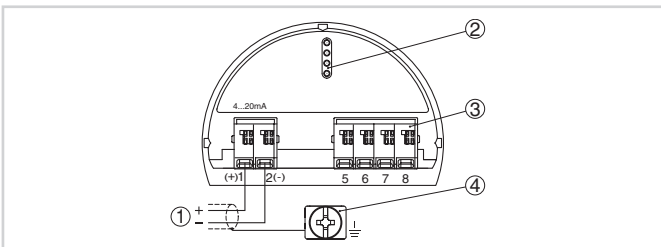


Adjustment via PACTware or app

Adjustment via remote systems

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

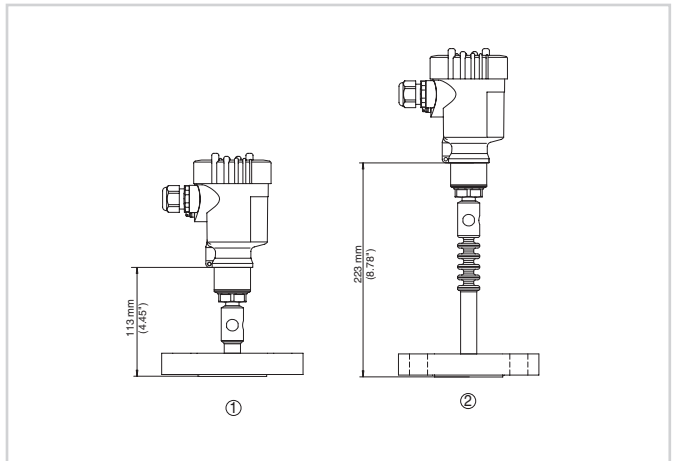
Electrical connection



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 81

- 1 Flange version up to +150 °C (+302 °F)
- 2 Flange version with cooling element +400 °C (+752 °F)

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

Under "Specify product" on www.vega.com and "Products" you can select the suitable measuring principle and instrument for your application.

You can find detailed information on the instrument versions in the "Configurator" at www.vega.com and "Products".

Contact

You can find your personal contact person at VEGA on our homepage www.vega.com and "Contact".