

VEGABAR 82

Slave sensor for electronic differential pressure Pressure transmitter with ceramic measuring cell



Application area

The VEGABAR 82 Slave sensor is combined with a sensor from the VEGABAR 80 series to an electronic differential pressure measurement. The unit is suitable for the measurement of differential pressure, level with superimposed pressure or vacuum, flow, density or interface. Measured products are gases, vapours and liquids. Even materials like sand are no problem for the abrasion-resistant ceramic measuring cell. The VEGABAR 82 offers maximum reliability and operational safety. Versatile use in all industries.

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 %
Deviation - Complete system	< 0.075 %; < 0.15 %; < 0.3 %
Process fitting	Threads from G½, flanges from DN 15, ¾", hygienic fittings
Process temperature	-40 ... +150 °C (-40 ... +302 °F)
Ambient, storage and transport temperature	-40 ... +80 °C (-40 ... +176 °F)
Voltage supply	Through the Master sensor

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 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/HART, also purely digital versions with Profibus PA and Foundation Fieldbus are possible for the corresponding master sensor.

Approvals

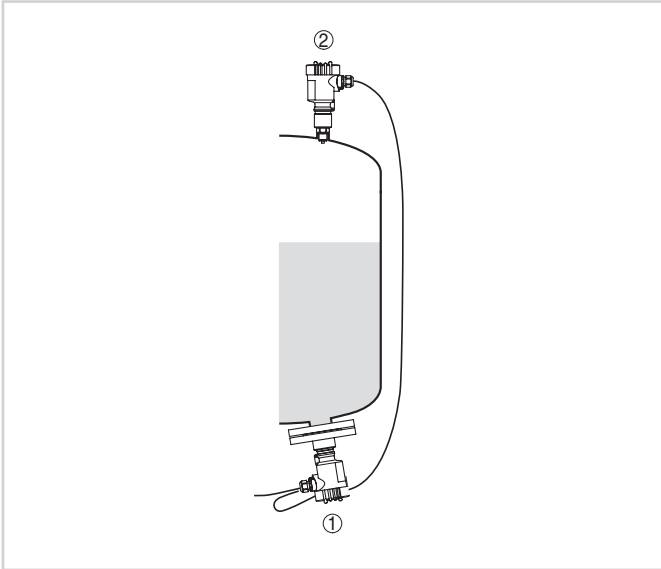
The instruments are suitable for use in hazardous areas and are approved e.g. according to ATEX and IEC. The instruments also have various ship approvals such as e.g. GL, LRS or ABS.

You can find detailed information at www.vega.com/downloads and "Approvals".

Operation

The adjustment of the instrument is carried out through the connected Master sensor.

Measurement setup



Measurement setup, level measurement in pressurized vessel

- 1 VEGABAR 82
- 2 VEGABAR 82 - Slave sensor

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.

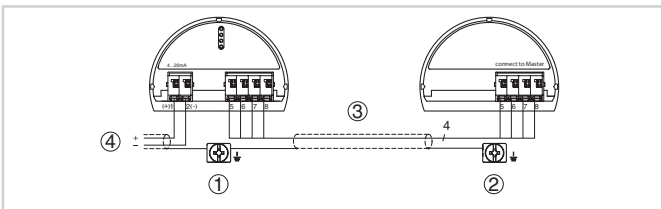
Instrument selection

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.

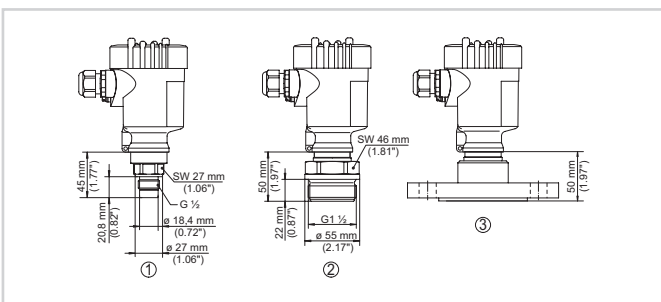
Electrical connection



Connection example, electronic differential pressure

- 1 Master sensor
- 2 Slave sensor
- 3 Connection cable
- 4 Supply and signal circuit, Master sensor

Dimensions



Dimensions VEGABAR 82

- 1 Threaded version $G\frac{1}{2}$ (front-flush according to ISO 228-1)
- 2 Threaded version $G1\frac{1}{2}$
- 3 Flange version DN 50