

VEGABAR 86

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



Application area

The VEGABAR 86 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.

The flexibility through different cable and tube versions, offers the possibility to use the VEGABAR 86 in many applications.

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 pressuredependent signal is convereted 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 indicating 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 %
Deviation	< 0.15 %
Process fitting	Straining clamp, threaded fitting, thread ab G1 $\frac{1}{2}$, 1 $\frac{1}{2}$ NPT, flanges from DN 32, 1 $\frac{1}{2}$ "
Process temperature	-20 +100 °C (-4 +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 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 <u>www.vega.com</u> 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

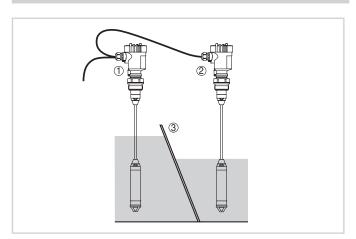
The instruments are suitable for use in hazardous areas and are approved e.g. according to ATEX and IEC. The instruments also have various ship approvals such as e.g. GL, LRS or ABS. You can find detailed information at <u>www.vega.com/downloads</u> and "*Approvals*".



Operation

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

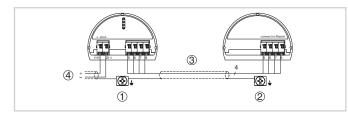
Measurement setup



Measurement setup with a level difference measurement

- 1 Master sensor
- 2 Slave sensor
- 3 Screen

Electrical connection

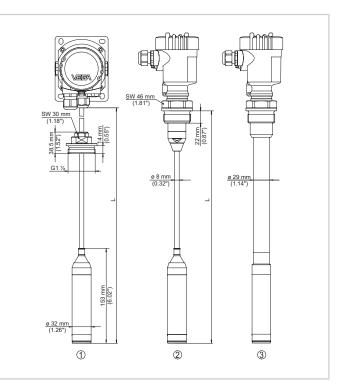


Connection example, electronic differential pressure

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

Specification sheet

Dimensions



1 Version with suspension cable and threaded fitting unassembled G11/2

2 Threaded version G1½, suspension cable

3 Threaded version G1½, connection tube

Information

You can find further information about the VEGA product line on <u>www.</u> <u>vega.com</u>.

In the download section at <u>www.vega.com/downloads</u> 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 <u>www.vega.com</u> 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 <u>www.vega.com</u> and "*VEGA Tools*".

Contact

You can find the VEGA agency serving your area on our homepage www.vega.com.