

## Switching - Vibration

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## VEGASWING:

### For manifold applications in liquids

The piezo drive is the heart of VEGASWING activating the tuning fork to vibrate on its resonance frequency. The frequency of the fork reduces with the immersion. The frequency change is evaluated by the integrated oscillator and converted into a switching command. The piezo drive is screwed to ensure reliability and ruggedness. With a tuning fork with only 40 mm length, VEGASWING 60 works reliably in all liquids and installation positions. Pressure, temperature, foam and bubbles or even viscosity do not influence the switching accuracy. Also pipelines with a nominal width of DN 25 are no problem.



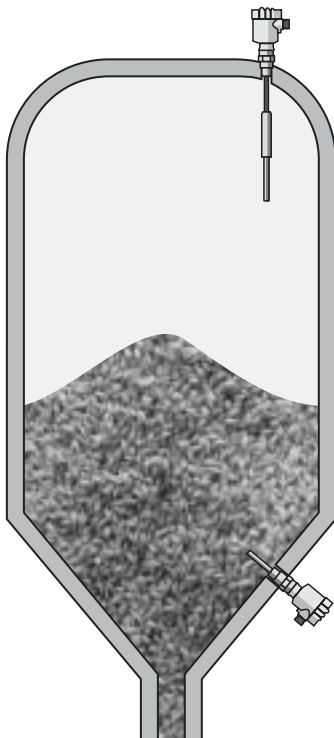
## VEGAVIB/VEGAWAVE:

### Reliable switching in solids

The vibrating rod of VEGAVIB is agitated via piezo ceramic elements. If the vibrating rod is immersed, the amplitude will be damped. An amplitude change is evaluated in the oscillator and converted into a switching command. Due to the rod design, it is almost impossible for material to build up or get wedged in (e.g. granules). Typical applications are overflow and dry run protection systems, e.g. in flour, milk powder and plastic granules. Setup is very easy because an adjustment with medium is not necessary.

The new instrument series VEGAWAVE uses a tuning fork as sensor. Control as well as evaluation correspond to the VEGAVIB series.

The advantages of the fork design are ruggedness as well as immunity to buildup. Typical applications are e.g. measurement in sand, cement and similar building materials. Also these instruments offer easy setup because an adjustment with medium is not necessary.



## Overview

**VEGASWING 51**



**VEGASWING 61**



**VEGASWING 63**



Applications:

level detection  
in liquids

level detection  
in liquids

level detection  
in liquids

Version:

standard version

standard version

with tube extension  
up to 6 m

Material:

316L

316L  
Hastelloy C4; enamel;  
ECTFE; PFA

316L  
Hastelloy C4; enamel;  
ECTFE; PFA

Process fitting:

from G $\frac{3}{4}$ A

from G $\frac{3}{4}$ A

from G $\frac{3}{4}$ A



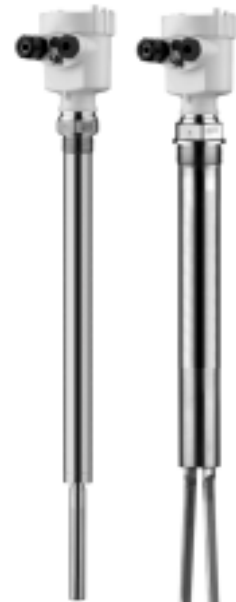
**VEGAVIB 61  
VEGAWAVE 61**



**VEGAVIB 62  
VEGAWAVE 62**



**VEGAVIB 63  
VEGAWAVE 63**



Applications:

level detection  
in solids

level detection  
in solids

level detection  
in solids with

Version:

standard version

with suspension cable  
up to 80 m

tube extension  
up to 6 m

Process fitting:

VEGAVIB 61: from G1A  
VEGAWAVE 61: G1 $\frac{1}{2}$ A

from G1 $\frac{1}{2}$ A

VEGAVIB 63: from G1A  
VEGAWAVE 63: G1 $\frac{1}{2}$ A

## VEGASWING 61

### Compact vibrating level switch for liquids

For universal use as overfill or dry run protection system

- setup without adjustment
- screwed piezo drive
- SIL 2 qualified
- product-independent switching point with high reproducibility
- wear and maintenance-free
- instrument from the plics® family



### Approval

<b>XX</b>	without .....
<b>XA</b>	Overfill protection according to WHG .....
<b>CA</b>	ATEX II 1G, 1/2G, 2G EEx ia IIC T6 + WHG <sup>1)</sup> .....
<b>DA</b>	ATEX II 1/2G, 2G EEx d IIC T6 + WHG <sup>2)</sup> .....
<b>CM</b>	ATEX II 1G, 1/2G, 2G EEx ia IIC T6 + ship approval .....
<b>DM</b>	ATEX II 1/2G, 2G EEx d IIC T6 + ship approval <sup>2)</sup> .....
<b>XM</b>	Ship approval .....
<b>CU</b>	FM Zone 0 Division 1 intrinsically safe <sup>1)</sup> .....
<b>DU</b>	FM Zone 0 Division 1 explosion proof <sup>2)</sup> .....
<b>XU</b>	FM Zone 2 Division 2 .....

Continuation see next page

**Process fitting / Material**

<b>GBV</b>	Thread G $\frac{3}{4}$ " PN64 / 316L .....
<b>NBV</b>	Thread $\frac{3}{4}$ " NPT PN64 / 316L .....
<b>GAV</b>	Thread G1" PN64 / 316L .....
<b>NAV</b>	Thread 1" NPT PN64 / 316L .....
<b>CCN</b>	Tri-Clamp 1" PN16 / 316L Ra<0.3 $\mu$ m .....
<b>CCP</b>	Tri-Clamp 1" PN16 / 316L Ra<0.8 $\mu$ m .....
<b>CAN</b>	Tri-Clamp 2" PN16 / 316L Ra<0.3 $\mu$ m .....
<b>CAP</b>	Tri-Clamp 2" PN16 / 316L Ra<0.8 $\mu$ m .....
<b>RAN</b>	Bolting DN40PN40 DIN11851 / 316L Ra<0.3 $\mu$ m .....
<b>RAP</b>	Bolting DN40PN40 DIN11851 / 316L Ra<0.8 $\mu$ m .....
<b>FPV</b>	Flange DN25PN40 Form C, DIN 2501 / 316L .....
<b>FPH</b>	Flange DN25PN40 Form C, DIN 2501 / ECTFE <sup>3)</sup> .....
<b>FPE</b>	Flange DN25PN40 Form C, DIN 2501 / enamelled <sup>3)</sup> .....
<b>FEV</b>	Flange DN50PN40 Form C, DIN 2501 / 316L .....
<b>FEH</b>	Flange DN50PN40 Form C, DIN 2501 / ECTFE <sup>3)</sup> .....
<b>FEF</b>	Flange DN50PN40 Form C, DIN 2501 / PFA <sup>3)</sup> .....
<b>FES</b>	Flange DN50PN40 Form B1, EN 1092-1/enamelled <sup>3)</sup> .....
<b>APV</b>	Flange 1" 150lb ANSI B16.5 / 316L .....
<b>APH</b>	Flange 1" 150lb RF, ANSI B16.5 / ECTFE <sup>3)</sup> .....
<b>APE</b>	Flange 1" 150lb RF, ANSI B16.5 / enamelled <sup>3)</sup> .....
<b>ACV</b>	Flange 2" 150lb RF, ANSI B16.5 / 316L .....
<b>ACH</b>	Flange 2" 150lb RF, ANSI B16.5 / ECTFE <sup>3)</sup> .....
<b>ACE</b>	Flange 2" 150lb RF, ANSI B16.5 / enamelled <sup>3)</sup> .....

**Adapter / Process temperature**

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

**Housing / Cable entry**

<b>P</b>	Plastic IP66/67 / M20x1.5 .....
<b>M</b>	Aluminium IP66/IP67 / M20x1.5 .....
<b>U</b>	Aluminium IP66/IP67 / $\frac{1}{2}$ " NPT .....
<b>V</b>	Stainless steel 316L IP66/67 / M20x1.5 .....

**Electronics**

<b>C</b>	Contactless electronic switch 20...250VAC/DC .....
<b>R</b>	Double relay (DPDT) 20...72VDC/20...250VAC (5A) .....
<b>T</b>	Floating transistor (NPN/PNP) 10...55VDC .....
<b>Z</b>	Two-wire for connection to VEGATOR (12...36 VDC) .....
<b>N</b>	NAMUR signal according to IEC 60947-5-6 .....

**Switching point**

<b>X</b>	Standard .....
<b>L</b>	as SWING81 or 81A .....



<sup>1)</sup> Only in conjunction with Electronics "Z" and "N"

<sup>2)</sup> Only in conjunction with Housing / Cable entry "U"

<sup>3)</sup> Delivery time: more than 5 working days

- Material ECTFE/PFA: only in conjunction with temperatures -50 ... 150°C
- Material enamel: only in conjunction with temperatures -50 ... 200°C; not with electronics "C" and "T"
- Further process fittings and options on request



## VEGASWING 63

### Compact vibrating level switch for liquids

For universal use as overfill or dry run protection system

- setup without adjustment
- screwed piezo drive
- SIL 2 qualified
- product-independent switching point with high reproducibility
- wear and maintenance-free
- instrument from the plics® family



### Approval

<b>XX</b>	without .....
<b>XA</b>	Overfill protection according to WHG .....
<b>CA</b>	ATEX II 1G, 1/2G, 2G EEx ia IIC T6 + WHG <sup>1)</sup> .....
<b>DA</b>	ATEX II 1/2G; 2G EEx d IIC T6 + WHG <sup>2)</sup> .....
<b>CM</b>	ATEX II 1G, 1/2G, 2G EEx ia IIC T6 + ship approval .....
<b>DM</b>	ATEX II 1/2G EEx d IIC T6 + ship approval <sup>2)</sup> .....
<b>XM</b>	Ship approval .....
<b>CU</b>	FM Zone 0 Division 1 intrinsically safe <sup>1)</sup> .....
<b>DU</b>	FM Zone 0 Division 1 explosion proof <sup>2)</sup> .....
<b>XU</b>	FM Zone 2 Division 2 .....

Continuation see next page

**Process fitting / Material**

- GBV** Thread G $\frac{3}{4}$ A PN64 / 316L .....
- NBV** Thread  $\frac{3}{4}$ NPT PN64 / 316L .....
- GAV** Thread G1A PN64 / 316L .....
- NAV** Thread 1NPT PN64 / 316L .....
- CCN** Tri-Clamp 1" PN16 / 316L Ra<0.3 $\mu$ m .....
- CCP** Tri-Clamp 1" PN16 / 316L Ra<0.8 $\mu$ m .....
- CAN** Tri-Clamp 2" PN16 / 316L Ra<0.3 $\mu$ m .....
- CAP** Tri-Clamp 2" PN16 / 316L Ra<0.8 $\mu$ m .....
- RAN** Bolting DN40PN40 DIN11851 / 316L Ra<0.3 $\mu$ m .....
- RAP** Bolting DN40PN40 DIN11851 / 316L Ra<0.8 $\mu$ m .....
- FPV** Flange DN25PN40 Form C, DIN 2501 / 316L .....
- FPH** Flange DN25PN40 Form C, DIN 2501 / ECTFE <sup>3)</sup> .....
- FEV** Flange DN50PN40 Form C, DIN 2501 / 316L .....
- FEH** Flange DN50PN40 Form C, DIN 2501 / ECTFE <sup>3)</sup> .....
- FEF** Flange DN50PN40 Form C, DIN 2501 / PFA <sup>3)</sup> .....
- FES** Flange DN50PN40 Form B1, EN 1092-1/enamelled <sup>3)</sup> .....
- APV** Flange 1" 150lb ANSI B16.5 / 316L .....
- APH** Flange 1" 150lb RF, ANSI B16.5 / ECTFE <sup>3)</sup> .....
- APE** Flange 1" 150lb RF, ANSI B16.5 / enamelled <sup>3)</sup> .....
- ACV** Flange 2" 150lb RF, ANSI B16.5 / 316L .....
- ACH** Flange 2" 150lb RF, ANSI B16.5 / ECTFE <sup>3)</sup> .....
- ACE** Flange 2" 150lb RF, ANSI B16.5 / enamelled <sup>3)</sup> .....

**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 entry**

- P** Plastic IP66/67 / M20x1.5 .....
- M** Aluminium IP66/IP67 / M20x1.5 .....
- U** Aluminium IP66/IP67 /  $\frac{1}{2}$ NPT .....
- V** Stainless steel 316L IP66/67 / M20x1.5 .....

**Electronics**

- C** Contactless electronic switch 20...250VAC/DC .....
- R** Double relay (DPDT) 20...72VDC/20...250VAC (5A) .....
- T** Floating transistor (NPN/PNP) 10...55VDC .....
- Z** Two-wire for connection to VEGATOR (12...36 VDC) .....
- N** NAMUR signal according to IEC 60947-5-6 .....

<b>SWING63.</b>							
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<sup>1)</sup> Only in conjunction with Electronics "Z" and "N"  
<sup>2)</sup> Only in conjunction with Housing / Cable entry "U"; L max. = 3000 mm  
<sup>3)</sup> Delivery time: more than 5 working days

**Total length in mm**

- per 100 mm of 316L
- per 100 mm of ECTFE
- per 100 mm of PFA
- per 100 mm of Hastelloy C4 (2.4610)
- per 100 mm of 316L, Ra <=0.8 $\mu$ m
- per 100 mm of 316L, Ra <=0.3 $\mu$ m
- enamelled version (300, 400, 500, 600 mm) once
- enamelled version other length (80...1500 mm) once

Length:  mm (switching point + 13 mm) (min. 80 mm; max. 6000 mm)

- Material ECTFE/PFA: only in conjunction with temperatures -50 ... 150°C
- Material enamel: only in conjunction with temperatures -50 ... 200°C and not with electronics "C" and "T"
- Further process fittings and options on request



## VEGASWING 51

### Vibrating level switch for liquids

For universal use as overfill or dry run protection system

- setup without adjustment
- very high reproducibility
- product-independent switching point
- wear and maintenance-free
- smallest mounting dimensions



#### 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

- GB** Thread G $\frac{3}{4}$  PN64 / 316L .....
- NB** Thread  $\frac{3}{4}$  NPT PN64 / 316L .....
- GA** Thread G1A PN64 / 316L .....
- NA** Thread 1NPT PN64 / 316L .....
- CL** Tri-Clamp 1" PN16 / 316L Ra<0.8µm .....
- CN** Tri-Clamp 2" PN16 / 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...250 V AC/DC .....
- T** Transistor output PNP 10...55 V DC .....

#### Housing

- P** 316L .....

#### Electrical connection / Protection

- M** M12x1 / IP67 <sup>1)</sup> .....
- V** according to DIN 43650 incl. plug / IP 65 .....

#### Switching point

- Standard .....
- L** as SWING71A .....

SG51.							
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<sup>1)</sup> Not in conjunction with Electronics "C"



## Welded socket VEGASWING

**suitable for**

1 VEGASWING 51/61/63 .....

2 VEGASWING 70A/81A/83A .....

**Version / Material**

**GB** Thread G $\frac{3}{4}$ A / 316L .....

**GA** Thread G1A / 316L .....

**Test certificate**

**X** without .....

**Seal**

**1** FKM .....

**3** EPDM .....

ESTSG.				
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## VEGAVIB 61

### Compact vibrating level switch for solids with vibrating rod

For use as overfill or dry run protection system

- optimum rod version avoids buildup and sticking material
- easy setup without adjustment
- SIL 2 qualified
- product-independent switching point
- easy cleaning
- wear and maintenance-free
- instrument from the plics® family



#### Approval

- XX** without .....
- CX** ATEX II 1G, 1/2G, 2G EEx ia IIC T6 <sup>1)</sup> .....
- CK** ATEX II 1G, 1/2G, 2G EEx ia IIC T6+ATEX II 1/2D IP6X T <sup>2)</sup> .....
- LX** ATEX II 1/2G, 2G EEx d IIC T6 <sup>3)</sup> .....
- GX** ATEX II 1/2 D IP6X T <sup>4)</sup> .....

#### Version / Process temperature

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

#### Process fitting / Material

- GC** Thread G1A PN16 / 316L .....
- NC** Thread 1NPT PN16 / 316L .....
- GD** Thread G1½A PN16 / 316L switching point as VIB51 .....
- ND** Thread 1½NPT PN16 / 316L switching point as VIB51 .....
- GG** Thread G1½A PN16 / 316L .....
- NG** Thread 1½NPT PN16 / 316L .....

#### Electronics

- C** Contactless electronic switch 20...253VAC/DC .....
- R** Relay (DPDT) 20...72VDC/20...253VAC(5A) .....
- T** Transistor (NPN/PNP) 10...55VDC .....
- Z** Two-wire 8/16 mA 10...36VDC .....

#### Housing / Protection

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

#### Cable entry / Plug connection

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

#### Additional equipment

- X** Without .....

VB61.								
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<sup>1)</sup> Only in conjunction with Electronics "Z"  
<sup>2)</sup> Only in conjunction with Electronics "Z", not in conjunction with Housing / Protection "K"  
<sup>3)</sup> Only in conjunction with Housing / Protection "A"  
<sup>4)</sup> Not in conjunction with Housing / Protection "K"

- Further process fittings and options on request

## VEGAVIB 62

### Vibrating level switch for solids with vibrating rod and suspension cable

For use as overflow or dry run protection system

- optimum rod version avoids buildup and sticking material
- easy setup without adjustment
- SIL 2 qualified
- product-independent switching point
- easy cleaning
- wear and maintenance-free
- instrument from the plics® family



#### Approval

- XX** without .....
- CX** ATEX II 1G, 1/2G, 2G EExia IIC T6<sup>1)</sup> .....
- CK** ATEX II 1G, 1/2G, 2G EExia IIC T6+ATEX II 1/2D IP6X T<sup>2)</sup> .....
- GX** ATEX II 1/2 D IP6X T<sup>3)</sup> .....

#### Version / Process temperature

- T** Standard / -20...80°C .....
- C** Detect. of solids in water / -20...80°C .....

#### Process fitting / Material

- GC** Thread G1A PN16 / 316L .....
- NC** Thread 1NPT PN16 / 316L .....
- GD** Thread G1½A PN16 / 316L .....
- ND** Thread 1½NPT PN16 / 316L .....

#### Electronics

- C** Contactless electronic switch 20...253VAC/DC .....
- R** Relay (DPDT) 20...72VDC/20...253VAC(5A) .....
- T** Transistor (NPN/PNP) 10...55VDC .....
- Z** Two-wire 8/16 mA 10...36VDC .....

#### Housing / Protection

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

#### Cable entry / Plug connection

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

#### Additional equipment

- X** Without .....

VB62.								
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<sup>1)</sup> Only in conjunction with Electronics "Z"  
<sup>2)</sup> Only in conjunction with Electronics "Z", not in conjunction with Housing / Protection "K"  
<sup>3)</sup> Not in conjunction with Housing / Protection "K"

**Length in mm (from seal surface)**  
 per 100 mm of PUR

Length:  mm (min. 480 mm; max. 25000 mm)

- Further process fittings and options on request
- Switching – Vibration



## VEGAWAVE 61

### Compact vibrating level switch for solids

For use as overfill or dry run protection system

- easy setup without adjustment
- SIL 2 qualified
- product-independent switching point
- wear and maintenance-free
- instrument from the plics® family



#### Approval

- XX** without .....
- CX** ATEX II 1G, 1/2G, 2G EEx ia IIC T6<sup>1)</sup> .....
- CK** ATEX II 1G, 1/2G, 2G EEx ia IIC T6+ATEX II 1/2D IP6X T<sup>2)</sup> .....
- LX** ATEX II 1/2G, 2G EEx d IIC T6<sup>3)</sup> .....
- GX** ATEX II 1/2 D IP6X T<sup>4)</sup> .....

#### Version / Process temperature

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

#### Process fitting / Material

- GD** Thread G1½A PN16 / 316L .....
- ND** Thread 1½NPT PN16 / 316L .....

#### Electronics

- C** Contactless electronic switch 20...253VAC/DC .....
- R** Relay (DPDT) 20...72VDC/20...253VAC(5A) .....
- T** Transistor (NPN/PNP) 10...55VDC .....
- Z** Two-wire 8/16 mA 10...36VDC .....

#### Housing / Protection

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

#### Cable entry / Plug connection

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

#### Additional equipment

- X** Without .....

**WE61.**

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1) Only in conjunction with Electronics "Z"  
 2) Only in conjunction with Electronics "Z", not in conjunction with Housing / Protection "K"  
 3) Only in conjunction with Housing / Protection "A"  
 4) Not in conjunction with Housing / Protection "K"

- Further process fittings and options on request

## VEGAWAVE 62

### Vibrating level switch for solids with suspension cable

For use as overflow or dry run protection system

- easy setup without adjustment
- SIL 2 qualified
- product-independent switching point
- wear and maintenance-free
- instrument from the plics® family



#### Approval

- XX** without .....
- CX** ATEX II 1G, 1/2G, 2G EExia IIC T6<sup>1)</sup> .....
- CK** ATEX II 1G, 1/2G, 2G EExia IIC T6+ATEX II 1/2D IP6X T<sup>2)</sup> .....
- GX** ATEX II 1/2 D IP6X T<sup>3)</sup> .....

#### Version / Process temperature

- T** Standard / -20...80°C .....
- C** Detect. of solids in water / -20...80°C .....

#### Process fitting / Material

- GD** Thread G1½A PN16 / 316L .....
- ND** Thread 1½NPT PN16 / 316L .....

#### Electronics

- C** Contactless electronic switch 20...253VAC/DC .....
- R** Relay (DPDT) 20...72VDC/20...253VAC(5A) .....
- T** Transistor (NPN/PNP) 10...55VDC .....
- Z** Two-wire 8/16 mA 10...36VDC .....

#### Housing / Protection

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

#### Cable entry / Plug connection

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

#### Additional equipment

- X** Without .....

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<sup>1)</sup> Only in conjunction with Electronics "Z"  
<sup>2)</sup> Only in conjunction with Electronics "Z", not in conjunction with Housing / Protection "K"  
<sup>3)</sup> Not in conjunction with Housing / Protection "K"

**Length in mm (from seal surface)**  
per 100 mm of PUR

Length:  mm (min. 480 mm; max. 80000 mm)

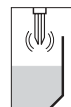
- Further process fittings and options on request

## VEGAWAVE 63

### Vibrating level switch for solids with tube extension

For use as overflow or dry run protection system

- easy setup without adjustment
- SIL 2 qualified
- product-independent switching point
- wear and maintenance-free
- instrument from the plics® family



#### Approval

- XX** without .....
- CX** ATEX II 1G, 1/2G, 2G EEx ia IIC T6<sup>1)</sup> .....
- CK** ATEX II 1G, 1/2G, 2G EEx ia IIC T6+ATEX II 1/2D IP6X T<sup>2)</sup> .....
- LX** ATEX II 1/2G, 2G EEx d IIC T6<sup>3)</sup> .....
- GX** ATEX II 1/2 D IP6X T<sup>4)</sup> .....

#### Version / Process temperature

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

#### Process fitting / Material

- GD** Thread G1½A PN16 / 316L .....
- ND** Thread 1½NPT PN16 / 316L .....

#### Electronics

- C** Contactless electronic switch 20...253VAC/DC .....
- R** Relay (DPDT) 20...72VDC/20...253VAC(5A) .....
- T** Transistor (NPN/PNP) 10...55VDC .....
- Z** Two-wire 8/16 mA 10...36VDC .....

#### Housing / Protection

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

#### Cable entry / Plug connection

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

#### Additional equipment

- X** Without .....

<b>WE63.</b>									
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1) Only in conjunction with Electronics "Z"  
 2) Only in conjunction with Electronics "Z", not in conjunction with Housing / Protection "K"  
 3) Only in conjunction with Housing / Protection "A"  
 4) Not in conjunction with Housing / Protection "K"

#### Length in mm (from seal surface)

per 100 mm of 316L

Length:  mm (min. 240 mm; max. 6000 mm)

- Further process fittings and options on request

## Lock fitting for VEGASWING 63

**Process pressure / Process temperature / suitable for**

- 1 Unpressurized/-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 G1A/316L .....
- NC Thread 1NPT/316L .....
- GD Thread G1½A/316L .....
- ND Thread 1½NPT/316L .....

ARV-SG63.

## Lock fitting for VEGAVIB 63

**Process pressure / Process temperature / suitable for**

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

**Process fitting / Material**

- GD Thread G1½A/316L .....
- ND Thread 1½NPT/316L .....

ARV-VB63.

## Lock fitting for VEGAWAVE 63

**Process pressure / Process temperature / suitable for**

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

**Process fitting / Material**

- GA Thread G2A/316L .....
- NA Thread 2NPT/316L .....

ARV-WE63.



## VEGATOR 536 Ex

### Single signal conditioning instrument for level signalling in 19" European size

For processing of vibrating level switches

- with adjustable integration time
- fault monitoring and fault signal
- with test key for function test according to WHG
- European size according to DIN 41494

Sensor input	: 1 x (vibrating level switch)
Relay output	: 1 x spdt
Transistor output	: 1 x
Fault signal	: 1 x relay and 1 x transistor
Switching hysteresis	: fixed
Protection	: IP30
Operating voltage	: 20...53V AC, 20...72V DC



**Approval**

**A** ATEX II (1) GD [Ex ia] IIC/IIB + WHG .....

**TOR536EX0.**

- Module for mounting into carriers and housings for single mounting, see chapter "Signal conditioning instruments and communication"

## VEGATOR 537 Ex

### Double signal conditioning instrument for level signalling in 19" European size

For processing of vibrating level switches

- with adjustable integration time
- fault monitoring and fault signal
- with test key for function test according to WHG
- European size according to DIN 41494

Sensor input	: 2 x (vibrating level switches)
Relay output	: 2 x spdt
Transistor output	: 2 x
Fault signal	: 1 x relay and 1 x transistor
Switching hysteresis	: fixed
Protection	: IP30
Operating voltage	: 20...53V AC, 20...72V DC



**Approval**

**A** ATEX II (1) GD [Ex ia] IIC/IIB + WHG .....

**TOR537EX0.**

- Module for mounting into carriers and housings for single mounting, see chapter "Signal conditioning instruments and communication"

## VEGATOR 636 Ex

### Single signal conditioning instrument for level signalling

For processing of vibrating level switches

- adjustable integration time
- fault monitoring and fault message via LED
- with test key for function test according to WHG
- mounting on carrier rail 35 x 7.5 according to EN 50022
- key for function test of the measuring chain according to WHG
- SIL 2 qualified



Sensor input : 1 x (vibrating level switch)  
 Relay output : 1 x spdt  
 Transistor output : 1 x  
 Switching hysteresis : fixed  
 Protection : IP20  
 Operating voltage : 20...250V AC, 20...72V DC

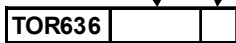


**Approval**

- EX0.A** ATEX II (1) GD [EEx ia] IIC + WHG .....
- EX0.M** ATEX II (1) GD [EEx ia] IIC + Ship approval .....

**Plug-in socket**

- K** Inclusive plug-in socket .....



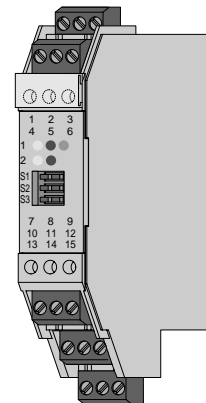
- Further level switches see chapter "Signal conditioning instruments and communication".

## Amplifier NAMUR

### NAMUR signal conditioning instrument for level signalling

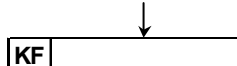
For processing and supply of NAMUR sensors such as e.g. VEGASWING 61/63

- control circuit [EEx ia] IIC
- reversible reaction direction
- detachable terminals
- NAMUR interface according to IEC 60947-5-6
- compact 20 mm housing for mounting on 35 mm standard rail EN 50022
- SIL 2 qualified

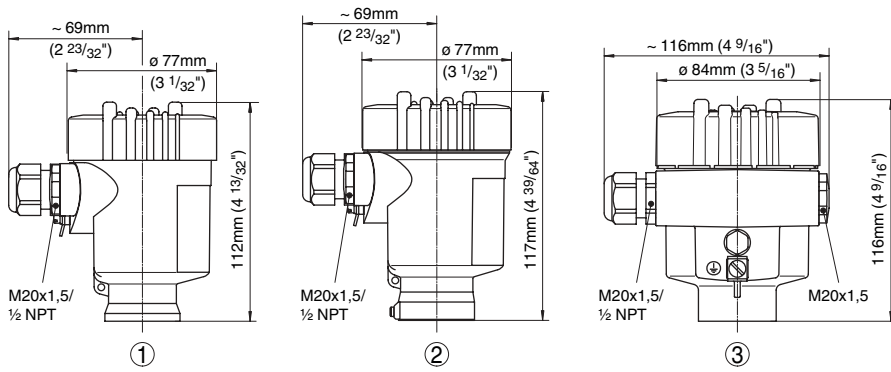


**Amplifier version:**

- A6-SR2-EX1.W** 1 channel, 230VAC; signal output: 1xspdt .....
- A6-SR2-EX2.W** 2 channels, 230VAC; signal output: 2xspdt .....
- D2-SR2-EX1.W** 1 channel, 24VDC; signal output: 1xspdt .....
- D2-SR2-EX2.W** 2 channels, 24VDC; signal output: 2xspdt .....

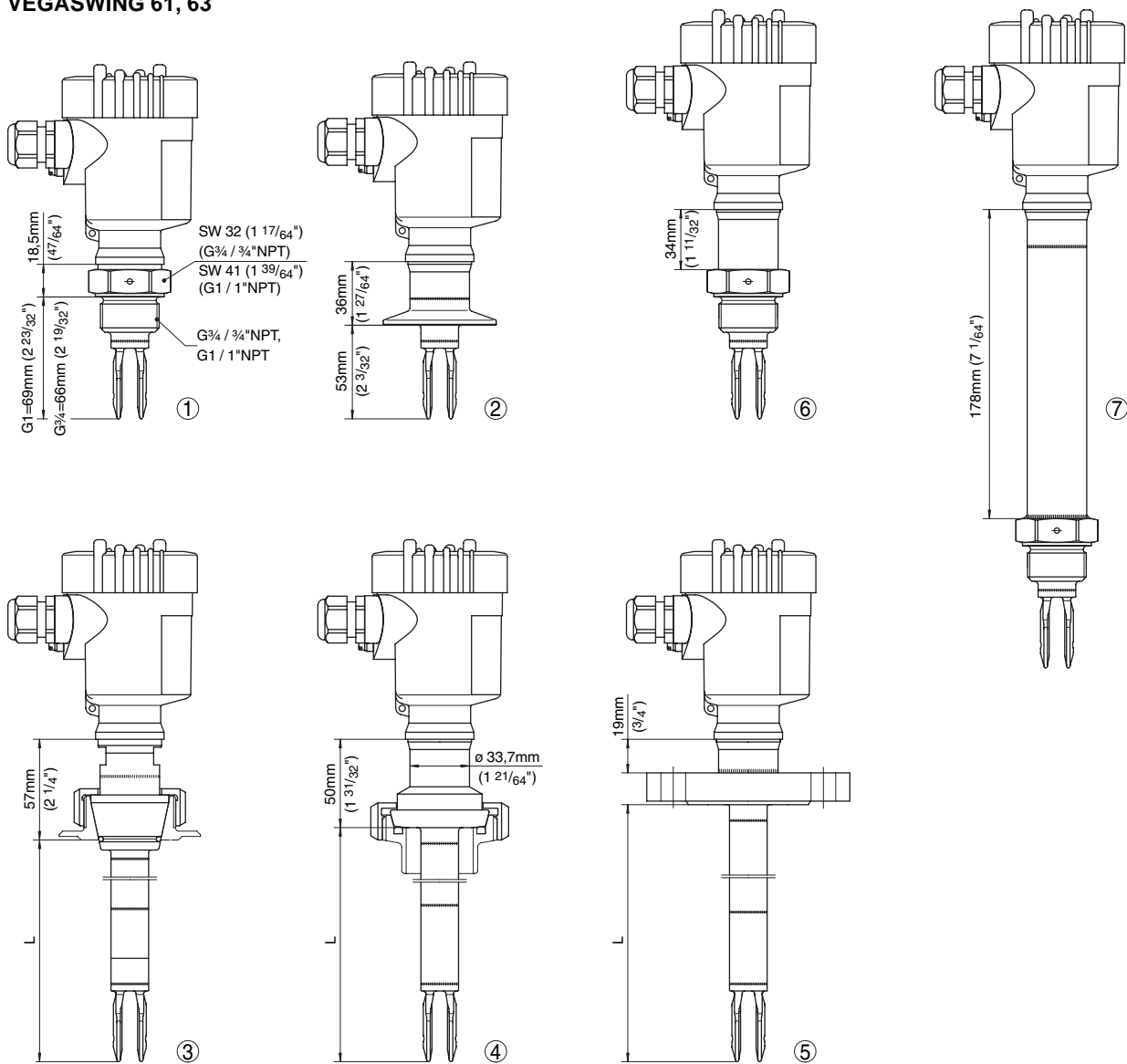


Housings



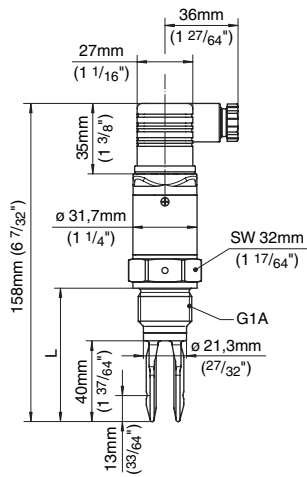
- 1 Plastic housing
- 2 Stainless steel housing
- 3 Aluminium housing

VEGASWING 61, 63

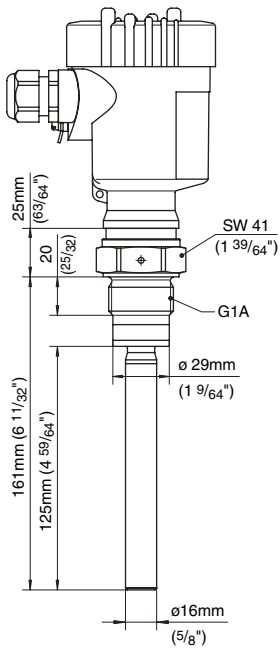


- 1 Thread
  - 2 Tri-Clamp
  - 3 Conus DN 25
  - 4 Bolting DN 40
  - 5 Flange
  - 6 Gastight leadthrough
  - 7 Temperature adapter
- Specifications in mm or inch

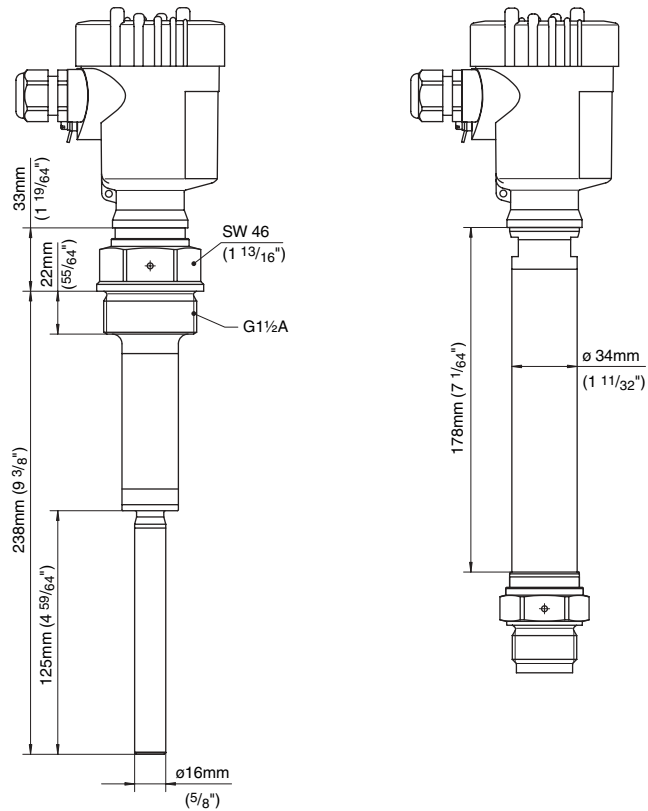
## VEGASWING 51



## VEGAVIB 61

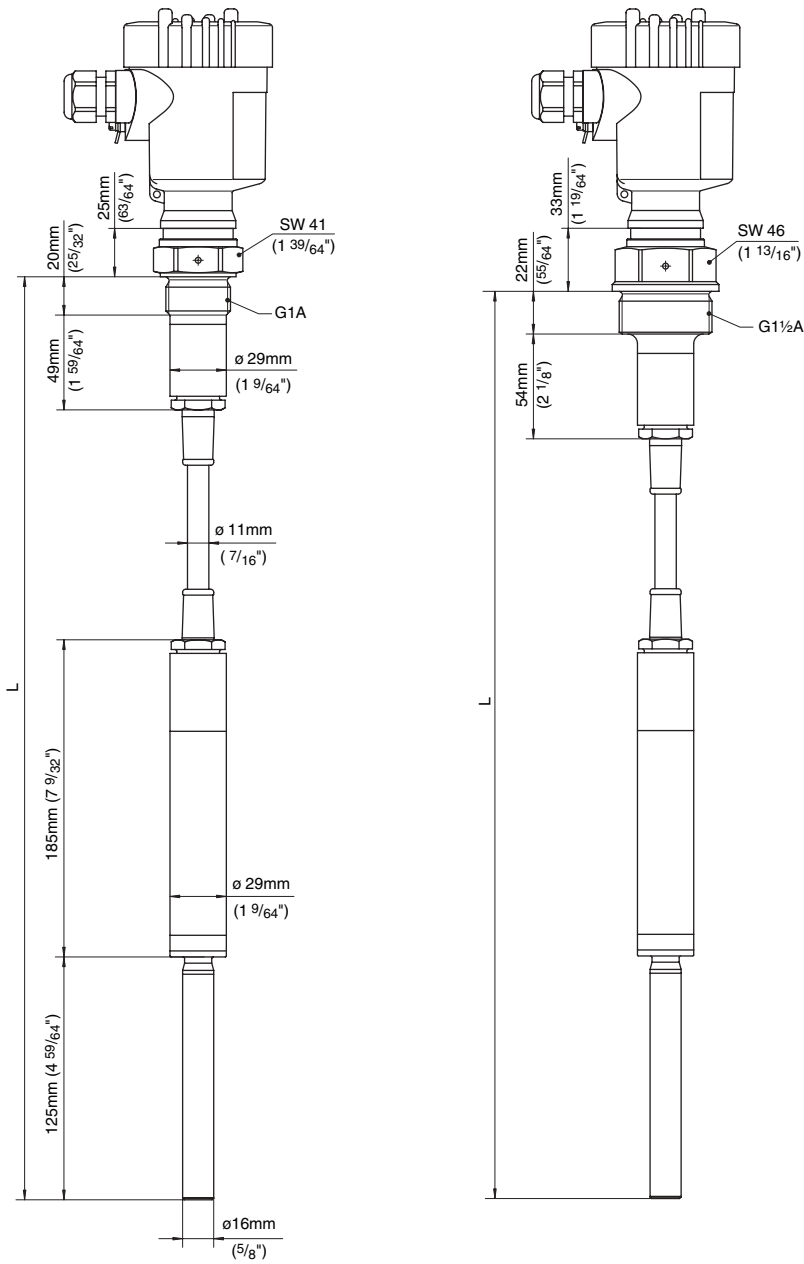


## VEGAVIB 6x – Temperature adapter



Switching point as VEGAVIB 51

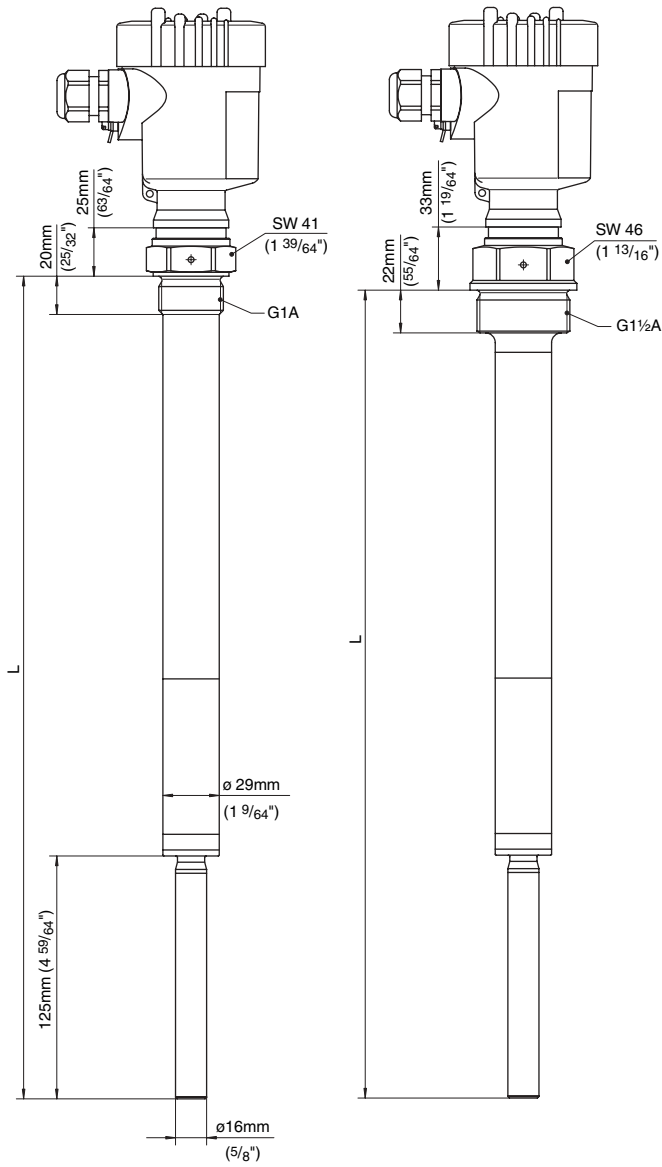
VEGAVIB 62



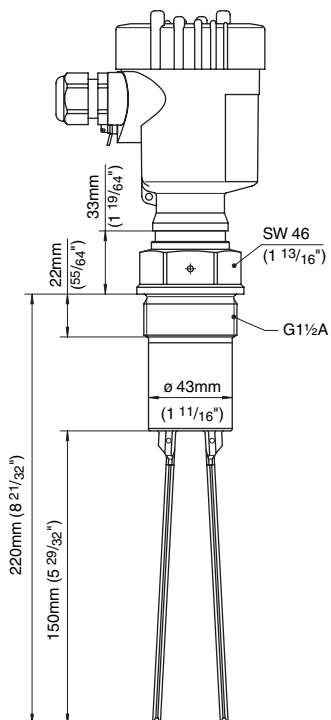
Specifications in mm or inch



## VEGAVIB 63

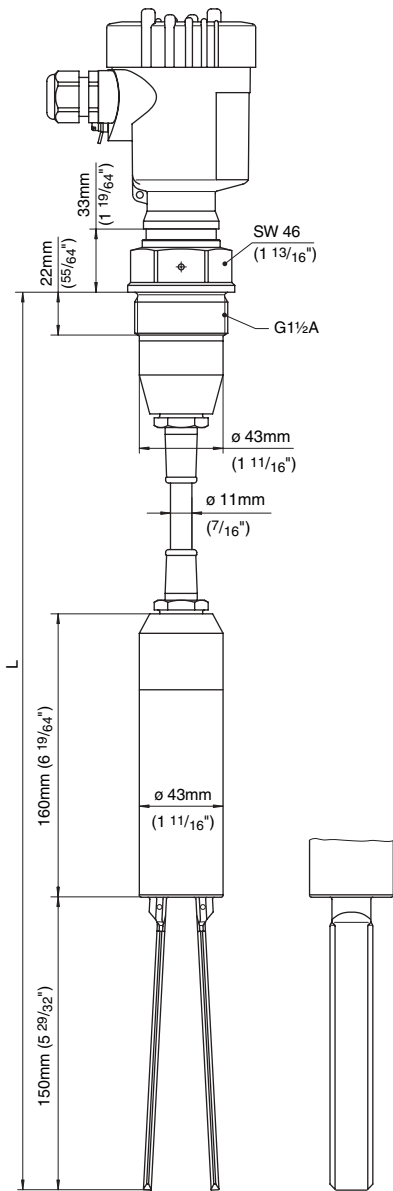


## VEGAWAVE 61

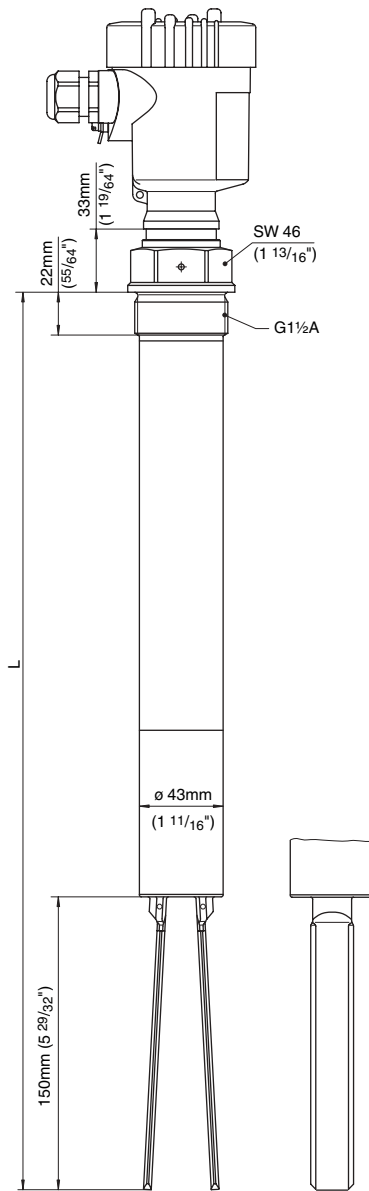


Specifications in mm or inch

**VEGAWAVE 62**



**VEGAWAVE 63**



Specifications in mm or inch

**NAMUR amplifier**

