

VEGABAR 87

4 ... 20 mA/HART

Pressure transmitter with metallic measuring cell



Application area

The VEGABAR 87 is a pressure transmitter for pressure and level measurements of liquids and viscous products in the chemical, food processing and pharmaceutical industry. The VEGABAR 87 offers the possibility to detect even smallest measuring ranges from 0.1 bar.

In conjunction with a Slave sensor the VEGABAR 87 is also suitable for the electronic differential pressure measurement.

Your benefit

- Excellent measurement reliability even with quickly changing process temperatures
- High plant availability through vacuum resistant version
- Very good cleanability and high chemical resistance through adapted materials

Function

The heart of the pressure transmitter is the pressure measuring cell converting the pressure into an electrical signal. This pressure-dependent signal is converted by the integrated electronics into a standardized output signal. Different measuring cells are used for pressure detection.

The metallic METEC® measuring cell allows fully welded versions and also covers higher measuring ranges. The measuring cell is also equipped with a temperature sensor. The temperature value can be displayed via the display and adjustment module or processed via the signal output.

Technical data

Measuring ranges	+0.1 ... +25 bar/+10 ... +2500 kPa (+1.45 ... +363 psig)
Smallest measuring range	+0.1 bar/+10 kPa (+1.45 psig)
Deviation	< 0.1 %
Process fitting	Straining clamp, threaded fitting, thread ab G1½, 1½ NPT, flanges from DN 32, 1½"
Process temperature	-12 ... +100 °C (-10 ... +212 °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 transmitter of the instrument is made of 316L. The process diaphragm consists of Alloy C276, the suspension cable of FEP.

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".

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.

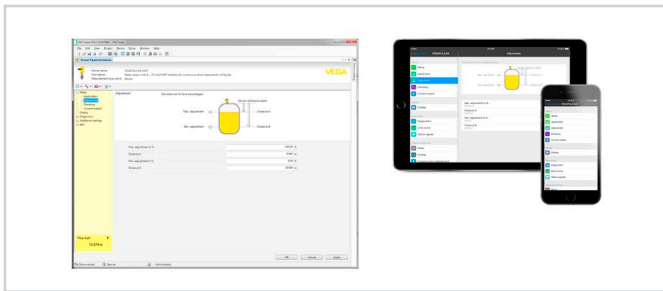
Wireless adjustment via Bluetooth

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.

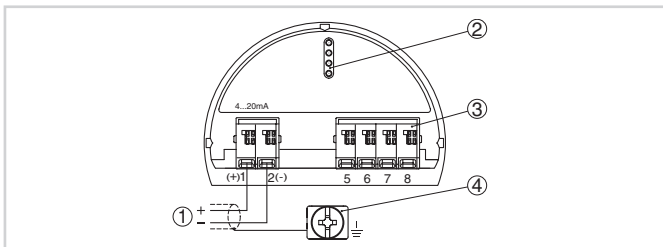


Adjustment via PACTware or app

Adjustment via remote systems

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

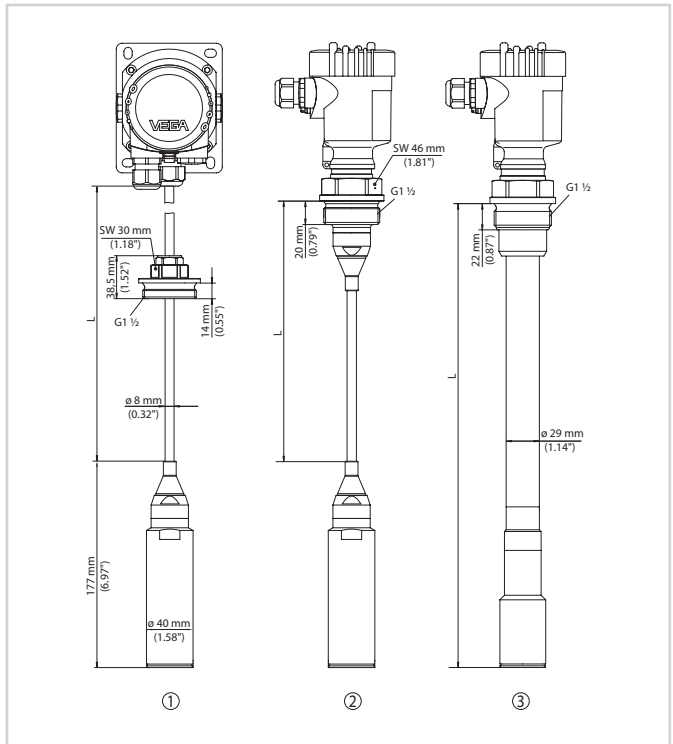
Electrical connection



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



- 1 Version with suspension cable and threaded fitting unassembled G1½
- 2 Threaded version G1½, suspension cable
- 3 Threaded version G1½, connection tube

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.