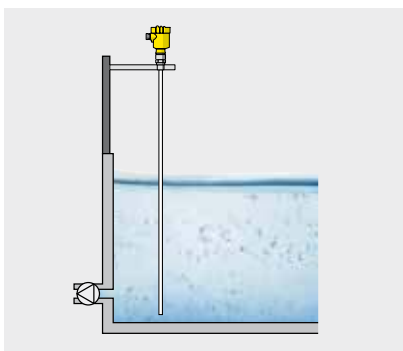




Overview VEGACAL



Area of application

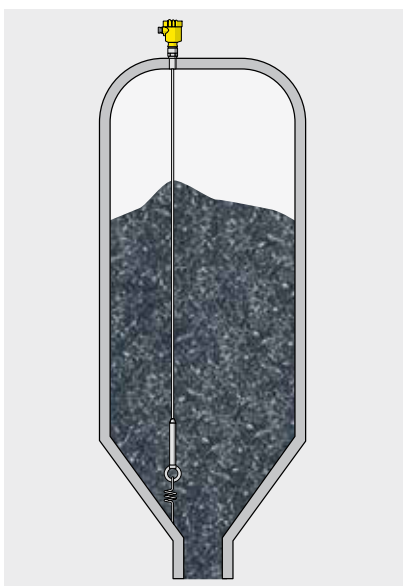
The robust level sensors of the VEGACAL series are used for level measurement in bulk solids and homogeneous liquids that provide stable electrical measuring conditions. With the fully insulated instrument version, aggressive liquids as well as very adhesive products can be measured. The partly insulated version is preferably used for bulk solids.

Measuring principle

In capacitive level measurement, sensor and vessel form the two electrodes of a capacitor. Any change in capacitance due to a level change is converted into a level signal.

Advantages

This level measuring method is very economical and allows measurement over the entire sensor length without dead band. Thanks to shortenable cable and rod versions, the sensors can be adapted to any application and are very easy to install. Its robust mechanical design is the basis for reliable, trouble and maintenance-free operation and a long service life.



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	VEGACAL 62	VEGACAL 63	VEGACAL 64
			
Application	Bulk solids, non-conductive liquids	Conductive liquids	Adhesive, conductive liquids
Measuring range	up to 6 m	up to 6 m	up to 4 m
Version	Partly insulated rod of steel, 316L, PTFE, PEEK	Fully insulated rod of steel, 316L, PE, PTFE	Fully insulated rod of steel, 316L, FEP
Process fitting	Thread from G $\frac{1}{2}$, $\frac{1}{2}$ NPT, flanges from DN 25, 1"	Thread from G $\frac{1}{2}$, $\frac{1}{2}$ NPT, flanges from DN 25, 1"	Thread from G $\frac{3}{4}$, $\frac{3}{4}$ NPT, flanges from DN 25, 1"
Process temperature	-50 ... +200 °C	-50 ... +200 °C	-50 ... +150 °C
Process pressure	-1 ... +64 bar (-100 ... +6400 kPa)	-1 ... +64 bar (-100 ... +6400 kPa)	-1 ... +64 bar (-100 ... +6400 kPa)
Signal output	4 ... 20 mA/HART, Profibus PA, Foundation Fieldbus	4 ... 20 mA/HART, Profibus PA, Foundation Fieldbus	4 ... 20 mA/HART, Profibus PA, Foundation Fieldbus
Display/Adjustment	PLICSCOM, PACTware, VEGADIS 81, VEGADIS 82	PLICSCOM, PACTware, VEGADIS 81, VEGADIS 82	PLICSCOM, PACTware, VEGADIS 81, VEGADIS 82
Approvals	ATEX, IEC, FM, CSA, GOST, Overfill protection, Ship, SIL2	ATEX, IEC, FM, CSA, GOST, Overfill protection, Ship, SIL2	ATEX, IEC, FM, CSA, GOST, Overfill protection, Ship, SIL2



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	VEGACAL 65	VEGACAL 66
		
Application	Bulk solids, non-conductive liquids	Bulk solids, conductive liquids
Measuring range	up to 32 m	up to 32 m
Version	Partly insulated cable of steel, 316L, PTFE, PA, PEEK	Fully insulated cable of steel, 316L, PTFE
Process fitting	Thread from G1, 1 NPT, flanges from DN 50, 2"	Thread from G1, 1 NPT, flanges from DN 50, 2"
Process temperature	-50 ... +200 °C	-50 ... +150 °C
Process pressure	-1 ... +64 bar (-100 ... +6400 kPa)	-1 ... +40 bar (-100 ... +4000 kPa)
Signal output	4 ... 20 mA/HART, Profibus PA, Foundation Fieldbus	4 ... 20 mA/HART, Profibus PA, Foundation Fieldbus
Display/Adjustment	PLICSCOM, PACTware, VEGADIS 81, VEGADIS 82	PLICSCOM, PACTware, VEGADIS 81, VEGADIS 82
Approvals	ATEX, IEC, FM, CSA, GOST, Overfill protection, Ship, SIL2	ATEX, IEC, FM, CSA, GOST, Overfill protection, Ship, SIL2



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	VEGACAL 67	VEGACAL 69
		
	Bulk solids with high process temperatures	Liquids in non-conductive vessels
	Rod up to 6 m; cable up to 40 m	up to 4 m
	Rod or cable of 316, 316L, ceramic	Double rod of PTFE, PP, FEP
	Thread from G1½, 1½ NPT, flanges from DN 50, 2"	Flanges from DN 50, 2"
	-50 ... +400 °C	-50 ... +100 °C
	-1 ... +16 bar (-100 ... +1600 kPa)	-1 ... +2 bar (-100 ... +200 kPa)
	4 ... 20 mA/HART, Profibus PA, Foundation Fieldbus	4 ... 20 mA/HART, Profibus PA, Foundation Fieldbus
	PLICSCOM, PACTware, VEGADIS 81, VEGADIS 82	PLICSCOM, PACTware, VEGADIS 81, VEGADIS 82
	ATEX	ATEX, IEC, GOST



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VEGACAL 62

Capacitive rod electrode for continuous level measurement

Application area

The VEGACAL 62 is a level sensor for continuous level measurement in all areas of industry. The partly insulated probe is designed for the measurement of bulk solids and can also be used in non-conductive liquids such as e.g. oil. The proven mechanical construction ensures high functional safety.

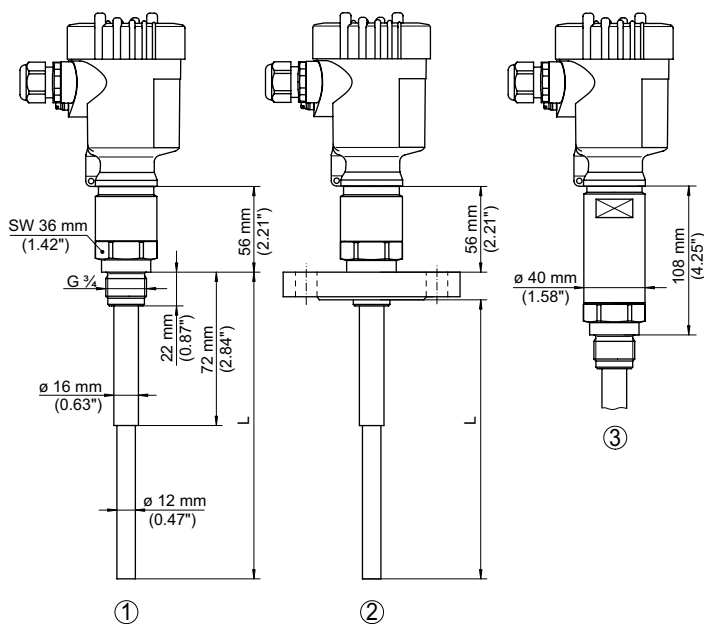
Your benefit

- Long lifetime and low maintenance requirement through robust mechanical construction
- High flexibility through shortenable probe
- Maximum use of the vessel, because measurement over the complete probe length

Technical data

Version:	partly insulated rod
Measuring range:	up to 6 m
Process fitting:	thread from G 1/2, 1/2 NPT flanges from DN 25, 1"
Materials:	steel, 316L, PTFE, PEEK
Process temperature:	-50 ... +200 °C
Process pressure:	-1 ... +64 bar (-100 ... +6400 kPa)
SIL qualification:	optionally up to SIL2

Delivery time:  **SPEED**



- ① Threaded version
 ② Flange version
 ③ Threaded version with temperature adapter +200 °C



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and housing overview:
Chapter Accessory

Approval

XX	without	
XM	Ship approval	
CX	ATEX II 1G, 1/2G, 2G Ex ia IIC T6...T1 Ga, Ga/Gb, Gb	.....
CA	ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + WHG	.....
CM	ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + Ship approval	.....
CK	ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + 1/2D, 2D Ex tD IP66 T*	.....
CI	IEC Ex ia IIC T6 Ga, Ga/Gb, Gb	.....
DX	ATEX II 1/2G, 2G Ex d ia IIC T6	.....
DI	IECEx Ex d ia IIC T6	.....
GX	ATEX II 1/2D, 2D Ex tD IP66 T	.....
GI	IEC Ex tD A20/21, A21 IP66 T*	.....

Version / Process temperature

E	Standard / -20 ... +150°C, steel C22.8 (1.0460)	.....
A	Standard / -50...+150°C	.....
K	Standard / -50...+150°C, PEEK	.....
B	Standard / -50 ... +200°C	.....
C	with screening tube PN1; 316L / -50 ... +150°C	.....
D	with screening tube PN1; 316L / -50 ... +200°C	.....

Process fitting / Material

GS	Thread G1½ PN64, DIN3852-A / Steel C22.8 (1.0460)	.....
GA	Thread G¾ PN64, DIN3852-A / 316L	.....
NA	Thread ¾NPT PN64, ASME B1.20.1 / 316L	.....
GC	Thread G1 PN64, DIN3852-A / 316L	.....
NC	Thread 1NPT PN64, ASME B1.20.1 / 316L	.....
GD	Thread G1½ PN64, DIN3852-A / 316L	.....
ND	Thread 1½NPT PN64, ASME B1.20.1 / 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	.....
OA	Flange 3" 150lb RF, ASME B16.5 / 316L	.....
SA	Flange 4" 150lb RF, ASME B16.5 / 316L	.....
WB	Flange 8" 150lb RF, ASME B16.5 / 316L	.....

Electronics

X	for connection to a signal conditioning instrument	.....
H	Two-wire 4...20mA/HART®	.....
P	Two-wire Profibus PA	.....
F	Two-wire Foundation Fieldbus	.....

Housing / Protection

K	Plastic single chamber / IP66/IP67	.....
R	Plastic double chamber / IP66/IP67	.....
A	Aluminium single chamber / IP66/IP68 (0.2 bar)	.....
D	Aluminium double chamber / IP66/IP68 (0.2 bar)	.....
8	Stainless steel (electropolished)/ IP66/IP68 (0.2 bar)	.....
W	Stainless steel double chamber / IP66/IP68 (0.2 bar)	.....

Cable entry / Cable gland / Plug connection

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

Display/adjustment module PLICSCOM

X	without	
A	Mounted	

Additional equipment

X	Without	
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CL62.

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Length (from seal surface)

316L (100-6000 mm) per 100 mm

Length screening tube

316L (50-5960 mm) per 100 mm

Insulation length

PTFE insulated (50-5990 mm) per 100 mm



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VEGACAL 63

Capacitive rod electrode for continuous level measurement

Application area

The VEGACAL 63 level sensor can be used universally for the measurement of conductive liquids. The rod electrode is fully insulated and the proven construction ensures high functional safety.

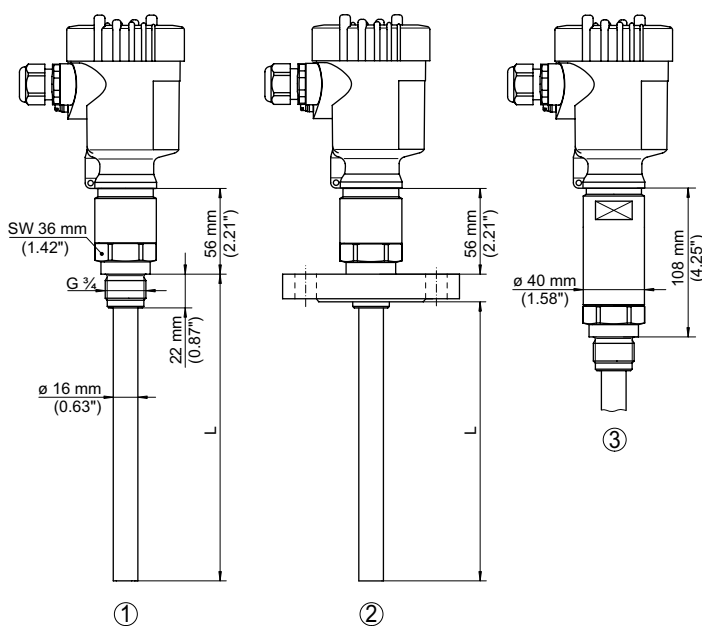
Your benefit

- Long lifetime and low maintenance requirement through robust mechanical construction
- Savings through simple mounting and setup
- Maximum use of the vessel, because measurement over the complete probe length

Technical data

Version:	fully insulated rod
Measuring range:	up to 6 m
Process fitting:	thread from G ½, ½ NPT flanges from DN 25, 1"
Materials:	steel, 316L, PE, PTFE
Process temperature:	-50 ... +200 °C
Process pressure:	-1 ... +64 bar (-100 ... +6400 kPa)
SIL qualification:	optionally up to SIL2

Delivery time:  **SPEED**



- ① Threaded version
 ② Flange version
 ③ Threaded version with temperature adapter +200 °C



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and housing overview:
Chapter Accessory

Approval

XX	without
XM	Ship approval
CX	ATEX II 1G, 1/2G, 2G Ex ia IIC T6...T1 Ga, Ga/Gb, Gb
CA	ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + WHG
CM	ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + Ship approval
CK	ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + 1/2D, 2D Ex tD IP66 T*
CI	IEC Ex ia IIC T6 Ga, Ga/Gb, Gb
DX	ATEX II 1/2G, 2G Ex d ia IIC T6
DI	IECEx Ex d ia IIC T6
GX	ATEX II 1/2D, 2D Ex tD IP66 T
GI	IEC Ex tD A20/21, A21 IP66 T*

Version / Process temperature

E	PE isolation / -40...+80°C
F	PTFE isolation / -50...+150°C
G	PTFE isolation / -50...+200°C
H	PE isolation and concentric tube 316L / -40...+80°C
I	PTFE isolation and concentric tube(316L)/ -50...+150°C
J	PTFE isolation and concentric tube (316L)/ -50...+200°C

Process fitting / Material

GS	Thread G1½ PN64, DIN3852-A / Steel C22.8 (1.0460)
GA	Thread G¾ PN64, DIN3852-A / 316L
NA	Thread ¾NPT PN64, ASME B1.20.1 / 316L
NI	Thread ¾NPT PN64, ASME B1.20.1 / Alloy C22 (2.4602)
GC	Thread G1 PN64, DIN3852-A / 316L
NC	Thread 1NPT PN64, ASME B1.20.1 / 316L
GD	Thread G1½ PN64, DIN3852-A / 316L
ND	Thread 1½NPT PN64, ASME B1.20.1 / 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
OA	Flange 3" 150lb RF, ASME B16.5 / 316L
SA	Flange 4" 150lb RF, ASME B16.5 / 316L

Electronics

X	for connection to a signal conditioning instrument
H	Two-wire 4...20mA/HART®
P	Two-wire Profibus PA
F	Two-wire Foundation Fieldbus

Housing / Protection

K	Plastic single chamber / IP66/IP67
R	Plastic double chamber / IP66/IP67
A	Aluminium single chamber / IP66/IP68 (0.2 bar)
D	Aluminium double chamber / IP66/IP68 (0.2 bar)
8	Stainless steel (electropolished)/ IP66/IP68 (0.2 bar)
W	Stainless steel double chamber / IP66/IP68 (0.2 bar)

Cable entry / Cable gland / Plug connection

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

Display/adjustment module(PLICSCOM)

X	without
A	Mounted

Additional equipment

X	Without
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CL63.

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Length (from seal surface)

316L/PE fully insulated (100-6000 mm) per 100 mm
316L/PTFE fully insulated (100-6000 mm) per 100 mm

Length concentric tube / screening tube

316L (100-6000 mm) per 100 mm



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VEGACAL 64

Capacitive rod electrode for continuous level measurement of adhesive products

Application area

The VEGACAL 64 is a level sensor for conductive liquids. The rod electrode is fully insulated and is particularly suitable for viscous and adhesive products.

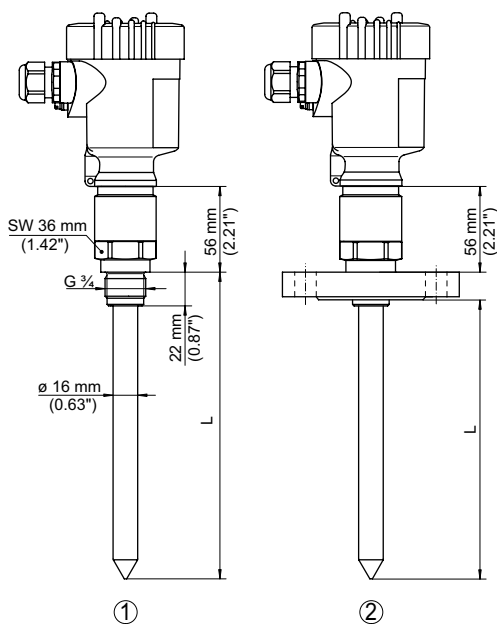
Your benefit

- Reduced number of cleaning cycles through measurement insensitive to buildup
- Maximum use of the vessel, because measurement over the complete probe length
- Long lifetime and low maintenance requirement through robust mechanical construction

Technical data

Version:	fully insulated rod
Measuring range:	up to 4 m
Process fitting:	thread from G $\frac{3}{4}$, $\frac{1}{4}$ NPT flanges from DN 25, 1"
Materials:	steel, 316L, FEP
Process temperature:	-50 ... +150 °C
Process pressure:	-1 ... +64 bar (-100 ... +6400 kPa)
SIL qualification:	optionally up to SIL2

Delivery time:  **SPEED**



- ① Threaded version
② Flange version



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Mounting accessories, welded sockets
and housing overview:
Chapter Accessory

Approval

XX	without
XM	Ship approval
CX	ATEX II 1G, 1/2G, 2G Ex ia IIC T6...T1 Ga, Ga/Gb, Gb
CA	ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + WHG
CM	ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + Ship approval
CK	ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + 1/2D, 2D Ex tD IP66 T*
CI	IEC Ex ia IIC T6 Ga, Ga/Gb, Gb
DX	ATEX II 1/2G, 2G Ex d ia IIC T6
DI	IECEx Ex d ia IIC T6
GX	ATEX II 1/2D, 2D Ex tD IP66 T
GI	IEC Ex tD A20/21, A21 IP66 T*

Version / Process temperature

R	FEP insulation / -50...+150°C
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Process fitting / Material

GS	Thread G1½ PN64, DIN3852-A / Steel C22.8 (1.0460)
GA	Thread G¾ PN64, DIN3852-A / 316L
NA	Thread ¾NPT PN64, ASME B1.20.1 / 316L
GC	Thread G1 PN64, DIN3852-A / 316L
NC	Thread 1NPT PN64, ASME B1.20.1 / 316L
GD	Thread G1½ PN64, DIN3852-A / 316L
ND	Thread 1½NPT PN64, ASME B1.20.1 / 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
OA	Flange 3" 150lb RF, ASME B16.5 / 316L
SA	Flange 4" 150lb RF, ASME B16.5 / 316L

Electronics

X	for connection to a signal conditioning instrument
H	Two-wire 4...20mA/HART®
P	Two-wire Profibus PA
F	Two-wire Foundation Fieldbus

Housing / Protection

K	Plastic single chamber / IP66/IP67
R	Plastic 2-chamber / IP66/IP67
A	Aluminium single chamber / IP66/IP68 (0.2 bar)
D	Aluminium double chamber / IP66/IP68 (0.2 bar)
8	StSt 1-chamber (electropolished) / IP66/IP68 (0.2 bar)
W	Stainless steel double chamber / IP66/IP68 (0.2 bar)

Cable entry / Cable gland / Plug connection

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

Display/adjustment module PLICSCOM

X	without
A	Mounted

Additional equipment

X	Without
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CL64.

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Length (from seal surface)

316L/FEP fully insulated (200-4000 mm) per 100 mm



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VEGACAL 65

Capacitive cable electrode for continuous level measurement

Application area

The VEGACAL 65 is a level sensor for use in all industries. The partly insulated probe is ideal for the measurement of bulk solids and can be also used in non-conductive liquids such as for example oil. The proven construction ensures a high functional safety.

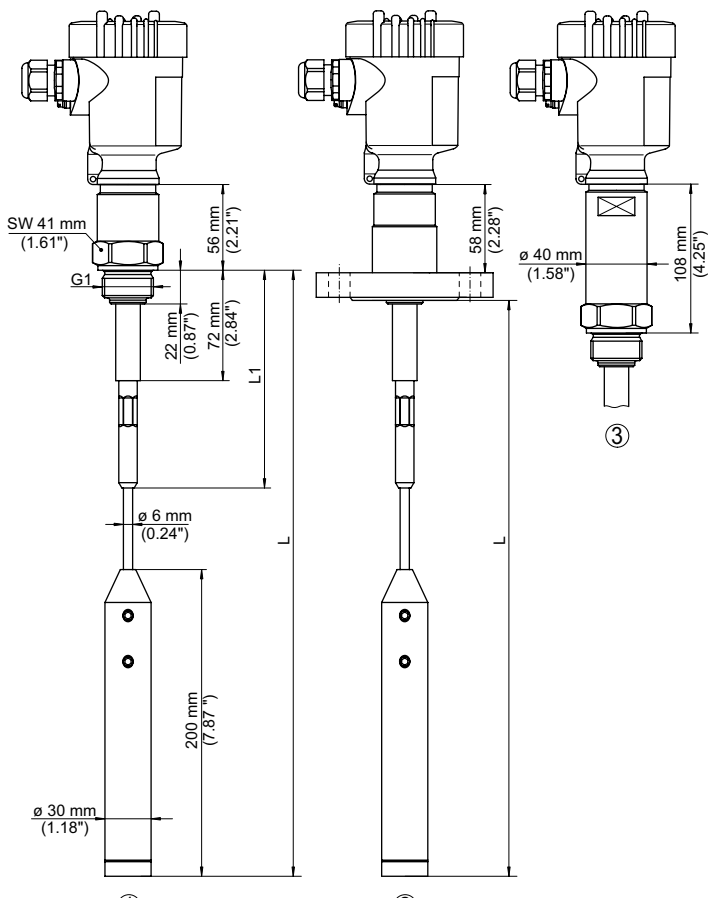
Your benefit

- Long lifetime and low maintenance requirement through robust mechanical construction
- High flexibility through shortenable probe
- Maximum use of the vessel, because measurement over the complete probe length

Technical data

Version:	partly insulated cable
Measuring range:	up to 32 m
Process fitting:	thread from G1, 1 NPT flanges from DN 50, 2"
Materials:	steel, 316L, PTFE, PA, PEEK
Process temperature:	-50 ... +200 °C
Process pressure:	-1 ... +64 bar (-100 ... +6400 kPa)
SIL qualification:	optionally up to SIL2

Delivery time:  **SPEED**



The options shown represent only a limited selection. Additional instrument options and possible restrictions.



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Approval

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XM	Ship approval
CX	ATEX II 1G, 1/2G, 2G Ex ia IIC T6...T1 Ga, Ga/Gb, Gb
CA	ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + WHG
CM	ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + Ship approval
CK	ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + 1/2D, 2D Ex tD IP66 T*
CI	IEC Ex ia IIC T6 Ga, Ga/Gb, Gb
DX	ATEX II 1/2G, 2G Ex d ia IIC T6
DI	IECEX Ex d ia IIC T6
GX	ATEX II 1/2D, 2D Ex tD IP66 T
GI	IEC Ex tD A20/21, A21 IP66 T*

Version / Process temperature

K	Cable (ø6mm), 316 with gravity weight / -50...+150°C
L	Cable (ø6mm), 316 with gravity weight / -50...+200°C
U	Cable (ø6mm) w.scr.tube a.gravity weight / -50...+150°C
V	Cable (ø6mm) w.scr.tube a.gravity weight / -50...+200°C

Process fitting / Material

GS	Thread G1½ PN64, DIN3852-A / Steel C22.8 (1.0460)
GC	Thread G1 PN64, DIN3852-A / 316L
NC	Thread 1NPT PN64, ASME B1.20.1 / 316L
GD	Thread G1½ PN64, DIN3852-A / 316L
ND	Thread 1½NPT PN64, ASME B1.20.1 / 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
OA	Flange 3" 150lb RF, ASME B16.5 / 316L
SA	Flange 4" 150lb RF, ASME B16.5 / 316L

Electronics

X	for connection to a signal conditioning instrument
H	Two-wire 4...20mA/HART®
P	Two-wire Profibus PA
F	Two-wire Foundation Fieldbus

Housing / Protection

K	Plastic single chamber / IP66/IP67
R	Plastic 2-chamber / IP66/IP67
A	Aluminium single chamber / IP66/IP68 (0.2 bar)
D	Aluminium double chamber / IP66/IP68 (0.2 bar)
8	StSt 1-chamber (electropolished) / IP66/IP68 (0.2 bar)
W	Stainless steel double chamber / IP66/IP68 (0.2 bar)

Cable entry / Cable gland / Plug connection

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

Display/adjustment module PLICSCOM

X	without
A	Mounted

Additional equipment

X	Without
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CL65.

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Length (from seal surface)

316 (400-32000 mm) per 100 mm

Length screening tube

316L (70-4000 mm) per 100 mm

Insulation length

PTFE (50-1000 mm) per 100 mm



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VEGACAL 66

Capacitive cable electrode for continuous level measurement

Application area

The VEGACAL 66 is a level sensor for use in conductive liquids and bulk solids. The cable probe is fully insulated. The proven construction ensures a high functional safety.

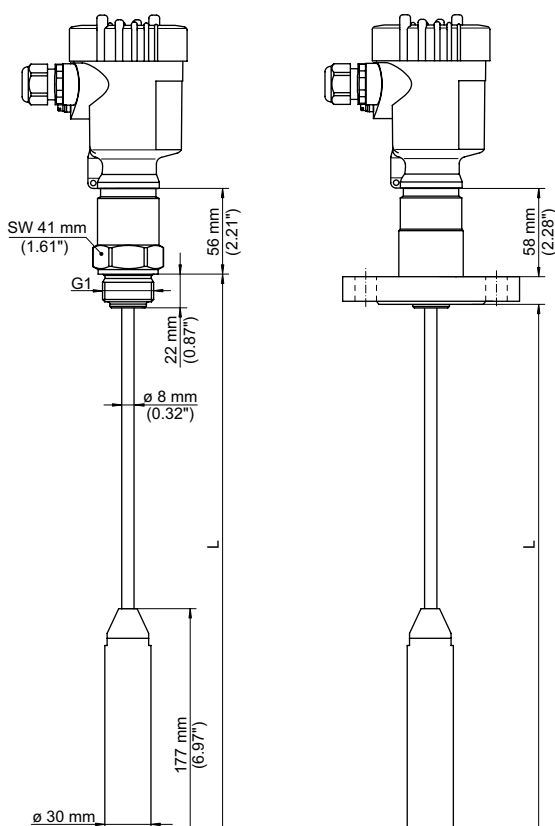
Your benefit

- Long lifetime and low maintenance requirement through robust mechanical construction
- Savings through simple mounting and setup
- Maximum use of the vessel, because measurement over the complete probe length

Technical data

Version:	fully insulated cable
Measuring range:	up to 32 m
Process fitting:	thread from G1, 1 NPT flanges from DN 50, 2"
Materials:	steel, 316L, PTFE
Process temperature:	-50 ... +150 °C
Process pressure:	-1 ... +40 bar (-100 ... +4000 kPa)
SIL qualification:	optionally up to SIL2

Delivery time:  **SPEED**



The options shown represent only a limited selection. Additional instrument options and possible restrictions



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Approval

XX	without
XM	Ship approval
CX	ATEX II 1G, 1/2G, 2G Ex ia IIC T6...T1 Ga, Ga/Gb, Gb
CA	ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + WHG
CM	ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + Ship approval
CK	ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + 1/2D, 2D Ex tD IP66 T*
CI	IEC Ex ia IIC T6 Ga, Ga/Gb, Gb
DX	ATEX II 1/2G, 2G Ex d ia IIC T6
DI	IECEx Ex d ia IIC T6
GX	ATEX II 1/2D, 2D Ex tD IP66 T
GI	IEC Ex tD A20/21, A21 IP66 T*

Version / Process temperature

N	PTFE insulated cable(ø8mm)w. gravity weight/-50...150°C
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Process fitting / Material

GS	Thread G1½ PN40, DIN 3852-A / Steel C22.8 (1.0460)
GC	Thread G1 PN40, DIN3852-A / 316L
NC	Thread 1NPT PN40, ASME B1.20.1 / 316L
GD	Thread G1½ PN40, DIN3852-A / 316L
ND	Thread 1½NPT PN40, ASME B1.20.1 / 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
OA	Flange 3" 150lb RF, ASME B16.5 / 316L
SA	Flange 4" 150lb RF, ASME B16.5 / 316L

Electronics

X	for connection to a signal conditioning instrument
H	Two-wire 4...20mA/HART®
P	Two-wire Profibus PA
F	Two-wire Foundation Fieldbus

Housing / Protection

K	Plastic single chamber / IP66/IP67
R	Plastic 2-chamber / IP66/IP67
A	Aluminium single chamber / IP66/IP68 (0.2 bar)
D	Aluminium double chamber / IP66/IP68 (0.2 bar)
8	StSt 1-chamber (electropolished) / IP66/IP68 (0.2 bar)
W	Stainless steel double chamber / IP66/IP68 (0.2 bar)

Cable entry / Cable gland / Plug connection

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

Display/adjustment module PLICSCOM

X	without
A	Mounted

Additional equipment

X	Without
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CL66.

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Length (from seal surface)

316/PTFE insulated (400-32000 mm) per 100 mm



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VEGACAL 67

Capacitive high temperature electrode for level measurement of bulk solids

Application area

The VEGACAL 67 is a level sensor for continuous level measurement of bulk solids at high temperatures.

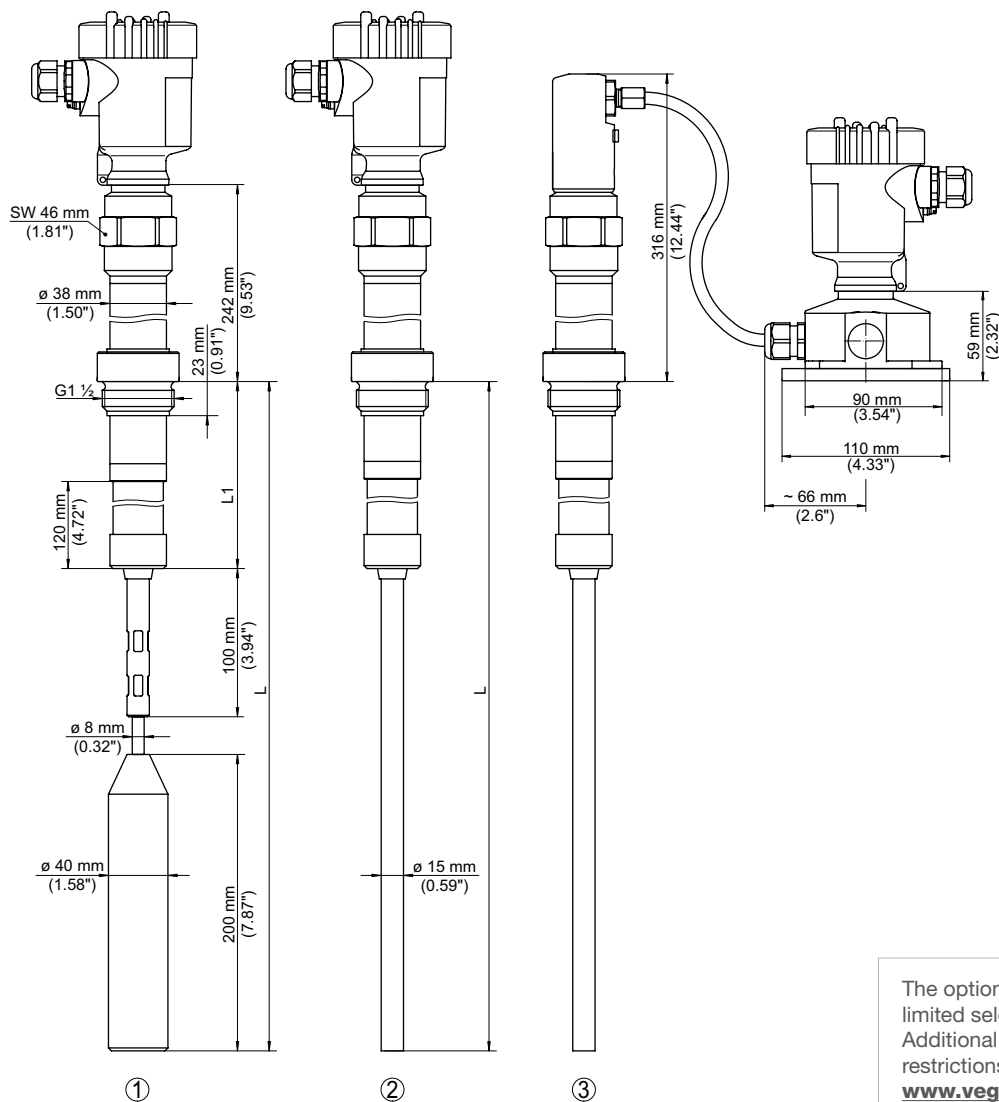
Your benefit

- Precise measuring results in virtually all bulk solids and high temperature ranges
- Long service life and low maintenance due to robust mechanical construction
- High flexibility through shortenable probe

Technical data

Version:	rod or cable
Measuring range:	up to 6 m or 40 m
Process fitting:	thread from G1½, 1½ NPT flanges from DN 50, 2"
Materials:	316, 316L, ceramic
Process temperature:	-50 ... +400 °C
Process pressure:	-1 ... +16 bar (-100 ... +1600 kPa)

Delivery time:  **SPEED**



① Cable version +300 °C

② Rod version +300 °C

③ Rod version with external housing +400 °C

L = Probe length

L1 = Supporting tube



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

Version / Process temperature

- 1 Ceramic-insulated rod probe / -50...+300°C
- 2 Ceramic-insulated cable probe / -50...+300°C
- 3 Ceramic-insulated rod probe / -50...+400°C
- 4 Ceramic-insulated cable probe / -50...+400°C
- 5 Ceramic-insul.cable probe w.crimping sleeve/-50...300°C
- 7 Insulated cable probe w.crimping sleeve/-50...400°C

Process fitting / Material

- GD Thread G1½ PN16, DIN 3852-A / 316L
- ND Thread 1½NPT PN16, ASME B1.20.1 / 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
- OA Flange 3" 150lb RF, ASME B16.5 / 316L
- SA Flange 4" 150lb RF, ASME B16.5 / 316L

Electronics

- X for connection to a signal conditioning instrument
- H Two-wire 4...20mA/HART®
- P Two-wire Profibus PA
- F Two-wire Foundation Fieldbus

Housing / Protection

- K Plastic single chamber / IP66/IP67
- R Plastic 2-chamber / IP66/IP67
- A Aluminium single chamber / IP66/IP68 (0.2 bar)
- D Aluminium double chamber / IP66/IP68 (0.2 bar)
- 8 Stainless steel single chamber (electropolished) / IP66/IP68 (0.2 bar)
- W Stainless steel double chamber / IP66/IP68 (0.2 bar)
- B Lateral cable outlet IP68,ext.plastic housing/IP66/IP67

Cable entry / Cable gland / Plug connection

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

Display/adjustment module PLICSCOM

- X without
- A Mounted

Additional equipment

- X Without

CL67.

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Length (from seal surface)

Rod/316L (275-6000 mm) per 100 mm

Cable/316 (500-40000 mm) per 100 mm



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VEGACAL 69

Capacitive double rod electrode for level measurement

Application area

The VEGACAL 69 is a level sensor for continuous level measurement of liquids in non-conductive vessels or corrosive liquids. The double rod probe is fully insulated and highly resistant.

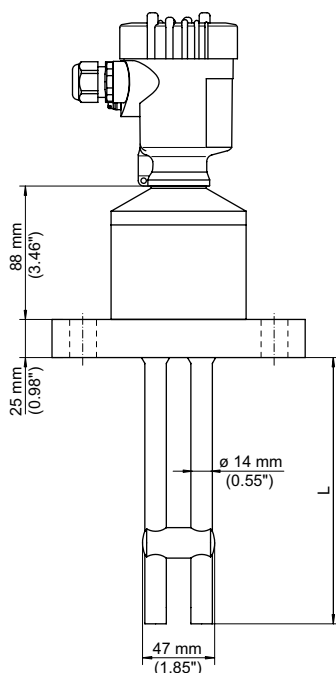
Your benefit

- Low mounting expenditure through compact double rod version
- Long service life and low maintenance due to high resistance materials
- Maximum utilization of the vessel because measurement over the complete probe length

Technical data

Version:	double rod
Measuring range:	up to 4 m
Process fitting:	flanges from DN 50, 2"
Materials:	PTFE, PP, FEP
Process temperature:	-50 ... +100 °C
Process pressure:	-1 ... +2 bar (-100 ... +200 kPa)
SIL qualification:	optionally up to SIL2

Delivery time:  **SPEED**



L = Probe length

The options shown represent only a limited selection.
Additional instrument options and possible



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Approval

XX without
CX ATEX II 1G, 1/2G, 2G Ex ia IIC T6...T1 Ga, Ga/Gb, Gb
CI IEC Ex ia IIC T6 Ga, Ga/Gb, Gb
DX ATEX II 1/2G, 2G Ex d ia IIC T6

Version / Process temperature

1 FEP isolation / 0...+60°C
2 FEP isolation / -40...+100°C

Process fitting / Material

PA Flange DN50 PN16 / PP
TA Flange DN50 PN16 / PTFE
PC Flange DN80 PN16 / PP
TC Flange DN80 PN16 / PTFE
PD Flange DN100 PN16 / PP
TD Flange DN100 PN16 / PTFE
PE Flange DN125 PN16 / PP
TE Flange DN125 PN16 / PTFE
PK Flange 2" 150lb / PP
TK Flange 2" 150lb / PTFE
TN Flange 2½" 150lb / PTFE
PL Flange 3" 150lb / PP
TL Flange 3" 150lb / PTFE
PM Flange 4" 150lb / PP
TM Flange 4" 150lb / PTFE

Electronics

X for connection to a signal conditioning instrument
H Two-wire 4...20mA/HART®
P Two-wire Profibus PA
F Two-wire Foundation Fieldbus

Housing / Protection

K Plastic single chamber / IP66/IP67
R Plastic 2-chamber / IP66/IP67

Cable entry / Cable gland / Plug connection

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

Display/adjustment module PLICSCOM

X without
A Mounted

CL69.

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Length (from seal surface)

per 100 mm of FEP isolation (200-4000 mm)



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