

Hydrostatic

Continuous level measurement



Overview

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Hydrostatic

Level and pressure measurement

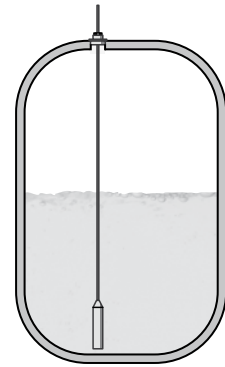
Measuring principle

The pressure measuring cell converting the pressure into an electrical signal is the heart of the pressure transmitter. This pressure-dependent signal is converted by the integrated electronics into a standardised output signal. Different measuring cells are used to detect the pressure. The ceramic cells offer the advantage of an excellent long-term stability and high overload resistance. The metal METEC® measuring cell enables fully welded versions.

VEGAWELL

For gauge measurements

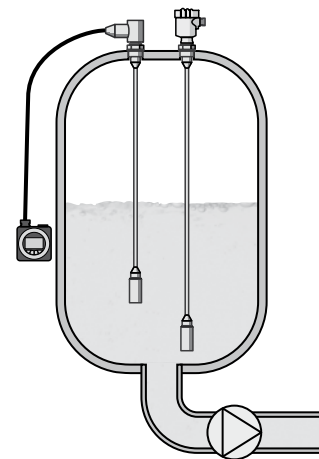
The suspension pressure transmitters are designed for gauge measurements in water/waster applications. Different versions in combination with different cable materials offer all necessary options. The robust ceramic measuring cell as well as the integrated overvoltage arrester ensure reliable operation.






VEGABAR series 80

For all industries

The VEGABAR series 80 covers all requirements on suspension pressure transmitters. Excellent accuracy, overload resistance, temperature resistance and corrosion resistance are the main points which must be met. In conjunction with application-optimised housing versions and electronics, these suspension pressure transmitters are the ideal solution for use in harsh environment. Especially the front-flush, abrasion-resistant CERTEC® measuring cell with its double seal system offers high reliability and measurement certainty.



Overview

| Instrument type | | Sensor diameter Deviation | Process fitting | Process temperature | Measuring range |
|--|---|------------------------------|--|---------------------|------------------------------------|
| VEGAWELL 52 CERTEC® / MINI-CERTEC® |  | from 22 mm 0.1 %; 0.2 % | Straining clamp, threaded fitting | -20 ... +80 °C | 0 ... +60 bar (0 ... +6000 kPa) |
| VEGABAR 86 CERTEC® |  | 32 mm 0.1 % | Straining clamp, threaded fitting, thread from G1½, 1½ NPT, flanges from DN 40, 2" | -20 ... +100 °C | 0 ... +25 bar (0 ... +2500 kPa) |
| VEGABAR 87 METEC® |  | 40 mm 0.1 % | Straining clamp, threaded fitting, thread from G1½, 1½ NPT, flanges from DN 50, 2" | -12 ... +100 °C | 0 ... +25 bar (0 ... +2500 kPa) |

VEGAWELL 52



Submersible pressure transmitter with ceramic measuring cell

Application area

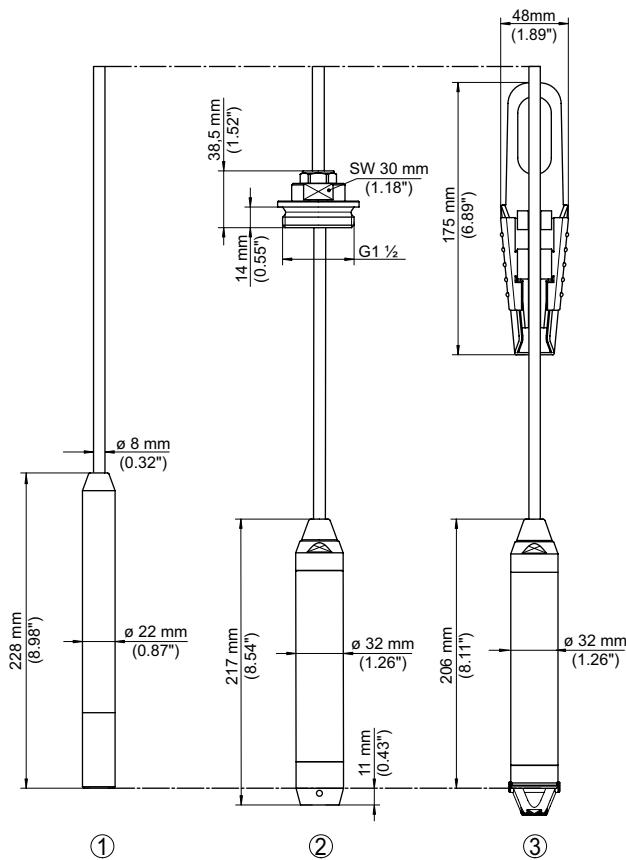
The VEGAWELL 52 is suitable for continuous level measurement of liquids. Typical applications are measurements in water/waste water, deep wells and in the shipbuilding industry.

Your benefit

- High reliability through maximum overload and vacuum resistance of the ceramic measuring cell
- High plant availability through integrated overvoltage protection
- Versatile use through robust housing and cable design

Technical data

| | |
|-------------------------------|---------------------------------|
| Measuring cell: | CERTEC® |
| Sensor diameter: | from 22 mm |
| Measuring range: | 0 ... +60 bar (0 ... +6000 kPa) |
| Process temperature: | -20 ... +80 °C |
| Deviation in characteristics: | 0.2 %; 0.1 % |



- 1 Standard version
- 2 Version with adjustable suspension cable gland
- 3 Version with straining clamp and detachable plastic protective cage

You will find further process fittings and options under www.vega.com/configurator.

You will find further drawings and tables under www.vega.com/downloads.

You will find mounting accessory, welded sockets and housing overviews in chapter "Accessory".

Approval

- XX without
- XM Ship approval
- AX ATEX II 1G, 2G Ex ia IIC T6
- AM ATEX II 1G, 2G Ex ia IIC T6 + Ship approval
- AI IEC Ex ia IIC T6 Ga, Gb

Fastening / Material

- X4 without
- A4 Straining clamp / 316L
- GC Adjustable screw connection for suspension cable G1 PN3, ISO228-1 / 316L
- GA Adjustable screw connection for suspension cable G1½ PN3, ISO228-1 / 316L
- NP Adjustable screw connection for suspension cable G1½ PN0,2; ISO228-1 / PVDF
- GK Thread G1½ PN3, ISO228-1, plastic housing M20x1.5 / 316L
- GV Thread G1½ PN3, ISO228-1, stainless steel housing precision casting / 316L

Version / Process temperature

- A Suspension cable PE / -20...+60°C
- D Suspension cable PUR / -20...+80°C
- B Suspension cable FEP / -20...+80°C

Length

- K 6 m PE suspension cable
- L 12 m PE suspension cable
- M 27 m suspension cable PE

Transmitter material / Diameter

- D Duplex (1.4462) / 32mm
- V 316L / 22mm
- K Duplex (1.4462) with PE coating / 35mm
- P PVDF / 44mm
- T Titanium (3.7035) / 33mm

Sealing concept / Wetted seal

- 1 Single / FKM (VP2/A)
- 3 Single / EPDM (A+P 75.5/KW75F)
- 5 Double FFKM (Perlast G75S) and FKM (V75J)
- P Single / FFKM (Perlast G75S)

Measuring range

- A rel. / 0...+0.1 bar (0...+10 kPa)
- B rel. / 0...+0.2 bar (0...+20 kPa)
- C rel. / 0...+0.4 bar (0...+40 kPa)
- D rel. / 0...+1 bar (0...+100 kPa)
- E rel. / 0...+2.5 bar (0...+250 kPa)
- F rel. / 0...+5 bar (0...+500 kPa)
- G rel. / 0...+10 bar (0...+1000 kPa)
- 2 abs./0...+2.5 bar (0...+250kPa)
- 3 abs./0...+5.0 bar (0...+500kPa)

Electronics

- C Two-wire 4 ... 20mA
- D Two-wire 4...20mA/HART® + Four-wire PT100

Deviation in characteristic

- 1 0.20%
- 2 0.10%

Transmitter option

- X without
- V with impact protection

| | | | | | | | | | | | | | | | |
|-------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| WL52. | | | | | | | | | | | | | | | |
|-------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

Total length

- PE (400-550000 mm) per 100 mm
- FEP (400-550000 mm) per 100 mm
- PUR (400-550000 mm) per 100 mm

VEGABAR 86



Submersible pressure transmitter with ceramic measuring cell

Application area

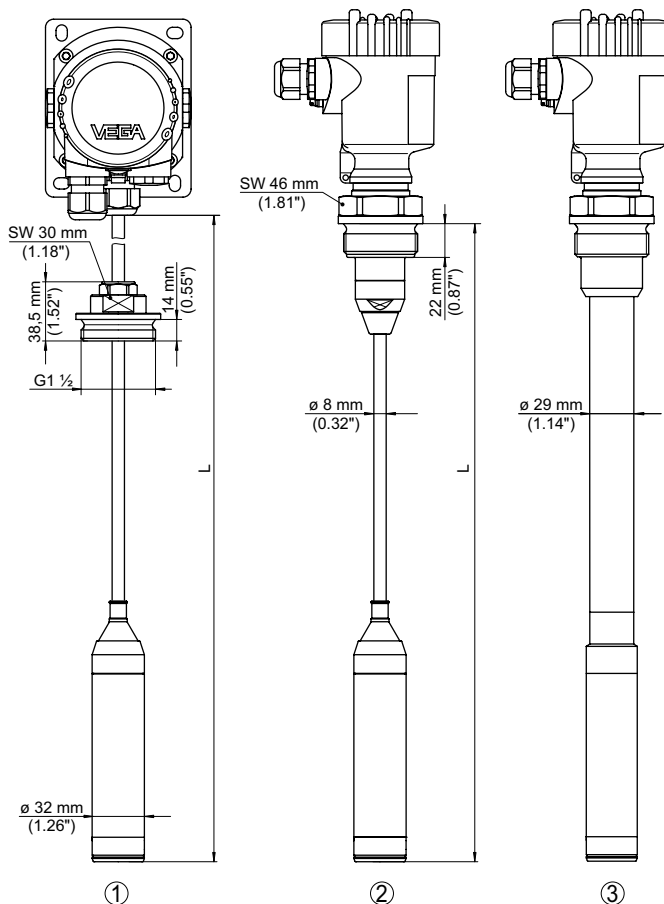
The VEGABAR 86 is a submersible pressure transmitter for level measurement in wells, basins and open vessels. Thanks to the flexibility through different cable and tube versions, VEGABAR 86 can be used in various applications.

Your benefit

- High plant availability through maximum overload and vacuum resistance of the ceramic measuring cell
- Self-cleaning effect through front-flush installation
- Low maintenance costs through wear-free ceramic measuring cell

Technical data

| | |
|----------------------|--|
| Measuring cell: | CERTEC® |
| Sensor diameter: | 32 mm |
| Measuring range: | 0 ... +25 bar (0 ... +2500 kPa) |
| Process fitting: | straining clamp, threaded fitting thread from G1½, 1½ NPT flanges from DN 40, 2" |
| Process temperature: | -20 ... +100 °C |
| Accuracy class: | 0.1 % |



- 1 Version with suspension cable, threaded fitting unassembled G1½ and cable outlet / IP 68, ext. housing plastic / IP 65
- 2 Threaded version G1½, suspension cable
- 3 Threaded version G1½, connection tube

Adjustment according to customer specification free-of-charge.

You will find further process fittings and options under www.vega.com/configurator.

You will find further drawings and tables under www.vega.com/downloads.

You will find mounting accessory, welded sockets and housing overviews in chapter "Accessory".

VEGABAR 87



Submersible pressure transmitter with metallic measuring cell

Application area

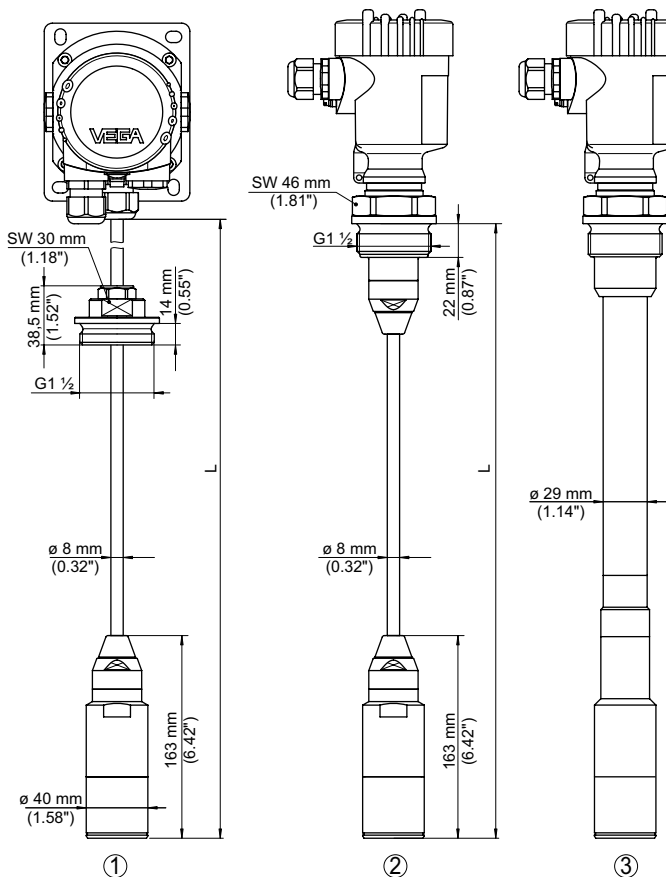
The VEGABAR 87 is a pressure transmitter for pressure and level measurements of liquids and viscous products with higher temperatures in the chemical, food processing and pharmaceutical industry. With VEGABAR 87 it is possible to detect even smallest measuring ranges from 0.1 bar.

Your benefit

- Maximum reliability even with rapidly changing process temperatures
- High plant availability through vacuum-resistant version
- Very good cleanability and high chemical resistance through adapted materials

Technical data

| | |
|----------------------|--|
| Measuring cell: | METEC® |
| Sensor diameter: | 40 mm |
| Measuring range: | 0 ... +25 bar (0 ... +2500 kPa) |
| Process fitting: | straining clamp, threaded fitting thread from G1½, 1½ NPT flanges from DN 50, 2" |
| Process temperature: | -12 ... +100 °C |
| Accuracy class: | 0.1 % |



- 1 Version with suspension cable, threaded fitting unassembled G1½ and cable outlet / IP 68, ext. housing plastic / IP 65
- 2 Threaded version G1½, suspension cable
- 3 Threaded version G1½, connection tube

Adjustment according to customer specification free-of-charge.

You will find further process fittings and options under www.vega.com/configurator.

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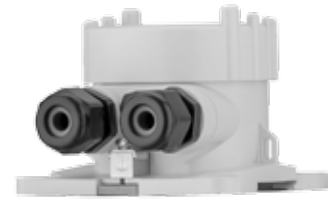
VEGABOX 03



Breather housing with ventilation filter

Application area

The VEGABOX 03 serves the electrical connection and the ventilation of the hydrostatic submersible pressure transmitter, e.g. VEGAWELL 52.



Your benefit

- Safe use in harsh environment through robust housing materials
- Simple and quick connection through integrated spring-loaded terminals
- Protection against moisture through high quality ventilation filter

Technical data

Protection: IP 66/IP 68 (0.2 bar)
 Mounting: wall, tube mounting
 carrier rail 35 x 7.5 according to EN 50022
 Ambient temperature: -20 ... +70 °C

Successor type for VEGABOX 02

Scope

- A Europe
- I Worldwide

Approval

- X for Ex-free area
- M Ship approval
- C ATEX II 1G, 2G, Ex ia IIC T6 Ga, Gb
- O ATEX II 1G, 2G, Ex ia IIC T6 Ga, Gb + Ship approval
- X for Ex-free area
- C IEC Ex ia IIC T6 Ga, Gb
- O IEC Ex ia IIC T6 + Ship approval

Version

- A Pressure compensation

Housing

- K Plastic
- A Aluminium
- V Stainless steel (precision casting)

Protection

- I IP66/IP67 NEMA 4X
- N IP66/IP68 NEMA 6P (0.2bar)

Cable entry / Connection

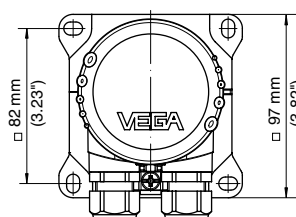
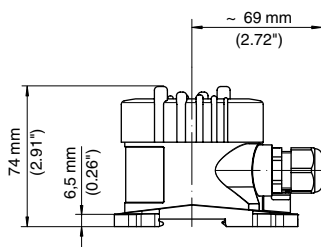
- M M20x1.5 / Cable gland PA black
- N 1/2NPT / Blind plug

Mounting

- A for wall mounting with Aluminium or stainless steel housing
- C for carrier rail and wall mounting with plastic housing
- D for carrier rail with Aluminium or stainless steel housing
- E for tube mounting (29...60mm) with mounting material

Certificates

- M Yes
- X no



Measuring instrument holder for wall/tube mounting



For mounting of pressure transmitters

The measuring instrument holder is used for mounting of pressure transmitters of VEGABAR series 50/80 as well as submersible pressure transmitters VEGAWELL 52.

The adaptation to different instrument diameters is enabled via an attached reduction piece.

The materials used are 316L and 304.

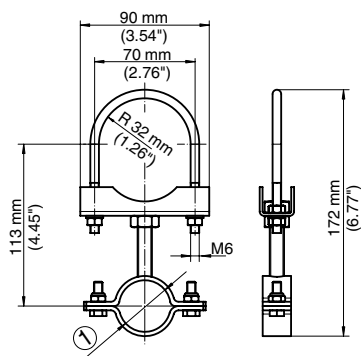


Version

D for VEGABAR series 50/80; VEGAWELL ø22, 32, 38...40 mm

E for VEGABAR series 50/80; VEGAWELL ø33, 36, 44 mm

BARMONT.



1 Adaptable diameter from 22 ... 44 mm

Straining clamp

Suitable for VEGABAR series 60/80 and VEGAWELL



Material
27363

Stainless steel 316L

2.

Screw connection for suspension cable

Suitable for VEGABAR series 60/80 and VEGAWELL



Version / Material

- GC Screw connection G1 PN3, DIN3852-A / 316L
- GA Screw connection G1½ PN3, DIN3852-A / 316L
- GB Verschraubung 1½NPT PN3, ASME B1.20.1 / 316L

WLVCHR.