

Vibration

Level detection



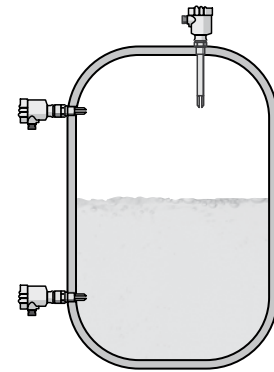
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VEGASWING

For manifold applications in liquids

Measuring principle and applications

The tuning fork of VEGASWING is activated to vibrate on its resonance frequency. The frequency of the fork reduces with the immersion. The frequency change is evaluated by the integrated electronics and converted into a switching signal. With the tuning fork of only 40 mm length, VEGASWINGS work reliably in all liquids independent of the installation position. Pressure, temperature, foam, viscosity and composition of the liquid do not influence the switching accuracy. The price-favourable setup is hence restricted to a simple electrical connection. The high degree of an integrated self-monitoring ensures always a safe and reliable function. Typical applications are overflow and dry run protection systems in liquids, but also in safety-relevant applications up to SIL2 and test with pressing the key.

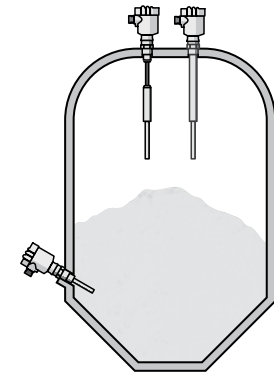


VEGAVIB

Reliable switching in granulated bulk solids

Measuring principle and applications

The vibrating rod of VEGAVIB is activated to vibrate via the piezo drive. If the vibrating rod is immersed, the amplitude will be damped. The electronics detects this damping and converts it into a switching command. The ideal rod design ensures a reliable function in granulated bulk solids. The vibrating element of VEGAVIB is always free and operates reliably. Due to the simple cleanability, it fulfils all requirements for use in the food processing and pharmaceutical industry. The installation position and granulation size do not influence the reliability. Mounting and setup are very easy, an adjustment with medium is not necessary. The VEGAVIB is used as overflow protection and empty alarm in silos and bunkers, also in safety-relevant applications up to SIL2. Typical applications are bulk solids such as plastic granules, pellets and non-adhesive powder products.

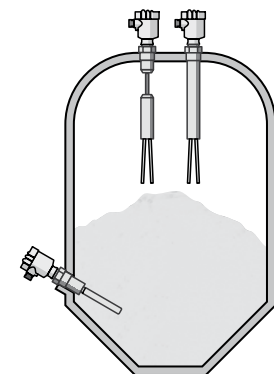


VEGAWAVE

Robust and reliable for powdery bulk solids

Measuring principle and applications







A tuning fork is used as sensor element for the VEGAWAVE series. The principle of amplitude processing corresponds to that of VEGAVIB series. The advantages of this series are ruggedness as well as insensitivity to buildup. Therefore, it is the ideal sensor for powders and fine-grained products. Mounting and setup are very easy, an adjustment with medium is not necessary. The VEGAWAVE is used as overflow protection and empty alarm in silos and bunkers, also in safety-relevant applications up to SIL2. Typical applications are products such as flour, cement and sand as well as fine-grained bulk solids such as plastic granules, grit and styrofoam.







Overview

Instrument type		Material	Process fitting	Process temperature	Process pressure
VEGASWING 51 Liquids Standard		316L	Thread from G½, ½ NPT, hygienic fittings	-40 ... +150 °C	-1 ... +64 bar (-100 ... +6400 kPa)
VEGASWING 61 Liquids Standard		316L, Hastelloy, ECTFE, PFA, enamel, Monel	Thread from G¾, ¾ NPT, flanges from DN 25, 1", hygienic fittings	-50 ... +250 °C	-1 ... +64 bar (-100 ... +6400 kPa)
VEGASWING 63 Liquids Tube extension up to 6 m		316L, Hastelloy, ECTFE, PFA, enamel, Monel	Thread from G¾, ¾ NPT, flanges from DN 25, 1", hygienic fittings	-50 ... +250 °C	-1 ... +64 bar (-100 ... +6400 kPa)
VEGASWING 66 Liquids under extreme high and low process temperatures Tube extension up to 3 m		316L, Inconel 718, Hastelloy	Thread from G1, 1 NPT, flanges from DN 50, 2"	-196 ... +450 °C	-1 ... +160 bar (-100 ... +16000 kPa)

Overview

Instrument type		Measuring range	Process fitting	Process temperature	Process pressure
VEGAVIB 61 Standard		Bulk solids from 20 g/l	Thread from G1, 1 NPT, flanges from DN 32, 1½", hygienic fittings	-50 ... +250 °C	-1 ... +16 bar (-100 ... +1600 kPa)
VEGAVIB 62 Suspension cable up to 80 m		Bulk solids from 20 g/l	Thread from G1, 1 NPT, flanges from DN 32, 1½", hygienic fittings	-40 ... +150 °C	-1 ... +6 bar (-100 ... +600 kPa)
VEGAVIB 63 Tube extension up to 6 m		Bulk solids from 20 g/l	Thread from G1, 1 NPT, flanges from DN 32, 1½", hygienic fittings	-50 ... +250 °C	-1 ... +16 bar (-100 ... +1600 kPa)
VEGAWAVE 61 Standard		Bulk solids from 8 g/l	Thread G1½, 1½ NPT, flanges from DN 50, 2", hygienic fittings	-50 ... +250 °C	-1 ... +25 bar (-100 ... +2500 kPa)
VEGAWAVE 62 Suspension cable up to 80 m		Bulk solids from 8 g/l	Thread G1½, 1½ NPT, flanges from DN 50, 2", hygienic fittings	-40 ... +150 °C	-1 ... +6 bar (-100 ... +600 kPa)
VEGAWAVE 63 Tube extension up to 6 m		Bulk solids from 8 g/l	Thread G1½, 1½ NPT, flanges from DN 50, 2", hygienic fittings	-50 ... +250 °C	-1 ... +25 bar (-100 ... +2500 kPa)

Overview

Instrument type		Input	Hysteresis	Output	Operating voltage
VEGATOR 111 Single channel signal conditioning instrument acc. to NAMUR		1 x sensor input NAMUR (IEC 60947-5-6)	fix	1 x relay output (SPDT) Optionally 1 fail safe relay output (SPDT)	20 ... 253 V AC/DC, 50/60 Hz
VEGATOR 112 Double channel signal conditioning instrument acc. to NAMUR		2 x sensor input NAMUR (IEC 60947-5-6)	fix	2 x relay output (SPDT)	20 ... 253 V AC/DC, 50/60 Hz
VEGATOR 121 Single channel signal conditioning instrument for level detection		1 x sensor input two-wire 8/16 mA	fix	1 x relay output (SPDT) Optionally 1 fail safe relay output (SPDT)	20 ... 253 V AC/DC, 50/60 Hz
VEGATOR 122 Double channel signal conditioning instrument for level detection		2 x sensor input two-wire 8/16 mA	fix	2 x relay output (SPDT)	20 ... 253 V AC/DC, 50/60 Hz

VEGASWING 51



Vibrating level switch for liquids

Application area

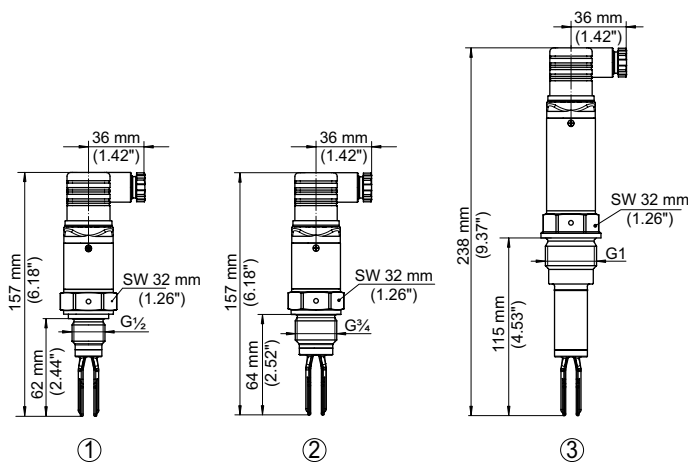
The VEGASWING 51 is a universal level switch with small dimensions for use in liquids. Independent of the mounting position, it detects reliably with millimetre accuracy the limit level. The instrument can be used as empty or full detector, as approved overflow protection, dry run protection or pump protection in vessels and pipelines. The VEGASWING 51 is an economical solution with maximum reliability and safety.

Your benefit

- Minimum time and cost expenditure thanks to simple setup without medium
- Precise and reliable function due to product-independent switching point
- Low maintenance costs

Technical data

Material:	316L
Process fitting:	thread from G $\frac{1}{2}$, $\frac{1}{2}$ NPT hygienic fittings
Process temperature:	-40 ... +150 °C
Process pressure:	-1 ... +64 bar (-100 ... +6400 kPa)



- 1 Threaded version G $\frac{1}{2}$ up to 100 °C
- 2 Threaded version G $\frac{3}{4}$ up to 100 °C
- 3 Threaded version G1 up to 150 °C and switching point as SWING 71A

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
- XA** Overfill protection acc. to WHG

Version / Process temperature

- S** Standard / -40...100°C
- T** Extended / -40...150°C
- H** Hygienic applications / -40...150°C

Process fitting / Material

- GH** Thread G½ (DIN 3852-A) PN64 / 316L
- NH** Thread ½NPT (ASME B1.20.1) PN64 / 316L
- GB** Thread G¾ (DIN 3852-A) PN64 / 316L
- GP** Thread G¾ (DIN 3852-A) PN64 / 316L Ra <0.8µm
- NB** Thread ¾NPT (ASME B1.20.1) PN64 / 316L
- GA** Thread G1 (DIN 3852-A) PN64 / 316L
- GL** Thread G1 (DIN 3852-A) PN64 / 316L Ra <0.8µm
- NA** Thread 1NPT (ASME B1.20.1) PN64 / 316L
- RF** Thread R 1 (EN10226-1) PN64 / 316L Ra <0.8 µm
- CL** Clamp 1", 1½"PN16(ø50.5mm)DIN32676,ISO2852/316L Ra<0.8µm
- CN** Clamp 2" PN16(ø64mm) DIN32676,ISO2852 /316L Ra <0.8µm
- RL** Bolting DN25PN40 DIN11851 / 316L Ra<0.8µm
- RM** Bolting DN40PN40 DIN11851 / 316L Ra<0.8µm
- RN** Bolting DN50PN25 DIN11851 / 316L Ra<0.8µm

Electronics

- C** Contactless electronic switch 20...253 V AC/DC
- T** Transistor output PNP 9.6...35VDC

Housing material

- P** 316L

Electrical connection / Protection

- M** M12x1 / IP67 ¹⁾
- V** according to ISO4400 incl. plug / IP65
- Q** acc. to ISO4400 incl. plug with QuickOn connection/IP67
- P** M12x1 incl. 5m cable / IP68 (0.2bar) ¹⁾

Switching point

- Standard
- L** Switching point as VEGASWING 71A

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¹⁾ Not in conjunction with Electronics "C"



VEGASWING 61



Vibrating level switch for liquids

Application area

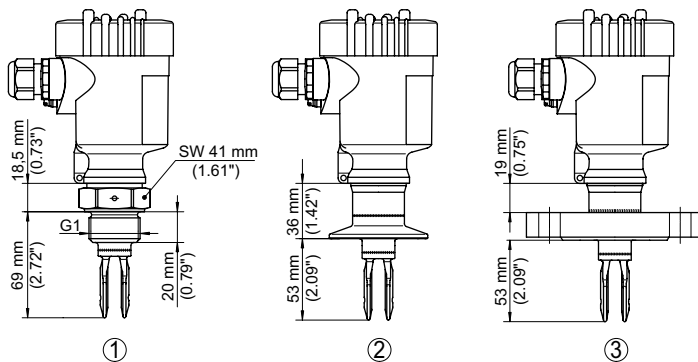
The VEGASWING 61 is a universal level switch for use in all liquids. Independent of the mounting position, it detects reliably with millimetre accuracy the limit level. The instrument can be used as empty or full detector, as approved overflow protection, dry run protection or pump protection in vessels and pipelines. The VEGASWING 61 offers maximum reliability in a wide application range.

Your benefit

- Minimum time and cost expenditure thanks to simple setup without medium
- Precise and reliable function through product-independent switching point
- Low maintenance costs

Technical data

Materials:	316L, Hastelloy, ECTFE, PFA, enamel, Monel
Process fitting:	thread from G $\frac{3}{4}$, $\frac{3}{4}$ NPT flanges from DN 25, 1" hygienic fittings
Process temperature:	-50 ... +250 °C
Process pressure:	-1 ... +64 bar (-100 ... +6400 kPa)
SIL qualification:	optionally up to SIL2



- 1 Threaded version G1
- 2 Clamp version
- 3 Flange version

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
- XA Overfill protection according to WHG
- CA ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + WHG
- DA ATEX II 1/2G, Ex d IIC T2...T6 + WHG
- CM ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + Ship approval
- DM ATEX II 1/2G, Ex d IIC T2...T6 + Ship approval
- CI IECEX Ex ia IIC T6
- DI IEC Ex Ex d IIC T6...T2 Ga/Gb
- GI IECEX Ex tD A20/21 IP66 T, A21
- XM** Ship approval

Process fitting / Material

- GBV Thread G $\frac{3}{4}$ (DIN 3852-A) PN64 / 316L
- NBV Thread $\frac{3}{4}$ NPT (ASME B1.20.1) PN64 / 316L
- GAV Thread G1 (DIN 3852-A) PN64 / 316L
- NAV Thread 1NPT (ASME B1.20.1) PN64 / 316L
- CCN Clamp 1" PN16(ϕ 50.5mm) DIN32676,ISO2852 / 316L Ra<0.3 μ m
- CCP Clamp 1" PN16(ϕ 50.5mm) DIN32676,ISO2852 / 316L Ra<0.8 μ m
- CAN Clamp 2" PN16(ϕ 64mm) DIN32676,ISO2852 / 316L Ra <0.3 μ m
- CAP Clamp 2" PN16(ϕ 64mm) DIN32676,ISO2852 / 316L Ra <0.8 μ m
- RAN Bolting DN40PN40 DIN11851 / 316L Ra<0.3 μ m
- RAP Bolting DN40PN40 DIN11851 / 316L Ra<0.8 μ m
- FPV Flange DN25PN40 Form C, DIN 2501 / 316L
- FPH Flange DN25PN40 Form C, DIN 2501 / ECTFE
- FEV Flange DN50PN40 Form C, DIN 2501 / 316L
- FEH Flange DN50PN40 Form C, DIN 2501 / ECTFE
- FEF Flange DN50PN40 Form C, DIN 2501 / PFA
- FPS Flange DN25PN40 Form B1, EN 1092-1 / Enamel
- FES Flange DN50PN40 Form B1, EN 1092-1 / Enamel
- APV Flange 1" 150lb RF, ANSI B16.5 / 316L
- APH Flange 1" 150lb RF, ANSI B16.5 / ECTFE
- APE Flange 1" 150lb RF, ANSI B16.5 / Enamel
- ACV Flange 2" 150lb RF, ANSI B16.5 / 316L
- ACH Flange 2" 150lb RF, ANSI B16.5 / ECTFE
- ACE Flange 2" 150lb RF, ANSI B16.5 / Enamel

Adapter / Process temperature

- X without / -50...150°C
- T with / -50...250°C
- G with gas-tight leadthrough / -50...150°C
- D with gas-tight leadthrough / -50...250°C

Housing / Cable gland

- P Plastic IP66/67 / M20x1.5
- M Aluminium IP66/IP67 / M20x1.5
- U Aluminium IP66/IP67 / $\frac{1}{2}$ NPT
- 8 StSt (electropolished) 316L / IP66/IP67 / M20x1.5

Electronics

- C Contactless electronic switch 20...250VAC/DC
- R Relay (DPDT) 20...72VDC/20...250VAC (3A)
- T Transistor (NPN/PNP) 10...55VDC
- Z Two-wire 8/16 mA 12...36VDC
- N NAMUR signal

Switching point

- X Standard
- L as SWING81 or 81A



VEGASWING 63



Vibrating level switch with tube extension for liquids

Application area

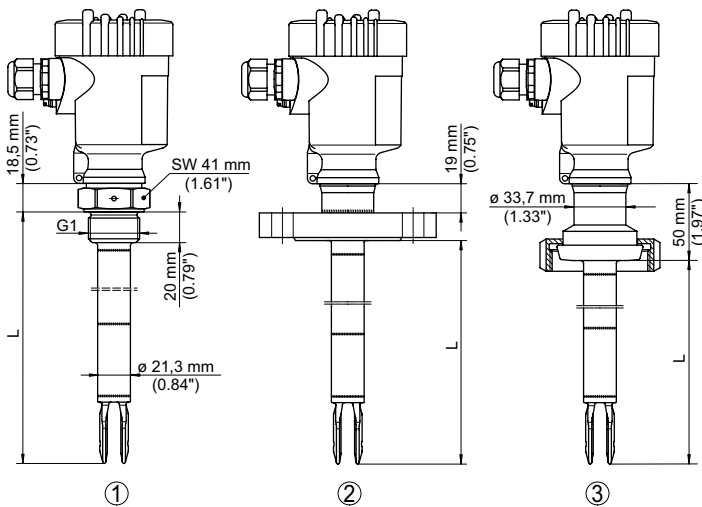
VEGASWING 63 is used as a universal level switch in all liquids. Independent of the mounting position it detects reliably with millimetre accuracy the level. The instrument can be used in vessels as empty or full detector, as approved overflow protection, dry run protection or pump protection. The position of the switching point is determined through the tube extension. The VEGASWING 63 offers high reliability and security in a wide application range.

Your benefit

- Minimum time and cost expenditure thanks to simple setup without medium
- Precise and reliable function through product-independent switching point
- Low maintenance costs

Technical data

Version:	tube extension up to 6 m
Materials:	316L, Hastelloy, ECTFE, PFA, enamel, Monel
Process fitting:	thread from G $\frac{3}{4}$, $\frac{3}{4}$ NPT flanges from DN 25, 1" hygienic fittings
Process temperature:	-50 ... +250 °C
Process pressure:	-1 ... +64 bar (-100 ... +6400 kPa)
SIL qualification:	optionally up to SIL2



- 1 Threaded version G1
- 2 Flange version
- 3 Bolting DN 50 PN 25

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
- XA Overfill protection according to WHG
- CA ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + WHG
- DA ATEX II 1/2G, Ex d IIC T2...T6 + WHG
- CM ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + Ship approval
- DM ATEX II 1/2G, Ex d IIC T2...T6 + Ship approval
- CI IECEX Ex ia IIC T6
- DI IECEX Ex d IIC T6...T2 Ga/Gb
- GI IECEX Ex tD A20/21 IP66 T, A21
- XM** Ship approval

Process fitting / Material

- GBV Thread G $\frac{3}{4}$ (DIN 3852-A) PN64 / 316L
- NBV Thread $\frac{3}{4}$ NPT (ASME B1.20.1) PN64 / 316L
- GAV Thread G1 (DIN 3852-A) PN64 / 316L
- NAV Thread 1NPT (ASME B1.20.1) PN64 / 316L
- CCN Clamp 1" PN16(ϕ 50.5mm) DIN32676,ISO2852 / 316L Ra<0.3 μ m
- CCP Clamp 1" PN16(ϕ 50.5mm) DIN32676,ISO2852 / 316L Ra<0.8 μ m
- CAN Clamp 2" PN16(ϕ 64mm) DIN32676,ISO2852 / 316L Ra <0.3 μ m
- CAP Clamp 2" PN16(ϕ 64mm) DIN32676,ISO2852 / 316L Ra <0.8 μ m
- RAN Bolting DN40PN40 DIN11851 / 316L Ra<0.3 μ m
- RAP Bolting DN40PN40 DIN11851 / 316L Ra<0.8 μ m
- FPV Flange DN25PN40 Form C, DIN 2501 / 316L
- FPH Flange DN25PN40 Form C, DIN 2501 / ECTFE
- FEV Flange DN50PN40 Form C, DIN 2501 / 316L
- FEH Flange DN50PN40 Form C, DIN 2501 / ECTFE
- FEF Flange DN50PN40 Form C, DIN 2501 / PFA
- FPS Flange DN25PN40 Form B1, EN 1092-1 / Enamel
- FES Flange DN50PN40 Form B1, EN 1092-1 / Enamel
- APV Flange 1" 150lb RF, ANSI B16.5 / 316L
- APH Flange 1" 150lb RF, ANSI B16.5 / ECTFE
- APE Flange 1" 150lb RF, ANSI B16.5 / Enamel
- ACV Flange 2" 150lb RF, ANSI B16.5 / 316L
- ACH Flange 2" 150lb RF, ANSI B16.5 / ECTFE
- ACE Flange 2" 150lb RF, ANSI B16.5 / Enamel

Adapter / Process temperature

- X without / -50...150°C
- T with / -50...250°C
- G with gas-tight leadthrough / -50...150°C
- D with gas-tight leadthrough / -50...250°C

Housing / Cable gland

- P Plastic IP66/67 / M20x1.5
- M Aluminium IP66/IP67 / M20x1.5
- U Aluminium IP66/IP67 / $\frac{1}{2}$ NPT
- 8 StSt (electropolished) 316L / IP66/IP67 / M20x1.5

Electronics

- C Contactless electronic switch 20...250VAC/DC
- R Relay (DPDT) 20...72VDC/20...250VAC (3A)
- T Transistor (NPN/PNP) 10...55VDC
- Z Two-wire 8/16 mA 12...36VDC
- N NAMUR signal



Length (from seal surface)

- 316L (80-6000 mm) per 100 mm
- ECTFE coated (80-3000 mm) per 100 mm
- PFA coated (80-3000 mm) per 100 mm
- 316L Ra <0.8 μ m (80-6000 mm) per 100 mm
- 316L Ra <0.3 μ m (80-6000 mm) per 100 mm
- enamelled version (300, 400, 500, 600 mm) once

VEGASWING 66



Vibrating level switch for liquids under extreme process temperatures and pressures

Application area

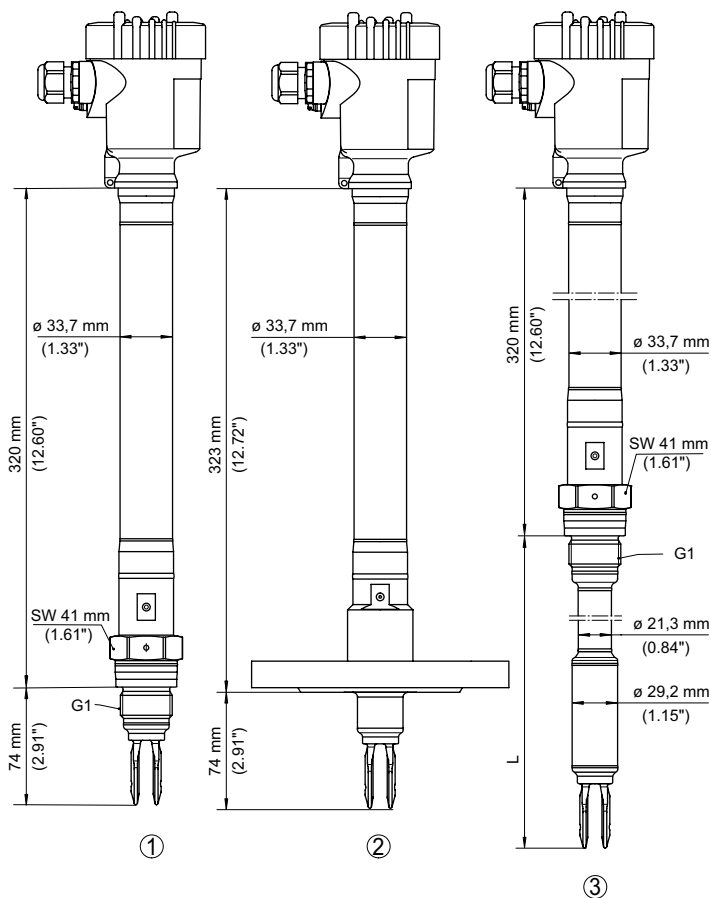
VEGASWING 66 is used as a universal vibrating level switch in all liquids. In compact version or with tube extension, it detects reliably with millimetre accuracy the limit level. The instrument can be used in vessels, pipelines and steam generators as empty or full detector. The VEGASWING offers maximum reliability and security in a wide process temperature and process pressure range.

Your benefit

- Minimum time and cost expenditure thanks to simple setup without medium
- Precise and reliable function through product-independent switching point
- Low maintenance costs
- High reliability through monitored sensor element

Technical data

Versions:	compact version or with tube extension up to 3 m
Materials:	316L, Inconel 718, Hastelloy
Process fitting:	thread from G1, 1 NPT flanges from DN 50, 2"
Process temperature:	-196 ... +450 °C
Process pressure:	-1 ... +160 bar (-100 ... +16000 kPa)
SIL qualification:	optionally up to SIL2 (homogeneous redundancy up to SIL3)



- 1 Compact version
- 2 Flange version
- 3 Tube version
- L Sensor length

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".

Scope

- A Europe
- I Worldwide

Approvals

- X without
- M Ship approval (GL; LRS; ABS)
- C ATEX II 1G, 1/2G, 2G Ex ia IIC T6
- E ATEX II 1/2G, 2G Ex d IIC T6
- C IEC Ex ia IIC T6
- O IEC Ex ia IIC T6 + Ship approval
- E IEC Ex d IIC T6

Version / Material

- K Compact version / Inconel 718
- R with tube extension / 316L and Inconel 718

Process fitting / Material

- AA Thread G1 (DIN 3852-A) PN160 / 316L
- AB Thread G1 (DIN 3852-A) PN160 / Inconel 718
- AC Thread 1NPT (ASME B1.20.1) PN100 / 316L
- AD Thread 1NPT (ASME B1.20.1) PN160 / Inconel 718
- AG Flange DN50PN40 Form C, DIN2501 / 316L
- AI Flange DN65PN40 Form C, DIN2501 / 316L
- AJ Flange DN80PN40 Form C, DIN2501 / 316L
- AK Flange DN100PN16 Form C, DIN2501 / 316L
- AL Flange DN100PN40 Form C, DIN2501/316L
- AN Flange DN125PN40 Form C, DIN2501 / 316L
- AO Flange DN150PN16 Form C, DIN2501 / 316L
- AP Flange DN150PN40 Form C, DIN2501 / 316L
- BG Flange DN50PN40 EN1092-1 Form B1 / 316L
- BE Flange DN150PN40 EN1092-1 Form B1/316L
- BC Flange 1½" 1500lb RJF, ANSI B16.5 / 316L
- AS Flange 2" 150lb RF, ANSI B16.5 / 316L
- AT Flange 2" 300lb RF, ANSI B16.5 / 316L
- AU Flange 2" 600lb RF, ANSI B16.5 / 316L
- BF Flange 2" 900lb RJF, ANSI B16.5 / 316L
- AV Flange 2½" 150lb RF, ANSI B16.5 / 316L
- AW Flange 2½" 300lb RF, ANSI B16.5 / 316L
- AY Flange 2½" 600lb RF, ANSI B16.5 / 316L
- AZ Flange 3" 150lb RF, ANSI B16.5 / 316L
- BA Flange 3" 300lb RF, ANSI B16.5 / 316L
- BB Flange 4" 300lb RF, ANSI B16.5 / 316L

Second line of defense / Process temperature

- A with / -196...450°C
- X without / -196...450°C

Electronics

- R Relay (2x SPDT) 20...72VDC/20...253VAC (5A)
- T Transistor (NPN/PNP) 9.6...55VDC
- Z Two-wire 8/16 mA 9.6...35VDC
- S Relay (2x SPDT) 20...72VDC/20...253VAC (5A) SIL
- I Transistor (NPN/PNP) 9.6...55VDC SIL
- L Two-wire 8/16 mA 9.6...35VDC SIL

Housing / Protection

- K Plastic / IP66/IP67
- A Aluminium / IP66/IP68 (0.2 bar)
- 8 Stainless steel (electropol.) 316L/IP66/IP68 (0.2bar)

Cable entry / Connection

- M M20x1.5 / Cable gland PA black
- N ½NPT / Blind plug

Certificates

- M yes (e.g. FDA; EN 10204-3.1; NACE)
- X no

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Length (from seal surface)
316L (260-3000 mm) per 100 mm

VEGAVIB 61



Vibrating level switch for granular bulk solids

Application area

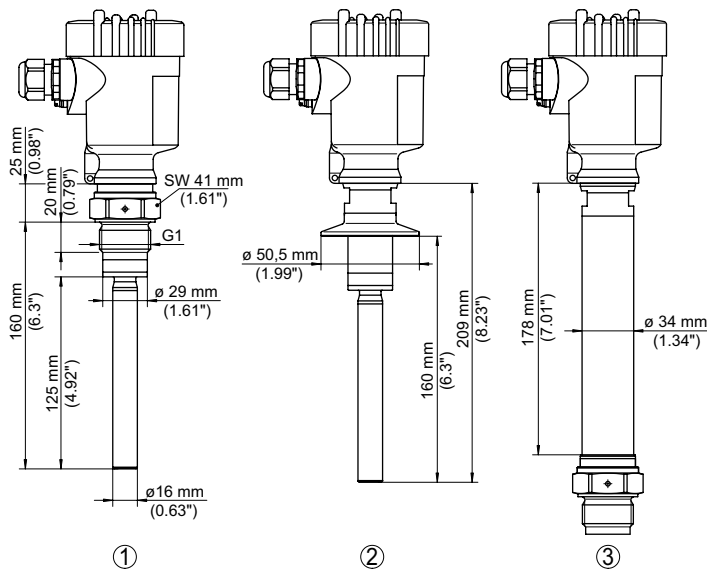
The VEGAVIB 61 is a level switch for granular and coarse-grained bulk solids. The VEGAVIB 61 detects reliably and accurately the min. or max. level. The smooth surface of the vibrating rod, without corners and edges, avoids jamming of the bulk solid and is easy to clean.

Your benefit

- Minimum time and cost expenditure thanks to simple setup without medium
- Reliable function through product-independent switching point
- Low maintenance costs

Technical data

Measuring range:	bulk solids from 20 g/l
Process fitting:	thread from G1, 1 NPT flanges from DN 32, 1½"
	hygienic fittings
Process temperature:	-50 ... +250 °C
Process pressure:	-1 ... +16 bar (-100 ... +1600 kPa)
SIL qualification:	optionally up to SIL2



- 1 Threaded version G1
- 2 Clamp version 1", 1½"
- 3 Version with temperature 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
- CX** ATEX II 1G, 1/2G, 2G Ex ia IIC T6
- CK** ATEX II 1, 1/2, 2G Ex ia IIC T6+1, 1/2, 2D Ex tD IP66 T*
- CI** IECEx Ex ia IIC T6
- LX** ATEX II 1/2G, 2G Ex d IIC T1... T6 Ga/Gb, Gb
- GX** ATEX II 1, 1/2, 2D Ex tD IP66 T*
- GI** IECEx Ex tD A20/21 IP66 T, A21

Version / Process temperature

- A** Standard / -50...150°C
- B** With adapter / -50...+250°C
- C** Detection of bulk solids in water / -50...+150°C

Process fitting / Material

- GC** Thread G1 (DIN 3852-A) PN16 / 316L
- NC** Thread 1NPT (ASME B1.20.1) PN16 / 316L
- GD** Thread G1½ (DIN 3852-A) PN16 / 316L switching point VIB51
- ND** Thread 1½NPT (ASME B1.20.1) PN16 / 316L switching pt. VIB51
- GG** Thread G1½ (DIN 3852-A) PN16 / 316L
- NG** Thread 1½NPT (ASME B1.20.1) PN16 / 316L
- CT** Clamp 1½" PN16 (ø50.5mm) DIN32676, ISO2852 / 316L Ra<0.8µm
- CV** Clamp 2" PN16 (ø64mm) DIN32676, ISO2852 / 316L Ra <0.8µm
- RA** Bolting DN40 PN40 DIN11851 / 316L
- EF** Flange DN50 PN40 Form C, DIN2501 / 316L
- KF** Flange DN80 PN40 Form C, DIN2501 / 316L
- MF** Flange DN100 PN16 Form C, DIN2501 / 316L
- HA** Flange 2" 150lb RF, ANSI B16.5 / 316L
- OA** Flange 3" 150lb RF, ANSI B16.5 / 316L

Electronics

- C** Contactless electronic switch 20...253VAC/DC
- R** Relay (DPDT) 20...72VDC/20...253VAC(3A)
- T** Transistor (NPN/PNP) 10...55VDC
- Z** Two-wire 8/16 mA 10...36VDC
- N** NAMUR signal

Housing / Protection

- K** Plastic / IP66/IP67
- A** Aluminium / IP66/IP68 (0.2bar)
- 8** StSt (electropolished) 316L / IP66/IP68 (0.2bar)

Cable entry / Cable gland / Plug connection

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

Additional equipment

- X** without

VB61.							
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VEGAVIB 62



Vibrating level switch with suspension cable for granular bulk solids

Application area

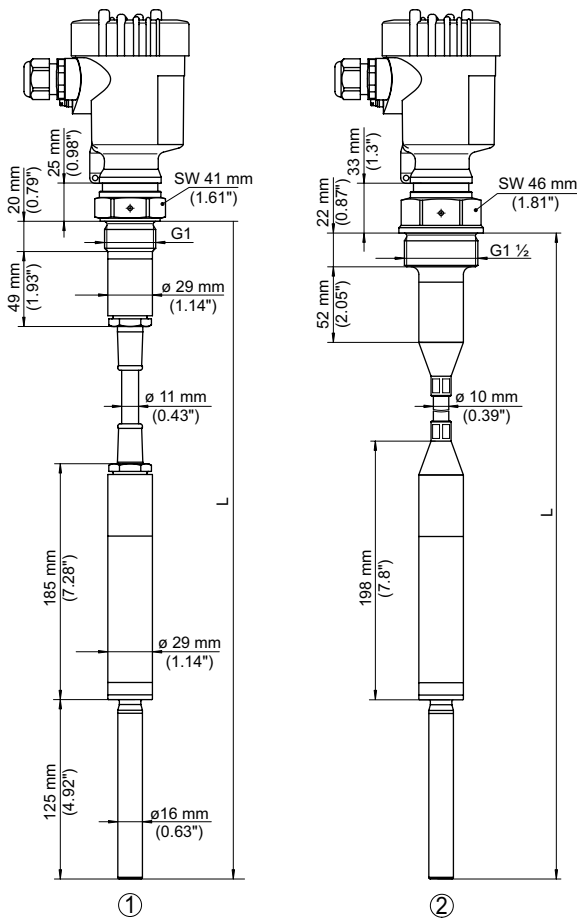
The VEGAVIB 62 is a level switch for granular and coarse-grained bulk solids. The optimized rod design without corners and edges avoids jamming of the bulk solids and is easy to clean. The VEGAVIB 62 detects reliably and accurately the min. or max. level in bulk solids. The position of the switching point is specified flexibly through the length of the suspension cable.

Your benefit

- Minimum time and cost expenditure thanks to simple setup without medium
- Reliable function through product-independent switching point
- Low maintenance costs

Technical data

Version:	suspension cable up to 80 m
Measuring range:	bulk solids from 20 g/l
Process fitting:	thread from G1, 1 NPT flanges from DN 32, 1½"
	hygienic fittings
Process temperature:	-50 ... +150 °C
Process pressure:	-1 ... +6 bar (-100 ... +600 kPa)
SIL qualification:	optionally up to SIL2



- 1 Version with PUR suspension cable
- 2 Version with FEP suspension cable

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
- CX** ATEX II 1G, 1/2G, 2G Ex ia IIC T6
- CK** ATEX II 1, 1/2, 2G Ex ia IIC T6+1, 1/2, 2D Ex tD IP66 T*
- CI** IECEx Ex ia IIC T6
- GX** ATEX II 1, 1/2, 2D Ex tD IP66 T*
- GI** IECEx Ex tD A20/21 IP66 T, A21

Version / Process temperature

- T** Cable PUR / -20...80°C
- H** Cable FEP / -40...150°C
- C** Detection of solids in water / -20...80°C
- E** Detection of solids in water / -40...100°C

Process fitting / Material

- GC** Thread G1 (DIN 3852-A) PN6 / 316L
- NC** Thread 1NPT (ASME B1.20.1) PN6 / 316L
- GD** Thread G1½ (DIN 3852-A) PN6 / 316L
- ND** Thread 1½NPT (ASME B1.20.1) PN6 / 316L
- EF** Flange DN50PN40 Form C, DIN2501 / 316L
- KF** Flange DN80PN40 Form C, DIN2501 / 316L
- MF** Flange DN100PN16 Form C, DIN2501 / 316L
- HA** Flange 2"150lb RF, ANSI B16.5 / 316L
- OA** Flange 3"150lb RF, ANSI B16.5 / 316L

Electronics

- C** Contactless electronic switch 20...253VAC/DC
- R** Relay (DPDT) 20...72VDC/20...253VAC(3A)
- T** Transistor (NPN/PNP) 10...55VDC
- Z** Two-wire 8/16 mA 10...36VDC
- N** NAMUR signal

Housing / Protection

- K** Plastic / IP66/IP67
- A** Aluminium / IP66/IP68 (0.2 bar)
- 8** StSt (electropolished) 316L / IP66/IP68 (0.2bar)

Cable entry / Cable gland / Plug connection

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

Additional equipment

- X** without



Length (from seal surface)

- PUR (480-80000 mm) per 100 mm
- FEP (480-80000 mm) per 100 mm

VEGAVIB 63



Vibrating level switch with tube extension for granular bulk solids

Application area

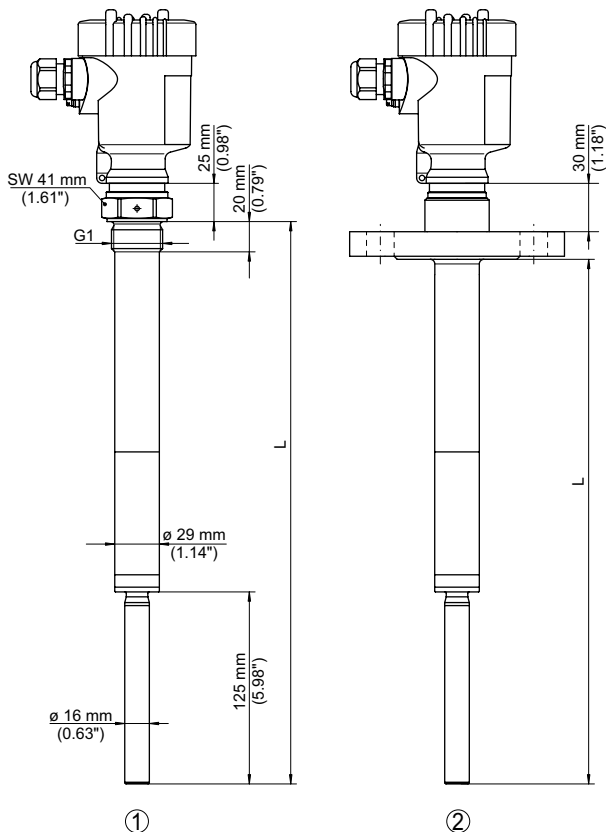
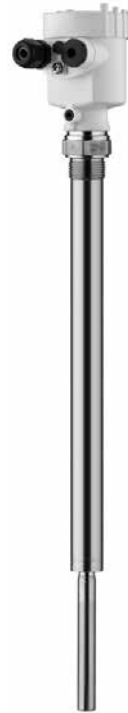
The VEGAVIB 63 is a level switch for granular and coarse-grained bulk solids. The VEGAVIB 63 detects reliably and accurately the min. or max. level. The smooth surface of the vibrating rod, without corners and edges, avoids jamming of the bulk solid and is easy to clean. The position of the switching point is specified through the tube extension.

Your benefit

- Minimum time and cost expenditure thanks to simple setup without medium
- Reliable function through product-independent switching point
- Low maintenance costs

Technical data

Version:	tube extension up to 6 m
Measuring range:	bulk solids from 20 g/l
Process fitting:	thread from G1, 1 NPT flanges from DN 32, 1½"
	hygienic fittings
Process temperature:	-50 ... +250 °C
Process pressure:	-1 ... +16 bar (-100 ... +1600 kPa)
SIL qualification:	optionally up to SIL2



- 1 Threaded version G1
- 2 Flange version

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
- CX** ATEX II 1G, 1/2G, 2G Ex ia IIC T6
- CK** ATEX II 1, 1/2, 2G Ex ia IIC T6+1, 1/2, 2D Ex tD IP66 T*
- CI** IECEx Ex ia IIC T6
- LX** ATEX II 1/2G, 2G Ex d IIC T1... T6 Ga/Gb, Gb
- GX** ATEX II 1, 1/2, 2D Ex tD IP66 T*
- GI** IECEx Ex tD A20/21 IP66 T, A21

Version / Process temperature

- A** Standard / -50...150°C
- B** With adapter / -50...+250°C
- C** Detection of bulk solids in water / -50...+150°C

Process fitting / Material

- GC** Thread G1 (DIN 3852-A) PN16 / 316L
- NC** Thread 1NPT (ASME B1.20.1) PN16 / 316L
- GD** Thread G1½ (DIN 3852-A) PN16 / 316L
- ND** Thread 1½NPT (ASME B1.20.1) PN16 / 316L
- CA** Clamp 2" PN16(ø64mm) DIN32676, ISO2852 / 316L
- RA** Bolting DN40PN40 DIN11851 / 316L
- DF** Flange DN40PN40 Form C, DIN2501 / 316L
- EF** Flange DN50PN40 Form C, DIN2501 / 316L
- KF** Flange DN80PN40 Form C, DIN2501 / 316L
- MF** Flange DN100PN16 Form C, DIN2501 / 316L
- HA** Flange 2"150lb RF, ANSI B16.5 / 316L
- IA** Flange 2"300lb RF, ANSI B16.5 / 316L
- OA** Flange 3"150lb RF, ANSI B16.5 / 316L

Electronics

- C** Contactless electronic switch 20...253VAC/DC
- R** Relay (DPDT) 20...72VDC/20...253VAC(3A)
- T** Transistor (NPN/PNP) 10...55VDC
- Z** Two-wire 8/16 mA 10...36VDC
- N** NAMUR signal

Housing / Protection

- K** Plastic / IP66/IP67
- A** Aluminium / IP66/IP68 (0.2bar)
- 8** StSt (electropolished) 316L / IP66/IP68 (0.2bar)

Cable entry / Cable gland / Plug connection

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

Additional equipment

- X** without

VB63.									
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Length (from seal surface)
316L (180-6000 mm) per 100 mm

VEGAWAVE 61



Vibrating level switch for powders

Application area

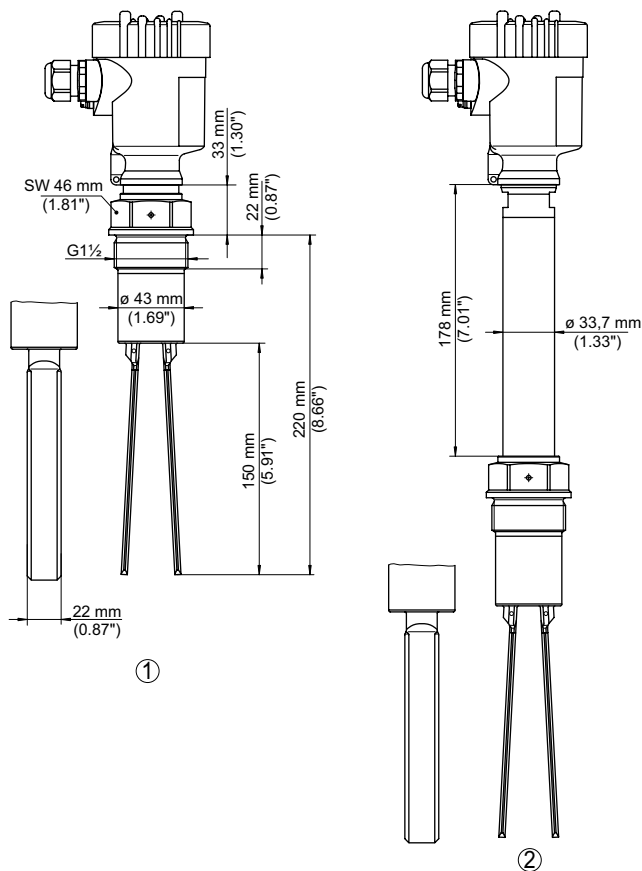
The VEGAWAVE 61 is a level switch for universal use in powders and fine-grained bulk solids. The level switch detects reliably and robust the min. or max. level. The tuning fork is ideal for use either in adhesive and abrasive products as well as in bulk solids with very low density.

Your benefit

- Minimum time and cost expenditure thanks to simple setup without medium
- Reliable function through product-independent switching point
- Low costs for maintenance through robust design

Technical data

Measuring range:	bulk solids from 8 g/l
Process fitting:	thread G1½, 1½ NPT flanges from DN 50, 2"
Process temperature:	-50 ... +250 °C
Process pressure:	-1 ... +25 bar (-100 ... +2500 kPa)
SIL qualification:	optionally up to SIL2



- 1 Threaded version G1½
- 2 Threaded version G1½ with temperature adapter up to +250 °C

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
- CX** ATEX II 1G, 1/2G, 2G Ex ia IIC T6
- CK** ATEX II 1G, 1/2G, 2G Ex ia IIC T6+ATEX II 1/2D IP6X T
- CI** IECEx Ex ia IIC T6
- LX** ATEX II 1/2G, 2G Ex d IIC T1...T6
- GX** ATEX II 1,1/2,2D Ex tD IP66 T*
- GI** IECEx Ex tD A20/21 IP66 T, A21

Version / Process temperature

- A** Standard / -50...150°C
- B** with adapter / -50...250°C
- C** Detection of solids in water / -50...150°C
- D** Detection of solids in water / -50...250°C

Process fitting / Material

- GD** Thread G1½ (DIN 3852-A) PN25 / 316L
- ND** Thread 1½NPT (ASME B1.20.1) PN25 / 316L
- EF** Flange DN50PN40 Form C, DIN2501 / 316L
- KF** Flange DN80PN40 Form C, DIN2501 / 316L
- MF** Flange DN100PN16 Form C, DIN2501 / 316L
- HA** Flange 2"150lb RF, ANSI B16.5 / 316L
- OA** Flange 3"150lb RF, ANSI B16.5 / 316L

Electronics

- C** Contactless electronic switch 20...253VAC/DC
- R** Relay (DPDT) 20...72VDC/20...253VAC(3A)
- T** Transistor (NPN/PNP) 10...55VDC
- Z** Two-wire 8/16 mA 10...36VDC
- N** NAMUR signal

Housing / Protection

- K** Plastic / IP66/IP67
- A** Aluminium / IP66/IP68 (0.2bar)
- 8** StSt (electropolished) 316L / IP66/IP68 (0.2bar)

Cable entry / Cable gland / Plug connection

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

Additional equipment

- X** without

WE61.



VEGAWAVE 62



Vibrating level switch with suspension cable for powders

Application area

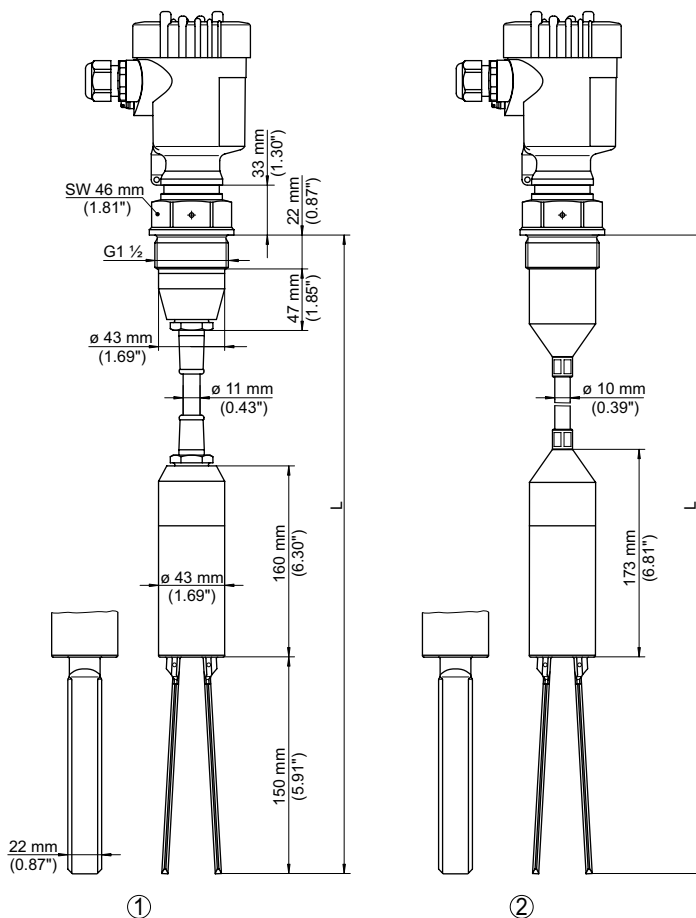
The VEGAWAVE 62 is a level switch for universal use in powders and fine-grained bulk solids. The level switch detects reliably and robust the min. or max. level. The tuning fork is ideal for use either in adhesive and abrasive products as well as in bulk solids with very low density. The position of the switching point is determined through the length of the suspension cable.

Your benefit

- Minimum time and cost expenditure thanks to simple setup without medium
- Reliable function through product-independent switching point
- Low costs for maintenance through robust design

Technical data

Version:	suspension cable up to 80 m
Measuring range:	bulk solids from 8 g/l
Process fitting:	thread G1½, 1½ NPT flanges from DN 50, 2"
Process temperature:	-50 ... +150 °C
Process pressure:	-1 ... +6 bar (-100 ... +600 kPa)
SIL qualification:	optionally up to SIL2



- 1 Version with PUR suspension cable (-20 ... +80 °C)
- 2 Version with FEP suspension cable (-40 ... +150 °C)

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
- CX** ATEX II 1G, 1/2G, 2G Ex ia IIC T6
- CK** ATEX II 1G, 1/2G, 2G Ex ia IIC T6+ATEX II 1/2D IP6X T
- CI** IECEx Ex ia IIC T6
- GX** ATEX II 1, 1/2, 2D Ex tD IP66 T*
- GI** IECEx Ex tD A20/21 IP66 T, A21

Version / Process temperature

- T** Cable PUR / -20...80°C
- H** Cable FEP / -40...150°C
- C** Detection of solids in water / -20...80°C
- E** Detection of solids in water / -40...100°C

Process fitting / Material

- GD** Thread G1½ (DIN 3852-A) PN16 / 316L
- ND** Thread 1½NPT (ASME B1.20.1) PN16 / 316L
- EF** Flange DN50PN40 Form C, DIN2501/316L
- KF** Flange DN80PN40 Form C, DIN2501/316L
- MF** Flange DN100PN16 Form C, DIN2501/316L
- HA** Flange 2"150lb RF, ANSI B16.5, 316L
- OA** Flange 3"150lb RF, ANSI B16.5/316L

Electronics

- C** Contactless electronic switch 20...253VAC/DC
- R** Relay (DPDT) 20...72VDC/20...253VAC(3A)
- T** Transistor (NPN/PNP) 10...55VDC
- Z** Two-wire 8/16 mA 10...36VDC
- N** NAMUR signal

Housing / Protection

- K** Plastic / IP66/IP67
- A** Aluminium / IP66/IP68 (0.2 bar)
- 8** StSt (electropolished) 316L / IP66/IP68 (0.2bar)

Cable entry / Cable gland / Plug connection

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

Additional equipment

- X** without

WE62.

Length (from seal surface)

- PUR (480-80000 mm) per 100 mm
- FEP (480-80000 mm) per 100 mm

VEGAWAVE 63



Vibrating level switch with tube extension for powders

Application area

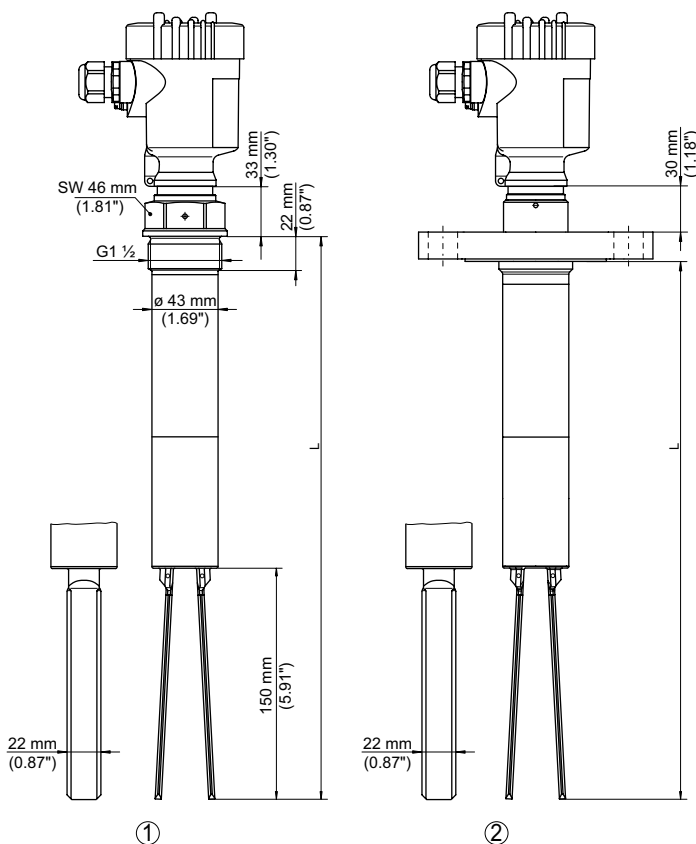
The VEGAWAVE 63 is a level switch for universal use in powders and fine-grained bulk solids. The level switch detects reliably and robust the min. or max. level. The tuning fork is ideal for use either in adhesive and abrasive products as well as in bulk solids with very low density. The position of the switching point can be determined through the length of the tube extension.

Your benefit

- Minimum time and cost expenditure thanks to simple setup without medium
- Reliable function through product-independent switching point
- Low costs for maintenance through robust design

Technical data

Version:	tube extension up to 6 m
Measuring range:	bulk solids from 8 g/l
Process fitting:	thread G1½, 1½ NPT flanges from DN 50, 2"
Process temperature:	-50 ... +250 °C
Process pressure:	-1 ... +25 bar (-100 ... +2500 kPa)
SIL qualification:	optionally up to SIL2



- 1 Threaded version G1½
- 2 Flange version

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
- CX** ATEX II 1G, 1/2G, 2G Ex ia IIC T6
- CK** ATEX II 1G, 1/2G, 2G Ex ia IIC T6+ATEX II 1/2D IP6X T
- CI** IECEx Ex ia IIC T6
- LX** ATEX II 1/2G, 2G Ex d IIC T1...T6
- GX** ATEX II 1,1/2,2D Ex tD IP66 T*
- GI** IECEx Ex tD A20/21 IP66 T, A21

Version / Process temperature

- A** Standard / -50...150°C
- B** with adapter / -50...250°C
- C** Detection of solids in water / -50...150°C
- D** Detection of solids in water / -50...250°C

Process fitting / Material

- GD** Thread G1½ (DIN 3852-A) PN25 / 316L
- ND** Thread 1½NPT (ASME B1.20.1) PN25 / 316L
- EF** Flange DN50PN40 Form C, DIN2501 / 316L
- KF** Flange DN80PN40 Form C, DIN2501 / 316L
- MF** Flange DN100PN16 Form C, DIN2501 / 316L
- HA** Flange 2"150lb RF, ANSI B16.5 / 316L
- OA** Flange 3"150lb RF, ANSI B16.5 / 316L

Electronics

- C** Contactless electronic switch 20...253VAC/DC
- R** Relay (DPDT) 20...72VDC/20...253VAC(3A)
- T** Transistor (NPN/PNP) 10...55VDC
- Z** Two-wire 8/16 mA 10...36VDC
- N** NAMUR signal

Housing / Protection

- K** Plastic / IP66/IP67
- A** Aluminium / IP66/IP68 (0.2bar)
- 8** StSt (electropolished) 316L / IP66/IP68 (0.2bar)

Cable entry / Cable gland / Plug connection

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

Additional equipment

- X** without



Length (from seal surface)

316L (240-6000 mm) per 100 mm

Welded socket VEGASWING 51/61/63



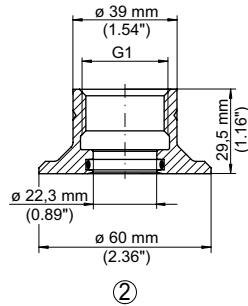
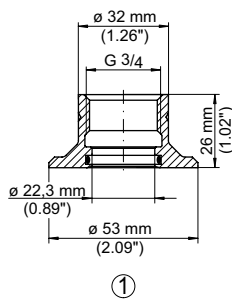
– with O-ring seal in front and welding marking



suitable for

1	VEGASWING 51/61/63
	Version / Material
	GB Thread G $\frac{3}{4}$ (DIN 3852-A) / 316L
	GA Thread G1 (DIN 3852-A) / 316L
	Test certificate
	B C 3.1-Certificate/Mat.
	A H 2.2-Certificate/Mat.
	X without
	Seal
	1 FKM
	3 EPDM

ESTSG. [] [] [] []



- 1 Thread G $\frac{3}{4}$, version ESTSG.1GB**
- 2 Thread G1, version ESTSG.1GA**

Lock fitting for VEGASWING 63



- for continuous height adjustment of a VEGASWING 63
- up to a process pressure of 64 bar



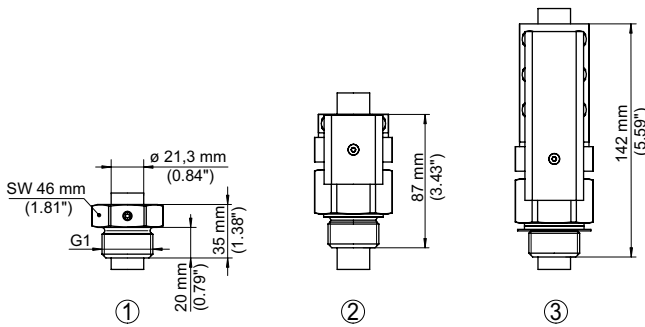
Process pressure / Process temperature / suitable for

- 1 Unpressurised / -50...250°C / Approval XX, XA
- 2 -1...16 bar / -50...150°C / Approval XX,XA,CA,DA,GX,GK
- 3 -1...64 bar / -50...250°C / Approval XX,XA,CA,DA,GX,GK

Process fitting / Material

- GC Thread G1 (DIN 3852-A) / 316L
- NC Thread 1NPT (ASME B1.20.1) / 316L
- GD Thread G1½ (DIN 3852-A) / 316L
- ND Thread 1½NPT (ASME B1.20.1) / 316L

ARV-SG63.



- 1 Version – unpressurized / -50 ... +250 °C
- 2 Version – -1 ... 16 bar / -50 ... +150 °C
- 3 Version – -1 ... 64 bar / -50 ... +250 °C

Lock fitting for VEGAVIB 63



– for continuous height adjustment of a VEGAVIB 63/S61

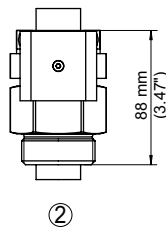
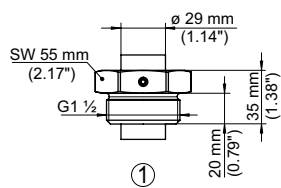
Process pressure / Process temperature / suitable for

- 1 Unpressurised / -50...250°C / Approval XX
- 2 -1...16 bar / -50...150°C / Approval XX,CX,CK,LX,GX

Process fitting / Material

- GD Thread G1½ (DIN 3852-A) / 316L
- ND Thread 1½NPT (ASME B1.20.1) / 316L

ARV-VB63.



- 1 Version – unpressurized / -50 ... +250 °C
- 2 Version – -1 ... 16 bar / -50 ... +150 °C

Lock fitting for VEGAWAVE 63



– for continuous height adjustment of a VEGAWAVE 63/S61

5

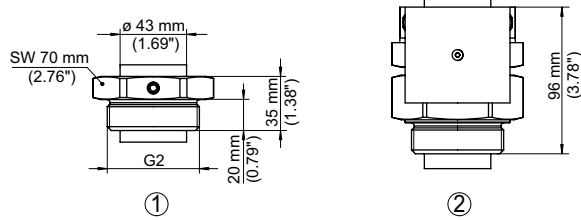
Process pressure / Process temperature / suitable for

- 1 Unpressurised / -50...250°C / Approval XX
- 2 -1...16 bar / -50...150°C / Approval XX,CX,CK,LX,GX

Process fitting / Material

- GA Thread G2 (DIN 3852-A)1) / 316L
- NA Thread 2NPT (ASME B1.20.1) / 316L

ARV-WE63.



- 1 Version – unpressurized / -50 ... +250 °C
- 2 Version – -1 ... 16 bar / -50 ... +150 °C

VEGATOR 111



Single channel signal conditioning instrument acc. to NAMUR (IEC 60947-5-6) for level detection

Application area

The VEGATOR 111 is a signal conditioning instrument for level detection for vibrating level switches VEGASWING, VEGAVIB and VEGAWAVE with electronics version according to NAMUR (IEC 60947-5-6). With this instrument, simple control tasks can be solved. Typical applications are monitoring functions such as overflow or dry run protection. Optionally a false signal output is available.

Your benefit

- Comprehensive monitoring detects short-circuit and line break of the measuring cable and interferences in the sensor
- Simple and comfortable line monitoring by means of test key (also for SIL and WHG)
- Simple installation through carrier rail mounting as well as detachable, coded terminals



Technical data

Input:	1 x sensor input NAMUR (IEC 60947-5-6)
Output:	1 x relay output (SPDT) optionally 1 x fail safe relay output (SPDT)
Operating voltage:	20 ... 253 V AC/DC, 50/60 Hz
Mounting:	carrier rail mounting 35 x 7.5 according to EN 50022
SIL qualification:	optionally up to SIL2

Scope

- A Europe
- I Worldwide

Approval

- X for Ex-free area
- M Ship approval
- A ATEX II3GExnA nC ic IICT4Gc+II(1)G/D[ExiaGa/Da]IIC/IIIC
- C ATEX II(1)G/D[Ex iaGa/Da]IIC/IIIC,I(M1)[ExiaMa]I
- U ATEX II(1)G/D[ExiaGa/Da]IIC/IIIC,I(M1)[ExiaMa]I+WHG
- O ATEX II(1)G/D[ExiaGa/Da]IIC/IIIC,I(M1)[ExiaMa]I+Ship
- A IEC Ex nA nC ic T4 Gc + [Ex iaGa/Da]IIC/IIIC,[ExiaMa]I
- C IEC [Ex iaGa]IIC, [ExiaDa]IIIC, [ExiaMa]I
- U IEC [Ex iaGa]IIC, [ExiaDa]IIIC, [ExiaMa]I + WHG
- O IEC [Ex iaGa]IIC, [ExiaDa]IIIC, [ExiaMa]I + Ship

Version

- X Single-channel NAMUR IEC 60947-5-6
- S Single-channel NAMUR IEC 60947-5-6 with fail safe relay

Housing / Protection

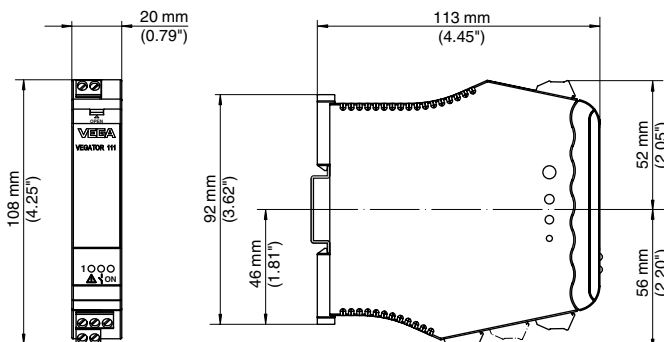
- K Plastic / IP20

Terminal blocks / Connection

- X 2.5 mm² detachable terminal blocks 1 x black/2 x black
- B 2.5 mm² detachable terminal blocks 1 x blue / 2 x black

Certificates

- M yes
- X no



VEGATOR 112



Double channel signal conditioning instrument acc. to NAMUR (IEC 60947-5-6) for level detection

Application area

The VEGATOR 112 is a signal conditioning instrument for level detection for vibrating level switches VEGASWING, VEGAVIB and VEGAWAVE with electronics version according to NAMUR (IEC 60947-5-6). With this instrument, simple control tasks can be solved. Typical applications are monitoring functions such as overflow or dry run protection.

Your benefit

- Comprehensive monitoring detects short-circuit and line break of the measuring cable and interferences in the sensor
- Simple and comfortable line monitoring by means of test keys for both channels (also for SIL and WHG)
- Simple installation through carrier rail mounting as well as detachable, coded terminals

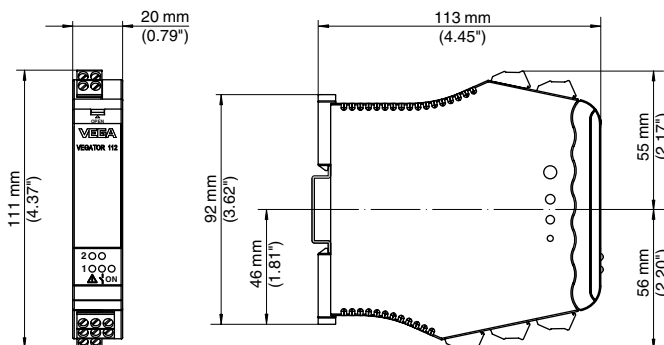
Technical data

Input: 2 x sensor input NAMUR (IEC 60947-5-6)
 Output: 2 x relay output (SPDT)
 Operating voltage: 20 ... 253 V AC/DC, 50/60 Hz
 Mounting: carrier rail mounting 35 x 7.5 acc. to EN 50022
 SIL qualification: optionally up to SIL2



Scope

- A Europe
- I Worldwide
- Approval**
- X for Ex-free area
- M Ship approval
- A ATEX II3GExnA nC ic IICT4Gc+II(1)G/D[ExiaGa/Da]IIC/IIIC
- C ATEX II(1)G/D[Ex iaGa/Da]IIC/IIIC,I(M1)[ExiaMa]I
- U ATEX II(1)G/D[ExiaGa/Da]IIC/IIIC,I(M1)[ExiaMa]I+WHG
- O ATEX II(1)G/D[ExiaGa/Da]IIC/IIIC,I(M1)[ExiaMa]I+Ship
- A IEC Ex nA nC ic T4 Gc + [Ex iaGa/Da]IIC/IIIC,[ExiaMa]I
- C IEC [Ex iaGa]IIC, [ExiaDa]IIIC, [ExiaMa]I
- U IEC [Ex iaGa]IIC, [ExiaDa]IIIC, [ExiaMa]I + WHG
- O IEC [Ex iaGa]IIC, [ExiaDa]IIIC, [ExiaMa]I + Ship
- Version**
- X Double channel according to NAMUR (IEC 60947-5-6)
- Housing / Protection**
- K Plastic / IP20
- Terminal blocks / Connection**
- X 2.5 mm² detachable terminal blocks 2 x black/2 x black
- B 2.5 mm² detachable terminal blocks 2 x blue / 2 x black
- Certificates**
- M yes
- X no



VEGATOR 121



Single channel signal conditioning instrument for level detection

Application area

The VEGATOR 121 is a signal conditioning instrument for level detection for the vibrating level switches VEGASWING, VEGAVIB and VEGAWAVE with electronics version "Two-wire 8/16 mA". With this instrument simple control tasks can be solved. Typical applications are monitoring functions such as overflow or dry run protection. Optionally a false signal output is available.

Your benefit

- Comprehensive monitoring detects short-circuit and line break of the measuring cable and interferences in the sensor
- Simple and comfortable line monitoring by means of test key (also for SIL and WHG)
- Simple installation through carrier rail mounting as well as detachable, coded terminals



Technical data

Input:	1 x sensor input two-wire 8/16 mA
Output:	1 x relay output (SPDT) optionally 1 x fail safe relay output (SPDT)
Operating voltage:	20 ... 253 V AC/DC, 50/60 Hz
Mounting:	carrier rail 35 x 7.5 acc. to EN 50022
SIL qualification:	optionally up to SIL2

Scope

- A** Europe
- I** Worldwide

Approval

- X** for Ex-free area
- M** Ship approval
- A** ATEX II3GExnA nC ic IICT4Gc+II(1)G/D[ExiaGa/Da]IIC/IIIC
- C** ATEX II(1)G/D[Ex iaGa/Da]IIC/IIIC,I(M1)[ExiaMa]I
- U** ATEX II(1)G/D[ExiaGa/Da]IIC/IIIC,I(M1)[ExiaMa]I+WHG
- O** ATEX II(1)G/D[ExiaGa/Da]IIC/IIIC,I(M1)[ExiaMa]I+Ship
- A** IEC Ex nA nC ic T4 Gc + [Ex iaGa/Da]IIC/IIIC,[ExiaMa]I
- C** IEC [Ex iaGa]IIC, [ExiaDa]IIIC, [ExiaMa]I
- U** IEC [Ex iaGa]IIC, [ExiaDa]IIIC, [ExiaMa]I + WHG
- O** IEC [Ex iaGa]IIC, [ExiaDa]IIIC, [ExiaMa]I + Ship

Version

- X** Single-channel (8/16mA) for level detection
- S** Single-channel (8/16mA), level det.with fail safe relay

Housing / Protection

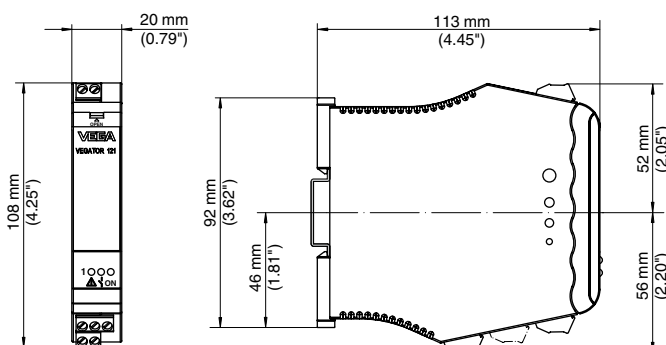
- K** Plastic / IP20

Terminal blocks / Connection

- X** 2.5 mm² detachable terminal blocks 1 x black/2 x black
- B** 2.5 mm² detachable terminal blocks 1 x blue / 2 x black

Certificates

- M** yes
- X** no



VEGATOR 122



Double channel signal conditioning instrument for level detection

Application area

The VEGATOR 122 is a signal conditioning instrument for level detection for the vibrating level switches VEGASWING, VEGAVIB and VEGAWAVE with electronics version "Two-wire 8/16 mA". With this instrument simple control tasks can be solved. Typical applications are monitoring functions such as overflow or dry run protection.

Your benefit

- Comprehensive monitoring detects short-circuit and line break of the measuring cable and interferences in the sensor
- Simple and comfortable line monitoring by means of test keys for both channels (also for SIL and WHG)
- Simple installation through carrier rail mounting as well as detachable, coded terminals

Technical data

Input:	2 x sensor input two-wire 8/16 mA
Output:	2 x relay output (SPDT)
Operating voltage:	20 ... 253 V AC/DC, 50/60 Hz
Mounting:	carrier rail 35 x 7.5 acc. to EN 50022
SIL qualification:	optionally up to SIL2



Scope

- A** Europe
- I** Worldwide

Approval

- X** for Ex-free area
- M** Ship approval
- A** ATEX II3GExnA nC ic IICT4Gc+II(1)G/D[ExiaGa/Da]IIC/IIIC
- C** ATEX II(1)G/D[Ex iaGa/Da]IIC/IIIC,I(M1)[ExiaMa]I
- U** ATEX II(1)G/D[ExiaGa/Da]IIC/IIIC,I(M1)[ExiaMa]I+WHG
- O** ATEX II(1)G/D[ExiaGa/Da]IIC/IIIC,I(M1)[ExiaMa]I+Ship
- A** IEC Ex nA nC ic T4 Gc + [Ex iaGa/Da]IIC/IIIC,[ExiaMa]I
- C** IEC [Ex iaGa]IIC, [ExiaDa]IIC, [ExiaMa]I
- U** IEC [Ex iaGa]IIC, [ExiaDa]IIC, [ExiaMa]I + WHG
- O** IEC [Ex iaGa]IIC, [ExiaDa]IIC, [ExiaMa]I + Ship

Version

- X** Double-channel (8/16mA) for level detection

Housing / Protection

- K** Plastic / IP20
- U** Protective housing plastic / IP66/IP67

Terminal blocks / Connection

- X** 2.5 mm² detachable terminal blocks 2 x black/2 x black
- B** 2.5 mm² detachable terminal blocks 2 x blue / 2 x black

Certificates

- M** yes
- X** no

