



LFV330-DAGBVXMC0500

LFV300

VIBRATING LEVEL SWITCH

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

| Type | Part no. |
|---------------------|----------|
| LFV330-DAGBVXMC0500 | 6039736 |

Other models and accessories → www.sick.com/LFV300

Detailed technical data

Features

| | |
|------------------------------|---|
| Medium | Fluids |
| Measurement | Switch |
| Probe length | 500 mm |
| Process pressure | -1 bar ... 64 bar |
| Process temperature | -50 °C ... +150 °C, See safety notes for ATEX devices |
| Fill material density | 0.5 g/cm ³ ... 2.5 g/cm ³ |
| ATEX approval | ATEX II 1/2G Ex db IIC T6...T2 Ga/Gb +WHG |
| Type examination | DEKRA 16 ATEX 0130 X |
| WHG approval | ✓ |

Performance

| | |
|-----------------------------------|--------------------------|
| Accuracy of sensor element | ± 2 mm |
| Reproducibility | ≤ 1 mm |
| Viscosity | 0.1 mPas ... 10,000 mPas |
| Response time | 500 ms |
| MTBF | 9,73*10 ⁶ h |

Electronics

| | |
|-------------------------------|--|
| Power consumption | < 4.2 mA |
| Initialization time | < 3 s |
| VDE protection class 1 | ✓ |
| Connection type | M20 x 1.5 |
| Output signal | Non-contact switch |
| Supply voltage | Non-contact switch: 20 V AC/DC ... 253 V AC/DC |
| Hysteresis | 2 mm |
| Output current | < 400 mA |
| Inductive load | ≤ 1 H |
| Capacitive load | 100 nF |

| | |
|--------------------------|-------------|
| Enclosure rating | IP66 / IP67 |
| Temperature drift | 0,03 mm/K |

Mechanics

| | |
|---------------------------|---|
| Wetted parts | Stainless steel 316L (optional Ra ≤ 0.8 µm) |
| Process connection | G ¾ A PN 64 / 1.4404 |
| Housing material | Aluminum |
| Sensor material | Stainless steel 1.4404 |

Ambient data

| | |
|--------------------------------------|-------------------|
| Ambient operating temperature | -40 °C ... +70 °C |
| Ambient temperature, storage | -40 °C ... +80 °C |

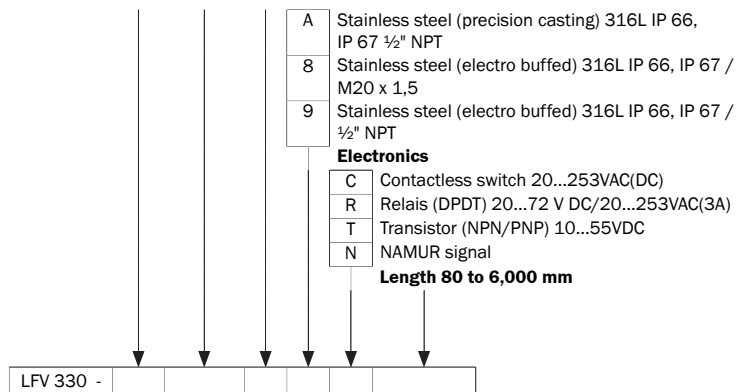
Classifications

| | |
|-----------------------|----------|
| ECLASS 5.0 | 27273202 |
| ECLASS 5.1.4 | 27273202 |
| ECLASS 6.0 | 27273202 |
| ECLASS 6.2 | 27273202 |
| ECLASS 7.0 | 27273202 |
| ECLASS 8.0 | 27273202 |
| ECLASS 8.1 | 27273202 |
| ECLASS 9.0 | 27273202 |
| ECLASS 10.0 | 27273202 |
| ECLASS 11.0 | 27273202 |
| ECLASS 12.0 | 27273106 |
| ETIM 5.0 | EC002654 |
| ETIM 6.0 | EC002654 |
| ETIM 7.0 | EC002654 |
| ETIM 8.0 | EC002654 |
| UNSPSC 16.0901 | 41111938 |

Type code

LFV330 type code

| | |
|--|---|
| Certification | |
| XX | Without approval |
| XA | WHG approval |
| CA | ATEX II 1G, 1/2G, 2G Ex ia IIC T6 Ga, Ga/Gb, Gb +WHG |
| DA | ATEX II 1/2G Ex db IIC T6...T2 Ga/Gb +WHG |
| Process connection/Material (see below) | |
| Middle section / Process temperature | |
| X | without / -50 °C ... +150 °C |
| T | with / -50 °C ... +250 °C |
| Housing / Cable screw connection | |
| P | Plastics IP 66, IP 67 / M20 x 1,5 |
| N | Plastics IP 66, IP 67 / ½" NPT |
| M | Aluminium IP 66, IP 67 / M20 x 1,5 |
| U | Aluminium IP 66, IP 67 / ½" NPT |
| V | Stainless steel (precision casting) 316L IP66, IP67 / M20 x 1,5 |



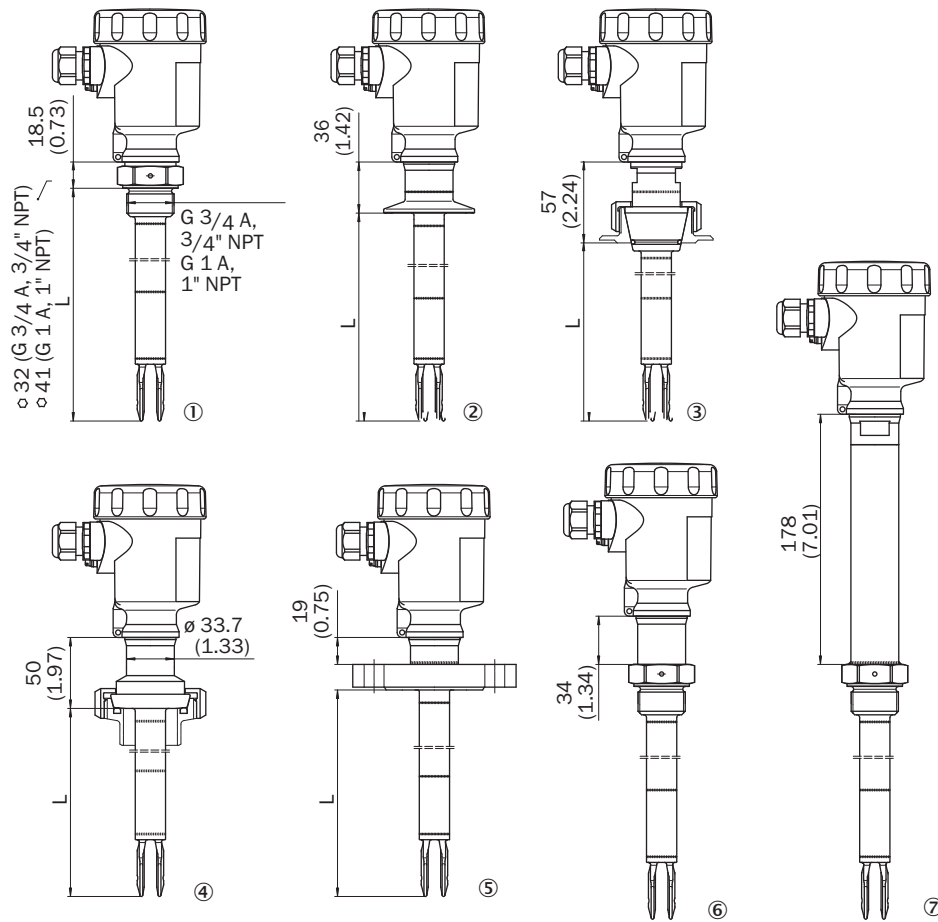
Not all variations of the type code can be combined! Not all available variations are shown.

Process connection/Material

| | | | |
|-----|---|-----|---|
| GBV | Thread G 3/4 A PN 64 / 316L | PLV | Flange DN 125, PN 40 Form N, DIN 2501 / 316L |
| GBP | Thread G 3/4 A PN 64 / 316L Ra<0,8µm | FMV | Flange DN 150, PN 16 Form C, DIN 2501 / 316L |
| NBV | Thread 3/4" NPT PN 64 / 316L | MMV | Flange DN 150, PN 16 Form D, DIN 2501 / 316L |
| NBP | Thread 3/4" NPT PN 64 / 316L Ra<0,8µm | FVV | Flange DN 150, PN 40 Form C, DIN 2501 / 316L |
| GAV | Thread G 1 A PN 64 / 316L | OVV | Flange DN 150, PN 40 Form F, DIN 2501 / 316L |
| GAP | Thread G 1 A PN 64 / 316L Ra<0,8µm | PVV | Flange DN 150, PN 40 Form N, DIN 2501 / 316L |
| NAV | Thread 1" NPT PN 64 / 316L | FQV | Flange DN 200, PN 16 Form C, DIN 2501 / 316L |
| NAP | Thread 1" NPT PN 64 / 316L Ra<0,8µm | F5V | Flange DN 250, PN 10 Form C, DIN 2501 / 316L |
| GCV | Thread G 1 1/2 A PN 64 / 316L | UCV | Flange DN 40, PN 40 V13, DIN 2501 / 316L |
| NCV | Thread 1 1/2" NPT PN 64 / 316L | FEV | Flange DN 50, PN 40 Form C, DIN 2501 / 316L |
| TAP | Varivent N50-40 / 316L Ra<0,8µm ZB3052 | RCP | Fitting DN 25, PN 40, DIN 11851 / 316L Ra<0,8µm |
| TNP | Varivent N25-100 / 316L Ra<0,8µm ZB3052 | REP | Fitting DN 32, PN 40, DIN 11851 / 316L Ra<0,8µm |
| CCP | Tri-Clamp 1" PN 16 / 316L Ra<0,8µm | RAP | Fitting DN 40, PN 40, DIN 11851 / 316L Ra<0,8µm |
| CBP | Tri-Clamp 1 1/2" PN 16 / 316L Ra<0,8µm | RFP | Fitting DN 40, PN 40, DIN 11864-1A / 316L Ra<0,8µm ZB3052 |
| CAP | Tri-Clamp 2" PN 16 / 316L Ra<0,8µm | RBP | Fitting DN 50, PN 25, DIN 11851 / 316L Ra<0,8µm |
| CDP | Tri-Clamp 2 1/2" PN 10 / 316L Ra<0,8µm | RDP | Fitting DN 50, PN 25, DIN 11864-1A / 316L Ra<0,8µm ZB3052 |
| CEP | Tri-Clamp 3" PN 10 / 316L Ra<0,8µm | | |

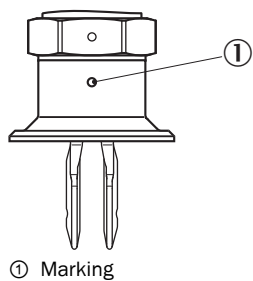
Dimensional drawing (Dimensions in mm (inch))

LFV330



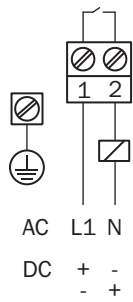
- ① Thread
- ② Tri-Clamp
- ③ DN 25 cone
- ④ Bolting D 40
- ⑤ Flange
- ⑥ Gas-tight leadthrough
- ⑦ Temperature adapter

Marking on the welded flange



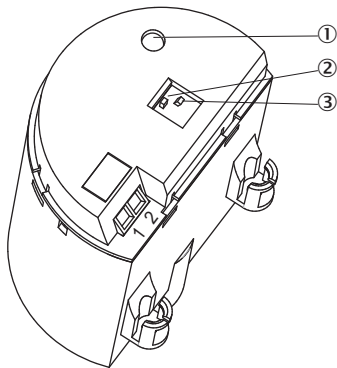
Connection diagram

Contactless electronic switch connection diagram



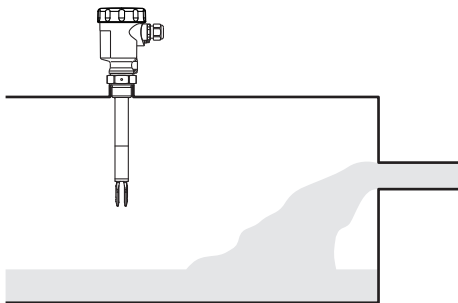
Connection type

LFV300 Contactless electronic switch - electronic module



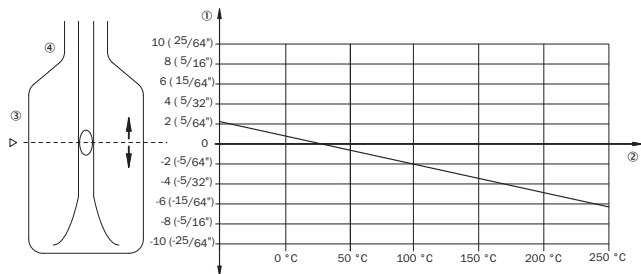
Instruction for installation

Inflowing medium



Characteristic curve






Influence of the process temperature on the switching point



- ① Shifting of the switching point in mm (in)
- ② Process temperature in °C (°F)
- ③ Switching point at reference conditions (notch)
- ④ Tuning fork

Recommended accessories

Other models and accessories → www.sick.com/LFV300

| | Brief description | Type | Part no. |
|---|---|--------------------|----------|
| Electronic modules | | | |
|  | Contactless switch: 20 V AC/DC ... 250 V AC/DC | ECD-RE-LFKOS-0001 | 6038669 |
| Flanges | | | |
|  | Welded flange/welded connector, DIN11851-1, DN25 / PN40, Stainless steel 1.4404 | BEF-FL-851D25-LFV2 | 5321527 |
|  | Welded flange/welded connector, process connection G 1, Stainless steel 1.4404 | BEF-FL-GEWG10-LFV2 | 4054605 |
|  | Welded flange/welded connector, G 3/4 process connection, Stainless steel 1.4404 | BEF-FL-GEWG34-LFV2 | 4054604 |
|  | Welded flange/welded connector, process connection Tri-Clamp 1", Stainless steel 1.4404 | BEF-FL-TCLI10-LFV2 | 5321678 |
| | Welded flange/welded connector, process connection Tri-Clamp 2", Stainless steel 1.4404 | BEF-FL-TCLI20-LFV2 | 5321679 |
| Mounting brackets and plates | | | |
| | BEF-MU-316G10-ALFV | BEF-MU-316G10-ALFV | 5322463 |

SICK AT A GLANCE

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Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

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