Capacitive

Overview 98
VEGACAP series 60 100
VEGACAP
Level detection in bulk solids and liquids

Measuring principle
Sensor and vessel form the two electrodes of a capacitor. A capacitance change caused by a level change is processed by the integrated electronics and converted into a switching signal. The capacitive measuring principle makes no special demands to installation and mounting. Due to the availability of robust cable and rod versions, suitable instruments are available for all applications. The shortenable, partly insulated cable and rod versions offer also the advantage of an individual adaptation to all local conditions.

Applications in liquids
Mainly fully insulated instrument versions are used in these applications. Hence level detection of corrosive liquids or adhesive products are no problem. The mounting of the instruments is easy and the rugged construction is the basis for an interference and maintenance-free operation. The VEGACAP is used as overfill protection, dry run protection, oil/water detection and for foam detection in vessels and pipelines, also in safety-relevant applications up to SIL2.

Applications in bulk solids
Partly insulated versions are preferably used in bulk solids. Also here, we have the proven, rugged configuration as basis for the manifold and reliable use, e.g. in the aggregates and mining industry. The VEGACAP is used as overfill protection and empty alarm in silos and bunkers, also in safety-relevant applications up to SIL2.
## Overview

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<td>Conductive liquids</td>
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<td>Thread from G¾, ¾ NPT Flanges from DN 25, 1&quot;</td>
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<tr>
<td><strong>Process temperature</strong></td>
<td>-50 ... +200 °C</td>
<td>-50 ... +200 °C</td>
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<tr>
<td><strong>Process pressure</strong></td>
<td>-1 ... +64 bar (-100 ... +6400 kPa)</td>
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<table>
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<td>Bulk solids, non-conductive liquids</td>
<td>Conductive liquids, bulk solids</td>
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<tr>
<td><strong>Version</strong></td>
<td>Partly insulated cable</td>
<td>Fully insulated cable</td>
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<tr>
<td><strong>Measuring range</strong></td>
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<tr>
<td><strong>Process fitting</strong></td>
<td>Thread from G1, 1 NPT Flanges from DN 50, 2&quot;</td>
<td>Thread from G1, 1 NPT Flanges from DN 50, 2&quot;</td>
</tr>
<tr>
<td><strong>Process temperature</strong></td>
<td>-50 ... +200 °C</td>
<td>-50 ... +150 °C</td>
</tr>
<tr>
<td><strong>Process pressure</strong></td>
<td>-1 ... +64 bar (-100 ... +6400 kPa)</td>
<td>-1 ... +40 bar (-100 ... +4000 kPa)</td>
</tr>
</tbody>
</table>
VEGACAP 62

Capacitive rod electrode for level detection

Application area
The VEGACAP 62 is a level sensor for level detection in all areas of industry. The partly insulated probe is ideal for measurement of bulk solids and can be used in non-conductive liquids such as for example oil. The proven mechanical construction ensures a high functional safety.

Advantages
- Long lifetime and reduced maintenance 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 G¾, ¾ NPT
flanges from DN 50, 2"
Materials: steel, 316L, PTFE
Process temperature: -50 … +200 °C
Process pressure: -1 ... +64 bar (-100 ... +6400 kPa)

1 Threaded version
2 Flange version
3 Threaded version with temperature adapter +200 °C
Approval
UX FM(NI)CL I,II,III,DIV1,GP ABCD (DIP)CL II,III,DIV1,GP EFG
UF FM(S)CL I,II,III, DIV 1,GP ABCDEF
KX CSA (NI) CL I D1 2 GP ABCD CL II, III DIV 1 GP EFG
KF ~CSA(IS)CL I,II,III,...............................

Version / Process temperature
A Standard / -50 .. 150°C .............................................
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
NH Thread ½NPT (ASME B1.20.1) PN64 / 316L ..............
NA Thread ¾NPT (ASME B1.20.1) PN64 / 316L ..............
NC Thread 1NPT (ASME B1.20.1) PN64/316L .............
ND Thread 1½NPT (ASME B1.20.1) PN64/316L ..........
AA Flange 1*150lb RF, ANSI B16.5/316L .................
BA Flange 1*300lb RF, ANSI B16.5/316L .................
DA Flange 1½*150lb RF, ANSI B16.5/316L ..............
EA Flange 1½*300lb RF, ANSI B16.5/316L ..............
EC Flange 1½*300lb ST, ANSI B16.5/316L ..............
FE Flange 1½*600lb RF, ANSI B16.5/316L ..............
HA Flange 2*150lb RF, ANSI B16.5/316L ...............
IA Flange 2*300lb RF, ANSI B16.5/316L ...............
KA Flange 2*600lb RF, ANSI B16.5/316L ...............
OA Flange 3*150lb RF, ANSI B16.5/316L ...............
PA Flange 3*300lb RF, ANSI B16.5/316L ...............2A Flange 3*600lb RF, ANSI B16.5/316L ...............
SA Flange 4*150lb RF, ANSI B16.5/316L ...............
UA Flange 4*300lb RF, ANSI B16.5/316L ...............3A Flange 5*150lb RF, ANSI B16.5/316L ...............
WA Flange 6*150lb RF, ANSI B16.5/316L ...............VA Flange 6*300lb RF, ANSI B16.5/316L ...............

Electronics
C Contactless electronic switch 20...253VAC/DC .........
R Relay (DPDT) 20...72VDC/20...250VAC (3A) .........
T Transistor (NPN/PNP) 10...55VDC .....................
Z Two-wire for connection to VEGATOR .................

Housing / Protection
K Plastic / IP66/IP67 ..............................................
A Aluminium / IP66/IP68 (0.2bar) .........................
V SSt (precision casting) 316L / IP66/IP68 (0.2bar) ....
B SSt (electropolished) 316L / IP66/IP68 (0.2bar) ....

Cable entry / Cable gland / Plug connection
N ½NPT / without / without ................................
X Without ......................................................

Additional equipment

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
VEGACAP 63

Capacitive rod electrode for level detection

Application area
The VEGACAP 63 is a level sensor for universal use in conductive liquids. The rod probe is fully insulated and the proven construction ensures high functional safety.

Advantages
- Long lifetime and reduced 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 G¾, ¾ NPT
flanges from DN 50, 2"
Materials: 316L, PE, PTFE
Process temperature: -50 ... +200 °C
Process pressure: -1 ... +64 bar (-100 ... +6400 kPa)

1 Threaded version
2 Flange version
3 Threaded version with temperature adapter +200 °C
## Capacitive – VEGACAP 63

**Approval**
- **XX** without ...........................
- **UX** FM(N)ICL I, DIV2, GP ABCD (DIP) CL II, III, DIV1, GP EFG ...........................
- **UF** FM(IS)ICL I, II, III, DIV 1, GP ABCDEF ...........................
- **KX** CSA (NI) CL I DIV 2 GP ABCD CL II, III DIV 1 GP EFG ...........................
- **KF** CSA(IS)CL I, II, III, DIV 1, GP ABCDEFG ...........................

### Version / Process temperature
- **E** PE insulation / -40...80°C ...........................
- **F** PTFE insulation / -50...150°C ...........................
- **G** PTFE insulation / -50...200°C ...........................

### Process fitting / Material
- **NH** Thread ½NPT (ASME B1.20.1) PN64 / 316L ...........................
- **NA** Thread ½NPT (ASME B1.20.1) PN64 / 316L ...........................
- **NC** Thread 1NPT (ASME B1.20.1) PN64 / 316L ...........................
- **ND** Thread 1½NPT (ASME B1.20.1) PN64 / 316L ...........................
- **NS** Thread 1½NPT (ASME B1.20.1) PN64 / Steel ...........................
- **AA** Flange 1*150lb RF, ANSI B16.5/316L ...........................
- **AD** Flange 1*150lb RF, ANSI B16.5/316L ...........................
- **BA** Flange 1*300lb RF, ANSI B16.5/316L ...........................
- **DA** Flange 1½*150lb RF, ANSI B16.5/316L ...........................
- **DD** Flange 1½*150lb, ANSI B16.5/316L PTFE-plated ...........................
- **EA** Flange 1½*300lb RF, ANSI B16.5/316L ...........................
- **EE** Flange 1½*300lb FF, ANSI B16.5/316L ...........................
- **EC** Flange 1½*300lb ST, ANSI B16.5/316L ...........................
- **FE** Flange 1½*600lb RF, ANSI B16.5/316L ...........................
- **HA** Flange 2*150lb RF, ANSI B16.5/316L ...........................
- **HD** Flange 2*150lb ANSI B16.5/316L PTFE-plated ...........................
- **IA** Flange 2*300lb RF, ANSI B16.5/316L ...........................
- **KA** Flange 2*600lb RF, ANSI B16.5/316L ...........................
- **KD** Flange 2*600lb, ANSI B16.5/316L PTFE-plated ...........................
- **OA** Flange 3*150lb RF, ANSI B16.5/316L ...........................
- **OD** Flange 3*150lb ANSI B16.5/316L PTFE-plated ...........................
- **PA** Flange 3*300lb RF, ANSI B16.5/316L ...........................
- **2A** Flange 3*600lb RF, ANSI B16.5/316L ...........................
- **SA** Flange 4*150lb RF, ANSI B16.5/316L ...........................
- **SD** Flange 4*150lb ANSI B16.5/316L PTFE-plated ...........................
- **UA** Flange 4*300lb RF, ANSI B16.5/316L ...........................
- **UD** Flange 4*300lb, ANSI B16.5/316L PTFE-plated ...........................
- **3A** Flange 5*150lb RF, ANSI B16.5/316L ...........................
- **WA** Flange 6*150lb RF, ANSI B16.5/316L ...........................
- **VA** Flange 6*300lb RF, ANSI B16.5/316L ...........................

### Electronics
- **C** Contactless electronic switch 20...253VAC/DC ...........................
- **R** Relay (DPDT) 20...72VDC/20...250VAC (3A) ...........................
- **T** Transistor (NPN/PNP) 10...55VDC ...........................
- **Z** Two-wire for connection to VEGATOR ...........................

### Housing / Protection
- **K** Plastic / IP66/IP67 ...........................
- **A** Aluminium / IP66/IP68 (0.2bar) ...........................
- **V** StSt (precision casting) 316L / IP66/IP68 (0.2bar) ...........................
- **B** StSt (electropolished) 316L / IP66/IP68 (0.2bar) ...........................

### Cable entry / Cable gland / Plug connection
- **N** ½NPT / without / without ...........................

### Additional equipment
- **X** Without ...........................

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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
VEGACAP 64

Capacitive rod electrode for level detection

Application area
The VEGACAP 64 is a level sensor for conductive liquids. The rod probe is fully insulated and is particularly suitable for viscous and adhesive products.

Advantages
- 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 construction

Technical data
Version: fully insulated rod
Measuring range: up to 4 m
Process fitting: thread from G¾, ¾ NPT
flanges from DN 50, 2"
Materials: 316L, PTFE
Process temperature: -50 … +200 °C
Process pressure: -1 … +64 bar (-100 … +6400 kPa)

1 Threaded version
2 Flange version
3 Threaded version with temperature adapter +200 °C
LA active length (50 … 200 mm)
### Approval
- **XX** without
- **UX** FM(NI)CL I,DIV2,GP ABCD (DIP)CL II,III,DIV1,GP EFG
- **UF** FM(IS)CL I,II,III, DIV 1,GP ABCDEF
- **KX** CSA (NI) CL I DIV 2 GP ABCD CL II, III DIV 1 GP EFG
- **KF** CSA(IS)CL I,II,III, DIV1, GP ABCDEFG

### Version / Process temperature
- **F** PTFE insulation / -50...150°C
- **G** PTFE insulation / -50...200°C

### Process fitting / Material
- **NA** Thread ½NPT (ASME B1.20.1) PN64 / 316L
- **NC** Thread 1NPT (ASME B1.20.1) PN64 / 316L
- **ND** Thread 1½NPT (ASME B1.20.1) PN64 / 316L
- **NS** Thread 1¾NPT (ASME B1.20.1) PN64 / Steel
- **AA** Flange 1”150lb RF,ANSI B16.5/316L
- **AD** Flange 1”150lb ANSI/316L PTFE-plated
- **BA** Flange 1”300lb RF,ANSI B16.5/316L
- **BD** Flange 1”300lb ,ANSI B16.5/316L PTFE-plated
- **DA** Flange 1½”150lb RF,ANSI B16.5/316L
- **DD** Flange 1½”150lb ,ANSI B16.5/316L PTFE-plated
- **EA** Flange 1½”300lb RF,ANSI B16.5/316L
- **EE** Flange 1½”300lb FF,ANSI B16.5/316L PTFE-plated
- **EC** Flange 1½”300lb ST,ANSI B16.5/316L
- **FE** Flange 1½”600lb RF,ANSI B16.5/316L
- **HA** Flange 2”150lb RF,ANSI B16.5/316L
- **HD** Flange 2”150lb ANSI B16.5/316L PTFE-plated
- **IA** Flange 2”300lb RF,ANSI B16.5/316L
- **ID** Flange 2”300lb,ANSI B16.5/316L PTFE-plated
- **KA** Flange 2½”600lb RF,ANSI B16.5/316L
- **KD** Flange 2½”600lb,ANSI B16.5/316L PTFE-plated
- **OA** Flange 3”150lb RF,ANSI B16.5/316L
- **OD** Flange 3”150lb ANSI/316L PTFE-plated
- **PA** Flange 3”300lb RF,ANSI B16.5/316L
- **2A** Flange 3”600lb RF,ANSI B16.5/316L
- **SA** Flange 4”150lb RF,ANSI B16.5/316L
- **SD** Flange 4”150lb ANSI B16.5/316L PTFE-plated
- **UA** Flange 4”300lb RF,ANSI B16.5/316L
- **UD** Flange 4”300lb ANSI B16.5/316L PTFE-plated
- **3A** Flange 5”150lb RF,ANSI B16.5/316L
- **WA** Flange 6”150lb RF,ANSI B16.5/316L
- **VA** Flange 6”300lb RF,ANSI B16.5/316L

### Electronics
- **C** Contactless electronic switch 20...253VAC/DC
- **R** Relay (DPDT) 20...72VDC/20...250VAC (3A)
- **T** Transistor (NPN/PNP) 10...55VDC
- **Z** Two-wire for connection to VEGATOR

### Housing / Protection
- **K** Plastic / IP66/IP67
  - **A** Aluminium / IP66/IP68 (0.2 bar)
  - **V** STSt (precision casting) 316L / IP66/IP68 (0.2bar)
  - **B** STSt (electropolished) 316L / IP66/IP68 (0.2bar)
- **N** ¾NPT / without / without
- **X** Without

### Cable entry / Cable gland / Plug connection
- **N** ½NPT / without / without

### Additional equipment
- **X** Without

### Length (from seal surface)
316L/PTFE fully insulated (150-6000 mm) per 100 mm
VEGACAP 65

Capacitive cable electrode for level detection

Application area
The VEGACAP 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 high functional safety.

Advantages
- Long lifetime and reduced maintenance 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, PE
Process temperature: -50 ... +200 °C
Process pressure: -1 ... +64 bar (-100 ... +6400 kPa)

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

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<tr>
<td>UX</td>
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<td>UF</td>
<td>FM(S)CL I, II, III, DIV 1, GP ABCDEF ..........................</td>
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<tr>
<td>KX</td>
<td>CSA (N) CL I DIV 2 GP ABCD CL II, III DIV 1 GP EFG ........</td>
</tr>
<tr>
<td>KF</td>
<td>~~CSA(IS) CL I, II, III, .................................................</td>
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### Version / Process temperature

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<tr>
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<tbody>
<tr>
<td>K</td>
<td>Cable ø 6mm / 316 with gravity weight / -50...150°C ..........</td>
</tr>
<tr>
<td>S</td>
<td>Cable ø 8mm / Steel with gravity weight / -50...150°C ..........</td>
</tr>
<tr>
<td>U</td>
<td>Cable ø6mm with screening tube a. gr.weight/-50...150°C ..........</td>
</tr>
<tr>
<td>L</td>
<td>Cable ø 6mm / 316 with gravity weight / -50...200°C ..........</td>
</tr>
<tr>
<td>V</td>
<td>Cable ø6mm w. screening tube a.grav. weight/-50...200°C ..........</td>
</tr>
</tbody>
</table>

### Process fitting / Material

<table>
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<tr>
<th>Process Fitting / Material</th>
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<tbody>
<tr>
<td>NC</td>
<td>Thread 1NPT (ASME B1.20.1) PN64 / 316L .........................</td>
</tr>
<tr>
<td>ND</td>
<td>Thread 1½NPT (ASME B1.20.1) PN64 / 316L .........................</td>
</tr>
<tr>
<td>NS</td>
<td>Thread 1½NPT (ASME B1.20.1) PN64 / Steel .....................</td>
</tr>
<tr>
<td>HA</td>
<td>Flange 2*150lb RF, ANSI B16.5/316L .................................</td>
</tr>
<tr>
<td>IA</td>
<td>Flange 2*300lb RF, ANSI B16.5/316L .................................</td>
</tr>
<tr>
<td>KA</td>
<td>Flange 2*600lb RF, ANSI B16.5/316L .................................</td>
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<td>PA</td>
<td>Flange 3*300lb RF, ANSI B16.5/316L .................................</td>
</tr>
<tr>
<td>2A</td>
<td>Flange 3*600lb RF, ANSI B16.5/316L .................................</td>
</tr>
<tr>
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<td>T</td>
<td>Transistor (NPN/PNP) 10...55VDC .................................</td>
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<td>Z</td>
<td>Two-wire for connection to VEGATOR .............................</td>
</tr>
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### Housing / Protection

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<th>Housing / Protection</th>
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<tbody>
<tr>
<td>K</td>
<td>Plastic / IP66/IP67 ..................................................</td>
</tr>
<tr>
<td>A</td>
<td>Aluminium / IP66/IP68 (0.2 bar) ..................................</td>
</tr>
<tr>
<td>V</td>
<td>SS (precision casting) 316L / IP66/IP68 (0.2bar) ............</td>
</tr>
<tr>
<td>8</td>
<td>SS (electropolished) 316L / IP66/IP68 (0.2bar) ...............</td>
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### Cable entry / Cable gland / Plug connection

<table>
<thead>
<tr>
<th>Cable Entry / Cable gland / Plug connection</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>N</td>
<td>½NPT / without / without ........................................</td>
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### Additional equipment

<table>
<thead>
<tr>
<th>X</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Without .................................................................</td>
</tr>
</tbody>
</table>

### Length (from seal surface)

- 316 (400-32000 mm) per 100 mm
- Steel/PA fully insulated (400-32000 mm) per 100 mm

### Length screening tube

- 316L per 100 mm

### Insulation length

- PTFE (50-1000 mm) per 100 mm
VEGACAP 66

Capacitive cable electrode for level detection

Application area

The VEGACAP 66 is a level sensor for use in all industries. The fully insulated probe measures liquids as well as bulk solids. The proven construction ensures high functional safety.

Advantages

- Long lifetime and reduced maintenance through robust mechanical construction
- Savings through simple mounting and setup
- Maximum utilization 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: 316L, PTFE
Process temperature: -50 … +150 °C
Process pressure: -1 … +40 bar (-100 … +4000 kPa)
### Approval

| XX | without ................................................................. |
| UX | FM(NI)CL I, DIV2, GP ABCD (DIP) CL II, III, DIV1, GP EFG |
| UF | FM(IS)CL I, II, III, DIV 1, GP ABCDEF ........................... |
| KX | CSA (NI) CL I DIV 2 GP ABCD CL II, III DIV 1 GP EFG .......... |
| KF | CSA(IS)CL I, II, III, DIV1, GP ABCDEFG ............................ |

### Version / Process temperature

| N   | PTFE insulated cable ø8mm w. gravity weight/-50...150°C |

### Process fitting / Material

| NC  | Thread 1NPT (ASME B1.20.1) PN64 / 316L ............................. |
| ND  | Thread 1½NPT (ASME B1.20.1) PN40/316L ............................. |
| HA  | Flange 2*150lb RF, ANSI B16.5/316L ...................................... |
| IA  | Flange 2*300lb RF, ANSI B16.5/316L ...................................... |
| KA  | Flange 2*600lb RF, ANSI B16.5/316L ...................................... |
| OA  | Flange 3*150lb RF, ANSI B16.5/316L ...................................... |
| PA  | Flange 3*300lb RF, ANSI B16.5/316L ...................................... |
| 2A  | Flange 3*600lb RF, ANSI B16.5/316L ...................................... |
| SA  | Flange 4*150lb RF, ANSI B16.5/316L ...................................... |
| UA  | Flange 4*300lb RF, ANSI B16.5/316L ...................................... |
| 3A  | Flange 5*150lb RF, ANSI B16.5/316L ...................................... |
| WA  | Flange 6*150lb RF, ANSI B16.5/316L ...................................... |
| VA  | Flange 6*300lb RF, ANSI B16.5/316L ...................................... |

### Electronics

| C   | Contactless electronic switch 20...253VAC/DC ....................... |
| R   | Relay (DPDT) 20...72VDC/20...250VAC (3A) ........................... |
| T   | Transistor (NPN/PNP) 10...55VDC ........................................ |
| Z   | Two-wire for connection to VEGATOR ..................................... |

### Housing / Protection

| K   | Plastic / IP66/IP67 .......................................................... |
| A   | Aluminium / IP66/IP68 (0.2 bar) ......................................... |
| V   | StSt (precision casting) 316L / IP66/IP68 (0.2bar) ................. |
| 8   | StSt (electropolished) 316L / IP66/IP68 (0.2bar) .................... |

### Cable entry / Cable gland / Plug connection

| N   | ½NPT / without / without .................................................. |

### Additional equipment

| X   | Without ............................................................................. |

### Length (from seal surface)

316/PTFE insulated (400-32000 mm) per 100 mm
VEGACAP 67

Capacitive high temperature electrode for level detection

**Application area**
The VEGACAP 67 level sensor can be used universally for bulk solids. The probe is designed for high temperature applications.

**Advantages**
- Universal use in bulk solids through wide temperature range
- Long lifetime and reduced maintenance through robust mechanical construction
- High flexibility through shortenable probe

**Technical data**
- Version: rod or cable
- Measuring range: up to 6 m or 32 m
- Process fitting: thread from G1½, 1½ NPT, flanges from DN 50, 2"
- Materials: steel, 316L, PTFE, ceramic
- Process temperature: -50 … +400 °C
- Process pressure: -1 … +16 bar (-100 … +1600 kPa)

![Diagram of VEGACAP 67 sensor models](image)

1 Cable version +300 °C
2 Rod version +300 °C
3 Rod version +400 °C
**Approval**

<table>
<thead>
<tr>
<th>Cap</th>
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**Version / Process temperature**

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<th>Process temperature</th>
<th>Details</th>
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<tbody>
<tr>
<td>1</td>
<td>Ceramic-insulated rod probe / -50...300°C</td>
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<tr>
<td>3</td>
<td>Ceramic-insulated rod probe / -50...400°C</td>
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<tr>
<td>2</td>
<td>Ceramic-insulated cable probe / -50...300°C</td>
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<tr>
<td>4</td>
<td>Ceramic-insulated cable probe / -50...400°C</td>
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**Process fitting / Material**

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**Cable entry / Cable gland / Plug connection**

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<tbody>
<tr>
<td>N</td>
<td>½NPT / without / without</td>
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**Length (from seal surface)**

<table>
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<tbody>
<tr>
<td>Rod 316L (275-6000 mm) per 100 mm</td>
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</tr>
<tr>
<td>Cable 316L (500-40000 mm) per 100 mm</td>
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