

VEGABAR 87

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



Application area

The VEGABAR 87 Slave sensor is a submersible pressure transmitter which combined with a sensor from the VEGABAR 80 series to an electronic differential pressure measurement. It is suitable for the measurement of the gauge difference, level with superimposed pressure or vacuum, flow, density or interface. Measured products are liquids and viscous products with higher temperatures in the chemical, food processing and pharmaceutical industry.

The VEGABAR 87 offers the possibility to detect even smallest measuring ranges from 0.1 bar.

Your benefit

- Excellent measuring accuracy 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 %
Deviation	< 0.15 %
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)
Voltage supply	Through the Master sensor

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 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

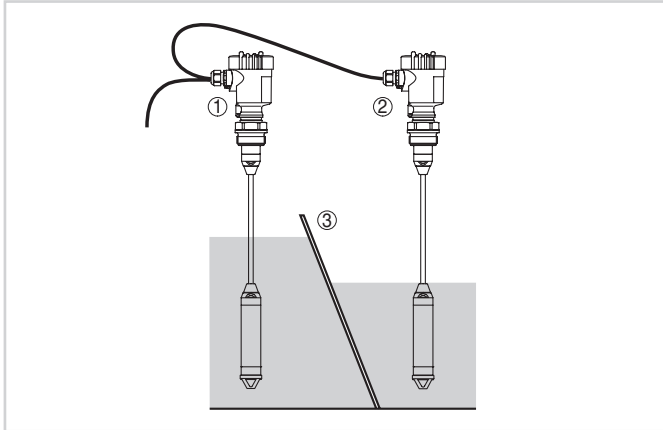
The instruments are suitable for use in hazardous areas and are approved e.g. according to ATEX and IEC. The instruments also have various ship approvals such as e.g. GL, LRS or ABS.

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.

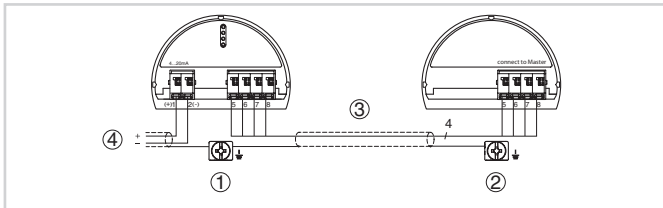
Measurement setup



Measurement setup with a level difference measurement

- 1 Master sensor
- 2 Slave sensor
- 3 Screen

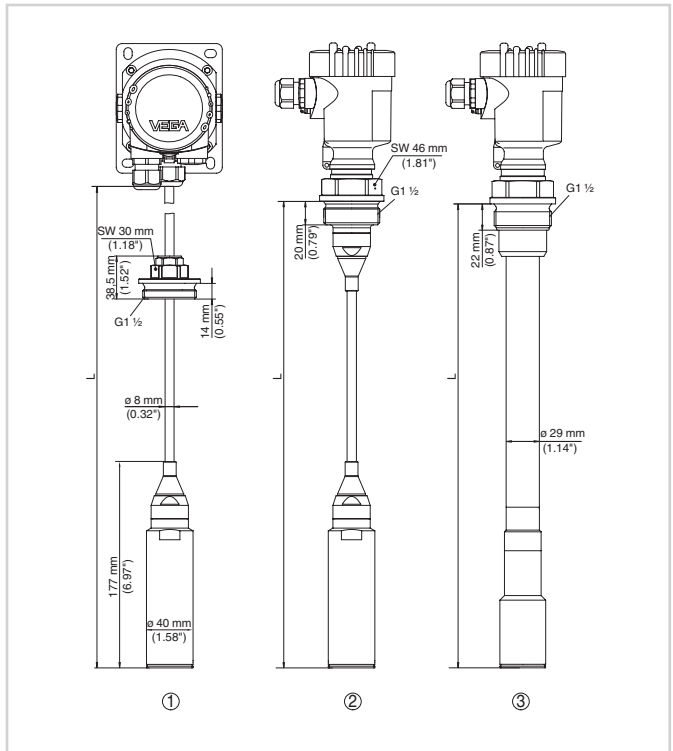
Electrical connection



Connection example, electronic differential pressure

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

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.