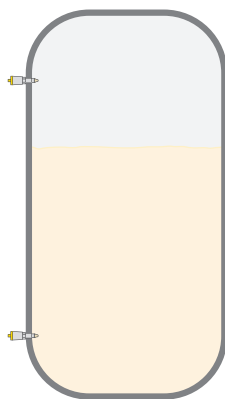




Point level | Capacitive



Area of application

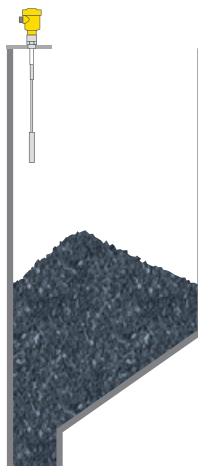
The point level sensors of the VEGAPOINT and VEGACAP series are used in homogeneous liquids and bulk solids in tanks and pipelines. They serve as overflow protection and dry run protection. They can also be used for foam detection and liquid media differentiation, e.g. oil-water detection.

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 switching signal. The capacitive measuring principle places no special requirements on installation and mounting.



Advantages




These low-cost point level sensors can be installed in tanks or pipes in any position. Thanks to shortenable cable and rod versions, VEGACAP sensors can be adapted to suit their application and are very easy to install. Their robust mechanical design is the basis for reliable, trouble-free and maintenance-free operation and a long service life. The excellent cleanability and hygienic design of VEGAPOINT sensors make them particularly suitable for use in the food and pharmaceutical industries.



	VEGAPOINT 11	VEGAPOINT 21/31
		
Application	Water-based liquids	VEGAPOINT 21: liquids VEGAPOINT 31: bulk solids
Version	Compact version	Compact version
Process fitting	Threads from G½, ½ NPT, universal connector for hygiene adapter	Threads from G½, ½ NPT, universal connector for hygiene adapter
Process temperature	-20 °C ... +100 °C/ 1 h @ +135 °C	-40 °C ... +115 °C/ 1 h @ +135 °C
Process pressure	-1 ... +25 bar (-100 ... +2500 kPa)	-1 ... +25 bar (-100 ... +2500 kPa)
Signal output	Three-wire: PNP/NPN, IO-Link	Three-wire: PNP/NPN, IO-Link
Approvals	EG 1935/2004, FDA, ADI	ATEX, IEC, EG 1935/2004, FDA, 3-A, EHEDG, ASME BPE, USP Class VI, ADI, China FDA, WHG, VLAREM, SVTI, Ship
Benefit	<ul style="list-style-type: none"> ▪ Low-cost level switch with extremely small installation dimensions ▪ Adjustment-free for easy setup ▪ Highly visible, adjustable full-colour multidirectional (360°) switching status display 	<ul style="list-style-type: none"> ▪ Low-cost level switch with extremely small installation dimensions ▪ Adjustment-free for easy setup ▪ Highly visible, adjustable full-colour multidirectional (360°) switching status display ▪ User-friendly, wireless setup and diagnosis via Bluetooth with smartphone

Point level | Capacitive

	VEGAPOINT 23	VEGAPOINT 24
		
Application	Liquids and bulk solids	Adhesive media or flush mounting
Version	Compact version with tube extension up to 1 m	Compact version
Process fitting	Thread from G½, ½ NPT, universal connector for hygiene adapter	Thread from G½, ½ NPT, universal connector for hygiene adapter
Process temperature	Tube extension ≤ 250 mm: -40 °C ... +115 °C/1 h @ +135 °C Tube extension > 250 mm: -40 °C ... +80 °C/1 h @ +135 °C	-40 °C ... +115 °C/1 h @ +135 °C
Process pressure	-1 ... +25 bar (-100 ... +2500 kPa)	-1 ... +25 bar (-100 ... +2500 kPa)
Signal output	Three-wire: PNP/NPN, IO-Link	Three-wire: PNP/NPN, IO-Link
Approvals	ATEX, IEC, EG 1935/2004, FDA, 3-A, EHEDG, ASME BPE, USP Class VI, ADI, China FDA, WHG, VLAREM, SVTI, Ship	ATEX, EG 1935/2004, FDA, 3-A, EHEDG, USP Class VI, ADI, China FDA, WHG, VLAREM, SVTI
Benefit	<ul style="list-style-type: none"> • Low-cost level switch with selectable switching point position/tube extension • Adjustment-free for easy setup • Highly visible, adjustable full-colour multidirectional (360°) switching status display • User-friendly, wireless setup and diagnosis via Bluetooth with smartphone 	<ul style="list-style-type: none"> • Inexpensive level switch, optimised for adhesive media • Absolutely front-flush measuring cell • Highly visible, adjustable full-colour multidirectional (360°) switching status display • User-friendly, wireless setup and diagnosis via Bluetooth with smartphone

	VEGACAP 62	VEGACAP 63	VEGACAP 64
			
Application	Liquids and bulk solids	Liquids and bulk solids, not abrasive	Adhesive liquids and light-weight bulk solids, not abrasive
Version	Partly insulated rod of steel, 316L, PTFE up to 6 m	Fully insulated rod of steel, 316L, PE, PTFE, Alloy up to 6 m	Fully insulated rod of steel, 316L, PTFE up to 4 m
Process fitting	Thread from G½, ½ NPT, flanges from DN 25, 1"	Thread from G½, ½ NPT, flanges from DN 25, 1"	Thread from G¾, ¼ NPT, flanges from DN 25, 1"
Process temperature	-50 ... +200 °C	-50 ... +200 °C	-50 ... +200 °C
Process pressure	-1 ... +64 bar (-100 ... +6400 kPa)	-1 ... +64 bar (-100 ... +6400 kPa)	-1 ... +64 bar (-100 ... +6400 kPa)
Signal output	Relay, transistor, two-wire output, contactless electronic switch	Relay, transistor, two-wire output, contactless electronic switch	Relay, transistor, two-wire output, contactless electronic switch
Approvals	ATEX, IEC, FM, CSA, EAC (GOST), UKR Sepro, Overfill protection, Ship, SIL2, NEPSI	ATEX, IEC, FM, CSA, EAC (GOST), UKR Sepro, Overfill protection, Ship, SIL2, NEPSI	ATEX, IEC, FM, CSA, EAC (GOST), UKR Sepro, Overfill protection, Ship, SIL2, NEPSI
Benefit	<ul style="list-style-type: none"> • Rugged, resistant designs • Cost savings thanks to simple installation and setup 		

Point level | Capacitive

	VEGACAP 65	VEGACAP 66	VEGACAP 67
			
Application	Liquids and bulk solids	Liquids and bulk solids, not abrasive	Bulk solids with high process temperatures
Version	Partly insulated steel cable, 316L, PTFE, PE up to 32 m	Fully insulated steel cable, 316L, PTFE up to 32 m	Partly insulated steel rod or cable, 316L, ceramic up to 6 m (rod) up to 40 m (cable)
Process fitting	Thread from G1, 1 NPT, flanges from DN 50, 2"	Thread from G1, 1 NPT, flanges from DN 50, 2"	Thread from G1½, 1½ NPT, flanges from DN 50, 2"
Process temperature	-50 ... +200 °C	-50 ... +150 °C	-50 ... +400 °C
Process pressure	-1 ... +64 bar (-100 ... +6400 kPa)	-1 ... +40 bar (-100 ... +4000 kPa)	-1 ... +16 bar (-100 ... +1600 kPa)
Signal output	Relay, transistor, two-wire output, contactless electronic switch	Relay, transistor, two-wire output, contactless electronic switch	Relay, transistor, two-wire output, contactless electronic switch
Approvals	ATEX, IEC, FM, CSA, EAC (GOST), UKR Sepro, Overfill protection, Ship, SIL2, NEPSI	ATEX, IEC, FM, CSA, EAC (GOST), UKR Sepro, Overfill protection, Ship, SIL2, NEPSI	–
Benefit	<ul style="list-style-type: none"> ▪ Rugged, resistant designs with capability to ignore buildup on sensor ▪ Cost savings thanks to simple installation and setup 		<ul style="list-style-type: none"> ▪ Universal use in bulk solids thanks to wide temperature range

	VEGACAP 69	VEGACAP 27	VEGACAP 35	VEGACAP 98
				
	Liquids, also in non-conductive vessels	Adhesive, conductive liquids	Bulk solids	Liquids, bulk solids
	Fully insulated double rod of PTFE, PP, FEP up to 4 m	Fully insulated rod of steel, 316Ti, PTFE, PFA up to 4 m	Insulated cable of steel, 316Ti, PE, PA12 up to 20 m	Fully insulated rod of PP up to 2 m
	Flanges from DN 50, 2"	Thread from G1, 1 NPT, Clamp 1½"	Thread from G1½, 1½ NPT	Thread from G1½, 1½ NPT
	-50 ... +100 °C	-50 ... +200 °C	-40 ... +80 °C	-40 ... +80 °C
	-1 ... +2 bar (-100 ... +200 kPa)	-1 ... +63 bar (-100 ... +6300 kPa)	-1 ... +16 bar (-100 ... +1600 kPa)	Unpressurized operation
	Relay, transistor, two-wire output, contactless electronic switch	Relay output	Relay output	Relay output
	ATEX, EAC (GOST), UKR Sepro	Overfill protection	Overfill protection	Overfill protection
	<ul style="list-style-type: none"> Simple, fast installation thanks to compact, double rod design 	<ul style="list-style-type: none"> Minimal time and cost expenditure thanks to simple setup without medium Exact switching point even with heavy buildup 		