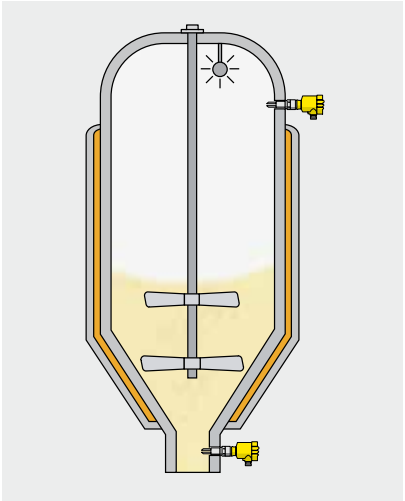
Vibration

Overview VEGASWING



Area of application

The point level sensors of the VEGASWING series are used for overfill and dry run protection in liquids. They are also suitable for safety-related applications up to SIL2. Special materials and coated versions also allow their use in aggressive media.

Measuring principle

The tuning fork of VEGASWING is made to vibrate by a piezo drive. If the tuning fork comes in contact with the medium, the frequency is damped. The electronics responds by triggering a switching signal.

Advantages

With a vibrating fork only 40 mm long, VEGASWING works reliably in all liquids – regardless of the installation position. Pressure, temperature, foam and viscosity do not influence the switching accuracy. The low-cost point level sensors are easy to install and can be set up and commissioned without medium.

	VEGASWING 51	VEGASWING 61/63	VEGASWING 66
			
Application	Liquids	Liquids	Liquids under high and low process temperatures
Version	Compact version	Compact version/Tube extension up to 6 m	Compact version or with tube extension up to 3 m
Werkstoff	316L	316L, Alloy, ECTFE, PFA, enamel, Alloy 400, Duplex	Inconel 718 (tuning fork), 316L, Alloy
Process fitting	Thread from G½, ½ NPT, hygienic fittings	Thread from G¾, ¾ NPT, flanges from DN 25, 1", hygienic fittings	Thread from G1, 1 NPT, flanges from DN 50, 2"
Process temperature	-40 … +150 °C	-50 … +250 °C	-196 … +450 °C
Process pressure	-1 … +64 bar (-100 … +6400 kPa)	-1 … +64 bar (-100 … +6400 kPa)	-1 … +160 bar (-100 … +16000 kPa)
Signal output	Transistor output, contactless electronic switch	Relay, transistor, two-wire, NAMUR output, contactless electronic switch	Relay, transistor, two-wire output
Approvals	Ship, Overfill protection	ATEX, IEC, FM, CSA, GOST, Overfill protection, Ship, SIL2	ATEX, IEC, CSA, GOST, steam boiler, Ship, SIL2

Signal conditioning instruments see chapter "Signal processing"

VEGASWING 51

Vibrating level switch for liquids

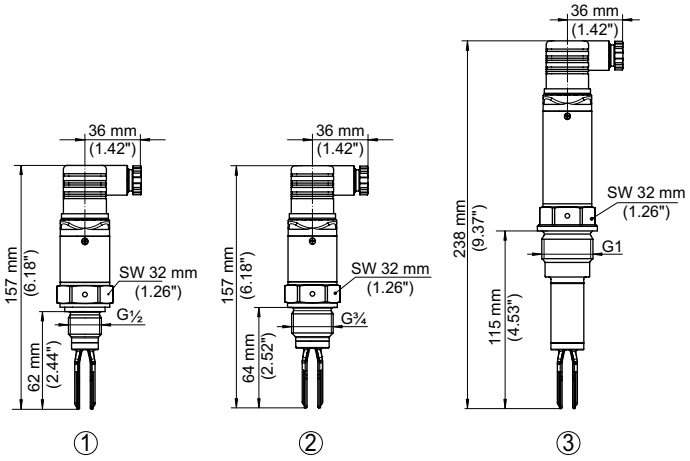
Application area
The VEGASWING 51 is a universal level switch with small dimensions for use in liquids. Independent of the mounting position, it detects reliably with millimetre accuracy the limit level. The instrument can be used as empty or full detector, as approved overfill protection, dry run protection 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 G½, ½ NPT hygienic fittings
Process temperature:	-40 … +150 °C
Process pressure:	-1 … +64 bar (-100 … +6400 kPa)

Delivery time: SPEED



① Threaded version G½ up to +100 °C
② Threaded version G¾ up to +100 °C
③ Threaded version G1 up to +150 °C with extended switching point

Instrument documentation and drawings:
www.vega.com/downloads

Approval

- **XX** without
- **XA** Overfill protection according to WHG
- **XM** Ship approval

Version / Process temperature

- **S** Standard / -40...+100°C
- **T** Extended / -40...+150°C
- **H** Hygienic applications (Ra<0.8µm) / -40...+150°C

Process fitting / Material

- **GH** Thread G½ PN64, DIN3852-A / 316L
- **GR** Thread G½ PN64, DIN3852-A / 316L (Ra <0.8µm)
- **NH** Thread ½NPT PN64, ASME B1.20.1 / 316L
- **NR** Thread ½NPT PN64, ASME B1.20.1 / 316L (Ra<0.8µm)
- **GB** Thread G¾ PN64, DIN3852-A / 316L
- **GP** Thread G¾ PN64, DIN3852-A / 316L (Ra<0.8µm)
- **NB** Thread ¾NPT PN64, ASME B1.20.1 / 316L
- **NP** Thread ¾NPT PN64, ASME B1.20.1 / 316L (Ra<0.8µm)
- **R3** Thread R¾ PN64, EN10226-1 / 316L
- **GA** Thread G1 PN64, DIN3852-A / 316L
- **GL** Thread G1 PN64, DIN3852-A / 316L (Ra<0.8µm)
- **NA** Thread 1NPT PN64, ASME B1.20.1 / 316L
- **NL** Thread 1NPT PN64, ASME B1.20.1 / 316L (Ra<0.8µm)
- **R2** Thread R1½ PN64, EN10226-1 / 316L
- **R1** Thread R1 PN64, EN10226-1 / 316L
- **RF** Thread R1 PN64, EN10226-1 / 316L (Ra<0.8µm)
- **CL** Clamp 1" PN16 (ø50.5mm), DIN32676, ISO2852 / 316L (Ra<0.8µm)
- **CM** Clamp 1½" PN16 (ø50.5mm), DIN32676, ISO2852 / 316L (Ra<0.8µm)
- **CN** Clamp 2" PN16 (ø64mm), DIN32676, ISO2852 / 316L (Ra<0.8µm)
- **RL** Slotted nut DN25 PN40, DIN11851 / 316L (Ra<0.8µm)
- **RM** Slotted nut DN40 PN40, DIN11851 / 316L (Ra<0.8µm)
- **RN** Slotted nut DN50 PN25, DIN11851 / 316L (Ra<0.8µm)
- **RR** SMS DN38 PN6 / 316L (Ra<0.8µm)
- **LA** Hygienic fitting with compression nut F40 PN25 / 316L (Ra<0.8µm)

Electronics

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

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** with extended switching point

SG51.							

[1)] Not in conjunction with Electronics "C"

VEGASWING 61

Vibrating level switch for liquids

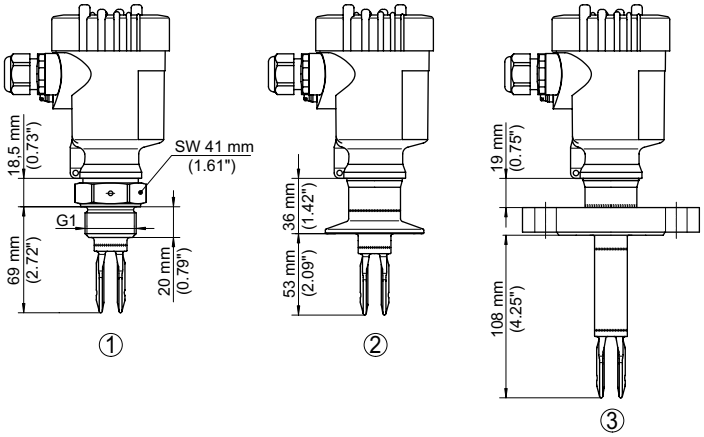
Application area
The VEGASWING 61 is a universal level switch for use in all liquids. Independent of the mounting position, it detects reliably with millimetre accuracy the limit level. The instrument can be used as empty or full detector, as approved overfill protection, dry run protection or pump protection 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, Alloy, ECTFE, PFA, enamel, Alloy 400, Duplex
Process fitting:	thread from G¾, ¾ 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

Delivery time: SPEED



① Threaded version G1
② Clamp version
③ Flange version with extended switching point

L = Probe length

The options shown represent only a limited selection.
Additional instrument options and possible restrictions.
www.vega.com/configurator

Instrument documentation and drawings:
www.vega.com/downloads

Mounting accessories, welded sockets and housing overview:
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** IEC Ex ia IIC T6
- **DI** IEC Ex d IIC T6...T2 Ga/Gb
- **GI** IEC Ex tD A20/21 IP66 T*, A21
- **XM** Ship approval

Process fitting / Material

- **GBV** Thread G¾ PN64, DIN3852-A / 316L
- **NBV** Thread ¾NPT PN64, ASME B1.20.1 / 316L
- **GAV** Thread G1 PN64, DIN3852-A / 316L
- **NAV** Thread 1NPT PN64, ASME B1.20.1 / 316L
- **CCP** Clamp 1" PN16 (ø50.5mm) DIN32676, ISO2852 / 316L (Ra<0.8µm)
- **CCN** Clamp 1" PN16 (ø50.5mm) DIN32676, ISO2852 / 316L (Ra<0.3µm)
- **CAN** Clamp 2" PN16 (ø64mm) DIN32676, ISO2852 / 316L (Ra<0.3µm)
- **CAP** Clamp 2" PN16 (ø64mm) DIN32676, ISO2852 / 316L (Ra<0.8µm)
- **RAP** Slotted nut DN40 PN40, DIN11851 / 316L (Ra<0.8µm)
- **FPV** Flange DN25 PN40 Form C, DIN 2501 / 316L
- **FPH** Flange DN25 PN40 Form C, DIN 2501 / ECTFE
- **FPS** Flange DN25 PN40 Form B1, EN1092-1 / Enamel
- **FEV** Flange DN50 PN40 Form C, DIN2501 / 316L
- **FEH** Flange DN50 PN40 Form C, DIN2501 / ECTFE
- **FEF** Flange DN50 PN40 Form C, DIN2501 / PFA
- **FES** Flange DN50 PN40 Form B1, EN1092-1 / Enamel
- **APV** Flange 1" 150lb RF, ASME B16.5 / 316L
- **APH** Flange 1" 150lb RF, ASME B16.5 / ECTFE
- **ACV** Flange 2" 150lb RF, ASME B16.5 / 316L
- **ACH** Flange 2" 150lb RF, ASME B16.5 / ECTFE
- **ACE** Flange 2" 150lb RF, ASME B16.5 / Enamel
- **GB3** Thread G¾ PN64, DIN3852-A / Duplex (1.4462)
- **GCV** Thread G1½ PN64, DIN3852-A / 316L
- **FEC** Flange DN50 PN40 Form B1, EN1092-1 / 316L

Adapter / Process temperature

- **X** without / -50...+150°C
- **H** with / -50...+200°C (in conjunction with enamel coating)
- **T** with / -50...+250°C
- **G** with gas-tight leadthrough / -50...+150°C
- **D** with gas-tight leadthrough / -50...+250°C

Housing / Protection / Cable gland

- **P** Plastic single chamber IP66/67 / M20x1.5
- **M** Aluminium single chamber IP66/IP67 / M20x1.5
- **U** Aluminium single chamber / IP66/IP67 / ½NPT
- **V** Stainless steel single chamber (precision casting) / IP66/IP67 / M20x1.5
- **8** Stainless steel single chamber (electropolished) / IP66/IP67 / M20x1.5

Electronics

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

Switching point

- **X** Standard
- **L** with extended switching point

SWING61.						

VEGASWING 63

Vibrating level switch with tube extension for liquids

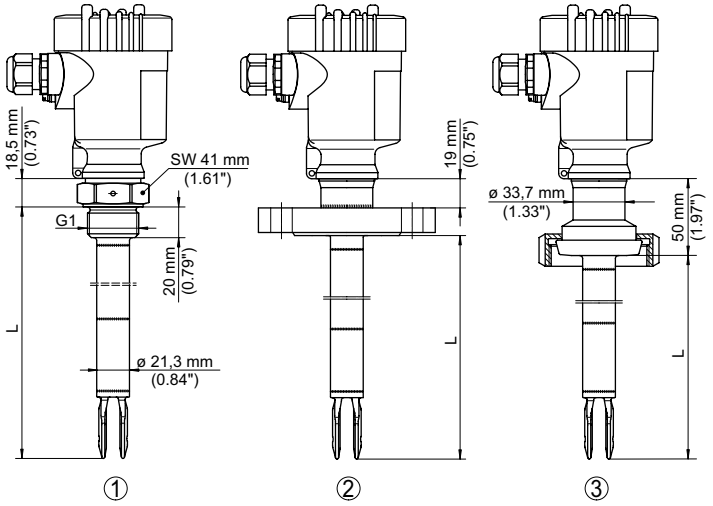
Application area
VEGASWING 63 is used as a universal level switch in all liquids. Independent of the mounting position it detects reliably with millimetre accuracy the level. The instrument can be used in vessels as empty or full detector, as approved overfill protection, dry run protection or pump protection. 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, Alloy, ECTFE, PFA, enamel, Alloy 400, Duplex
Process fitting:	thread from G¾, ¾ 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

Delivery time: SPEED



① Threaded version G1
② Flange version
③ Slotted nut DN 50 PN 25

L = Sensor length

The options shown represent only a limited selection.
Additional instrument options and possible restrictions.
www.vega.com/configurator

Instrument documentation and drawings:
www.vega.com/downloads

Mounting accessories, welded sockets and housing overview:
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 d IIC T6...T2 Ga/Gb
- **GI** IEC Ex tD A20/21 IP66 T*, A21
- **XM** Ship approval

Process fitting / Material

- **GBV** Thread G¾ PN64, DIN3852-A / 316L
- **NBV** Thread ¾NPT PN64, ASME B1.20.1 / 316L
- **GAV** Thread G1 PN64, DIN3852-A / 316L
- **NAV** Thread 1NPT PN64, ASME B1.20.1 / 316L
- **CCP** Clamp 1" PN16 (ø50.5mm) DIN32676, ISO2852 / 316L (Ra<0.8µm)
- **CCN** Clamp 1" PN16 (ø50.5mm) DIN32676, ISO2852 / 316L (Ra<0.3µm)
- **CAN** Clamp 2" PN16 (ø64mm) DIN32676, ISO2852 / 316L (Ra<0.3µm)
- **CAP** Clamp 2" PN16 (ø64mm) DIN32676, ISO2852 / 316L (Ra<0.8µm)
- **RAP** Slotted nut DN40 PN40, DIN11851 / 316L (Ra<0.8µm)
- **FPV** Flange DN25 PN40 Form C, DIN 2501 / 316L
- **FPH** Flange DN25 PN40 Form C, DIN 2501 / ECTFE
- **FPS** Flange DN25 PN40 Form B1, EN1092-1 / Enamel
- **FEV** Flange DN50 PN40 Form C, DIN2501 / 316L
- **FEH** Flange DN50 PN40 Form C, DIN2501 / ECTFE
- **FEF** Flange DN50 PN40 Form C, DIN2501 / PFA
- **FES** Flange DN50 PN40 Form B1, EN1092-1 / Enamel
- **APV** Flange 1" 150lb RF, ASME B16.5 / 316L
- **APH** Flange 1" 150lb RF, ASME B16.5 / ECTFE
- **ACV** Flange 2" 150lb RF, ASME B16.5 / 316L
- **ACH** Flange 2" 150lb RF, ASME B16.5 / ECTFE
- **ACE** Flange 2" 150lb RF, ASME B16.5 / Enamel
- **GB3** Thread G¾ PN64, DIN3852-A / Duplex (1.4462)
- **GCV** Thread G1½ PN64, DIN3852-A / 316L
- **FEC** Flange DN50 PN40 Form B1, EN1092-1 / 316L

Adapter / Process temperature

- **X** without / -50...+150°C
- **H** with / -50...+200°C (in conjunction with enamel coating)
- **T** with / -50...+250°C
- **G** with gas-tight leadthrough / -50...+150°C
- **D** with gas-tight leadthrough / -50...+250°C

Housing / Protection / Cable gland

- **P** Plastic single chamber IP66/67 / M20x1.5
- **M** Aluminium single chamber IP66/IP67 / M20x1.5
- **U** Aluminium single chamber / IP66/IP67 / ½NPT
- **V** Stainless steel single chamber (precision casting) / IP66/IP67 / M20x1.5
- **8** Stainless steel single chamber (electropolished) / IP66/IP67 / M20x1.5

Electronics

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

SWING63.					

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 <0.8µm (80-6000 mm) per 100 mm
316L Ra <0.3µm (80-6000 mm) per 100 mm
enamelled version (300, 400, 500, 600 mm) once

VEGASWING 66

Vibrating level switch for liquids under exteme process temperatures and pressures

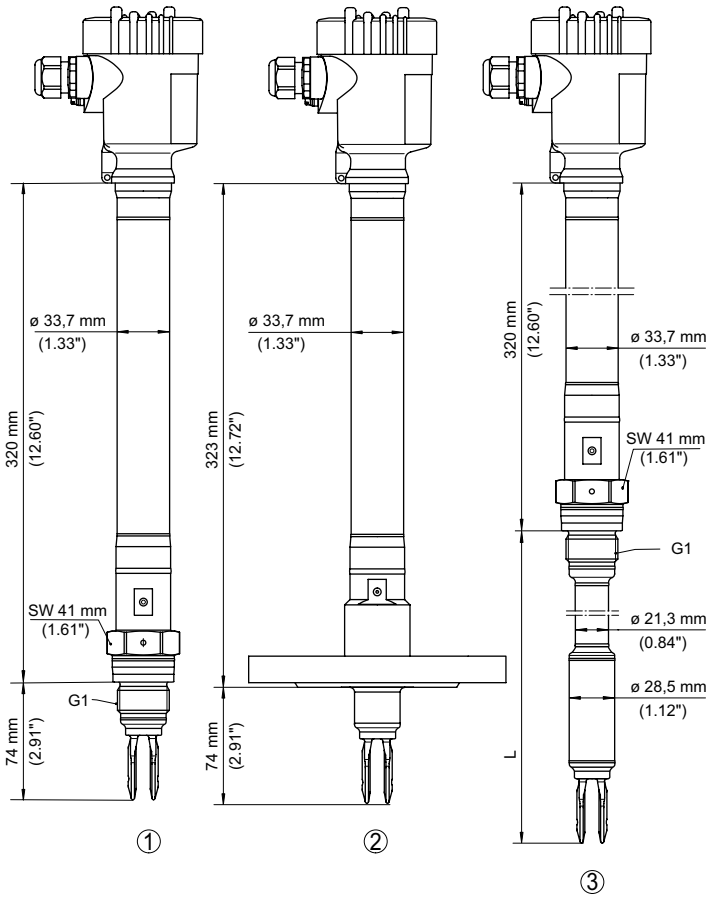
Application area
VEGASWING 66 is used as a universal vibrating level switch in all liquids. In compact version or with tube extension, it detects reliably with millimetre accuracy the limit level. The instrument can be used in vessels, pipelines and steam generators as empty or full detector. The VEGASWING 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, Alloy
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)

Delivery time: SPEED



① Compact version
② Flange version
③ Tube version

L = Sensor length

The options shown represent only a limited selection.
Additional instrument options and possible restrictions.
www.vega.com/configurator

Instrument documentation and drawings:
www.vega.com/downloads

Mounting accessories, welded sockets and housing overview:
Chapter Accessory

Scope

A Europe

I Worldwide

Approvals

X without

M Ship approval (GL; BV)

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 (2.4668)

R with tube extension / 316L and Inconel 718 (2.4668)

H with tube extension / Alloy C22 (2.4602) and Inconel 718 (2.4668)

Process fitting / Material

AA Thread G1 PN100, DIN3852-A / 316L

AB Thread G1 PN160, DIN3852-A / Inconel 718 (2.4668)

AC Thread 1NPT PN100, ASME B1.20.1 / 316L

AD Thread 1NPT PN160, ASME B1.20.1 / Inconel 718 (2.4668)

AG Flange DN50 PN40 Form C, DIN2501 / 316L

BR Flange DN50 PN40 Form V13, DIN2501 / 316L

AI Flange DN65 PN40 Form C, DIN2501 / 316L

AJ Flange DN80 PN40 Form C, DIN2501 / 316L

AK Flange DN100 PN16 Form C, DIN2501 / 316L

AL Flange DN100 PN40 Form C, DIN2501 / 316L

AN Flange DN125 PN40 Form C, DIN2501 / 316L

AO Flange DN150 PN16 Form C, DIN2501 / 316L

AP Flange DN150 PN40 Form C, DIN2501 / 316L

BG Flange DN50 PN40 Form B1, EN1092-1 / 316L

BE Flange DN150 PN40 Form B1, EN1092-1 / 316L

BC Flange 1½" 1500lb RJF, ASME B16.5 / 316L

AS Flange 2" 150lb RF, ASME B16.5 / 316L

AT Flange 2" 300lb RF, ASME B16.5 / 316L

CA Flange 2" 300lb RJF, ASME B16.5 / 316L

AU Flange 2" 600lb RF, ASME B16.5 / 316L

DN Flange 2" 900lb RF, ASME B16.5 / 316L

BF Flange 2" 900lb RJF, ASME B16.5 / 316L

BQ Flange 2" 1500lb RJF, ASME B16.5 / 316L

AV Flange 2½" 150lb RF, ASME B16.5 / 316L

AZ Flange 3" 150lb RF, ASME B16.5 / 316L

BA Flange 3" 300lb RF, ASME B16.5 / 316L

BB Flange 4" 300lb RF, ASME B16.5 / 316L

Second line of defense / Process temperature

X without / -196...+450°C

A with / -196...+450°C

Electronics

R Relay (2xSPDT) 20...72V DC / 20...253V AC (5A)

T Transistor (NPN/PNP) 9.6...55V DC

Z Two-wire (8/16mA) 9.,6...35V DC

S Relay (2xSPDT) 20...72V DC / 20...253V AC (5A) with SIL qualification

I Transistor (NPN/PNP) 9.6...55V DC with SIL qualification

L Two-wire (8/16mA) 9.6...35V DC with SIL qualification

Housing / Protection

K Plastic single chamber / IP66/IP67

A Aluminium single chamber / IP66/IP68 (0.2 bar)

8 Stainless steel single chamber (electropolished) / IP66/IP68 (0.2 bar)

Cable entry / Connection

M M20x1.5 / Cable gland PA black

N ½NPT / Blind plug

Certificates

X no

M yes (e.g. FDA; test certificates NACE) further add. prices possible

SG66.									

Length (from seal surface)

316L (260-3000 mm) per 100 mm

Alloy C22 (200-3000 mm) per 100 mm

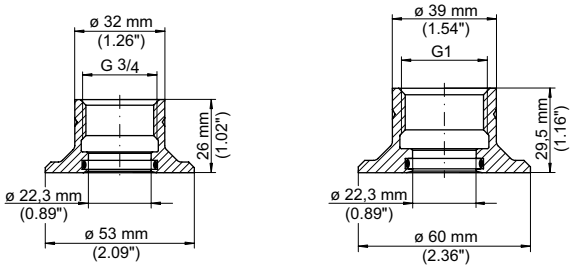
Welded socket VEGASWING 51/61/63

– with O-ring seal in front and welding marking

Delivery time: SPEED

suitable for
1 VEGASWING 51/61/63 .....
Version / Material
GB Thread G¾, DIN3852-A / 316L .....
GA Thread G1, DIN3852-A / 316L .....
Test certificate
X without .....
A (H) 2.2-Factory certification for material (EN 10204) .....
B (C) 3.1-Inspection certificate for material (EN 10204) .....
Seal
1 FKM .....
3 EPDM .....
4 G75B FFKM 78 black Perlast .....

ESTSG.				



① Thread G¾, version ESTSG.1GB**
② Thread G1, version ESTSG.1GA**

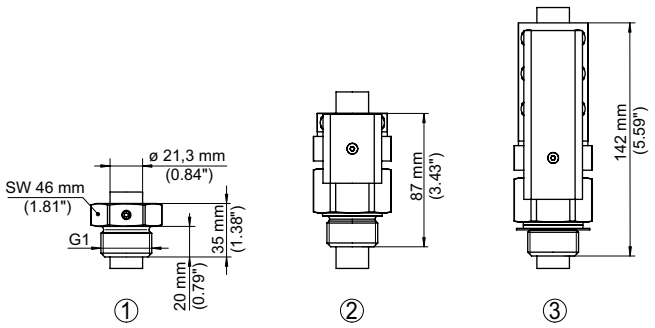
Lock fitting for VEGASWING 63

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

Delivery time: SPEED

Process pressure / Process temperature / suitable for
1 Unpressurised / -50...+250°C / Approval XX, XA .....
2 -1...+16bar / -50...+150°C / Approval XX, XA, CA, DA, GX, GK .....
3 -1...+64bar / -50...+250°C / Approval XX, XA, CA, DA, GX, GK .....
Process fitting / Material
GC Thread G1, DIN3852-A / 316L .....
NC Thread 1NPT, ASME B1.20.1 / 316L .....
GD Thread G1½, DIN3852-A / 316L .....
ND Thread 1½NPT, ASME B1.20.1 / 316L .....

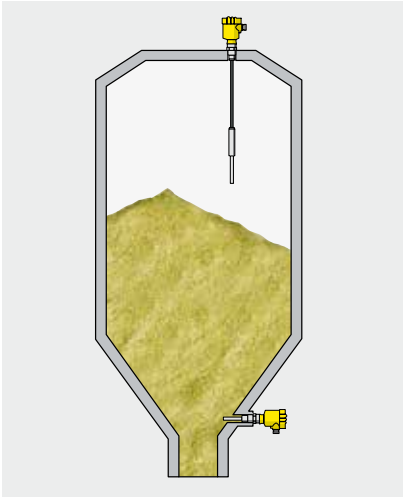
ARV-SG63.		



For mounting the lock fitting, the associated VEGASWING 63 (depending on the version) must have the following min. length:

① Version: unpressurized / -50 … +250 °C; min. length: 120 mm
② Version: -1 … 16 bar / -50 … +150 °C; min. length: 175 mm
③ Version: -1 … 64 bar / -50 … +250 °C; min. length: 235 mm

Overview VEGAVIB



Area of application

The point level sensors of the VEGAVIB series are used as overfill protection and as empty detector in silos and bunkers containing bulk solids. Typical applications include bulk materials such as plastic granules, pellets and non-adhesive media. The sensors are also suitable for safety-related applications up to SIL2.

Measuring principle

The vibrating rod of VEGAVIB is made to vibrate by a piezo drive. If the vibrating rod comes in contact with the medium, the vibration amplitude is damped. The electronics responds by triggering a switching signal.

Advantages

The sensors are easy to clean and therefore ideal for use in food and pharmaceutical products. Mounting position and grain size have no effect on their functional reliability. The sensors are easy to install and can be set up and commissioned without medium.

	VEGAVIB 61	VEGAVIB 62	VEGAVIB 63
			
Application	Granuled and coarse-grained bulk solids	Granuled and coarse-grained bulk solids (with suspension cable up to 80 m)	Granuled and coarse-grained bulk solids (with tube extension up to 6 m)
Measuring range	Bulk solids from 20 g/l	Bulk solids from 20 g/l	Bulk solids from 20 g/l
Material	316L, Carbocer coating	316L and PUR or FEP, Carbocer coating	316L, Carbocer coating
Process fitting	Thread from G1, 1 NPT, flanges from DN 32, 1½", hygienic fittings	Thread from G1, 1 NPT, flanges from DN 32, 1½", hygienic fittings	Thread from G1, 1 NPT, flanges from DN 32, 1½", hygienic fittings
Process temperature	-50 … +250 °C	-40 … +150 °C	-50 … +250 °C
Process pressure	-1 … +16 bar (-100 … +1600 kPa)	-1 … +6 bar (-100 … +600 kPa)	-1 … +16 bar (-100 … +1600 kPa)
Signal output	Relay, transistor, two-wire, NAMUR output, contactless electronic switch	Relay, transistor, two-wire, NAMUR output, contactless electronic switch	Relay, transistor, two-wire, NAMUR output, contactless electronic switch
Approvals	ATEX, IEC, FM, CSA, GOST, SIL2	ATEX, IEC, FM, CSA, GOST, SIL2	ATEX, IEC, FM, CSA, GOST, SIL2

Signal conditioning instruments see chapter "Signal processing"

VEGAVIB 61

Vibrating level switch for granular bulk solids

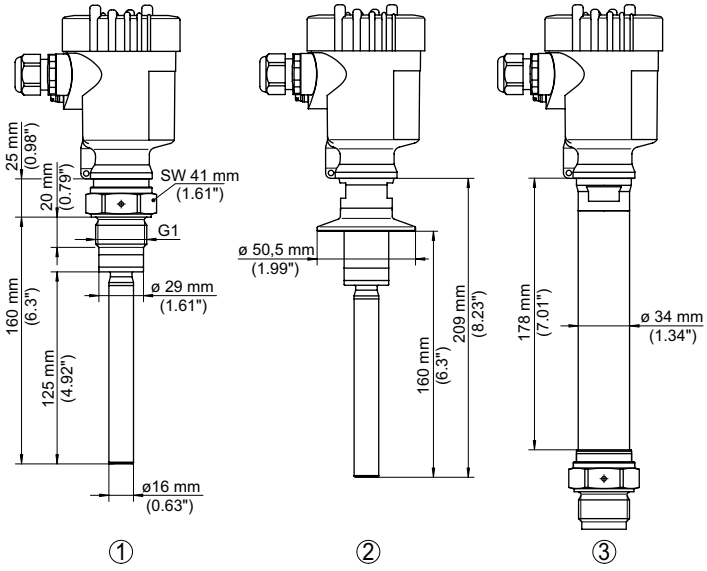
Application area
The VEGAVIB 61 is a level switch for granular and coarse-grained bulk solids. The VEGAVIB 61 detects reliably and accurately the min. or max. level. The smooth surface of the vibrating rod, without corners and edges, avoids jamming of the bulk solid and is easy to clean.

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

Delivery time: SPEED



① Threaded version G1
② Clamp version 1", 1½"
③ Version with temperature adapter

The options shown represent only a limited selection.
Additional instrument options and possible restrictions.
www.vega.com/configurator

Instrument documentation and drawings:
www.vega.com/downloads

Mounting accessories, welded sockets and housing overview:
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 + 1D, 1/2D, 2D Ex tD IP66 T*
- **CI** IEC Ex ia IIC T6
- **LX** ATEX II 1/2G, 2G Ex d IIC T1...T6 Ga/Gb, Gb
- **GX** ATEX II 1D, 1/2D, 2D Ex tD IP66 T*
- **GI** IEC 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
- **E** with Carbocer coating, reduced buildup, no corrosion/abrasion protection / -50...+150°C
- **F** with Carbocer coating, reduced buildup, no corrosion/abrasion protection / -50...+250°C

Process fitting / Material

- **GC** Thread G1 PN16, DIN3852-A / 316L
- **GR** Thread G1 PN16, DIN3852-A / 316L (Ra<0.8µm)
- **NC** Thread 1NPT PN16, ASME B1.20.1 / 316L
- **NA** Thread R1 PN16, EN10226 / 316L
- **GD** Thread G1½ PN16, DIN3852-A / 316L, switching point as VEGAVIB 51
- **ND** Thread 1½NPT PN16, ASME B1.20.1 / 316L, switching point as VEGAVIB 51
- **GG** Thread G1½ PN16, DIN 3852-A / 316L
- **NG** Thread 1½NPT PN16, ASME B1.20.1 / 316L
- **CD** Clamp 1½" PN16 (ø50.5mm), DIN32676, ISO2852 / 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** Slotted nut DN40 PN40, DIN11851 / 316L
- **C1** Collar clamp connection DN40 PN40 Form A, DIN11864-3 / 316L
- **EF** Flange DN50 PN40 Form C, DIN2501 / 316L
- **KF** Flange DN80 PN40 Form C, DIN2501 / 316L
- **HA** Flange 2" 150lb RF, ASME B16.5 / 316L
- **OA** Flange 3" 150lb RF, ASME B16.5 / 316L

Electronics

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

Housing / Protection

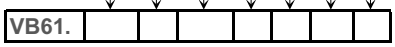
- **K** Plastic single chamber / IP66/IP67
- **A** Aluminum single chamber / IP66/IP68 (0.2 bar)
- **8** Stainless steel single chamber (electropolished) / IP66/IP68 (0.2 bar)
- **V** Stainless steel single chamber (precision casting) / IP66/IP68 (0.2 bar)

Cable entry / Cable gland / Plug connection

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

Additional equipment

- **X** without



VEGAVIB 62

Vibrating level switch with suspension cable for granular bulk solids

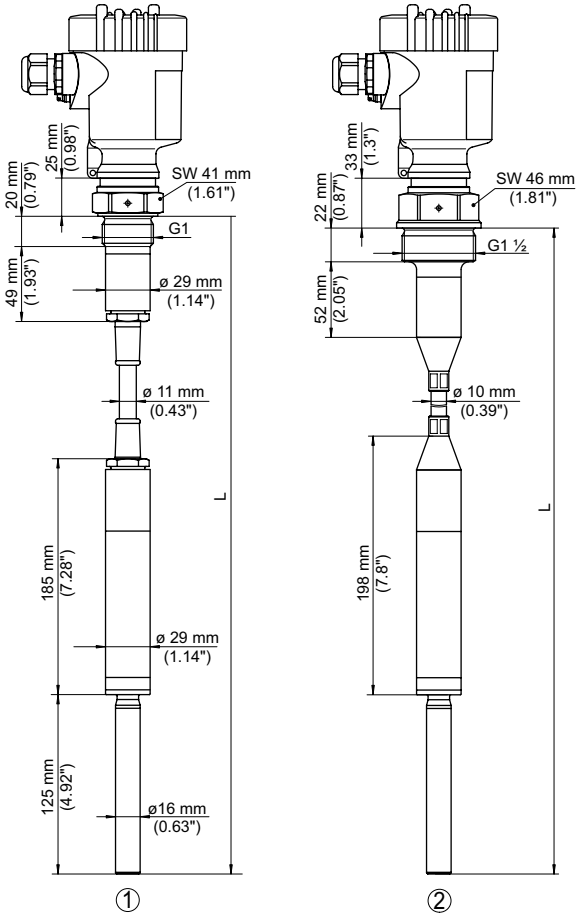
Application area
The VEGAVIB 62 is a level switch for granular and coarse-grained bulk solids. The optimized rod design without corners and edges avoids jamming of the bulk solids and is easy to clean. The VEGAVIB 62 detects reliably and accurately the min. or max. level in bulk solids. The position 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

Delivery time: SPEED



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

L = Sensor length

The options shown represent only a limited selection.
Additional instrument options and possible restrictions.
www.vega.com/configurator

Instrument documentation and drawings:
www.vega.com/downloads

Mounting accessories, welded sockets and housing overview:
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 + 1D, 1/2D, 2D Ex tD IP66 T*

CI IEC Ex ia IIC T6

GX ATEX II 1D, 1/2D, 2D Ex tD IP66 T*

GI IEC 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

K Cable PUR with Carbocer coating, less buildup, no corrosion/abrasion protection / -20...+80°C

L Cable FEP with Carbocer coating, less buildup, no corrosion/abrasion protection / -40...+150°C

Process fitting / Material

XX without / vibrating rod: 316L

GC Thread G1 PN6, DIN3852-A / 316L

NC Thread 1NPT PN6, ASME B1.20.1 / 316L

GD Thread G1½ PN6, DIN3852-A / 316L

ND Thread 1½NPT PN6, ASME B1.20.1 / 316L

EF Flange DN50 PN40 Form C, DIN2501 / 316L

MF Flange DN100 PN16 Form C, DIN2501 / 316L

HA Flange 2" 150lb RF, ASME B16.5 / 316L

OA Flange 3" 150lb RF, ASME B16.5 / 316L

Electronics

C Contactless electronic switch 20...253V AC/DC

R Relay (DPDT) 20...72V DC / 20...253V AC (3A)

T Transistor (NPN/PNP) 10...55 V DC

Z Two-wire (8/16mA) 10...36V DC

N NAMUR signal

Housing / Protection

K Plastic single chamber / IP66/IP67

A Aluminium single chamber / IP66/IP68 (0.2 bar)

8 Stainless steel single chamber (electropolished) / IP66/IP68 (0.2 bar)

V Stainless steel single chamber (precision casting) / IP66/IP68 (0.2 bar)

Cable entry / Cable gland / Plug connection

M M20x1.5 / with / without

N ½NPT / without / without

Additional equipment

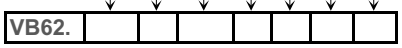
X without

D Closing screw G1 with strain relief IP20; 1.4305

Z Closing screw G1½ with strain relief IP20; 1.4305

E Closing screw G1 with cable gland and strain relief IP65; 316

M Closing screw G1½ with cable glang and strain relief IP65; 316



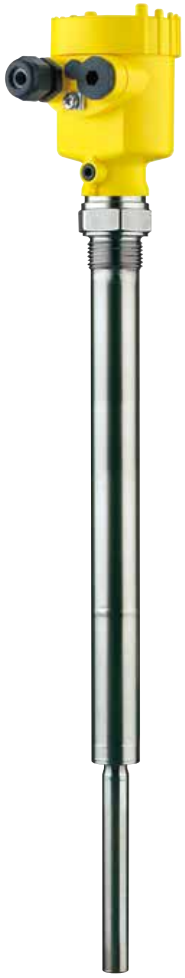
Length (from seal surface)

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



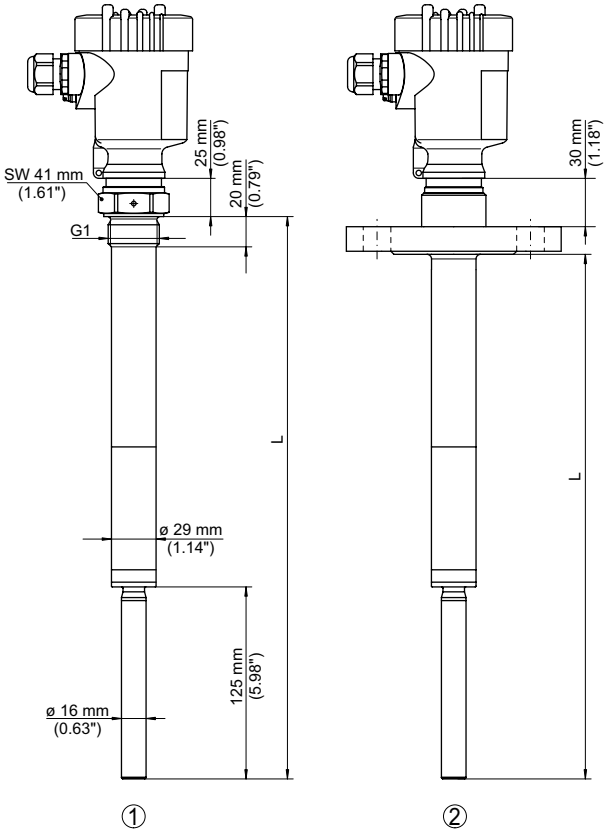
Application area
The VEGAVIB 63 is a level switch for granular and coarse-grained bulk solids. The VEGAVIB 63 detects reliably and accurately the min. or max. level. The smooth surface of the vibrating rod, without corners and edges, avoids jamming of the bulk solid and is easy to clean. The position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

Delivery time: SPEED



① Threaded version G1
② Flange version

L = Sensor length

The options shown represent only a limited selection.
Additional instrument options and possible restrictions.
www.vega.com/configurator

Instrument documentation and drawings:
www.vega.com/downloads

Mounting accessories, welded sockets and housing overview:
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 + 1D, 1/2D, 2D Ex tD IP66 T*
- **CI** IEC Ex ia IIC T6
- **LX** ATEX II 1/2G, 2G Ex d IIC T1...T6 Ga/Gb, Gb
- **GX** ATEX II 1D, 1/2D, 2D Ex tD IP66 T*
- **GI** IEC 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
- **E** with Carbocer coating, reduced buildup, no corrosion/abrasion protection / -50...+150°C
- **F** with Carbocer coating, reduced buildup, no corrosion/abrasion protection / -50...+250°C

Process fitting / Material

- **GC** Thread G1 PN16, DIN3852-A / 316L
- **NC** Thread 1NPT PN16, ASME B1.20.1 / 316L
- **GD** Thread G1½ PN16, DIN3852-A / 316L
- **ND** Thread 1½NPT PN16, ASME B1.20.1 / 316L
- **CA** Clamp 2" PN16 (ø64mm), DIN32676, ISO2852 / 316L
- **RA** Slotted nut DN40 PN40, DIN11851 / 316L
- **C1** Collar clamp connection DN40 PN40 Form A, DIN11864-3 / 316L
- **DF** Flange DN40 PN40 Form C, DIN2501 / 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, ASME B16.5 / 316L
- **IA** Flange 2" 300lb RF, ASME B16.5 / 316L
- **OA** Flange 3" 150lb RF, ASME B16.5 / 316L
- **UA** Flange 4" 300lb RF, ASME B16.5 / 316L

Electronics

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

Housing / Protection

- **K** Plastic single chamber / IP66/IP67
- **A** Aluminum single chamber / IP66/IP68 (0.2 bar)
- **8** Stainless steel single chamber (electropolished) / IP66/IP68 (0.2 bar)
- **V** Stainless steel single chamber (precision casting) / IP66/IP68 (0.2 bar)

Cable entry / Cable gland / Plug connection

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

Additional equipment

- **X** without

VB63.							

Length (from seal surface)

316L (180-6000 mm) per 100 mm

Lock fitting for VEGAVIB 63

– for continuous height adjustment of a VEGAVIB 63/S61

Delivery time: SPEED

Process pressure / Process temperature / suitable for

1 Unpressurised / -50...+250°C / Approval XX .....

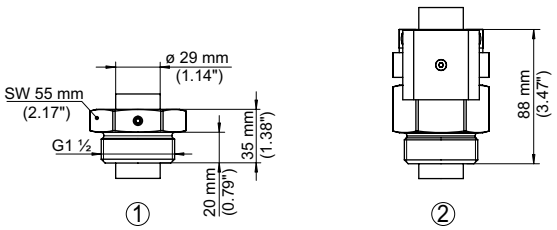
2 -1...+16bar / -50...+150°C / Approval XX, CX, CK, LX, GX .....

Process fitting / Material

GD Thread G1½, DIN3852-A / 316L .....

ND Thread 1½NPT, ASME B1.20.1 / 316L .....

ARV-VB63.		

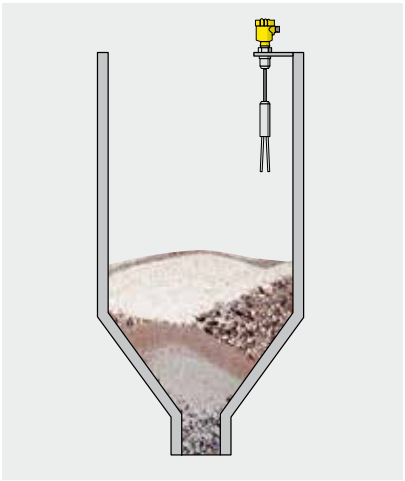


For mounting the lock fitting, the associated VEGAVIB 63 (depending on the version) must have the following min. length:

① Version: unpressurized / -50 … +250 °C; min. length: 205 mm

② Version: -1 … 16 bar / -50 … +150 °C; min. length: 265 mm

Overview VEGAWAVE



Area of application

The point level sensors of the VEGAWAVE series are used as overfill protection and empty detector in silos and bunkers containing powdery bulk solids. Typical applications are silos with powdery products such as flour, cement or sand as well as containers with fine-grained bulk materials such as plastic granules, fine gravel or styrofoam beads. The sensors are also suitable for safety-related applications up to SIL2.

Measuring principle

The tuning fork of VEGAWAVE is made to vibrate by a piezo drive. When the medium covers the fork, the vibration amplitude is damped. The electronics responds by triggering a switching signal.

Advantages

The sensors are robust and non-sensitive to buildup and function reliably in any position. They are easy to install and can be set up and commissioned without medium.

	VEGAWAVE 61	VEGAWAVE 62	VEGAWAVE 63
			
Application	Powders and fine-grained bulk solids	Powders and fine-grained bulk solids (with suspension cable up to 80 m)	Powders and fine-grained bulk solids (with tube extension up to 6 m)
Measuring range	Bulk solids from 8 g/l	Bulk solids from 8 g/l	Bulk solids from 8 g/l
Material	316L, Carbocer coating	316L and PUR or FEP, Carbocer coating	316L, Carbocer coating
Process fitting	Thread G1½, 1½ NPT, flanges from DN 50, 2", hygienic fittings	Thread G1½, 1½ NPT, flanges from DN 50, 2", hygienic fittings	Thread G1½, 1 NPT, flanges from DN 50, 2", hygienic fittings
Process temperature	-50 … +250 °C	-40 … +150 °C	-50 … +250 °C
Process pressure	-1 … +25 bar (-100 … +2500 kPa)	-1 … +6 bar (-100 … +600 kPa)	-1 … +25 bar (-100 … +2500 kPa)
Signal output	Relay, transistor, two-wire, NAMUR output, contactless electronic switch	Relay, transistor, two-wire, NAMUR output, contactless electronic switch	Relay, transistor, two-wire, NAMUR output, contactless electronic switch
Approvals	ATEX, IEC, FM, CSA, GOST, SIL2	ATEX, IEC, FM, CSA, GOST, SIL2	ATEX, IEC, FM, CSA, GOST, SIL2

Signal conditioning instruments see chapter "Signal processing"

VEGAWAVE 61

Vibrating level switch for powders

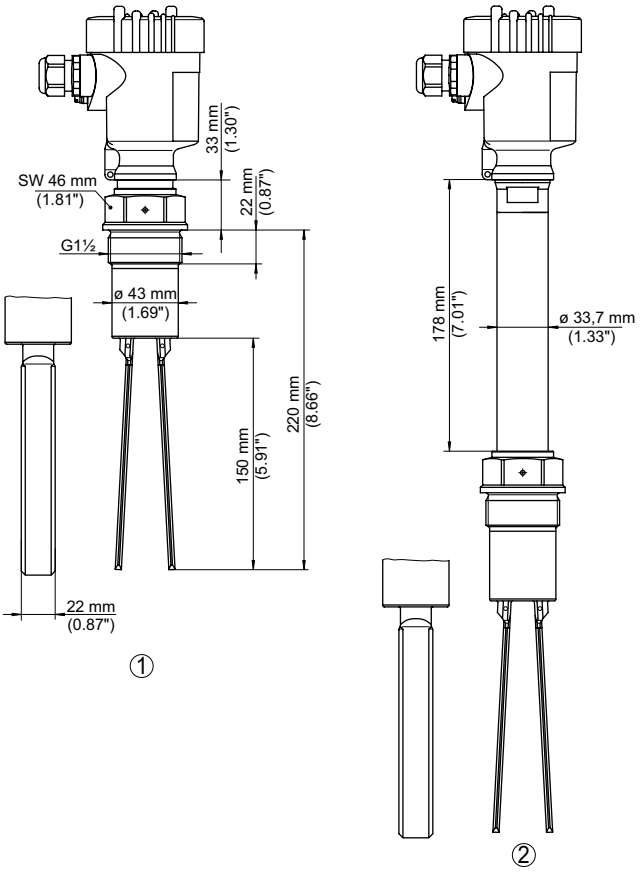
Application area
The VEGAWAVE 61 is a level switch for universal use in powders and fine-grained bulk solids. The level switch detects reliably and robust the min. or max. level. The tuning fork is ideal for use either in adhesive and abrasive products as well as in bulk solids with very low density.

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

Delivery time: SPEED



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

The options shown represent only a limited selection.
Additional instrument options and possible restrictions.
www.vega.com/configurator

Instrument documentation and drawings:
www.vega.com/downloads

Mounting accessories, welded sockets and housing overview:
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 IEC Ex ia IIC T6

LX ATEX II 1/2G, 2G Ex d IIC T1...T6

GX ATEX II 1D, 1/2D, 2D Ex tD IP66 T*

GI IEC 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

E with Carbocer coating, reduced buildup, no corrosion/abrasion protection / -50...+150°C

F with Carbocer coating, reduced buildup, no corrosion/abrasion protection / -50...+250°C

Process fitting / Material

GD Thread G1½ PN25, DIN3852-A / 316L

ND Thread 1½NPT PN25, ASME B1.20.1 / 316L

NF Thread R1½ PN25, EN10226-1 / 316L

CA Clamp 2" PN16 (ø64mm), DIN32676, ISO2852 / 316L

EF Flange DN50 PN40 Form C, DIN2501 / 316L

MF Flange DN100 PN16 Form C, DIN2501 / 316L

HA Flange 2" 150lb RF, ASME B16.5 / 316L

OA Flange 3" 150lb RF, ASME B16.5 / 316L

UA Flange 4" 300lb RF, ASME B16.5 / 316L

Electronics

C Contactless electronic switch 20...253V AC/DC

R Relay (DPDT) 20...72V DC / 20...253V AC (3A)

T Transistor (NPN/PNP) 10...55 V DC

Z Two-wire (8/16mA) 10...36V DC

N NAMUR signal

Housing / Protection

K Plastic single chamber / IP66/IP67

A Aluminum single chamber / IP66/IP68 (0.2 bar)

8 Stainless steel single chamber (electropolished) / IP66/IP68 (0.2 bar)

V Stainless steel single chamber (precision casting) / IP66/IP68 (0.2 bar)

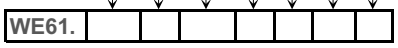
Cable entry / Cable gland / Plug connection

M M20x1.5 / with / without

N ½NPT / without / without

Additional equipment

X without



VEGAWAVE 62

Vibrating level switch with suspension cable for powders

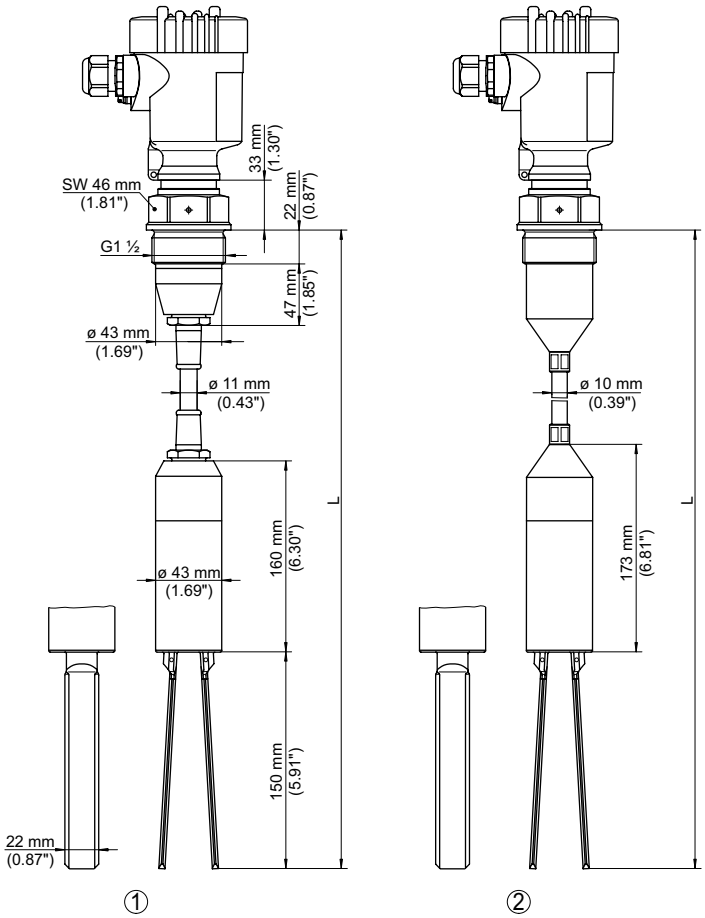
Application area
The VEGAWAVE 62 is a level switch for universal use in powders and fine-grained bulk solids. The level switch detects reliably and robust the min. or max. level. The tuning fork is ideal for use either in adhesive and abrasive products as well as in bulk solids with very low density. 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

Delivery time: SPEED



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

L = Sensor length

The options shown represent only a limited selection.
Additional instrument options and possible restrictions.
www.vega.com/configurator

Instrument documentation and drawings:
www.vega.com/downloads

Mounting accessories, welded sockets and housing overview:
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 IEC Ex ia IIC T6

GX ATEX II 1D, 1/2D, 2D Ex tD IP66 T*

GI IEC 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

K Cable PUR with Carbocer coating, less buildup, no corrosion/abrasion protection / -20...+80°C

L Cable FEP with Carbocer coating, less buildup, no corrosion/abrasion protection / -40...+150°C

Process fitting / Material

XX without / 316L

GD Thread G1½ PN6, DIN3852-A / 316L

ND Thread 1½NPT PN6, ASME B1.20.1 / 316L

NF Thread R1½ PN25, EN10226-1 / 316L

EF Flange DN50 PN40 Form C, DIN2501 / 316L

MF Flange DN100 PN16 Form C, DIN2501 / 316L

HA Flange 2" 150lb RF, ASME B16.5 / 316L

OA Flange 3" 150lb RF, ASME B16.5 / 316L

UA Flange 4" 300lb RF, ASME B16.5 / 316L

Electronics

C Contactless electronic switch 20...253V AC/DC

R Relay (DPDT) 20...72V DC / 20...253V AC (3A)

T Transistor (NPN/PNP) 10...55 V DC

Z Two-wire (8/16mA) 10...36V DC

N NAMUR signal

Housing / Protection

K Plastic single chamber / IP66/IP67

A Aluminium single chamber / IP66/IP68 (0.2 bar)

8 Stainless steel single chamber (electropolished) / IP66/IP68 (0.2 bar)

V Stainless steel single chamber (precision casting) / IP66/IP68 (0.2 bar)

Cable entry / Cable gland / Plug connection

M M20x1.5 / with / without

N ½NPT / without / without

Additional equipment

X without

Z Closing screw G1½ with strain relief IP20; 1.4305

M Closing screw G1½ with cable glang and strain relief IP65; 316

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

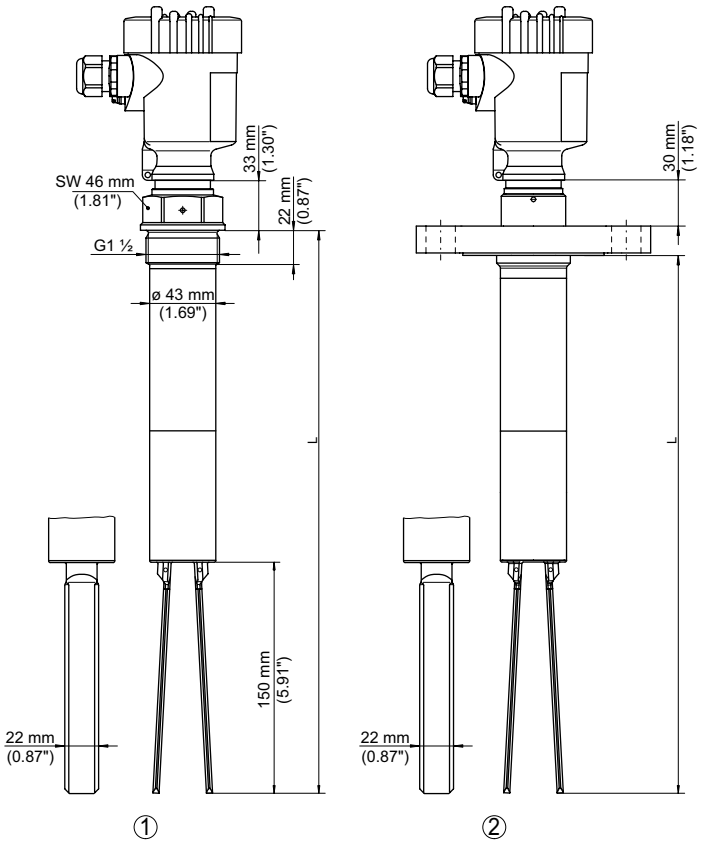
Application area
The VEGAWAVE 63 is a level switch for universal use in powders and fine-grained bulk solids. The level switch detects reliably and robust the min. or max. level. The tuning fork is ideal for use either in adhesive and abrasive products as well as in bulk solids with very low density. 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 pessure:	-1 … +25 bar (-100 … +2500 kPa)
SIL qualification:	optionally up to SIL2

Delivery time: SPEED



① Threaded version G1½
② Flange version

L = Sensor length

The options shown represent only a limited selection.
Additional instrument options and possible restrictions.
www.vega.com/configurator

Instrument documentation and drawings:
www.vega.com/downloads

Mounting accessories, welded sockets and housing overview:
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** IEC Ex ia IIC T6
- **LX** ATEX II 1/2G, 2G Ex d IIC T1...T6
- **GX** ATEX II 1D, 1/2D, 2D Ex tD IP66 T*
- **GI** IEC 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
- **E** with Carbocer coating, reduced buildup, no corrosion/abrasion protection / -50...+150°C
- **F** with Carbocer coating, reduced buildup, no corrosion/abrasion protection / -50...+250°C

Process fitting / Material

- **GD** Thread G1½ PN25, DIN3852-A / 316L
- **ND** Thread 1½NPT PN25, ASME B1.20.1 / 316L
- **NF** Thread R1½ PN25, EN10226-1 / 316L
- **CA** Clamp 2" PN16 (ø64mm), DIN32676, ISO2852 / 316L
- **EF** Flange DN50 PN40 Form C, DIN2501 / 316L
- **MF** Flange DN100 PN16 Form C, DIN2501 / 316L
- **HA** Flange 2" 150lb RF, ASME B16.5 / 316L
- **OA** Flange 3" 150lb RF, ASME B16.5 / 316L
- **UA** Flange 4" 300lb RF, ASME B16.5 / 316L

Electronics

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

Housing / Protection

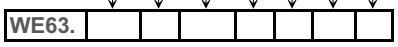
- **K** Plastic single chamber / IP66/IP67
- **A** Aluminum single chamber / IP66/IP68 (0.2 bar)
- **8** Stainless steel single chamber (electropolished) / IP66/IP68 (0.2 bar)
- **V** Stainless steel single chamber (precision casting) / IP66/IP68 (0.2 bar)

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

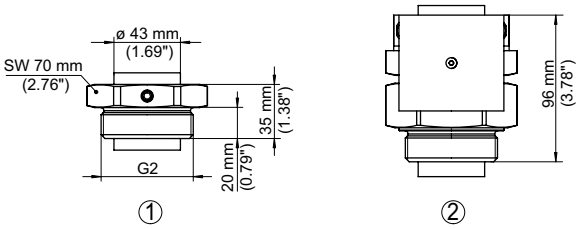
Lock fitting for VEGAWAVE 63

– for continuous height adjustment of a VEGAWAVE 63/S61

Delivery time: SPEED

Process pressure / Process temperature / suitable for
1 Unpressurised / -50...+250°C / Approval XX .....
2 -1...+16bar / -50...+150°C / Approval XX, CX, CK, LX, GX .....
Process fitting / Material
GA Thread G2, DIN3852-A / 316L .....
NA Thread 2NPT, ASME B1.20.1 / 316L .....

ARV-WE63. [ ] [ ]



For mounting the lock fitting, the associated VEGAWAVE 63 (depending on the version) must have the following min. length:

① Version: unpressurized / -50 … +250 °C; min. length: 230 mm
② Version: -1 … 16 bar / -50 … +150 °C; min. length: 290 mm