



Hydrostatic

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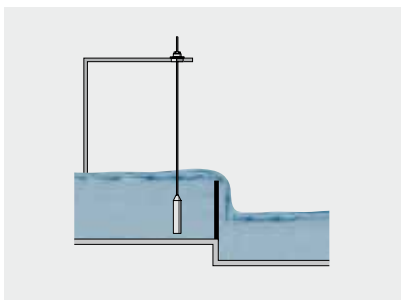
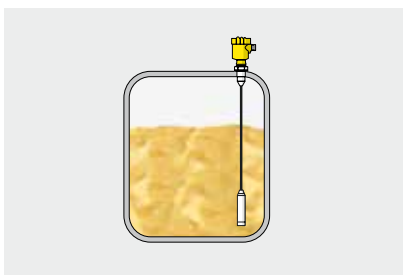


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Overview Hydrostatic



Area of application

The hydrostatic pressure transmitters VEGAWELL and VEGABAR were specifically designed to measure levels in a wide range of liquids with widely different properties. They can also measure the temperature of the medium.

Measuring principle

The hydrostatic pressure of the liquid column acts on a pressure measuring cell, which converts it into an electronic signal. Ceramic-capacitive and metallic pressure measuring cells are used for this purpose in the instruments.

Advantages

Level measurement by means of pressure measurement is totally unaffected by foam or internal vessel installations. The hydrostatic pressure transmitters can be precisely adapted to the process by selecting an appropriate measuring cell and suitable housing materials.



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	VEGAWELL 52	VEGABAR 86	VEGABAR 87
			
Application	Liquids	Liquids	Liquids
Sensor diameter	22 mm or 32 mm	32 mm	40 mm
Deviation	0.1 %; 0.2 %	0.1 %	0.1 %
Measuring cell	CERTEC®/MINI-CERTEC®	CERTEC®	METEC®
Process fitting	Straining clamp, thread, suspension cable, threaded fitting of 316L, PVDF, Duplex, Titanium	Straining clamp, suspension cable, threaded fitting, thread from G1½, 1½ NPT, flanges from DN 40, 2" aus 316L, PVDF	Straining clamp, suspension cable, threaded fitting, thread from G1½, 1½ NPT, flanges from DN 50, 2" of 316L
Process temperature	-20 ... +80 °C	-20 ... +100 °C	-12 ... +100 °C
Measuring range	0 ... +60 bar (0 ... +6000 kPa)	0 ... +25 bar (0 ... +2500 kPa)	0 ... +25 bar (0 ... +2500 kPa)
Overload resistance	up to 150-fold measuring range	up to 200-fold measuring range	up to 150-fold measuring range
Signal output	4 ... 20 mA 4 ... 20 mA/HART + PT 100	4 ... 20 mA, 4 ... 20 mA/HART, Profibus PA, Foundation Fieldbus	4 ... 20 mA, 4 ... 20 mA/HART, Profibus PA, Foundation Fieldbus
Display/Adjustment	PACTware, VEGADIS 82	PLICSCOM, PACTware, VEGADIS 81, VEGADIS 82	PLICSCOM, PACTware, VEGADIS 81, VEGADIS 82
Approvals	ATEX, IEC, FM, CSA, GOST Overfill protection, Ship	ATEX, IEC, FM, CSA, GOST, Overfill protection, Ship, SIL2	ATEX, IEC, FM, CSA, GOST, Overfill protection, Ship, SIL2



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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.

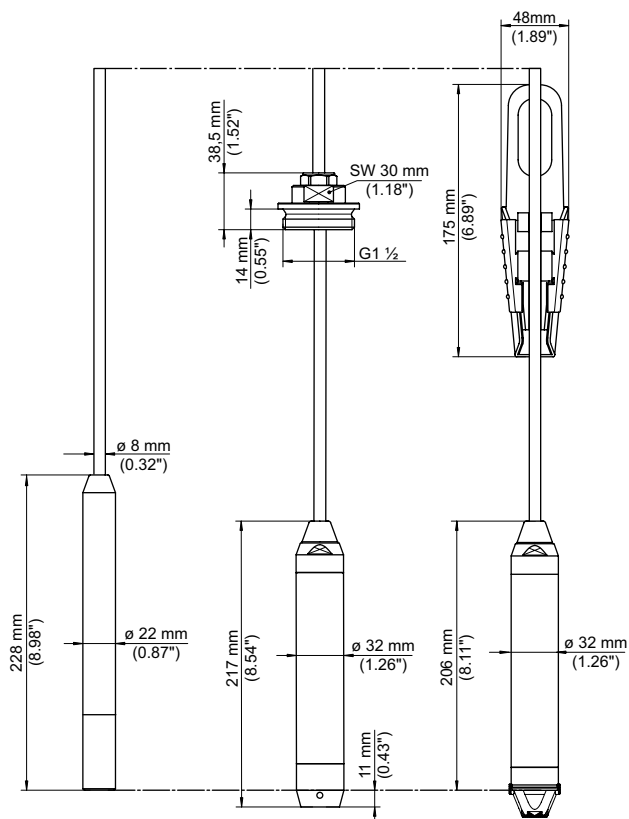
Your benefit

- 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 %

Delivery time:  **SPEED**



The options shown represent only a limited selection. Additional instrument options and possible restrictions.



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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
XO	Cable outlet with thread ¾NPT / Duplex (1.4462)
GK	Thread G1½ PN3, ISO228-1, plastic housing M20x1.5 / 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
T	individually selectable length (PE/PUR/FEP)

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

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

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

Deviation in characteristic

1	0.20%
2	0.10%

Transmitter option

X	without
V	with impact protection

WL52.																			
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Total length

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



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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. The transmitter can be used in all industries. The simple connection of VEGABAR series 80 sensors as electronic differential pressure opens new possibilities for the measurement of differential pressures.

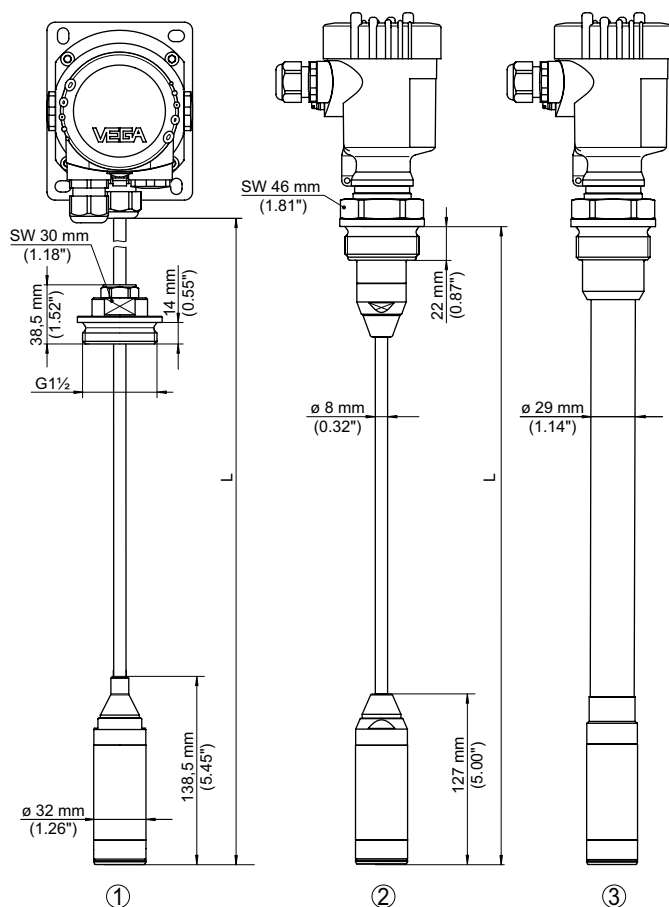
Your benefit

- 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 %

Delivery time:  **SPEED**



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

The options shown represent only a limited selection. Additional instrument options and possible restrictions.



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Mounting accessories, welded sockets
and housing overview:
Chapter Accessory

A	Europe	
I	worldwide	
	Approval	
X	for Ex-free area	
C	ATEX II 1G, 1/2G, 2G Ex ia IIC T6	
O	ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + Ship approval	
E	ATEX II 1/2G, 2G Ex d IIC T6	
C	IEC Ex ia IIC T6	
	Version / Process temperature	
A	Suspension cable PE / -20...+60°C	
B	Suspension cable FEP / -20...+100°C	
C	Suspension cable PUR / -20...+80°C	
D	Connection tube 316L / -20...+100°C	
	Process fitting / Material	
	XX without	
M9	Straining clamp / 316L	
MA	Adjustable screw connection for suspension cable G1½ PN3 / 316L	
DA	Thread G1½, DIN3852-A / 316L	
B2	Flange DN50 PN40 Form C, DIN2501 / 316L	
	Transmitter options	
X	without	
P	PE plastic coating	
	Seal concept / Measuring cell seal	
A	Double / FKM (VP2/A)	
J	Double / FFKM (Kalrez 6375)	
D	Double / EPDM (A+P 75.5/ KW75F)	
	Pressure	
G	Relative pressure (measurement against atmosphere)	
A	Absolute pressure (measurement against vacuum)	
	Measuring range	
A	0...+0.025bar (0...+2.5kPa)	
B	0...+0.1bar (0...+10kPa)	
C	0...+0.4bar (0...+40kPa)	
D	0...+1.0bar (0...+100kPa)	
E	0...+2.5bar (0...+250kPa)	
I	0...+25.0bar (0...+2500kPa)	
	Electronics	
Z	Two-wire 4 ... 20mA	
H	Two-wire 4...20mA/HART®	
A	Two-wire 4...20mA/HART® with SIL qualification	
P	Two-wire Profibus PA	
F	Two-wire Foundation Fieldbus	
S	Slave electronics for electronic differential pressure	
	Supplementary electronics	
X	without	
Z	Additional current output 4...20mA	
	Housing	
K	Plastic single chamber	
R	Plastic double chamber	
A	Aluminium single chamber	
D	Aluminium double chamber	
8	Stainless steel single chamber (electropolished)	
	Housing version / Protection	
I	compact / IP66/IP67; NEMA 6P	
T	Cable outlet / IP66/IP68	
	Cable entry / Connection	
M	M20x1.5 / Cable gland PA black (ø5-9mm), standard	
N	½NPT / Blind plug	
	Display/Adjustment module PLICSCOM	
X	without	
A	Mounted	
	Certificate	
X	no	
M	yes (e.g. FDA; test certificates NACE) further add. prices possible	

Total length

Adjustment acc. to customer specification free of charge.

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. The transmitter can be used in all industries. The simple connection of VEGABAR series 80 sensors as electronic differential pressure opens new possibilities for the measurement of differential pressures.

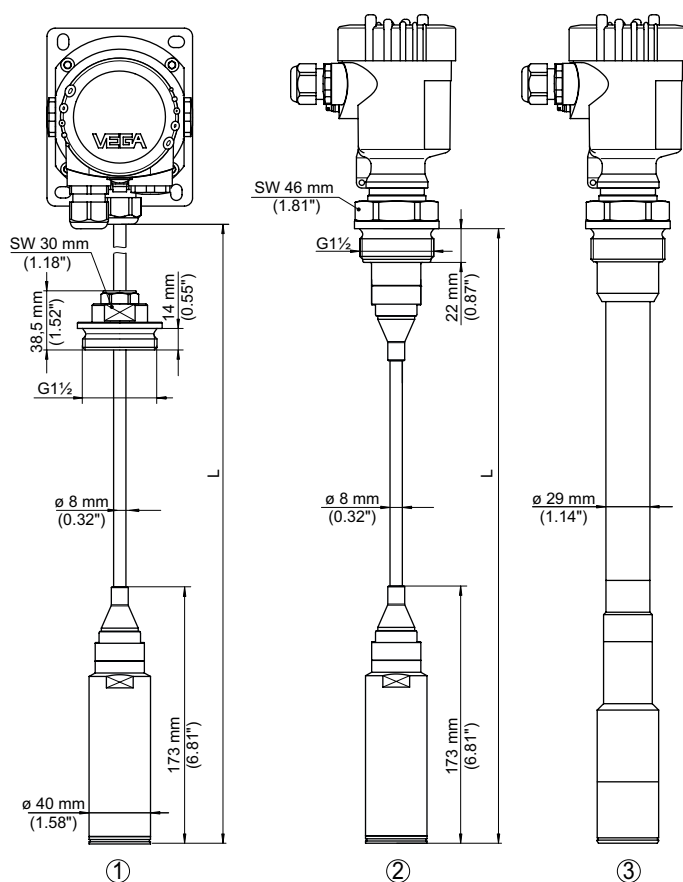
Your benefit

- 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 %

Delivery time:  **SPEED**



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



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Additional instrument options and possible

Mounting accessories, welded sockets
and housing overview:
Chapter Accessory

A	Europe
I	worldwide
Approval	
X	for Ex-free area
C	ATEX II 1G, 1/2G, 2G Ex ia IIC T6
O	ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + Ship approval
E	ATEX II 1/2G, 2G Ex d IIC T6
C	IEC Ex ia IIC T6
Version / Process temperature	
B	Suspension cable FEP / -20...+100°C
D	Connection tube 316L / -12...+100°C
Process fitting / Material	
XX	without
M9	Straining clamp / 316L
MA	Adjustable screw connection for suspension cable G1½ PN3 / 316L
DA	Thread G1½, DIN3852-A / 316L
B2	Flange DN50 PN40 Form C, DIN2501 / 316L
Transmitter options	
X	without
Pressure	
G	Relative pressure (measurement against atmosphere)
A	Absolute pressure (measurement against vacuum)
Measuring range	
B	0...+0.1bar (0...+10kPa)
C	0...+0.4bar (0...+40kPa)
D	0...+1.0bar (0...+100kPa)
E	0...+2.5bar (0...+250kPa)
G	0...+10.0bar (0...+1000kPa)
I	0...+25.0bar (0...+2500kPa)
Electronics	
Z	Two-wire 4 ... 20mA
H	Two-wire 4...20mA/HART®
A	Two-wire 4...20mA/HART® with SIL qualification
P	Two-wire Profibus PA
F	Two-wire Foundation Fieldbus
S	Slave electronics for electronic differential pressure
Supplementary electronics	
X	without
Z	Additional current output 4...20mA
Housing	
K	Plastic single chamber
R	Plastic double chamber
A	Aluminium single chamber
D	Aluminium double chamber
8	Stainless steel single chamber (electropolished)
Housing version / Protection	
I	compact / IP66/IP67; NEMA 6P
T	Cable outlet / IP66/IP68
Cable entry / Connection	
M	M20x1.5 / Cable gland PA black (ø5-9mm), standard
N	½NPT / Blind plug
Display/Adjustment module PLICSCOM	
X	without
A	Mounted
Certificate	
X	no
M	yes (e.g. FDA; test certificates NACE) further add. prices possible

Total length

Adjustment acc. to customer specification free of charge.



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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)

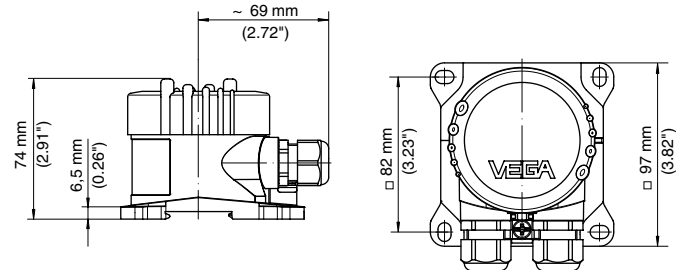
Mounting: wall, tube mounting
carrier rail 35 x 7.5 according to EN 50022

Ambient temperature: -20 ... +70 °C

Delivery time:  **SPEED**



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 ½NPT / 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	
X no	
M yes, further add. prices possible	



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.

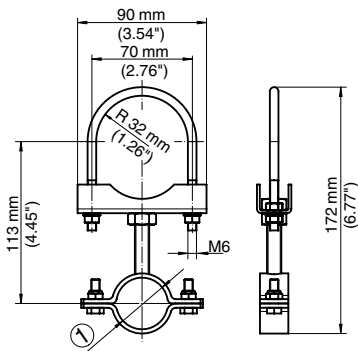
Delivery time:  **SPEED**



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



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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

WLVSCHR.