



Ultrasonic

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VEGASON

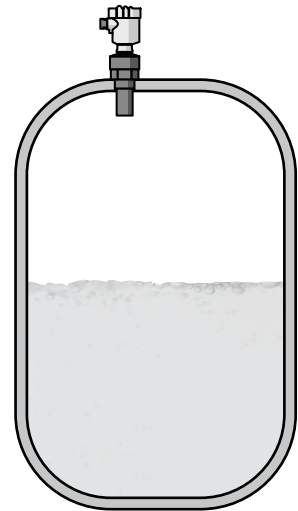
Non-contact measurement with ultrasonics

Measuring principle

Short ultrasonic impulses in the range of 18 to 70 kHz are emitted by the transducer to the measured product, reflected by the product surface and received again by the transducer. The pulses are spread with sound velocity. The time from emission to reception of the signals is proportional to the level in the vessel. The proven ECHOFOX signal processing analysis the reflections in the vessel based on long-standing experience and detects the level signal reliably. The adjustment of the sensors is very simple without changing the level.

Applications in liquids

Sensors with higher frequencies are used for these applications. Independent of product properties they deliver a continuous measuring signal and are ideal for water/waste water applications and the measurement of slightly corrosive acids and lyes. Sensors with respective approval are available for applications in gas-Ex areas.



Applications in bulk solids

Sensors with low frequencies are used for measurement in bulk solids. The lower switching frequency enables a considerably better penetration of dusty atmosphere. An adjustable mounting flange and an external electronics version enable the simple adaptation to the local conditions. Typical applications are level measurement of bulk solids containers, bulk solids silos with average size dimensions and open heaps. Approved sensors are available for applications in dust-Ex areas.



Overview



VEGASON 61

VEGASON 62

Application	Liquids and bulk solids in small vessels	Liquids and bulk solids in small vessels
Measuring range	Liquids: 0.25 ... 5 m Bulk solids: 0.25 ... 2 m	Liquids: 0.4 ... 8 m Bulk solids: 0.4 ... 3.5 m
Process fitting	Thread G1½, 1½ NPT	Thread G2, 2 NPT
Process temperature	-40 ... +80 °C	-40 ... +80 °C
Process pressure	-0.2 ... +2 bar (-20 ... +200 kPa)	-0.2 ... +2 bar (-20 ... +200 kPa)
Accuracy	+/- 10 mm	+/- 10 mm



VEGASON 63

VEGASON 64

VEGASON 65

Application	Liquids and bulk solids in all industries	Bulk solids in silos or bunkers	Bulk solids
Measuring range	Liquids: 0.6 ... 15 m Bulk solids: 0.6 ... 7 m	1 ... 15 m	0.8 ... 25 m
Process fitting	Compression flange DN 100 Mounting strap	Thread G1 Swivelling holder from DN 50, flanges from DN 150	Thread G1 Swivelling holder from DN 50, flanges from DN 150
Process temperature	-40 ... +80 °C	-40 ... +80 °C	-40 ... +80 °C
Process pressure	-0.2 ... +1 bar (-20 ... +100 kPa)	-0.2 ... +0.5 bar (-20 ... +50 kPa)	-0.2 ... +0.5 bar (-20 ... +50 kPa)
Accuracy	+/- 10 mm	+/- 10 mm	+/- 10 mm

VEGASON 61



Ultrasonic sensor for continuous level measurement

Application area

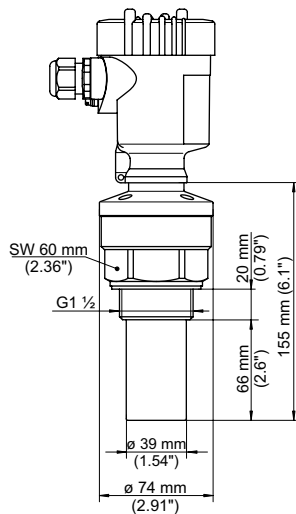
The VEGASON 61 is an ultrasonic sensor for continuous level measurement of liquids or bulk solids. Typical applications are the measurement of liquids in storage tanks or open basins. The sensor is also suitable for the detection of bulk solids in small vessels or open containers. The non-contact measuring principle is independent of product features and allows a setup without medium.

Advantages

- Non-contact measurement
- Reliable measurement independent of product features
- Price-favourable solution for simple applications

Technical data

Measuring range:	in liquids: 0.25 ... 5 m in bulk solids: 0.25 ... 2 m
Process fitting:	thread G1½, 1½ NPT
Process temperature:	-40 ... +80 °C
Process pressure:	-0.2 ... +2 bar (-20 ... +200 kPa)
Accuracy:	+/- 10 mm
SIL qualification:	up to SIL2



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
- CX ATEX II 1G, 1/2G, 2G Ex ia IIC T6
- CM ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + Ship approval
- CI IEC Ex ia IIC T6

Version / Process temperature

- A Seal EPDM/ -40...80°C

Process fitting / Material

- G Thread G1½ (DIN 3852-A-B) / PVDF
- N Thread 1½"NPT (ASME B1.20.1) / PVDF

Electronics

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

Housing / Protection

- K Plastic / IP66/IP67
- A Aluminium / IP66/IP68 (0.2bar)
- D Aluminium double chamber / IP66/IP68 (0.2bar)
- 8 StSt (electropolished) 316L / IP66/IP68 (0.2bar)
- R Plastic double chamber / IP66/IP67

Cable entry / Plug connection

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

Indicating/adjustment module (PLICSCOM)

- X without
- A mounted

Additional equipment

- X without



VEGASON 62



Ultrasonic sensor for continuous level measurement

Application area

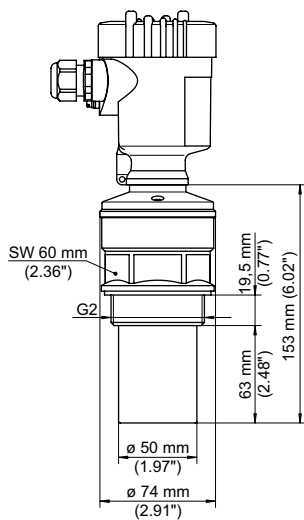
The VEGASON 62 is an ultrasonic sensor for continuous level measurement of liquids and bulk solids. Typical applications are the measurement of liquids in storage vessels or open basins. The sensor is also suitable for the detection of bulk solids in small vessels or silos. Application areas can be found in all industries. The non-contact measuring principle is unaffected by product features and allows a setup without medium.

Advantages

- Non-contact measurement
- Reliable measurement independent of product features
- Price-favourable solution for simple applications

Technical data

Measuring range:	in liquids: 0.4 ... 8 m in bulk solids: 0.4 ... 3.5 m
Process fitting:	thread G2, 2 NPT
Process temperature:	-40 ... +80 °C
Process pressure:	-0.2 ... +2 bar (-20 ... +200 kPa)
Accuracy:	+/- 10 mm
SIL qualification:	up to SIL2



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

Approval

- XX without
- XM Ship approval
- CX ATEX II 1G, 1/2G, 2G Ex ia IIC T6
- CM ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + Ship approval
- CI IEC Ex ia IIC T6

Version / Process temperature

- A Seal EPDM/ -40...80°C

Process fitting / Material

- G Thread G2 (DIN 3852-A-B) / PVDF
- N Thread 2"NPT (ASME B1.20.1) / PVDF

Electronics

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

Housing / Protection

- K Plastic / IP66/IP67
- A Aluminium / IP66/IP68 (0.2bar)
- D Aluminium double chamber / IP66/IP68 (0.2bar)
- 8 StSt (electropolished) 316L / IP66/IP68 (0.2bar)
- R Plastic double chamber / IP66/IP67

Cable entry / Plug connection

- M M20x1.5 / without
- N 1/2"NPT / without

Indicating/adjustment module (PLICSCOM)

- X without
- A mounted

Additional equipment

- X without



VEGASON 63



Ultrasonic sensor for continuous level measurement

Application area

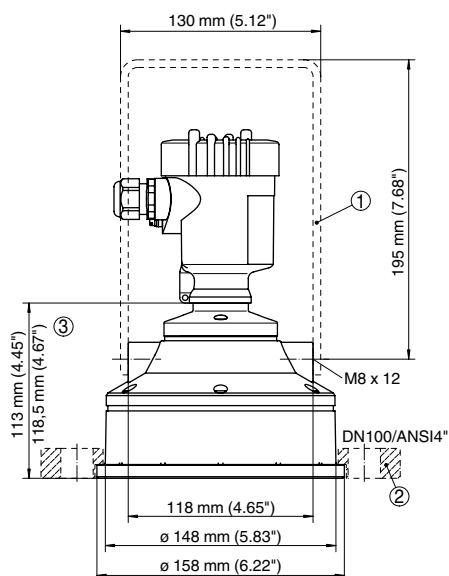
The VEGASON 63 is an ultrasonic sensor for continuous level measurement of liquids and bulk solids. Typical applications are the measurement of liquids in storage tanks and open basins. The sensor is suitable for continuous level measurement of bulk solids in small up to average-size vessels. The non-contact measuring principle is independent of product features and allows a setup without medium.

Advantages

- Non-contact measurement
- Reliable measurement, independent of product features
- Proven measurement technology for standard applications

Technical data

Measuring range:	in liquids: 0.6 ... 15 m in bulk solids: 0.6 ... 7 m
Process fitting:	compression flange DN 100 mounting strap
Process temperature:	-40 ... +80 °C
Process pressure:	-0.2 ... +1 bar (-20 ... +100 kPa)
Accuracy:	+/- 10 mm
SIL qualification:	up to SIL2



- 1 Mounting strap
- 2 Compression flange
- 3 Dimension for Aluminium housing/adapter

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

Version / Process temperature

A Seal EPDM/ -40...80°C

Process fitting / Material

X without compression flange

C Mounting strap / 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®

P Profibus PA

F Foundation Fieldbus

Housing / Protection

K Plastic / IP66/IP67

A Aluminium / IP66/IP68 (0.2bar)

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

8 StSt (electropolished) 316L / IP66/IP68 (0.2bar)

R Plastic double chamber / IP66/IP67

Cable entry / Plug connection

M M20x1.5 / without

N ½NPT / without

Indicating/adjustment module (PLICSCOM)

X without

A mounted

Additional equipment

X without

SN63.

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VEGASON 64



Ultrasonic sensor for continuous level measurement

Application area

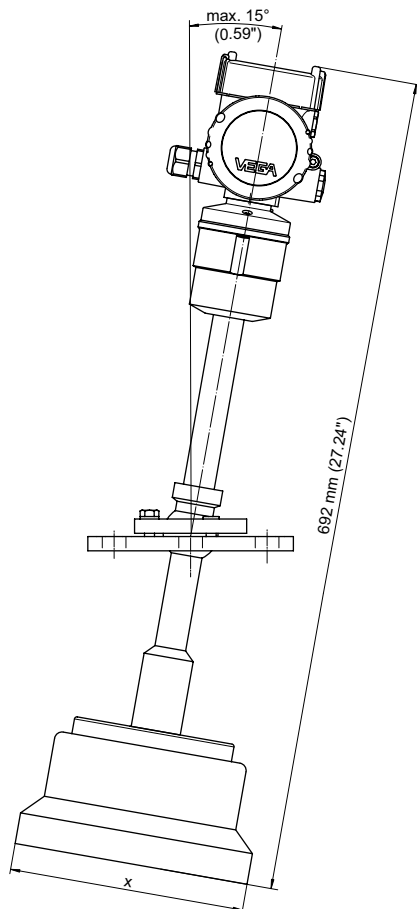
The VEGASON 64 is an ultrasonic sensor for continuous level measurement of bulk solids. Typical applications are the measurement of bulk solids in silos or bunkers. The VEGASON 64 characterizes by manifold mounting possibilities and a simple setup.

Advantages

- Non-contact measurement
- Reliable measurement, independent of product features
- Proven measurement technology for standard applications

Technical data

Measuring range:	1 ... 15 m
Process fitting:	thread G1 swivelling holder from DN 50 flanges from DN 150
Process temperature:	-40 ... +80 °C
Process pressure:	-0.2 ... +0.5 bar (-20 ... +50 kPa)
Accuracy:	+/- 10 mm



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
- GX ATEX II 1/2 D IP66 T

Version / Process temperature

- A Compact in flange version (version A) / -40...80°C
- B Compact with swivelling holder (version B) / -40...80°C
- C Separate with swivelling holder (version C) / -40...80°C
- D Separate with thread (version D) / -40...+80°C

Process fitting / Material

- GS Thread G1 / galvanized steel
- AS Swivelling holder with flange DN50/2" / galvanized St
- BS Swivelling holder with flange DN80/3" / galvanized St
- EA Flange DN200 / Aluminium
- EP Flange DN200 / PP
- LA Flange 8" / Aluminium
- LP Flange 8" / PP

Electronics

- V Four-wire 4...20mA/HART®
- P Profibus PA
- F Foundation Fieldbus

Housing / Protection

- D Aluminium double chamber / IP66/IP67
- R Plastic double chamber / IP66/IP67

Cable entry / Plug connection

- M M20x1.5 / without
- N 1/2NPT / without

Indicating/adjustment module (PLICSCOM)

- X without
- A mounted

Additional equipment

- X without



Connection cable

Connection cable > 5 m f. version C or D, per metre > 5 m

VEGASON 65



Ultrasonic sensor for continuous level measurement

Application area

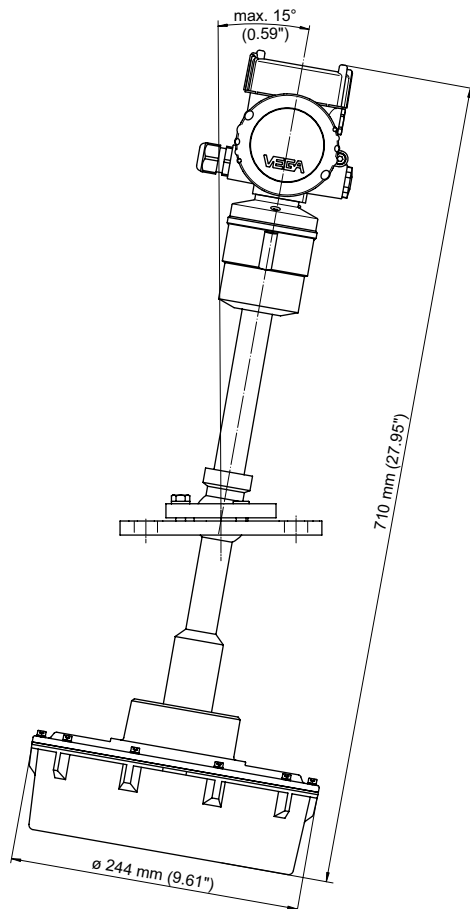
The VEGASON 65 is an ultrasonic sensor for continuous level measurement of bulk solids. Typical applications are the measurement of bulk solids in silos and bunkers. The VEGASON 65 characterizes by manifold mounting possibilities and a simple setup.

Advantages

- Non-contact measurement
- Reliable measurement, independent of product features
- Proven measurement technology for standard applications

Technical data

Measuring range:	0.8 ... 25 m
Process fitting:	thread G1 swivelling holder from DN 50 flanges DN 250
Process temperature:	-40 ... +80 °C
Process pressure:	-0.2 ... +0.5 bar (-20 ... +50 kPa)
Accuracy:	+/- 10 mm



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
- GX ATEX II 1/2 D IP66 T

Version / Process temperature

- A Compact in flange version (version A) / -40...80°C
- B Compact with swivelling holder (version B) / -40...80°C
- C Separate with swivelling holder (version C) / -40...80°C
- D Separate with thread (version D) / -40...+80°C

Process fitting / Material

- GS Thread G1 / galvanized steel
- AS Swivelling holder with flange DN50/2" / galvanized St
- BS Swivelling holder with flange DN80/3" / galvanized St
- FA Flange DN250 / Aluminium
- FP Flange DN250 / PP
- MP Flange 10" / PP

Electronics

- V Four-wire 4...20mA/HART®
- P Profibus PA
- F Foundation Fieldbus

Housing / Protection

- D Aluminium double chamber / IP66/IP67
- R Plastic double chamber / IP66/IP67

Cable entry / Plug connection

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

Indicating/adjustment module (PLICSCOM)

- X without
- A mounted

Additional equipment

- X without

SN65.

Connection cable

Connection cable > 5 m f. version C or D, per metre > 5 m

