



Level measurement – Ultrasonic

| | |
|-------------------------|----|
| Overview _____ | 50 |
| VEGASON series 60 _____ | 52 |
| Dimensions _____ | 57 |

VEGASON:

Non-contact measurement of liquids and solids with ultrasonic waves

Measuring principle

Short ultrasonic pulses between 10 kHz and 70 kHz are emitted by the transducer to the measured product, reflected by the product surface and received again by the transducer. They spread with sound velocity and the time from emission to reception of the signals is proportional to the level in the vessel.

Latest microcomputer technology and proven ECHOFOX software detect the level echo reliably from a number of false echoes and measure it precisely.

By simply entering the vessel dimensions, a level-proportional signal can be displayed. An adjustment with emptied and filled vessel is not necessary!

Wide application range

With different emitting frequencies, levels can be measured in a measuring range between 5 m to 45 m. Optional swivelling holders enable an ideal orientation of the sensors in solids.

Unaffected by product properties

Different product compositions or complete product changes do not influence the measuring result. A fresh adjustment is not necessary.



Overview

VEGASON 61



VEGASON 62



VEGASON 63



Applications: liquids und solids in all industries, especially in the water and sewage water treatment

Measuring range: liquids: 0.25 ... 5 m

solids: 0.25 ... 2 m

Process fitting: G1½A of PVDF

Process temperature: -40...80°C

Process pressure: -0.2...2 bar (-20...200 kPa)

liquids und solids in all industries, especially in the water and sewage water treatment

liquids: 0.4 ... 8 m

solids: 0.4 ... 3.5 m

G2A of PVDF

-40...80°C

-0.2...2 bar (-20...200 kPa)

liquids and solids in all industries

liquids:

0.6 ... 15 m

solids: 0.6 ... 7 m

compression flange or mounting loop

-40...80°C

-0.2...1 bar (-20...100 kPa)

VEGASON 64



VEGASON 65



Applications: solids

Measuring range:

liquids: 1 ... 25 m

solids: 1 ... 15 m

Process fitting: flange with optional swivelling holder

Process temperature: -40...80°C

Process pressure: -0.2...0.5 bar (-20...50 kPa)

solids

liquids: 0.8 ... 45 m

solids: 0.8 ... 25 m

Process fitting: flange with optional swivelling holder

-40...80°C

-0.2...0.5 bar (-20...50 kPa)

VEGASON 62

Compact ultrasonic sensor for continuous level measurement

Especially suitable for measurement of liquids and solids in virtually all industries, particularly in the water and waste water industry

- transducer of PVDF with EPDM seal and integrated temperature sensor for correction of the running time
- accuracy +/- 10mm
- ECHOFOX signal processing with Fuzzy-Logic
- adjustment with PLICSCOM, HART handheld or PC
- instrument from the plics® family

Measuring range:

- Liquids : 0.4...8 m
- Solids : 0.4...3.5 m



Approval

- XX** without
- XM** Ship approval
- CX** ATEX II 1G, 1/2G, 2G EEx ia IIC T6
- CM** ATEX II 1G, 1/2G, 2G EEx ia IIC T6 + Ship approval

Version / Process temperature

- A** Standard / -40...80°C

Process fitting / Material

- G** Thread G2A / PVDF
- N** Thread 2"NPT / PVDF

Electronics

- H** Two-wire 4...20mA/HART®
- V** Four-wire 4...20mA/HART®¹⁾
- P** Profibus PA
- F** Foundation Fieldbus

Housing / Protection

- K** Plastic / IP66/IP67
- A** Aluminium / IP66/IP68 (0.2 bar)
- D** Aluminium double chamber / IP66/IP68 (0.2 bar)
- V** Stainless steel 316L / IP66/IP68 (0.2bar)

Cable entry / Plug connection

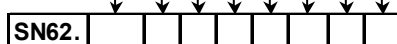
- M** M20x1.5 / without
- N** ½NPT / without

Indicating/adjustment module (PLICSCOM)

- X** Without
- A** Top mounted

Additional equipment

- X** without



¹⁾ Only in conjunction with Housing / Protection "D"

- Further options on request

VEGASON 63

Compact ultrasonic sensor for continuous level measurement

Especially suitable for measurement of liquids and solids in virtually all industries



- transducer of UP with stainless steel diaphragm (316L) and integrated temperature sensor for correction of the running time
- accuracy +/- 10mm
- ECHOFOX signal processing with Fuzzy-Logic
- adjustment with PLICSCOM, HART handheld or PC
- instrument from the plics® family

Measuring range:

- Liquids : 0.6...15 m
- Solids : 0.6...7 m



Approval

XX without

XM Ship approval

Version / Process temperature

A Standard / -40...80°C

Process fitting / Material

X without compression flange

C Mounting loop / 1.4301

B Compression flange DN100PN16 / 316L

A Compression flange DN100PN16 / PPH

E Compression flange ANSI 4" 150psi / 316L

D Compression flange ANSI 4" 150psi / PPH

Electronics

H Two-wire 4...20mA/HART®

V Four-wire 4...20mA/HART® ¹⁾

P Profibus PA

F Foundation Fieldbus

Housing / Protection

K Plastic / IP66/IP67

A Aluminium / IP66/IP68 (0.2 bar)

D Aluminium double chamber / IP66/IP68 (0.2 bar)

V Stainless steel 316L / IP66/IP68 (0.2bar)

Cable entry / Plug connection

M M20x1.5 / without

N ½NPT / without

Indicating/adjustment module (PLICSCOM)

X Without

A Top mounted

Additional equipment

X without

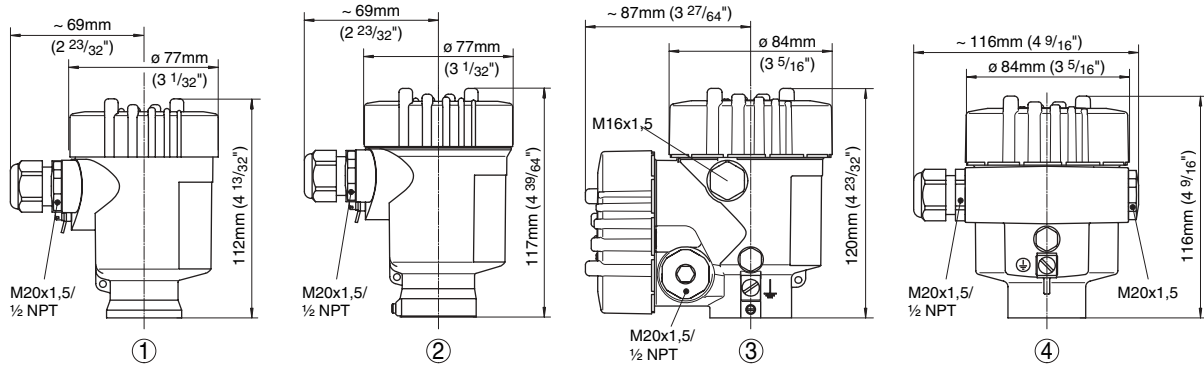
| | | | | | | | | | |
|-------|--|--|--|--|--|--|--|--|--|
| SN63. | | | | | | | | | |
|-------|--|--|--|--|--|--|--|--|--|

¹⁾ Only in conjunction with Housing / Protection "D"

- Further process fittings and options on request

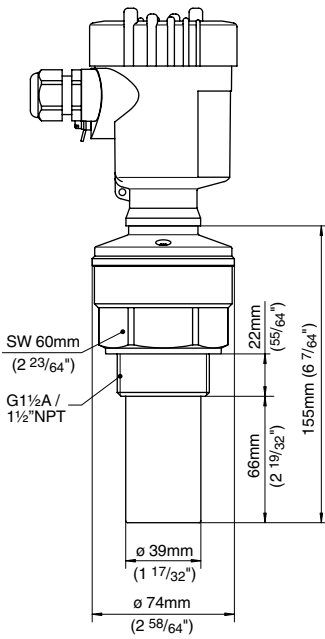
Dimensions

Housings

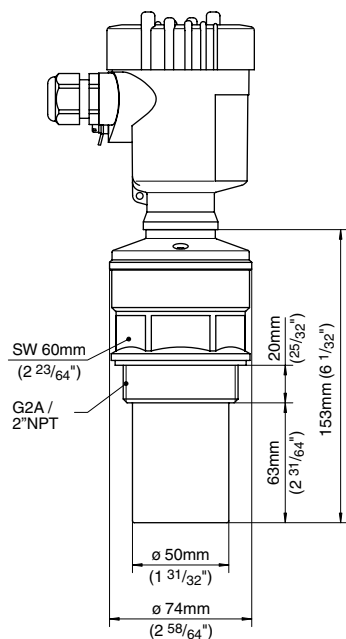


- 1 Plastic housing
- 2 Stainless steel housing
- 3 Aluminium double chamber housing
- 4 Aluminium housing

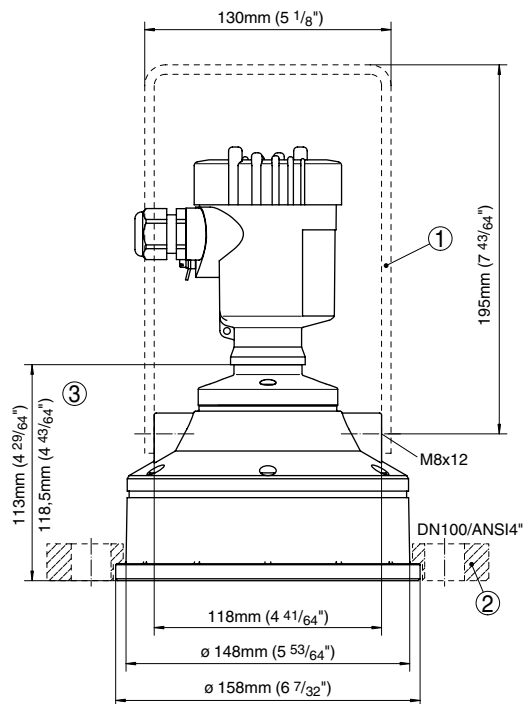
VEGASON 61



VEGASON 62

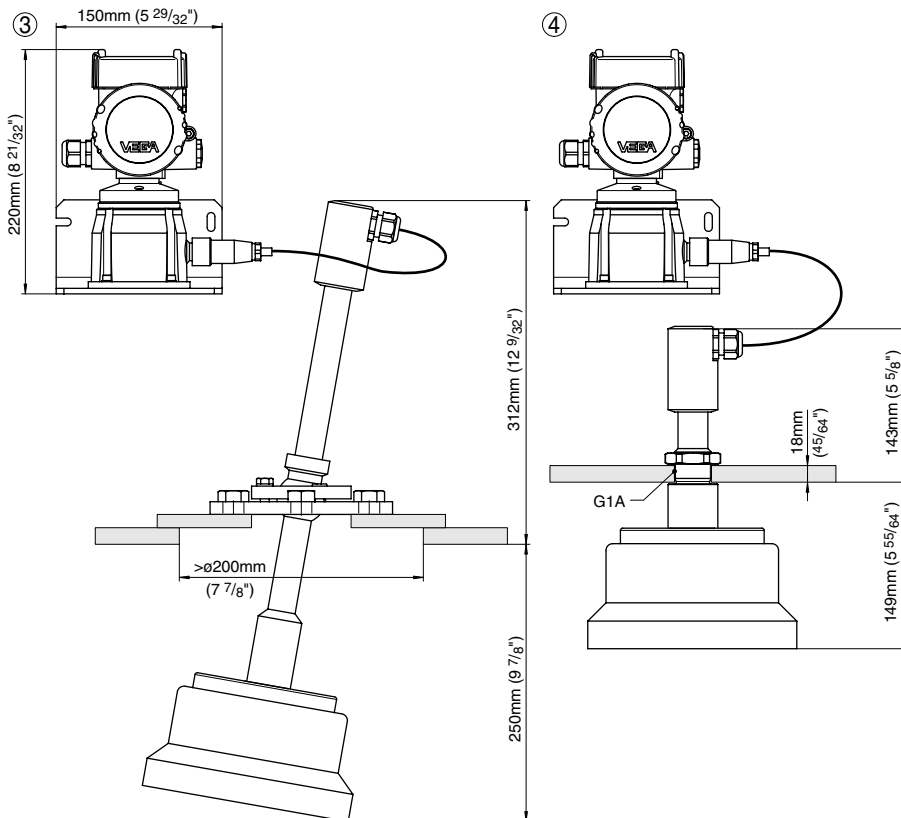
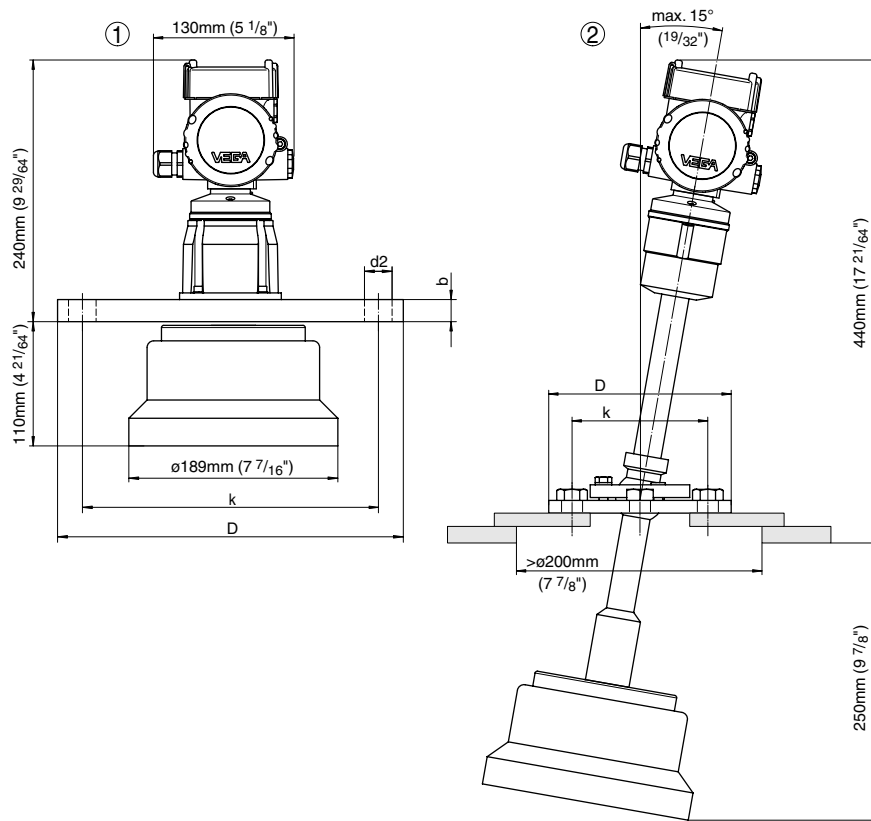


VEGASON 63



- 1 Mounting loop
 - 2 Compression flange
 - 3 Dimension for Aluminium housing/adaptor
- Specifications in mm or inch

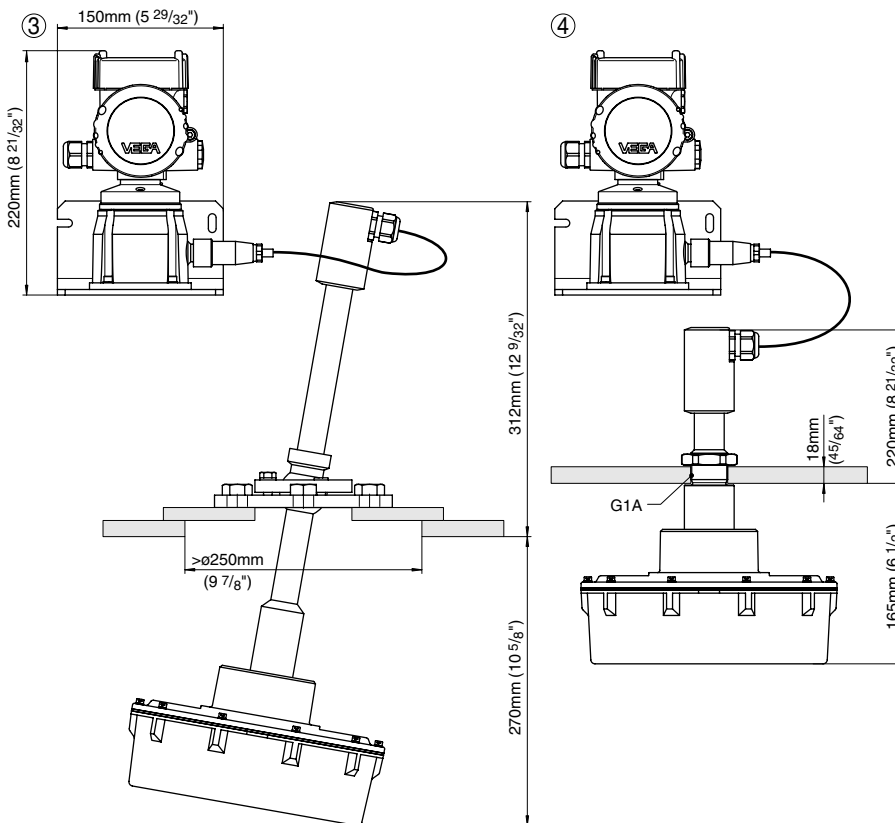
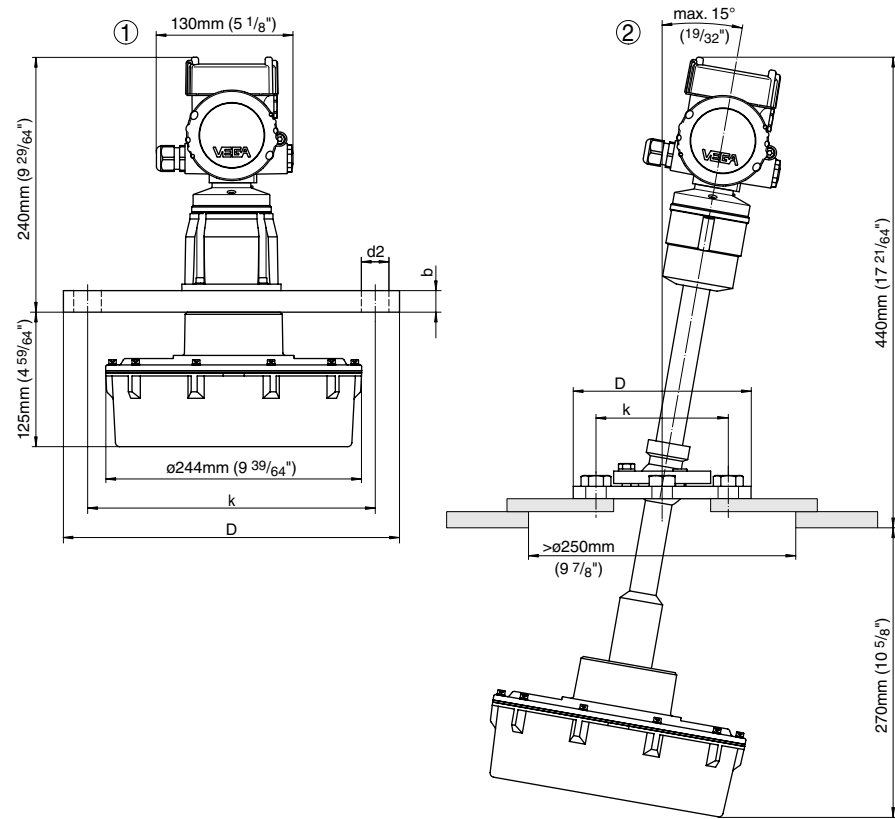
VEGASON 64



- 1 Version A
- 2 Version B
- 3 Version C
- 4 Version D

Specifications in mm or inch

VEGASON 65



- 1 Version A
 - 2 Version B
 - 3 Version C
 - 4 Version D
- Specifications in mm or inch



