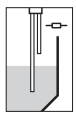


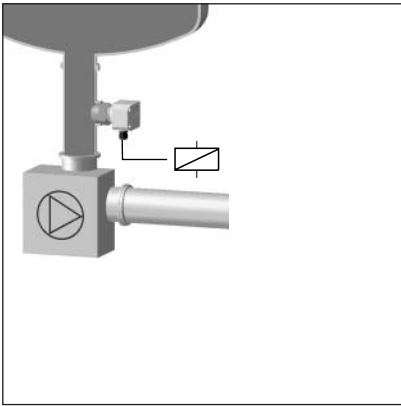
Switching - Conductive

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VEGAKON 61, 66	116
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VEGATOR level switches	123
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Application examples: Conductive level detection

Level detection with compact instrument

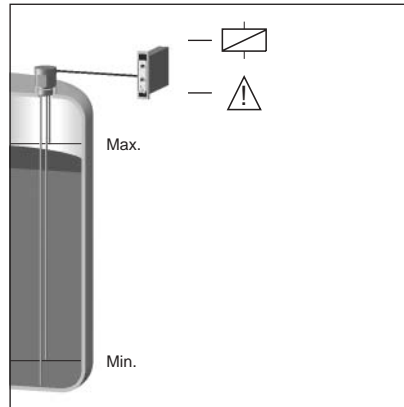


Measuring system with VEGAKON compact level switch

A measuring system consists of:

- a VEGAKON compact level switch with integrated oscillator

Level detection with separate processing



Measuring system with multiple rod electrode and signal conditioning instrument

A measuring system consists of:

- a single or multiple rod electrode or a single or multiple cable electrode
- one or several VEGATOR level switches



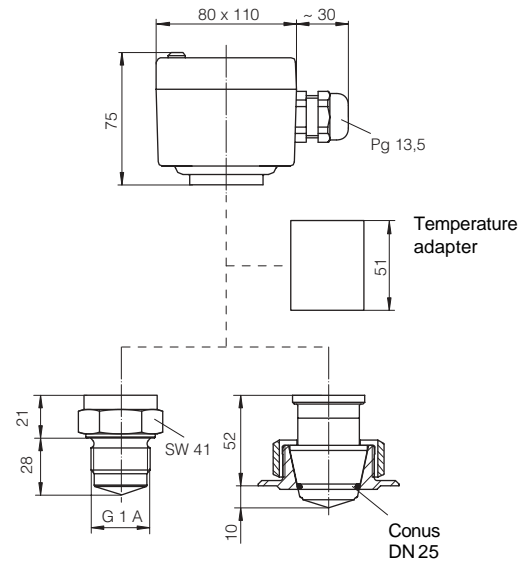
VEGAKON 61

Compact, conductive level switch for flush mounting

For use as overflow or dry run protection system in conductive liquids preferably in pipelines

- automatic adjustment to the product
- product-independent switching point
- insensitive to buildup
- wear and maintenance-free

Conductivity : from 7.5 $\mu\text{S}/\text{cm}$
Annular electrode : of 316Ti with PTFE insulation



Approval

- .X** without
.M Ship approval

Process connection

- G1** Thread G1A PN25
K1 Cone DN25PN25

Electronics

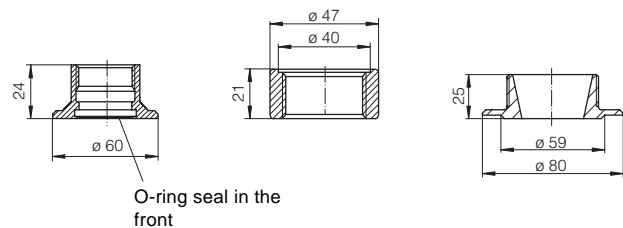
- R** Relay output 20...72VDC/20...250VAC(3A)
T Floating transistor (NPN/PNP) 10...55VDC

Process temperature

- X** -40...100°C
Z -40...150°C (with temperature adapter)

KON61

Welded socket VEGAKON



for VEGAKON

- .G1AS** 61/63 with thread G1A
61.G1AL 61 w.thread G1A hygienic version
.KDN25 61/63 with cone DN25

GSTKON

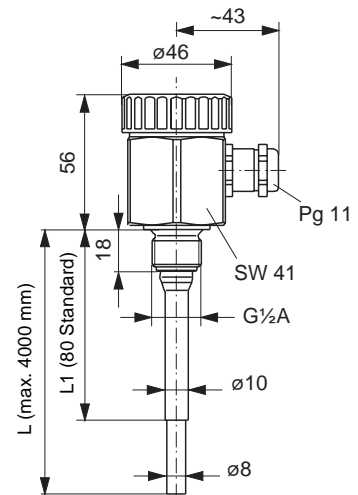
EL 1

Conductive, PTFE partly insulated rod electrode

For use as overfill or dry run protection system in conductive liquids

- easy setup
- rugged and maintenance-free
- electrode can be shortened

Process fitting	: G ½ A of 316Ti
Housing	: of 316Ti with cover of PBT; (IP66/IP67)
Process pressure	: -1...63 bar (-100...6300 kPa)
Process temperature	: -50...130°C
Evaluation	: via VEGATOR signal conditioning instrument



Approval

- X** without
- EX.X** ATEX II 1G, 1/2G, 2G EEx ia IIC T6
- EX.M** ATEX II 1G, 1/2G, 2G EEx ia IIC T6 + Ship approval
- EX.A** ATEX II 1G, 1/2G, 2G EEx ia IIC T6 + WHG

.M Ship approval

Number of rods

1 with 1 rod electrode

Material rod

VT 316Ti

HT Hastelloy C4

Line break monitoring

X without ¹⁾

L with line break monitoring ²⁾

EL1					
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¹⁾ Only in conjunction with VEGATOR 256C signal conditioning instrument

²⁾ Not in conjunction with VEGATOR 256C signal conditioning instrument

Rod length in mm

per 250 mm of 316Ti

per 250 mm of Hastelloy C4

Electrode length L: mm (min. 40 mm, max. 4000 mm)

Other insulation length L1: mm (min. 40 mm, max. 4000 mm)

Insulation deviating from standard length per 250 mm of PTFE (standard 80 mm)

Accessory Welded socket G½ of 1.4571:

Article no. 2.7783

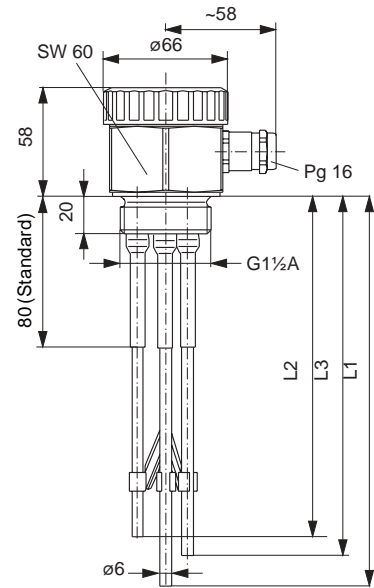
EL 3

Conductive, PTFE partly insulated multiple rod electrode

For use as overflow, dry run or pump control system

- easy setup
- electrodes can be shortened

Process fitting	: G 1½ A of 316Ti
Housing	: of 316Ti with cover of PBT; (IP66/IP67)
Process pressure	: -1...63 bar (-100...6300 kPa)
Process temperature	: -50...130°C
Evaluation	: via VEGATOR signal conditioning instrument



Approval

- .X without
- EX.X ATEX II 1G, 1/2G, 2G EEx ia IIC T6
- EX.A ATEX II 1G, 1/2G, 2G EEx ia IIC T6 + WHG

.M Ship approval

Number of rods

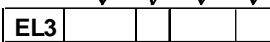
- 1 with 1 rod electrode
- 2 with 2 rod electrodes
- 3 with 3 rod electrodes
- 4 with 4 rod electrodes
- 5 with 5 rod electrodes

Material rod

- VTV 316Ti
- HTV Hastelloy C4

Line break monitoring

- X without¹⁾
- L with line break monitoring²⁾



¹⁾ Only in conjunction with VEGATOR 256C signal conditioning instrument
²⁾ Not in conjunction with VEGATOR 256C signal conditioning instrument

- L1 in mm(longest)**
 per 500 mm of 316Ti
 per 500 mm of Hastelloy C4
- L2 in mm(shortest)**
 per 500 mm of 316Ti
 per 500 mm of Hastelloy C4
- L3 in mm**
 per 500 mm of 316Ti
 per 500 mm of Hastelloy C4
- L4 in mm**
 per 500 mm of 316Ti
 per 500 mm of Hastelloy C4
- L5 in mm**
 per 500 mm of 316Ti
 per 500 mm of Hastelloy C4

- Welded socket see chapter “Accessory“

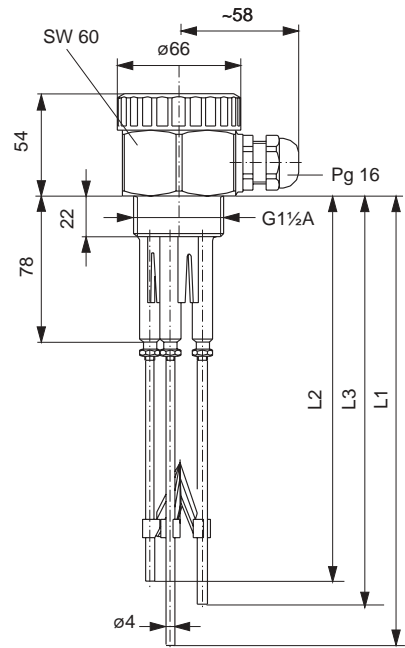
EL 4

Conductive, PP partly insulated multiple rod electrode

For use as overflow, dry run or pump control system

- easy setup
- electrodes can be shortened

Process fitting	: G 1½ A of PP
Housing	: of PP; IP66/IP67
Process pressure	: -1...6 bar (-100...600 kPa)
Process temperature	: -20...100°C
Evaluation	: via VEGATOR signal conditioning instrument



Approval

.X without

.M Ship approval

Number of rods

1 with 1 rod electrode

2 with 2 rod electrodes

3 with 3 rod electrodes

4 with 4 rod electrodes

5 with 5 rod electrodes

Material rod

VTK 316Ti

HTK Hastelloy C4

Line break monitoring

X without¹⁾

L with line break monitoring²⁾

EL4					
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¹⁾ Only in conjunction with VEGATOR 256C signal conditioning instrument

²⁾ Not in conjunction with VEGATOR 256C signal conditioning instrument

L1 in mm (longest)

per 500 mm of 316Ti

per 500 mm of Hastelloy C4

L2 in mm (shortest)

per 500 mm of 316Ti

per 500 mm of Hastelloy C4

L3 in mm

per 500 mm of 316Ti

per 500 mm of Hastelloy C4

L4 in mm

per 500 mm of 316Ti

per 500 mm of Hastelloy C4

L5 in mm

per 500 mm of 316Ti

per 500 mm of Hastelloy C4

- Welded socket see chapter "Accessory"

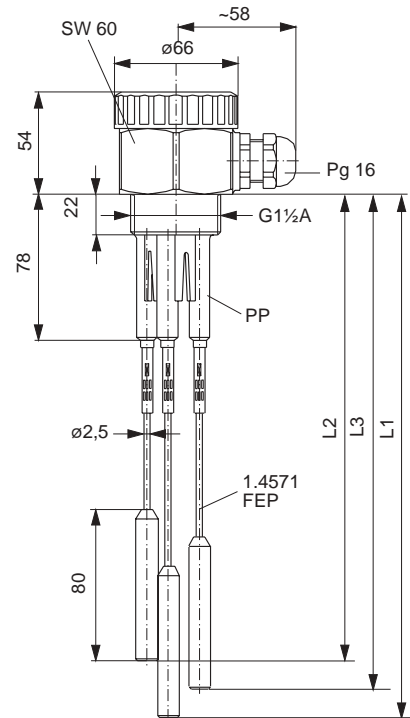
EL 6

Conductive, PP/FEP partly insulated multiple cable electrode

For use as overflow, dry run or pump control system

- easy setup
- electrodes can be shortened

Process fitting	: G 1½ A of PP
Housing	: of PP; IP66/IP67
Process pressure	: -1...6 bar (-100...6300 kPa)
Process temperature	: -20...100°C
Evaluation	: via VEGATOR signal conditioning instrument



Approval

- .X** without
- .M** Ship approval

Number of cables

- 1** with 1 cable electrode
- 2** with 2 cable electrodes
- 3** with 3 cable electrodes
- 4** with 4 cable electrodes
- 5** with 5 cable electrodes

Material cables and gravity weight

VAK 316Ti

Line break monitoring

- X** without ¹⁾
- L** with line break monitoring ²⁾



¹⁾ Only in conjunction with VEGATOR 256C signal conditioning instrument

²⁾ Not in conjunction with VEGATOR 256C signal conditioning instrument

L1 in mm(longest)

per 1000 mm of 316Ti, FEP insulated

L2 in mm(shortest)

per 1000 mm of 316Ti, FEP insulated

L3 in mm

per 1000 mm of 316Ti, FEP insulated

L4 in mm

per 1000 mm of 316Ti, FEP insulated

L5 in mm

per 1000 mm of 316Ti, FEP insulated

Shrunk gravity weight (protection screen), add. price per gravity weight

- Welded socket see chapter “Accessory“

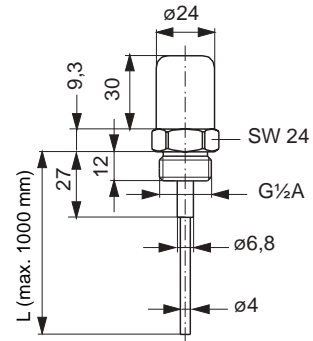
EL 8

Conductive, PE partly insulated rod electrode

For use as overflow and dry run protection system in conductive liquids

- easy setup
- inexpensive level detection
- electrode can be shortened

Process fitting	: G ½ A of (304)
Housing	: of PE; IP50
Process pressure	: -1...6 bar (-100...600 kPa)
Process temperature	: -10...60°C
Evaluation	: via VEGATOR signal conditioning instrument



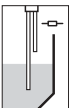
Number of rods

1 with 1 rod electrode

Rod material

VEG 316Ti

EL8



Rod length in mm

per 250 mm of 316Ti

Electrode length: mm (min. 30 mm, max. 1000 mm)

Accessory Welded socket G½ of 1.4571:

Article no. 2.7783

VEGATOR 256C

Signal conditioning instrument for level signalling for carrier rail mounting

For easy level detection or pump control in conjunction with conductive electrodes EL



- 1-channel version
- mounting on carrier rail 35 x 7.5 acc. to EN 50022
- adjustable response sensitivity (max. 200 kOhm)

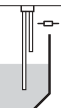
Sensor input : 1 conductive electrode
 : 1 x Min/Max
 Relay output : 1 x spdt
 Protection : IP20



Operating voltage

- E 24VAC
- D 42VAC
- C 48VAC
- B 100...130VAC
- A 200...250VAC

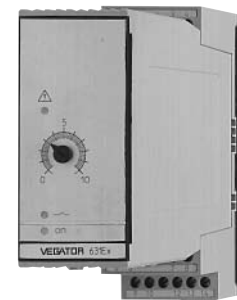
TOR256C.X



VEGATOR 631

Signal conditioning instrument for level signalling

For easy level detection or pump control in conjunction with conductive electrodes EL



- 1-channel version
- with fault monitoring and failure LED
- adjustable response sensitivity (max. 200 kOhm)
- mounting on carrier rail 35 x 7.5 acc. to EN 50022

Sensor input : 1x conductive electrode
 : 1 x Min/Max
 Relay output : 1 x spdt
 Transistor output : 1 x
 Protection : IP20
 Operating voltage : 20...250V AC, 20...72V DC

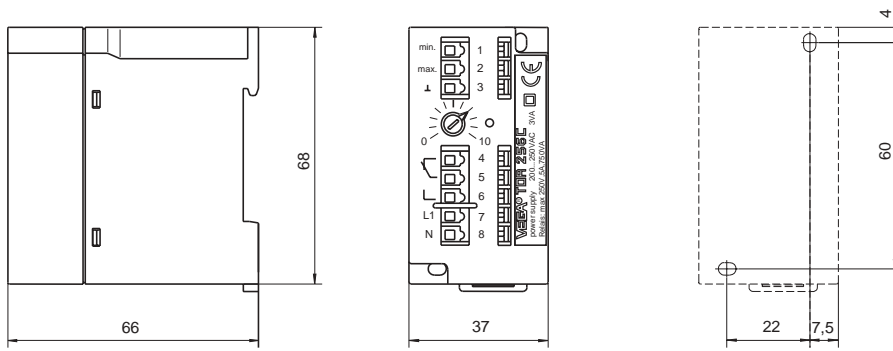


Approval

- .X without
- EX.A ATEX II (1) G [Ex ia] IIC + WHG
- .M Ship approval
- Plug-in socket
- K inclusive socket

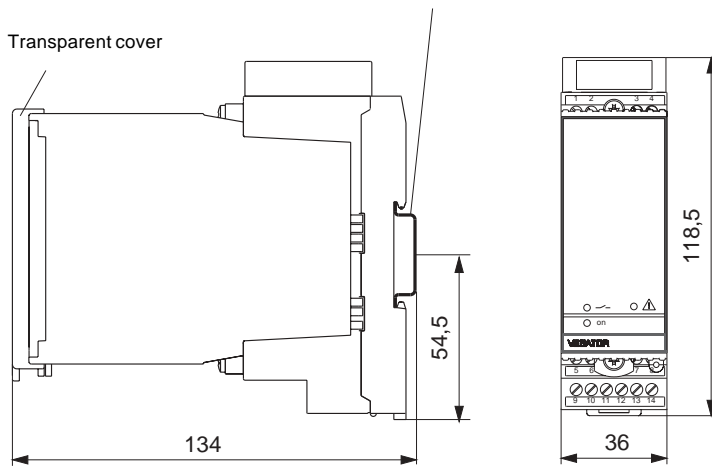
TOR631

VEGATOR 256C



VEGATOR 631 Ex

Carrier rail 35 x 7.5 or
35 x 15 acc. to EN 50 022



- Accessory see chapter "Signal conditioning instruments and communication"