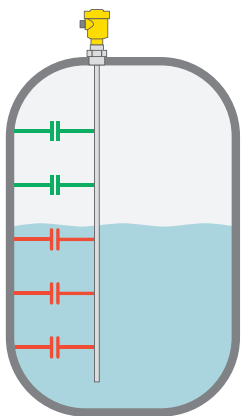


Level I Capacitive



Capacitive level measurement

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

Thanks to versions with shortenable cables and rods, the capacitive level sensors cover a wide variety of applications.

The advantages

- ✓ Capacitive level measurement enables measurement without blind spots over the entire sensor length
- ✓ Fully insulated capacitive sensors also measure aggressive liquids
- ✓ Cost-effective measurement for trouble-free and maintenance-free operation

PRO

VEGACAL 62



PRO

VEGACAL 63



PRO

VEGACAL 64



Application	Bulk solids, non-conductive liquids	Liquids	Adhesive liquids
Measuring range	up to 6 m	up to 6 m	up to 4 m
Version	Partly insulated rod of steel, 316L, Alloy, PTFE, PEEK	Fully insulated rod of steel, 316L, Alloy, PTFE, PE	Fully insulated rod of steel, 316L, Alloy, 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/DTM, VEGADIS 81, VEGADIS 82, VEGA Tools app	PLICSCOM, PACTware/DTM, VEGADIS 81, VEGADIS 82, VEGA Tools app	PLICSCOM, PACTware/DTM, VEGADIS 81, VEGADIS 82, VEGA Tools app
Approvals	ATEX, UKEX, IECEx, FM, CSA, EAC (GOST), UKR Sepro, Overfill protection, Ship, SIL2, NEPSI, KOSHA	ATEX, UKEX, IECEx, FM, CSA, EAC (GOST), UKR Sepro, Overfill protection, Ship, SIL2, NEPSI, KOSHA	ATEX, UKEX, IECEx, FM, CSA, EAC (GOST), UKR Sepro, Overfill protection, Ship, SIL2, NEPSI, KOSHA
Benefit	✓ Maximum container utilization, because entire probe length is used for measuring		

Level I Capacitive

PRO

VEGACAL 65



PRO

VEGACAL 66



Application	Bulk solids, non-conductive liquids	Liquids and bulk solids, not abrasive
Measuring range	up to 32 m	up to 32 m
Version	Partly insulated cable of steel, 316L, Alloy, PTFE, PEEK, PA	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/DTM, VEGADIS 81, VEGADIS 82, VEGA Tools app	PLICSCOM, PACTware/DTM, VEGADIS 81, VEGADIS 82, VEGA Tools app
Approvals	ATEX, UKEX, IECEx, FM, CSA, EAC (GOST), UKR Sepro, Overfill protection, Ship, SIL2, NEPSI, KOSHA	ATEX, UKEX, IECEx, FM, CSA, EAC (GOST), UKR Sepro, Overfill protection, Ship, SIL2, NEPSI, KOSHA
Benefit	✓ Maximum container utilization, because entire probe length is used for measuring	✓ Cost savings thanks to simple installation and setup

PRO

VEGACAL 67



Bulk solids with high process temperatures

Rod up to 6 m; cable up to 40 m

Rod or cable of steel,
316L, ceramic

Thread from G1½, 1½ NPT,
flanges from DN 50, 2"

-50 ... +400 °C

-1 ... +16 bar
(-100 ... +1600 kPa)

4 ... 20 mA/HART, Profibus PA,
Foundation Fieldbus

PLICSCOM, PACTware/DTM,
VEGADIS 81, VEGADIS 82,
VEGA Tools app

-

✓ Exact measuring results in almost all bulk solids and high temperature ranges

PRO

VEGACAL 69



Liquids in non-conductive vessels

up to 4 m

Fully insulated double rod made
of PTFE, PP, FEP

Flanges from DN 50, 2"

-50 ... +100 °C

-1 ... +2 bar
(-100 ... +200 kPa)

4 ... 20 mA/HART, Profibus PA,
Foundation Fieldbus

PLICSCOM, PACTware/DTM,
VEGADIS 81, VEGADIS 82,
VEGA Tools app

ATEX, UKEX, IECEx, EAC (GOST), UKR Sepro

✓ Simple, fast installation thanks to compact, double rod design