

VEGABAR 86

Modbus and Levelmaster protocol

Submersible pressure transmitter with ceramic measuring cell



Application area

The VEGABAR 86 is a submersible pressure transmitter for level measurement in wells, basins and open vessels. Its great flexibility through different cable and tube versions allows the instrument to be used in many different applications.

The simple connection of VEGABAR series 80 sensors as electronic differential pressure opens up new possibilities for measuring differential pressures.

Your benefit

- High plant availability through maximum overload and vacuum resistance of the ceramic measuring cell
- Self-cleaning effect thanks to front-flush design
- 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 86 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 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	+0.025 bar/+2.5 kPa (+0.363 psig)
Deviation	< 0.1 %
Process fitting	Straining clamp, threaded fitting, thread ab G1½, 1½ NPT, flanges from DN 32, 1½"
Process temperature	-20 ... +100 °C (-4 ... +212 °F)
Ambient, storage and transport temperature	-40 ... +80 °C (-40 ... +176 °F)
Operating voltage	9.6 ... 35 V DC

Materials

The transmitter of the instrument is made of 316L or PVDF. The process seal consists of FKM, FFKM or EPDM, the suspension cable of PE, PUR or FEP.

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 IP68 (25 bar) with external electronics as well as in IP69K.

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 Secondary sensor is available for the electronic differential pressure measurement.

Approvals

Worldwide approvals are available for VEGA instruments, e.g. for use in hazardous areas, on ships or in hygienic applications.

The technical data in the respective safety instructions are valid for approved instruments (e.g. with Ex approval). In some cases, these data can differ from the data listed herein.

You can find detailed information on the existing approvals with the appropriate product on our homepage.

Adjustment

Adjustment directly at the measuring point

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.

The connection of the PC is carried out via USB directly on the instrument or via an interface adapter USB/RS 485 on the signal cable.

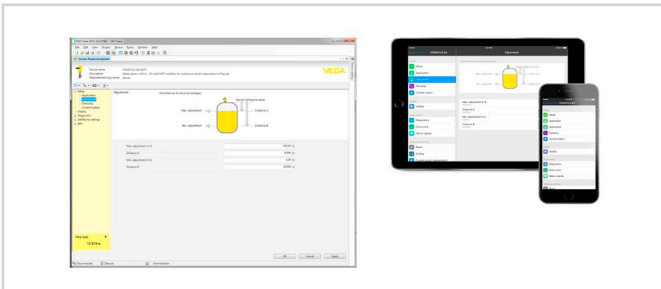
Wireless adjustment via Bluetooth

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.



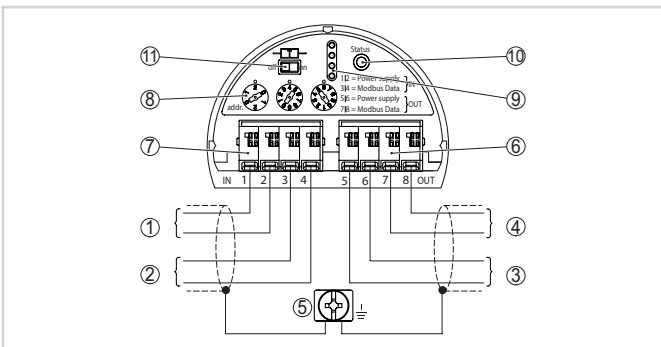
Wireless connection to standard operating devices

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

Electrical connection

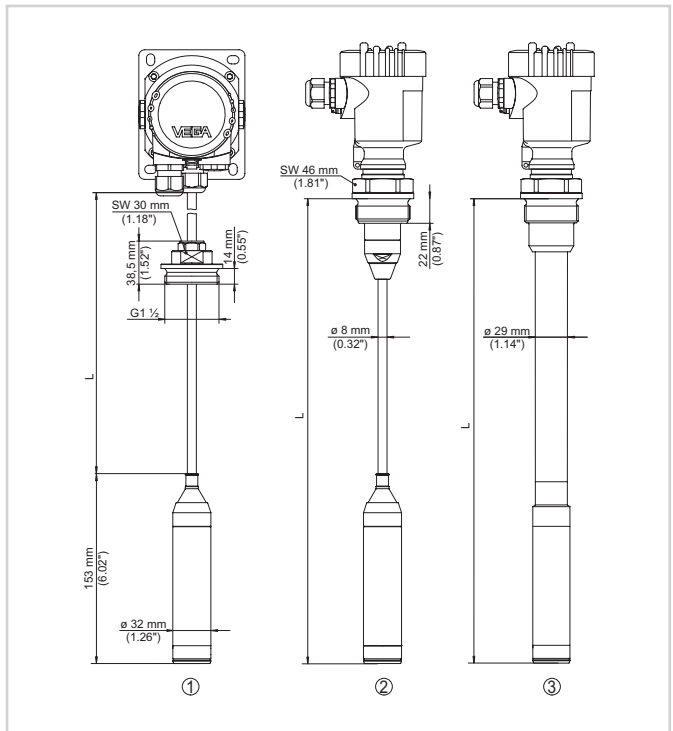


Electronics compartment - Connection Daisy-Chain

- 1 Voltage supply
- 2 Signal input
- 3 Power supply (to further Modbus sensors)
- 4 Signal output (to further Modbus sensors)
- 5 Ground terminal in the housing
- 6 Terminal block - Output (OUT)
- 7 Terminal block - Input (IN)
- 8 Rotary switch for address setting
- 9 Contacts for the display and adjustment module or the interface adapter
- 10 Signal lamp - Status
- 11 Connectable bus resistor

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

Dimensions



- 1 Version with suspension cable and threaded fitting unassembled G1½
- 2 Threaded version G1½, suspension cable
- 3 Threaded version G1½, connection tube
- L Total length from configurator

Information

You can find further information on the VEGA product line on our homepage.

In the download section of our homepage you'll find operating instructions, product information, industry brochures and approval documents as well as device and adjustment software.

Instrument selection

On our homepage under "Products" you can select the suitable measuring principle and instrument for your application.

There you will also find detailed information on the available device versions.

Contact

You can find your personal contact person at VEGA on our homepage under "Contact".