

VEGABAR 83

HART and accumulator pack

Pressure transmitter with metallic measuring cell



Application area

The VEGABAR 83 is a pressure transmitter for pressure measurement of gases, vapours and liquids in all industries. VEGABAR 83 offers special advantages for applications with high pressures.

Due to the integrated accumulator the instrument is particularly suitable as a portable measuring system or test sensor for special applications.

Your benefit

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

Function

The heart of the pressure transmitter is the completely welded, metallic measuring cell transforming the pressure via the integrated electronics into a standardized output signal.

For measuring ranges up to 40 bar, a piezoresistive sensor element with internal transmission liquid is used. From 100 bar a strain gauge sensor element on the rear of the stainless steel diaphragm is used. This dry system operates without additional isolating liquid.

The sensor element METEC® is used with temperature ranges up to 200 °C and larger process fittings,. This element consists of the ceramic-capacitive CERTEC® measuring cell and a special, temperature-compensated chemical seal system.

Technical data

Measuring ranges	-1 ... +1000 bar/-0.1 ... +100 MPa (-14.5 ... +15000 psig)
Process temperature	-40 ... +200 °C (-40 ... +392 °F)
Deviation	< 0.075 %; < 0.1 %; < 0.2 %
Process fitting	Threads from G½, flanges from DN 16, 1", hygienic fittings
Process temperature	-90 ... +400 °C (-130 ... +752 °F)
Ambient, storage and transport temperature	-40 ... +80 °C (-40 ... +176 °F)
Accumulator voltage	14.8 V DC
Life time with sensor permanently on and full accumulator	>60 h

Materials

The process fitting of the instrument is made of 316L or Alloy C276 (2.4819), the process diaphragm of Alloy C276 (2.4819). FKM, FFKM and EPDM.

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

Housing versions

The instrument is available as double chamber version in plastic, stainless steel or aluminium.

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.

Approvals

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.

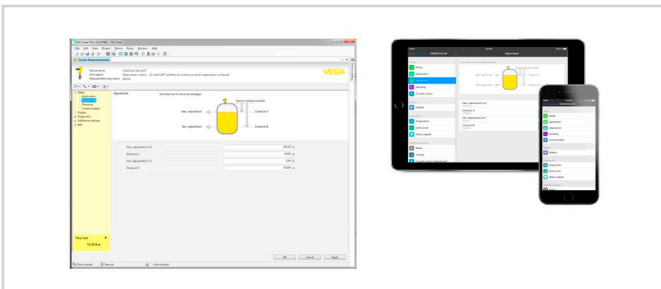
Wireless adjustment via Bluetooth

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.



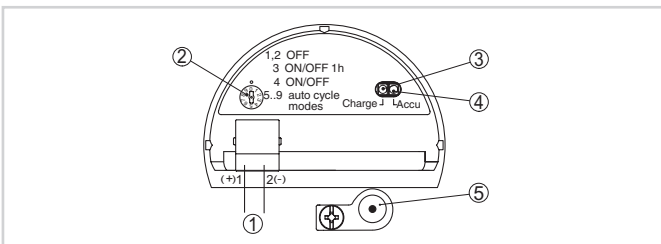
Wireless connection to standard operating devices

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



Adjustment via PACTware or app

Voltage supply

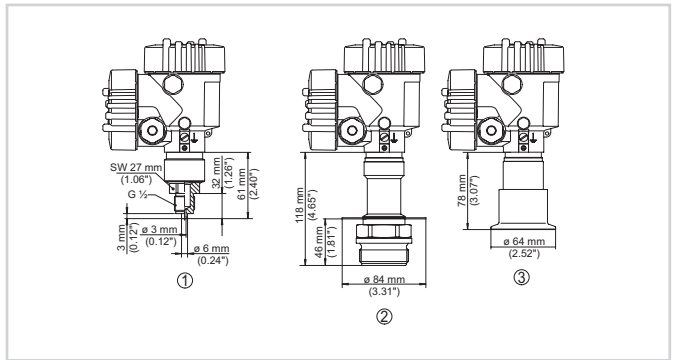


Supply room

- 1 Internal connection of the socket for the battery charger
- 2 Mode switch
- 3 LED green, charging process
- 4 LED yellow, charging status
- 5 Socket for the battery charger

You can find details on electrical connection in the instrument operating instructions at www.vega.com/downloads.

Dimensions



Dimensions VEGABAR 83

- 1 Threaded version $G\frac{1}{2}$, manometer connection EN 837
- 2 Threaded version $G\frac{1}{2}$, front-flush
- 3 Threaded version $G1$, front-flush

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".