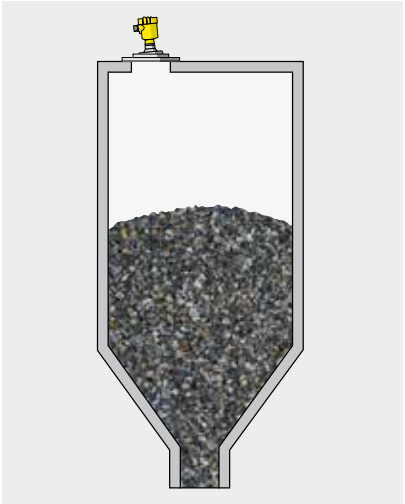
Overview VEGAPULS



Area of application

Radar sensors of the VEGAPULS series are used for non-contact level measurement of liquids and bulk solids. They measure all kinds of liquids, even under high pressure and extreme temperatures. They can be used in simple as well as in aggressive liquids and are suitable for applications with stringent hygiene requirements. The sensors measure light as well as heavy bulk solids with absolute reliability, even in the presence of dust and noise, and without being affected by buildup or condensation.

Measuring principle

The measuring instrument sends out short radar pulses toward the measured product via the antenna system. The product surface reflects the signal waves, which are then received back by the antenna system. The instrument calculates the level from the running time of the radar pulses and the entered tank height.

Advantages

Non-contact radar technology is characterized by a particularly high measurement accuracy. The measurement is affected neither by fluctuating product properties nor by changing process conditions such as temperature, pressure or intense dust generation. User-friendly adjustment without vessel filling and emptying saves time.

	VEGAPULS WL 61	VEGAPULS 61	VEGAPULS 62
			
Application	Water processing and sewage water applications, flow measurement in open flumes and gauge monitoring	Liquids in small vessels under simple process conditons	Storage containers, reactors and process vessels with various process conditions
Measuring range	up to 15 m	up to 35 m	up to 35 m
Antenna	Plastic horn antenna of PP	Plastic horn antenna of PP or encapsulated horn antenna of PVDF	Horn antenna, parabolic antenna or standpipe antenna ½" of 316L
Process fitting	Thread G1½, mounting strap, compression flanges from DN 80, 3"	Thread G1½, 1½ NPT mounting strap, compression flanges from DN 80, 3" adapter flanges from DN 100, 4"	Thread from G1½, 1½ NPT flanges from DN 50, 2"
Process temperature	-40 … +80 °C	-40 … +80 °C	-196 … +450 °C
Process pressure	-1 … +2 bar (-100 … +200 kPa)	-1 … +3 bar (-100 … +300 kPa)	-1 … +160 bar (-100 … +16000 kPa)
Accuracy	±2 mm	±2 mm	±2 mm
Frequency range	K-band	K-band	K-band
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	PACTware, VEGADIS 82	PLICSCOM, PACTware, VEGADIS 81, VEGADIS 82	PLICSCOM, PACTware, VEGADIS 81, VEGADIS 82
Approvals	ATEX, IEC, GOST, CSA	ATEX, IEC, FM, CSA, GOST Overfill protection, Ship, SIL2	ATEX, IEC, FM, CSA, GOST Overfill protection, Ship, SIL2

	VEGAPULS 63	VEGAPULS 65	VEGAPULS 66
			
Application	Aggressive liquids or with hygienic requirements	Liquids under simple process conditions	Storage tanks and process vessels with different process conditions
Measuring range	up to 35 m	up to 35 m	up to 35 m
Antenna	Hygienically encapsulated horn antenna of PTFE, FKM or EPDM	Rod antenna, PVDF and PTFE	Horn antenna of 316L or enamel or standpipe 2" of 316L
Process fitting	Flanges from DN 50, 2" slotted nut hygienic fittings	Thread from G1½, 1½ NPT flanges from DN 50, 2"	Flanges from DN 50, 2"
Process temperature	-196 … +200 °C	-40 … +150 °C	-60 … +400 °C
Process pressure	-1 … +16 bar (-100 … +1600 kPa)	-1 … +16 bar (-100 … +1600 kPa)	-1 … +160 bar (-100 … +16000 kPa)
Accuracy	±2 mm	±8 mm	±8 mm
Frequency range	K-band	C-band	C-band
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

	VEGAPULS 67	VEGAPULS 68 (SR 68)	VEGAPULS 69
			
	Bulk solids for smaller to average vessel heights	Bulk solids for average to large vessel heights	Bulk solids for smaller or very large vessels
	up to 15 m	up to 75 m SR 68: up to 30 m	up to 120 m
	Completely encapsulated plastic horn antenna of PP	Horn or parabolic antenna of 316L	Plastic horn antenna of PP, metal jacketed lens antenna with rinsing air connection of PEEK
	Mounting strap compression flanges from DN 80, 3"	Thread from G1½, 1½ NPT flanges from DN 50, 2"	Mounting strap, compression flange from DN 80, 3"; flanges from DN 80, 3", adapter flanges from DN 100, 4"
	-40 … +80 °C	-196 … +450 °C SR 68: -40 … +250 °C	-40 … +200 °C
	-1 … +2 bar (-100 … +200 kPa)	-1 … +160 bar (-100 … +16000 kPa) SR 68: -1 … +100 bar (-100 … +10000 kPa)	-1 … +3 bar (-100 … +300 kPa)
	±2 mm	±2 mm	±5 mm
	K-band	K-band	W-band
	4 ... 20 mA/HART, Profibus PA, Foundation Fieldbus	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	PLICSCOM, PACTware, VEGADIS 81, VEGADIS 82
	ATEX, IEC, FM, CSA, SIL2, GOST	ATEX, IEC, FM, CSA, GOST, only 68: Ship, SIL2	ATEX, IEC, FM, CSA, GOST

VEGAPULS WL 61

Radar sensor for continuous level measurement of water and waste water

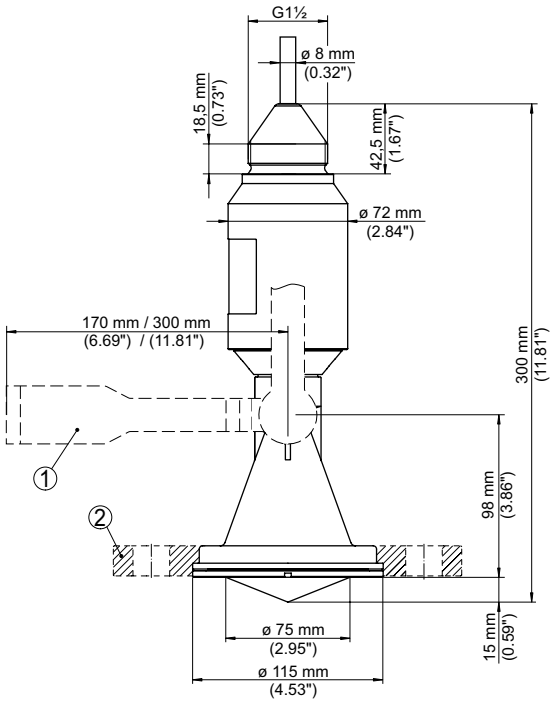
Application area
The VEGAPULS WL 61 is the ideal sensor for all applications in water and sewage water applications. It is particularly suitable for use in water processing, pump stations as well as overflow basins, for flow measurement in open flumes and gauge monitoring. The VEGAPULS WL 61 is an economical solution through versatile and simple mounting options. The flood-proof IP 68 housing ensures a maintenance-free permanent operation.

Your benefit
- Maintenance-free operation through non-contact measuring principle
- High plant availability, because wear and maintenance-free
- Exact measuring results independent of product, process and ambient conditions

Technical data

Measuring range:	up to 15 m
Process fitting:	thread G1½ mounting strap compression flanges from DN 80, 3"
Process temperature:	-40 … +80 °C
Process pressure:	-1 … +2 bar (-100 … +200 kPa)
Accuracy:	±2 mm

Delivery time: SPEED



① Mounting strap
② Combi compression flange

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

Mounting accessories, welded sockets and housing overview:
Chapter Accessory

Approval

XX without

AX ATEX II 3G Ex nA IIC T6 Gc X

CX ATEX II 1G, 1/2G, 2G Ex ia IIC T6 Ga, Ga/Gb, Gb

CX IEC Ex ia IIC T6 Ga, Ga/Gb, Gb

Version / Material / Process temperature

B with plastic horn antenna (ø80mm) / PP / -40...+80°C

Process fitting / Material

XX without

XG Counter nut G1½ / PPH

XC Mounting strap, length: 170mm / 316L

XD Mounting strap, length: 300 mm / 316L

YD Compression flange suitable for flanges 3" 150lb, DN80 PN16 / PP-GF30

Electronics

H Two-wire 4...20mA/HART®

P Two-wire Profibus PA

F Two-wire Foundation Fieldbus

Housing / Protection

K Plastic single chamber / IP68 (2bar) / with cable outlet

Cable / Material

A 6 m suspension cable (can be shortened) / PUR

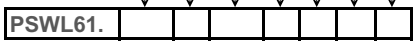
B 12m extension cable (can be shortened) / PUR

C 18m extension cable (can be shortened) / PUR

T individually selectable length / PUR

Additional equipment

X without



Cable length

from >6 m, per additional 100 mm cable of PUR

VEGAPULS 61

Radar sensor for continuous level measurement of liquids

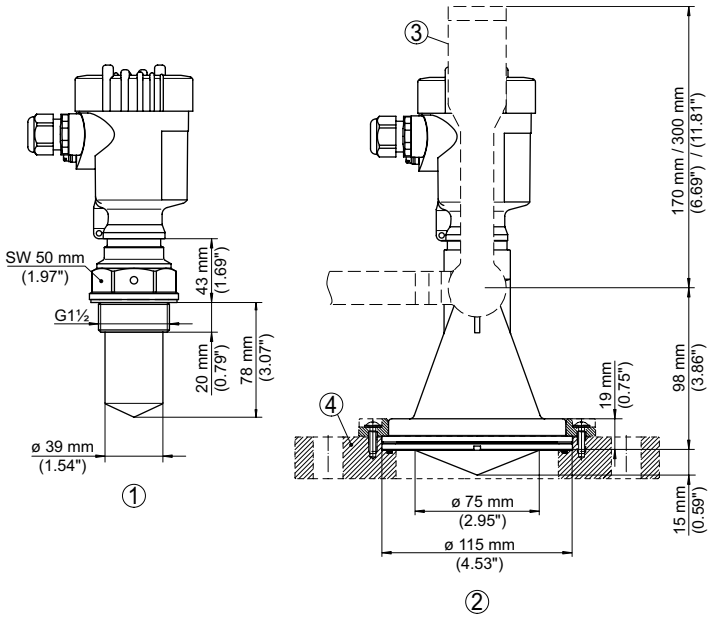
Application area
The VEGAPULS 61 is a radar sensor for continuous level measurement of liquids under simple process conditions. The VEGAPULS 61 is an economical solution through its simple and versatile mounting possibilities. The encapsulated antenna system ensures a maintenance-free operation.

Your benefit
- Maintenance-free operation through non-contact measuring principle
- High plant availability, because wear and maintenance-free
- Exact measuring results independent of process conditions

Technical data

Measuring range:	up to 35 m
Process fitting:	thread G1½, 1½ NPT mounting strap compression flanges from DN 80, 3" adapter flanges from DN 100, 4"
Process temperature:	-40 … +80 °C
Process pressure:	-1 … +3 bar (-100 … +300 kPa)
Accuracy:	±2 mm
SIL qualification:	optionally up to SIL2

Delivery time: SPEED



① Version with encapsulated antenna system (ø 40 mm)
② Version with plastic horn antenna (ø 80 mm)
③ Mounting strap
④ Adapter flange

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
XM Ship approval
CX ATEX II 1G, 1/2G, 2G Ex ia IIC T6
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
CI IEC Ex ia IIC T6
DX ATEX II 1/2G, 2G Ex d ia IIC T5/T6
DI IEC Ex d ia IIC T6

Version / Material / Process temperature

A with encapsulated horn antenna (ø40mm) / PVDF / -40...+80°C
B with plastic horn antenna (ø80mm) / PP / -40...+80°C

Process fitting / Material

XX without
GP Thread G1½ PN3, DIN3852-A / PVDF
NP Thread 1½NPT PN3, ASME B1.20.1 / PVDF
XG Counter nut G1½ / PPH
CA Clamp 2" PN3 (ø64mm) DIN32676, ISO2852 / 316L
CB Clamp 3" PN3 (ø91mm) DIN32676, ISO2852 / 316L
RA Slotted nut DN50 PN3, DIN11851 / 316L
RB Slotted nut DN80 PN3, DIN11851 / 316L
XC Mounting strap, length: 170mm / 316L
XD Mounting strap, length: 300mm / 316L
YD Compression flange suitable for flanges 3" 150lb, DN80 PN16 / PP-GF30
AE Adapter flange DN100 PN16 / PP-GF30, seal: FKM (SHS FPM 70C3 GLT)
AH Adapter flange DN150 PN16 / PP-GF30, seal: FKM (SHS FPM 70C3 GLT)
FK Adapter flange 4" 150lb, ASME / PP-GF30, seal: FKM (SHS FPM 70C3 GLT)
FM Adapter flange 6" 150lb, ASME / PP-GF30, seal: FKM (SHS FPM 70C3 GLT)
UC Adapter flange DN100 10K, JIS / PP-GF30, seal: FKM (SHS FPM 70C3 GLT)
UE Adapter flange DN150 10K, JIS / PP-GF30, seal: FKM (SHS FPM 70C3 GLT)

Electronics

H Two-wire 4...20mA/HART®
1 Two-wire 4...20mA/HART® and PLICSMOBILE
B Four-wire 4...20mA/HART®; 90...253V AC; 50/60Hz
I Four-wire 4...20mA/HART®; 9.6...48V DC; 20...42V AC
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 (0.2bar)
8 Stainless steel single 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

PS61.								

VEGAPULS 62

Radar sensor for continuous level measurement of liquids

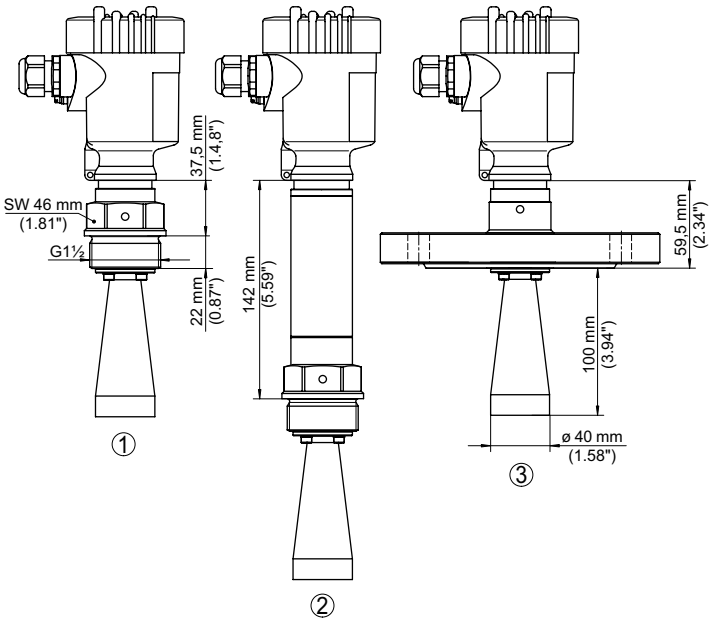
Application area
The VEGAPULS 62 is a universally implementable radar sensor for continuous level measurement of liquids. It is suitable for level measurement in storage containers, reactors and process vessels, even under difficult process conditions. With its various antenna versions and materials, VEGAPULS 62 is the optimal solution for almost all applications and processes. Its wide temperature and pressure range makes project planning simple.

Your benefit
- Maintenance-free operation through non-contact measuring principle
- High plant availability, because wear and maintenance-free
- Exact measuring results independent of pressure, temperature, gas and steam

Technical data

Measuring range:	up to 35 m
Process fitting:	thread from G1½, 1½ NPT flanges from DN 50, 2"
Process temperature:	-196 … +450 °C
Process pressure:	-1 … +160 bar (-100 … +16000 kPa)
Measuring accuracy:	±2 mm
SIL qualification:	optionally up to SIL2

Delivery time: SPEED



① Threaded version
② Threaded version with temperature adapter up to +250 °C
③ Flange version

Antenna-ø	Length	Beam angle
40 mm	100 mm	20°
48 mm	120 mm	15°
75 mm	216 mm	10°
95 mm	430 mm	8°
245 mm (parabolic)	138 mm	3°

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
- **XM** Ship approval
- **CX** ATEX II 1G, 1/2G, 2G Ex ia IIC T6
- **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
- **CI** IEC Ex ia IIC T6
- **DX** ATEX II 1/2G, 2G Ex d ia IIC T5/T6
- **DI** IEC Ex d ia IIC T6
- **CK** IEC Ex ia IIC Ga, Ga/Gb, Gb + Ex t IIIC T* Da, Da/Db, Db
- **DK** IEC Ex d IIC Ga/Gb, Gb + Ex t IIIC T* Da, Da/Db, Db
- **RX** IEC Ex t IIIC T* Da, Da/Db, Db

Version / Material

- **B** with horn antenna (ø40mm) / 316L
- **C** with horn antenna (ø48mm) / 316L
- **D** with horn antenna (ø75mm) / 316L
- **E** with horn antenna (ø95mm) / 316L
- **K** with parabolic antenna (ø245mm) / 316L
- **F** with ½"-standpipe / 316L

Process fitting / Material

- **GA** Thread G¾ PN40, DIN3852-A / 316L
- **GD** Thread G1½ PN40, DIN3852-A / 316L
- **ND** Thread 1½NPT PN40, ASME B1.20.1 / 316L
- **GB** Thread G1½ PN100, DIN3852-A / 316L
- **FC** Flange DN50 PN40 Form C, DIN2501 / 316L
- **FD** Flange DN80 PN40 Form C, DIN2501 / 316L
- **FE** Flange DN100 PN16 Form C, DIN2501 / 316L
- **FK** Flange DN150 PN16 Form C, DIN2501 / 316L
- **AE** Flange 2" 150lb RF, ASME B16.5 / 316L
- **AI** Flange 3" 150lb RF, ASME B16.5 / 316L
- **AK** Flange 4" 150lb RF, ASME B16.5 / 316L
- **AL** Flange 4" 300lb RF, ASME B16.5 / 316L
- **AM** Flange 6" 150lb RF, ASME B16.5 / 316L
- **AO** Flange 6" 300lb RF, ASME B16.5 / 316L

Seal / Process temperature

- **2** FKM (SHS FPM 70C3 GLT) and PTFE / -40...+130°C
- **3** FFKM (Kalrez 6375) and PTFE / -20...+130°C
- **F** FFKM (Kalrez 6375) and PEEK / -20...+250°C
- **H** Ceramic graphite / -196...+450°C

Electronics

- **H** Two-wire 4...20mA/HART®
- **1** Two-wire 4...20mA/HART® and PLICSMOBILE
- **B** Four-wire 4...20mA/HART®; 90...253V AC; 50/60Hz
- **I** Four-wire 4...20mA/HART®; 9.6...48V DC; 20...42V AC
- **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 (0.2bar)
- **8** Stainless steel single 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

PS62.									

Length standpipe / Total length

316L (200-5850 mm) per 100 mm

VEGAPULS 63

Radar sensor for continuous level measurement of liquids

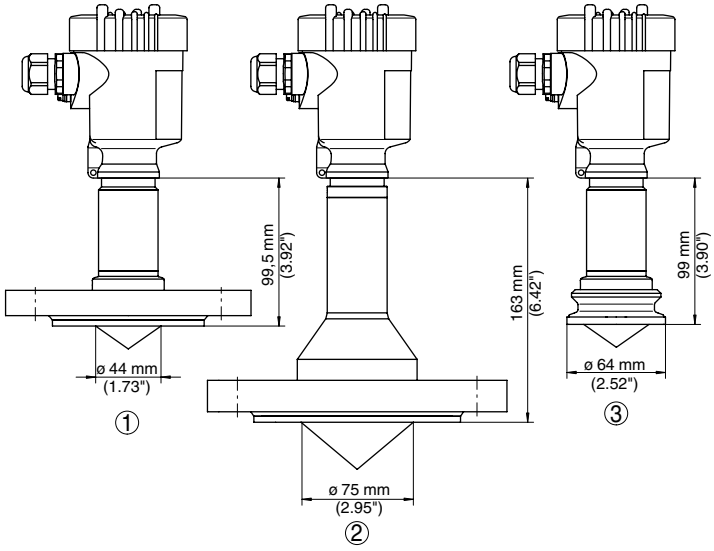
Application area
The VEGAPULS 63 is a radar sensor for continuous level measurement of aggressive liquids or with hygienic requirements. It is suitable for applications in storage tanks, process vessels, dosing vessels and reactors. The encapsulated antenna system of VEGAPULS 63 protects the VEGAPULS 63 against pollution and ensures a maintenance-free permanent operation. The front-flush mounting ensures an optimum cleanability even with high hygienic requirements.

Your benefit
- Maintenance-free operation through non-contact measuring principle
- High plant availability, because wear and maintenance-free
- Exact measuring results independent of process conditions

Technical data

Measuring range:	up to 35 m
Process fitting:	hygienic fittings slotted nuts flanges from DN 50, 2"
Process temperature:	-196 … +200 °C
Process pressure:	-1 … +16 bar (-100 … +1600 kPa)
Accuracy:	±2 mm
SIL qualification:	optionally up to SIL2

Delivery time: SPEED



① Flange version DN 50
② Flange version DN 80
③ Clamp version 2"

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
- **XM** Ship approval
- **CX** ATEX II 1G, 1/2G, 2G Ex ia IIC T6
- **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
- **CI** IEC Ex ia IIC T6
- **DX** ATEX II 1/2G, 2G Ex d ia IIC T5/T6
- **DI** IEC Ex d ia IIC T6
- **CK** IEC Ex ia IIC Ga, Ga/Gb, Gb + Ex t IIIC T* Da, Da/Db, Db
- **DK** IEC Ex d IIC Ga/Gb, Gb + Ex t IIIC T* Da, Da/Db, Db
- **RX** IEC Ex t IIIC T* Da, Da/Db, Db
- **TX** ATEX I M2 Ex ia I Mb

Version / Material / Process temperature

- **N** Hygienically encapsulated horn antenna / PTFE / -40...+200°C
- **J** Hygienically encapsulated horn antenna / PTFE / -196...+200°C
- **R** Hygienically encapsulated horn antenna / PTFE (8mm) / -40...+200°C
- **V** Hygienically encapsulated horn antenna / PTFE and FKM / -20...+130°C
- **E** Hygienically encapsulated horn antenna / PTFE and EPDM / -40...+130°C

Process fitting / Material

- **CA** Clamp 2" PN16 (ø64mm) DIN32676, ISO2852 / 316L
- **CB** Clamp 3" PN10 (ø91mm) DIN32676, ISO2852 / 316L
- **CC** Clamp 4" PN10 (ø119mm) DIN32676, ISO2852 / 316L
- **RA** Slotted nut DN50 PN16, DIN 11851 / 316L
- **RB** Slotted nut DN80 PN16, DIN 11851 / 316L
- **LB** Hygienic fitting with tension flange DN32 PN16 / 316L
- **LA** Hygienic fitting F40 PN16; with compression nut / 316L
- **TB** Varivent Form F DN25 (1"), D=50mm / 316L
- **QB** for NEUMO BioControl D50 PN16 / 316L
- **FC** Flange DN50 PN40 Form C, DIN2501 / 316L
- **FD** Flange DN80 PN40 Form C, DIN2501 / 316L
- **FE** Flange DN100 PN16 Form C, DIN2501 / 316L
- **LO** Flange DN125 PN40 Form V13, DIN2501 / 316L
- **FK** Flange DN150 PN16 Form C, DIN2501 / 316L
- **FM** Flange DN150 PN40 Form C, DIN2501 / 316L
- **LM** Flange DN150 PN40 Form V13, DIN2501 / 316L
- **AE** Flange 2" 150lb RF, ASME B16.5 / 316L
- **AI** Flange 3" 150lb RF, ASME B16.5 / 316L
- **AK** Flange 4" 150lb RF, ASME B16.5 / 316L
- **AM** Flange 6" 150lb RF, ASME B16.5 / 316L

Electronics

- **H** Two-wire 4...20mA/HART®
- **1** Two-wire 4...20mA/HART® and PLICSMOBILE
- **B** Four-wire 4...20mA/HART®; 90...253V AC; 50/60Hz
- **I** Four-wire 4...20mA/HART®; 9.6...48V DC; 20...42V AC
- **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 (0.2bar)
- **8** Stainless steel single 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

PS63.								

VEGAPULS 65

Radar sensor for continuous level measurement of liquids

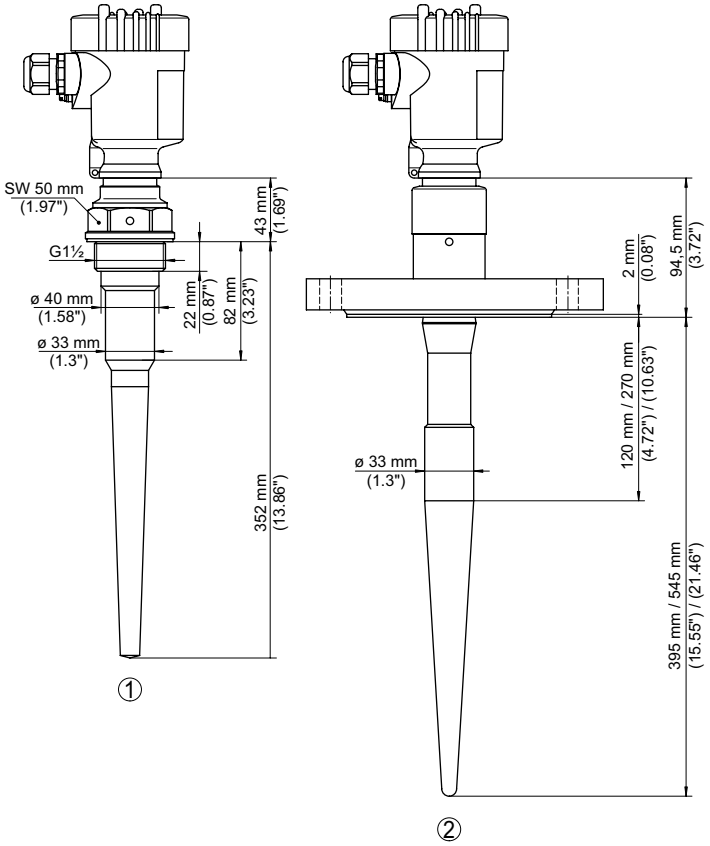
Application area
The VEGAPULS 65 is a radar sensor for continuous measurement of liquids under simple process conditions. It is particularly suitable for level measurement in vessels with small process fittings and under simple process conditions. The slim rod antenna enables the installation in small vessel openings.

Your benefit
- Maintenance-free operation through non-contact measuring principle
- High plant availability, because wear and maintenance-free
- Reliable measurement independent of process conditions

Technical data

Measuring range:	up to 35 m
Process fitting:	thread from G1½, 1½ NPT flanges from DN 50, 2"
Process temperature:	-40 … +150 °C
Process pressure:	-1 … +16 bar (-100 … +1600 kPa)
Accuracy:	±8 mm
SIL qualification:	optionally up to SIL2

Delivery time: SPEED



① Threaded version G1½
② Flange version DN 80

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
- **XM** Ship approval
- **CX** ATEX II 1G, 1/2G, 2G Ex ia IIC T6
- **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
- **CI** IEC Ex ia IIC T6
- **DX** ATEX II 1/2G, 2G Ex d ia IIC T5/T6
- **DI** IEC Ex d ia IIC T6

Version / Material / Process temperature

- **K** Rod antenna for socket length: 50mm / PVDF and PTFE / -40...+130°C
- **L** Rod antenna for socket length: 100mm / PTFE / -40...+130/+150°C
- **M** Rod antenna for socket length: 250mm / PTFE / -40...+130/+150°C

Process fitting / Material

- **GD** Thread G1½ PN16, DIN3852-A / 316L
- **GP** Thread G1½ PN3, DIN3852-A / PVDF
- **ND** Thread 1½NPT PN16, ASME B1.20.1 / 316L
- **NP** Thread 1½NPT PN3, ASME B1.20.1 / PVDF
- **FC** Flange DN50 PN40 Form C, DIN2501 / 316L, PTFE plated
- **FD** Flange DN80 PN40 Form C, DIN2501 / 316L, PTFE plated
- **FE** Flange DN100 PN16 Form C, DIN2501 / 316L, PTFE plated
- **FK** Flange DN150 PN16 Form C, DIN2501 / 316L, PTFE plated
- **AE** Flange 2" 150lb RF, ASME B16.5 / 316L, PTFE plated
- **AI** Flange 3" 150lb RF, ASME B16.5 / 316L, PTFE plated
- **AJ** Flange 3" 300lb RF, ASME B16.5 / 316L, PTFE plated
- **AK** Flange 4" 150lb RF, ASME B16.5 / 316L, PTFE plated
- **AM** Flange 6" 150lb RF, ASME B16.5 / 316L, PTFE plated

Electronics

- **H** Two-wire 4...20mA/HART®
- **1** Two-wire 4...20mA/HART® and PLICSMOBILE
- **B** Four-wire 4...20mA/HART®; 90...253V AC; 50/60Hz
- **I** Four-wire 4...20mA/HART®; 9.6...48V DC; 20...42V AC
- **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 (0.2bar)
- **8** Stainless steel single 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

PS65.								

VEGAPULS 66

Radar sensor for continuous level measurement of liquids

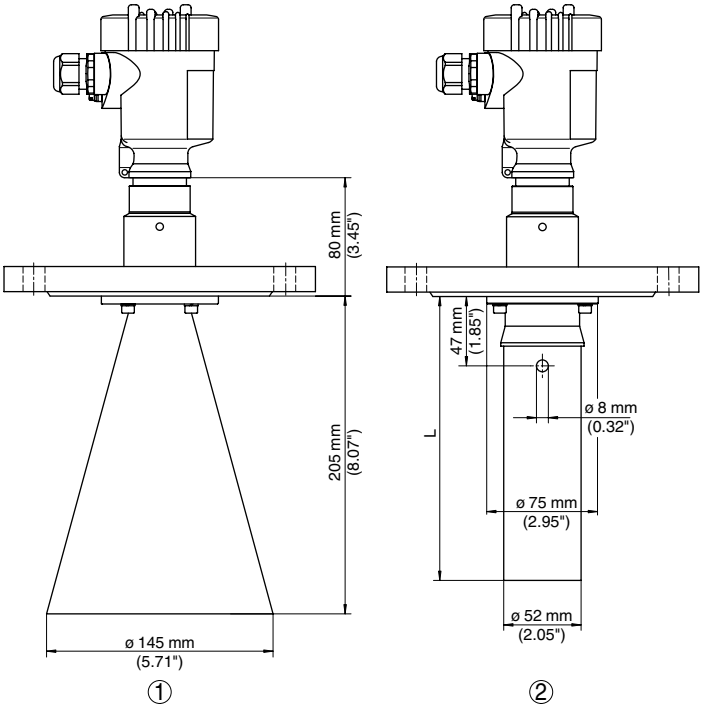
Application area
The VEGAPULS 66 is a sensor for continuous level measurement of liquids under arduous process conditions. It is suitable for applications in storage tanks, process vessels or standpipes. The VEGAPULS 66 can be used universally thanks to different antenna versions.

Your benefit
- Maintenance-free operation through non-contact measuring principle
- High plant availability, because wear and maintenance-free
- Reliable measurement independent of process conditions

Technical data

Measuring range:	up to 35 m
Process fitting:	flanges from DN 50, 2"
Process temperature:	-60 … +400 °C
Process pressure:	-1 … +160 bar (-100 … +16000 kPa)
Accuracy:	±8 mm
SIL qualification:	optionally up to SIL2

Delivery time: SPEED



① Version with horn antenna ø 145 mm
② Version with standpipe antenna

Antenna-ø	Length	Beam angle
75 mm	75 mm	38°
96 mm	113 mm	30°
145 mm	205 mm	20°
195 mm	296 mm	17°
240 mm	380 mm	14°

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
- **XM** Ship approval
- **CX** ATEX II 1G, 1/2G, 2G Ex ia IIC T6
- **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
- **CI** IEC Ex ia IIC T6
- **DX** ATEX II 1/2G, 2G Ex d ia IIC T5/T6
- **DI** IEC Ex d ia IIC T6
- **CK** IEC Ex ia IIC Ga, Ga/Gb, Gb + Ex t IIIC T* Da, Da/Db, Db
- **DK** IEC Ex d IIC Ga/Gb,Gb + Ex t IIIC T* Da, Da/Db, Db
- **RX** IEC Ex t IIIC T* Da, Da/Db, Db

Version / Material

- **A** for standpipe / 316L
- **D** with horn antenna (ø75mm) / 316L
- **E** with horn antenna (ø96mm) / 316L
- **H** with horn antenna (ø145mm) / 316L
- **K** with horn antenna (ø140mm) / enamel
- **I** with horn antenna (ø195mm) / 316L
- **J** with horn antenna (ø240mm) / 316L
- **F** with standpipe (ø52mm) / 316L

Process fitting / Material

- **FC** Flange DN50 PN40 Form C, DIN2501 / 316L
- **FD** Flange DN80 PN40 Form C, DIN2501 / 316L
- **FE** Flange DN100 PN16 Form C, DIN2501 / 316L
- **FK** Flange DN150 PN16 Form C, DIN2501 / 316L
- **FL** Flange DN200 PN16 Form C, DIN2501 / 316L
- **FI** Flange DN250 PN16 Form C, DIN2501 / 316L
- **AE** Flange 2" 150lb RF, ASME B16.5 / 316L
- **AI** Flange 3" 150lb RF, ASME B16.5 / 316L
- **AK** Flange 4" 150lb RF, ASME B16.5 / 316L
- **AM** Flange 6" 150lb RF, ASME B16.5 / 316L
- **AN** Flange 8" 150lb RF, ASME B16.5 / 316L
- **AP** Flange 10" 150lb RF, ASME B16.5 / 316L
- **LP** Flange 10" 150lb RJF, ASME B16.5 / 316L

Seal / Process temperature

- **2** FKM (A+P GLT FPM 70.16-06) / -40...+150°C
- **3** FFKM (Kalrez 6375) / -20...+150°C
- **G** Graphite and ceramic / -60...+250°C
- **H** Graphite and ceramic /-60...+400°C

Electronics

- **H** Two-wire 4...20mA/HART®
- **1** Two-wire 4...20mA/HART® and PLICSMOBILE
- **B** Four-wire 4...20mA/HART®; 90...253V AC; 50/60Hz
- **I** Four-wire 4...20mA/HART®; 9.6...48V DC; 20...42V AC
- **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 (0.2bar)
- **8** Stainless steel single 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

PS66.									

Length standpipe / Total length

316L (500-5950 mm) per 100 mm

VEGAPULS 67

Radar sensor for continuous level measurement of bulk solids

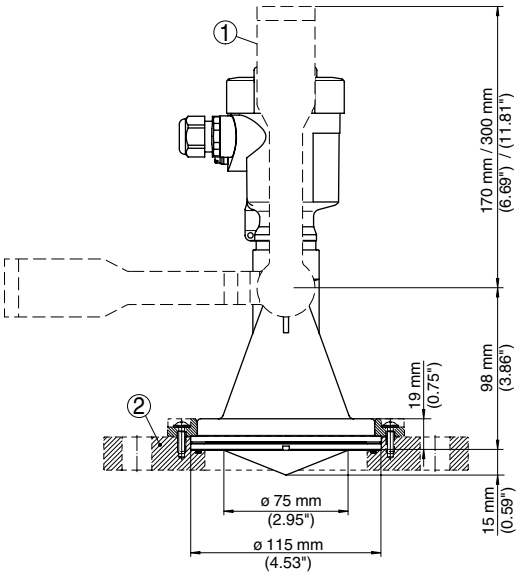
Application area
The VEGAPULS 67 is a sensor for continuous level measurement of bulk solids under simple process conditions. It is suitable for smaller silos and vessels. The VEGAPULS 67 is an economical solution through its versatile and simple mounting options. The encapsulated antenna system ensures maintenance-free permanent operation even with strong buildup.

Your benefit
- Maintenance-free operation through non-contact measuring principle
- High plant availability, because wear and maintenance-free
- Reliable measurement independent of vapour, dust and noise

Technical data

Measuring range:	up to 15 m
Process fitting:	mounting strap compression flanges from DN 80, 3"
Process temperature:	-40 … +80 °C
Process pressure:	-1 … +2 bar (-100 … +200 kPa)
Accuracy:	±2 mm
SIL qualification:	optionally up to SIL2

Delivery time: SPEED



① Mounting strap
② Adapter flange

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

RX ATEX II 1D, 1/2D, 2D Ex t IIIC T* Da, Da/Db, Db

RX IEC Ex t IIIC T* Da, Da/Db, Db

Version / Material / Process temperature

B with plastic horn antenna (ø80mm) / PP / -40...+80°C

Process fitting / Material

XX without

XC Mounting strap, length: 170mm / 316L

XD Mounting strap, length: 300mm / 316L

YD Compression flange suitable for flanges 3" 150lb, DN80 PN16 / PP-GF30

AE Adapter flange DN100 PN16 / PP-GF30, seal: FKM (SHS FPM 70C3 GLT)

AH Adapter flange DN150 PN16 / PP-GF30, seal: FKM (SHS FPM 70C3 GLT)

AD Adapter flange DN200 PN16 / PP-GF30, seal: FKM (SHS FPM 70C3 GLT)

FK Adapter flange 4" 150lb, ASME / PP-GF30, seal: FKM (SHS FPM370C3 GLT)

Electronics

H Two-wire 4...20mA/HART®

1 Two-wire 4...20mA/HART® and PLICSMOBILE

B Four-wire 4...20mA/HART®; 90...253V AC; 50/60Hz

I Four-wire 4...20mA/HART®; 9.6...48V DC; 20...42V AC

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 (0.2bar)

8 Stainless steel single 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

PS67.								

VEGAPULS SR 68

Radar sensor for continuous level measurement of bulk solids

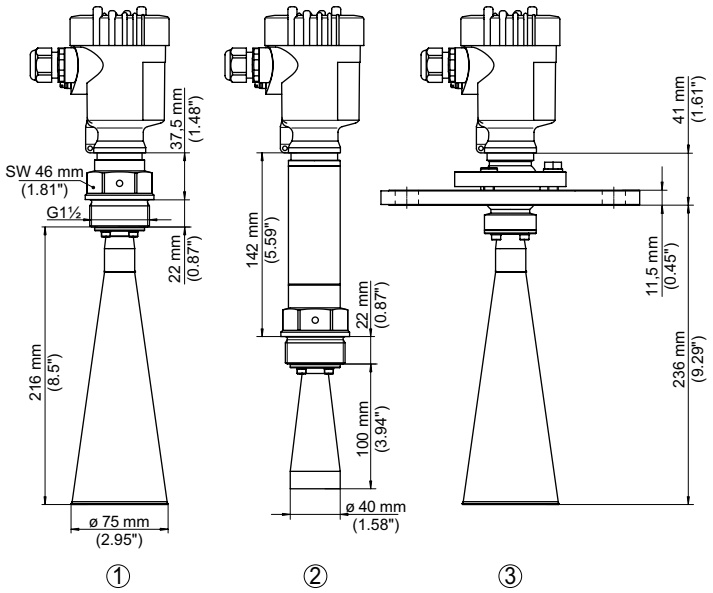
Application area
The VEGAPULS SR 68 is a radar sensor for continuous measurement of bulk solids even under difficult process conditions. It is particularly suitable for level measurement in high silos and large bunkers. The VEGAPULS SR 68 is an economical solution thanks to the simple setup and the reliable, maintenance-free operation.

Your benefit
- Maintenance-free operation through non-contact measuring principle
- High plant availability, because wear and maintenance-free
- Reliable measurement independent of vapour, dust and noise

Technical data

Measuring range:	up to 30 m
Process fitting:	thread from G1½, 1½ NPT flanges from DN 50, 2"
Process temperature:	-40 … +250 °C
Process pressure:	-1 … +100 bar (-100 … +10000 kPa)
Accuracy:	±2 mm

Delivery time: SPEED



① Threaded version with horn antenna
② Threaded version with horn antenna and with temperature adapter
③ Version with horn antenna and swivelling holder

Antenna-ø	Length	Beam angle
40 mm	100 mm	20°
48 mm	120 mm	15°
75 mm	216 mm	10°
95 mm	430 mm	8°

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 T5
- **CK** ATEX II 1D, 1/2D, 2G Ex ia IIC + II 1D, 1/2D, 2D Ex t IIIC
- **CI** IEC Ex ia IIC T6 Ga, Ga/Gb, Gb
- **DX** ATEX II 1/2G, 2G Ex d ia IIC T5/T6
- **DI** IEC Ex d ia IIC T6
- **CK** IEC Ex ia IIC Ga, Ga/Gb, Gb + Ex t IIIC T* Da, Da/Db, Db
- **DK** IEC Ex d IIC Ga/Gb,Gb + Ex t IIIC T* Da, Da/Db, Db
- **RX** ATEX II 1D, 1/2D, 2D Ex t IIIC T* Da, Da/Db, Db
- **RX** IEC Ex t IIIC T* Da, Da/Db, Db
- **TX** ATEX I M2 Ex ia I Mb

Version / Material

- **B** with horn antenna (ø40mm) / 316L
- **C** with horn antenna (ø48mm) / 316L
- **D** with horn antenna (ø75mm) / 316L
- **E** with horn antenna (ø95mm) / 316L
- **K** with parabolic antenna (ø245mm) / 316L

Process fitting / Material

- **GD** Thread G1½ PN40, DIN3852-A / 316L
- **ND** Thread 1½NPT PN40, ASME B1.20.1 / 316L
- **FC** Flange DN50 PN40 Form C, DIN2501 / 316L
- **FD** Flange DN80 PN40 Form C, DIN2501 / 316L
- **FE** Flange DN100 PN16 Form C, DIN2501 / 316L
- **AE** Flange 2" 150lb RF, ASME B16.5 / 316L
- **AI** Flange 3" 150lb RF, ASME B16.5 / 316L
- **AK** Flange 4" 150lb RF, ASME B16.5 / 316L
- **1O** Swivelling holder with flange DN50 PN16 / 316L
- **1P** Swivelling holder with flange DN80 PN16 / 316L
- **1Q** Swivelling holder with flange DN100 PN16 / 316L
- **1F** Swivelling holder with flange 2" 150lb / 316L
- **1G** Swivelling holder with flange 3" 150lb / 316L
- **1H** Swivelling holder with flange 4" 150lb / 316L
- **GB** Thread G1½ PN100, DIN3852-A / 316L
- **NB** Thread 1½NPT PN100, ASME B1.20.1 / 316L

Seal / Process temperature

- **2** FKM (SHS FPM 70C3 GLT) and PTFE / -40...+130°C
- **3** FFKM (Kalrez 6375) and PTFE / -20...+130°C
- **F** FFKM (Kalrez 6375) and PEEK / -20...+250°C

Electronics

- **H** Two-wire 4...20mA/HART®
- **1** Two-wire 4...20mA/HART® and PLICSMOBILE
- **B** Four-wire 4...20mA/HART®; 90...253V AC; 50/60Hz
- **I** Four-wire 4...20mA/HART®; 9.6...48V DC; 20...42V AC
- **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 (0.2bar)
- **8** Stainless steel single chamber (electropolished) / IP66/IP68 (0.2 bar)
- **W** Stainless steel double chamber / IP66/IP68 (0.2 bar)

Cable entry / Cable gland / Plug connection

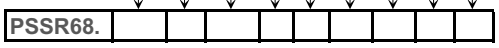
- **M** M20x1.5 / with / without
- **N** ½NPT / without / without

Display/adjustment module PLICSCOM

- **X** Without
- **A** Mounted

Additional equipment

- **X** without
- **K** Rinsing connection
- **V** Rinsing connection with reflux valve



VEGAPULS 68

Radar sensor for continuous level measurement of bulk solids

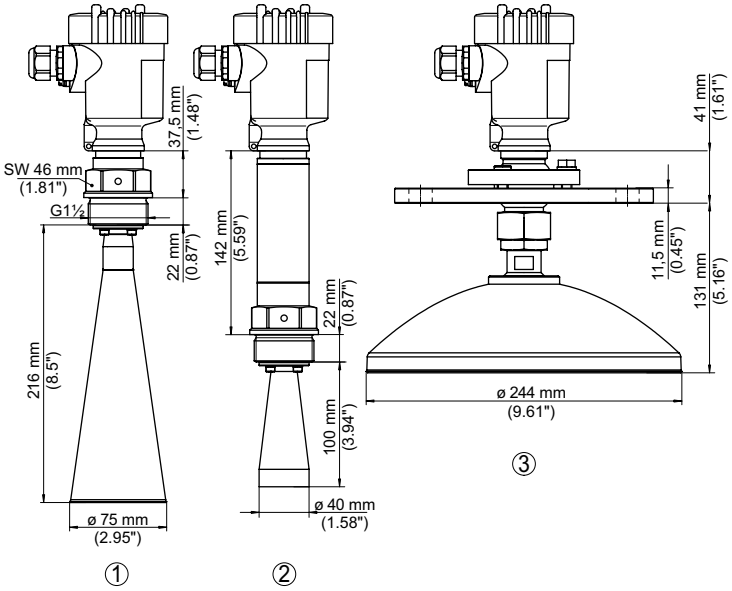
Application area
The VEGAPULS 68 is a radar sensor for continuous measurement of bulk solids also under difficult process conditions and with large measuring ranges. The sensor is ideal for level measurement in high silos, large bunkers, stone crushers and in the furnace. The VEGAPULS 68 with different antenna versions and materials is the optimum solution for virtually all applications and processes. Through the wide temperature and pressure range, the sensor can be used universally and enables a simple planning.

Your benefit
- Maintenance-free operation through non-contact measuring principle
- High plant availability, because wear and maintenance-free
- Reliable measurement independent of vapour, dust and noise

Technical data

Measuring range:	up to 75 m
Process fitting:	thread from G1½, 1½ NPT flanges from DN 50, 2"
Process temperature:	-196 … +450 °C
Process pressure:	-1 … +160 bar (-100 … +16000 kPa)
Accuracy:	±2 mm
SIL qualification:	optionally up to SIL2

Delivery time: SPEED



① Threaded version with horn antenna
② Threaded version with horn antenna and with temperature adapter
③ Version with parabolic antenna and swivelling holder

Antenna-ø	Length	Beam angle
40 mm	100 mm	20°
48 mm	120 mm	15°
75 mm	216 mm	10°
95 mm	430 mm	8°
245 mm (parabolic)	138 mm	3°

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
- **XM** Ship approval
- **CX** ATEX II 1G, 1/2G, 2G Ex ia IIC T5
- **CM** ATEX II 1G, 1/2G, 2G Ex ia IIC T5 + Ship approval
- **CK** ATEX II 1G, 1/2G, 2G Ex ia IIC + II 1D, 1/2D, 2D Ex t IIIC
- **CI** IEC Ex ia IIC T6 Ga, Ga/Gb, Gb
- **DX** ATEX II 1/2G, 2G Ex d ia IIC T5/T6
- **DI** IEC Ex d ia IIC T6
- **CK** IEC Ex ia IIC Ga, Ga/Gb, Gb + Ex t IIIC T* Da, Da/Db, Db
- **DK** IEC Ex d IIC Ga/Gb,Gb + Ex t IIIC T* Da, Da/Db, Db
- **RX** ATEX II 1D, 1/2D, 2D Ex t IIIC T* Da, Da/Db, Db
- **RX** IEC Ex t IIIC T* Da, Da/Db, Db
- **TX** ATEX I M2 Ex ia I or I M2 Ex ia I Mb

Version / Material

- **B** with horn antenna (ø40mm) / 316L
- **C** with horn antenna (ø48mm) / 316L
- **D** with horn antenna (ø75mm) / 316L
- **E** with horn antenna (ø95mm) / 316L
- **K** with parabolic antenna (ø245mm) / 316L

Process fitting / Material

- **GD** Thread G1½ PN40, DIN3852-A / 316L
- **ND** Thread 1½NPT PN40, ASME B1.20.1 / 316L
- **FC** Flange DN50 PN40 Form C, DIN2501 / 316L
- **FD** Flange DN80 PN40 Form C, DIN2501 / 316L
- **FE** Flange DN100 PN16 Form C, DIN2501 / 316L
- **AE** Flange 2" 150lb RF, ASME B16.5 / 316L
- **AI** Flange 3" 150lb RF, ASME B16.5 / 316L
- **AK** Flange 4" 150lb RF, ASME B16.5 / 316L
- **1O** Swivelling holder with flange DN50 PN16 / 316L
- **1P** Swivelling holder with flange DN80 PN16 / 316L
- **1Q** Swivelling holder with flange DN100 PN16 / 316L
- **1F** Swivelling holder with flange 2" 150lb / 316L
- **1G** Swivelling holder with flange 3" 150lb / 316L
- **1H** Swivelling holder with flange 4" 150lb / 316L
- **GB** Thread G1½ PN100, DIN3852-A / 316L
- **NB** Thread 1½NPT PN100, ASME B1.20.1 / 316L

Seal / Process temperature

- **2** FKM (SHS FPM 70C3 GLT) and PTFE / -40...+130°C
- **3** FFKM (Kalrez 6375) and PTFE / -20...+130°C
- **F** FFKM (Kalrez 6375) and PEEK / -20...+250°C
- **H** Ceramic graphite / -196...+450°C

Electronics

- **H** Two-wire 4...20mA/HART®
- **1** Two-wire 4...20mA/HART® and PLICSMOBILE
- **B** Four-wire 4...20mA/HART®; 90...253V AC; 50/60Hz
- **I** Four-wire 4...20mA/HART®; 9.6...48V DC; 20...42V AC
- **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 (0.2bar)
- **8** Stainless steel single chamber (electropolished) / IP66/IP68 (0.2 bar)
- **W** Stainless steel double chamber / IP66/IP68 (0.2 bar)

Cable entry / Cable gland / Plug connection

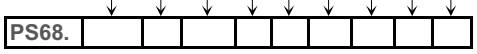
- **M** M20x1.5 / with / without
- **N** ½NPT / without / without

Display/adjustment module PLICSCOM

- **X** Without
- **A** Mounted

Additional equipment

- **X** without
- **K** Rinsing connection
- **V** Rinsing connection with reflux valve



VEGAPULS 69

Radar sensor for continuous level measurement of bulk solids

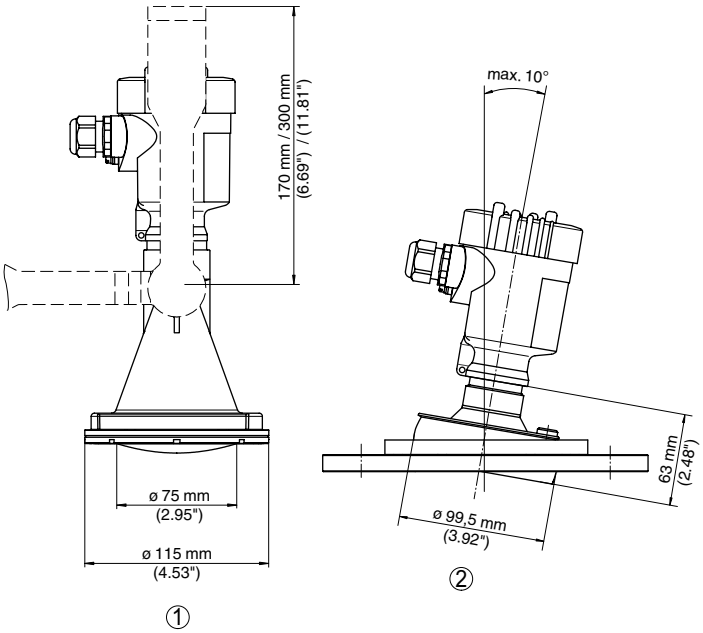
Application area
The VEGAPULS 69 is a sensor for continuous measurement of bulk solids under different process conditions. It is ideal for level measurement in very high silos, large bunkers and segmented vessels. Thanks to the very good signal focussing a simple setup and reliable measurement is ensured. The VEGAPULS 69 can be equipped with an encapsulated plastic antenna or a lens antenna integrated in the metal flange. This enables the optimum adaption to different application areas.

Your benefit
- Maintenance-free operation through non-contact measuring principle
- High plant availability, because wear and maintenance-free
- Reliable measurement independent of vapour, dust and noise

Technical data

Measuring range:	up to 120 m
Beam angle:	4°
Process fitting:	flanges from DN 80, 3"
Process temperature:	-40 … +200 °C
Process pressure:	-1 … +3 bar (-100 … +300 kPa)
Accuracy:	±5 mm

Delivery time: SPEED



① Plastic horn antenna with mounting strap
② Metal jacketed lens antenna with swivelling holder

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

Approval

X for Ex-free area

C ATEX II 1G, 1/2G, 2G Ex ia IIC T6

D ATEX II 1/2G, 2G Ex d ia IIC T6

E ATEX II 1/2G, 2G Ex d IIC T6

R ATEX II 1D, 1/2D, 1/3D, 2D IP66

C IEC Ex ia IIC T6

D IEC Ex d ia IIC T6

E IEC Ex d IIC T6

R IEC Ex t IIIC T... IP66

Version / Material

B with plastic horn antenna / PP

C Metal jacketed lens antenna with rinsing air connection / PEEK

Process fitting / Material

XX without

XC Mounting strap, length: 170mm / 316L

XD Mounting strap, length: 300 mm / 316L

YD Compression flange suitable for flanges 3" 150lb, DN80 PN16 / PP-GF30

AA Adapter flange DN100 PN16 Form B, DIN / PP-GF30

AD Adapter flange DN150 PN16 Form B, DIN / PP-GF30

AL Adapter flange 4" 150lb FF, ASME / PP-GF30

AM Adapter flange 6" 150lb FF, ASME / PP-GF30

SD Swivelling holder with flange 4" 150lb / 316L

SE Swivelling holder with flange 6" 150lb / 316L

SA Swivelling holder with flange DN100 PN16 Form B, DIN / 316L

SJ Swivelling holder with flange DN125 PN16 Form B, DIN / 316L

SB Swivelling holder with flange DN150 PN16 Form B, DIN / 316L

FA Flange DN80 PN16 Form B, DIN / 316L

FB Flange DN100 PN16 Form B, DIN / 316L

FC Flange DN150 PN16 Form B, DIN / 316L

FD Flange 3" 150lb FF, ASME / 316L

FE Flange 4" 150lb FF, ASME / 316L

FF Flange 6" 150lb FF, ASME / 316L

Seal / Process temperature

C PP / -40...+80°C

D FKM (SHS FPM 70C3 GLT) and PP / -40...+80°C

A FKM (SHS FPM 70C3 GLT) and PEEK / -40...+130°C

B FKM (SHS FPM 70C3 GLT) and PEEK / -40...+200°C

Electronics

H Two wire 4...20mA/HART®

B Four-wire 4...20mA/HART®; 90...253V AC; 50/60Hz

I Four-wire 4...20mA/HART®; 9.6...48V DC; 20...42V AC

P Two-wire Profibus PA

F Two-wire Foundation Fieldbus

Supplementary electronics

X without

Housing / Protection

K Plastic single chamber / IP66/IP67

R Plastic double chamber / IP66/IP67

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

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

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

W Stainless steel double chamber / IP66/IP68 (0.2 bar)

Cable entry / Connection

M M20x1.5 / Cable gland PA black ø5-9mm (standard)

N ½NPT / Blind plug

Display/adjustment module PLICSCOM

X without

A Mounted

Additional equipment

X without

Certificates

X no

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

PS69.												

Antenna cover for VEGAPULS SR68/68

Antenna cover of plastic or flexible Gore® diaphragm

The antenna cover can be retrofitted and avoids dust layers in the antenna system.
The necessary mounting material is included in the scope of delivery.

Cover for antenna / Material / Temperature max.

- **D** Horn antenna (ø75mm) / PP / +80°C
- **F** Horn antenna (ø75mm) / PTFE / +130°C
- **L** Horn antenna (ø75mm) / PTFE textile for flange / +250°C
- **H** Horn antenna (ø75mm) / PTFE textile with silicone ring / +200°C
- **E** Horn antenna (ø95mm) / PP / +80°C
- **G** Horn antenna (ø95mm) / PTFE / +130°C
- **M** Horn antenna (ø95mm) / PTFE textile for flange / +250°C
- **I** Horn antenna (ø95mm) / PTFE textile with silicone ring / +200°C
- **K** Parabolic antenna (ø245mm) / PTFE textile / +200°C

PS68ANTAB.XX	

Rinsing connection VEGAPULS 61, 67, 69

Process fitting / Material

- **Y** Compression flange
- **A** Adapter flange

Seal / Process temperature

- **D** FKM (SHS FPM 70C3 GLT) and PP / -40...80°C

Reflux valve

- **K** without
- **V** with

Additional equipment

- **X** without

PS60SPAN.				

Variable seal for VEGAPULS 67/69

Variable seal for sensor inclination

For flange / Material

33602 DN80 PN10-40, 3" 150lb ASME, DN80 10K JIS / EPDM .....
33750 DN100 PN10-16, 4" 150lb ASME , DN100 10K JIS / EPDM .....
33751 DN150 PN10-16, 6" 150lb ASME, DN150 10K JIS / EPDM .....
35744 DN200 PN10-16, 8" 150lb ASME / EPDM .....

PS67VDI.	

Mounting bracket with 45° reflector

For mounting of radar sensors VEGAPULS 61 and VEGAPULS WL 61

Reflector for lateral deflection of the radar signals via a surface which is declined by 45° with integrated fastening and complete mounting set. Particularly suitable for mounting in overflow basins and closed channels. Through the deflection of the signals via the reflector, a very low height is reached ensuring an optimum use of the complete filling height.

MONTZUB.REF