



LFV330-CAGAVXPN0120

LFV300

VIBRATING LEVEL SWITCH

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
LFV330-CAGAVXPN0120	6055917

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

Detailed technical data

Features

Medium	Fluids
Measurement	Switch
Probe length	120 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/cm³ ... 2.5 g/cm³
ATEX approval	ATEX II 1G, 1/2G, 2G Ex ia IIC T6 Ga, Ga/Gb, Gb +WHG
Type examination	PTB 16 ATEX 2008 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

Residual ripple	≤ 5 V _{pp}
Power consumption	1 mA / 2,5 mA
Initialization time	< 2 s
VDE protection class 2	✓
Connection type	M20 x 1.5
Output signal	NAMUR signal
Supply voltage	NAMUR signal: 4.5 V DC ... 12 V DC
Hysteresis	2 mm
Output current	1 mA / 2,5 mA
Enclosure rating	IP66 / IP67

Temperature drift	0,03 mm/K
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Mechanics

Wetted parts	Stainless steel 316L (optional Ra ≤ 0.8 µm)
Process connection	G 1 A PN 64
Housing material	Plastic
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

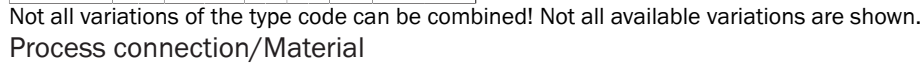
Process connection/Material (see below)

Middle section / Process temperature

X	without / -50 °C ... +150 °C
T	with / -50 °C ... +250 °C

Housing / Cable screw connection

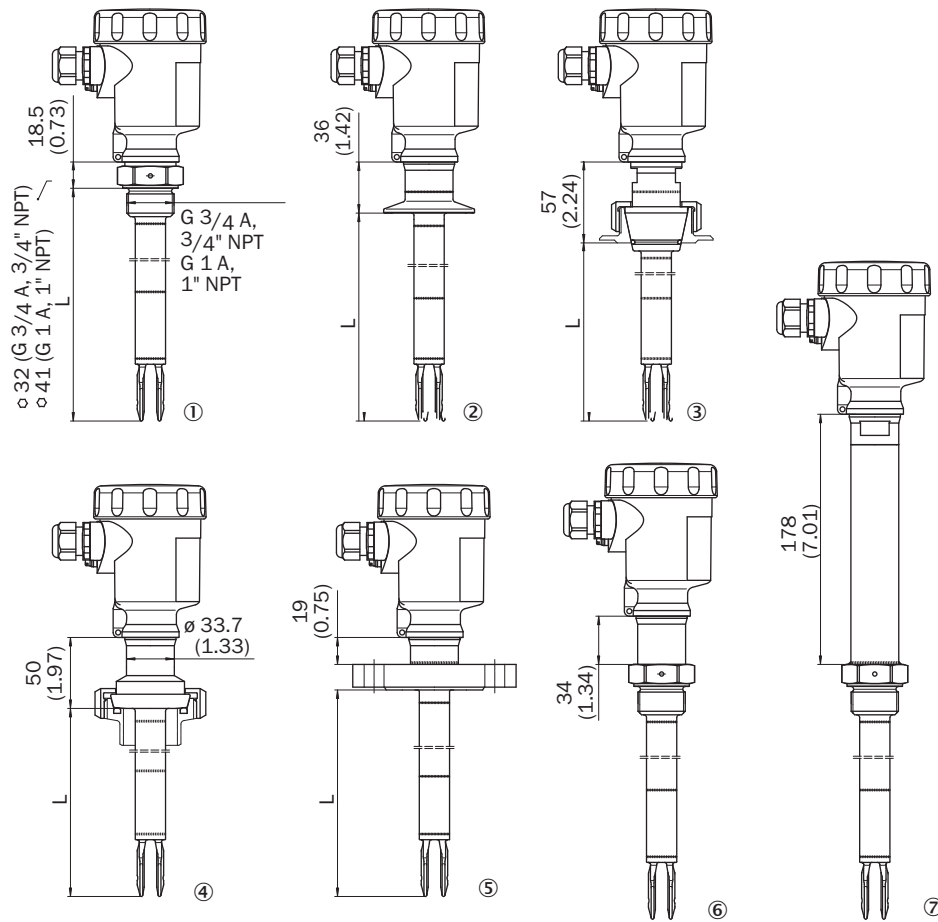
P	Plastics IP 66, IP 67 / M20 x 1,5
N	Plastics IP 66, IP 67 / ½" NPT
M	Aluminium IP 66, IP 67 / M20 x 1,5
U	Aluminium IP 66, IP 67 / ½" NPT
V	Stainless steel (precision casting) 316L IP66, IP67 / M20 x 1,5
A	Stainless steel (precision casting) 316L IP 66, IP 67 ½" NPT



4 LEVEL SENSORS | SICK

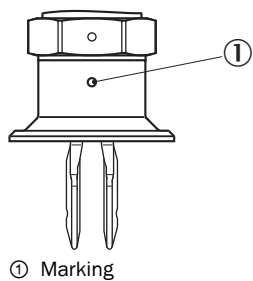
Dimensional drawing (Dimensions in mm (inch))

LFV330



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

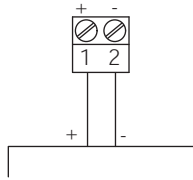
Marking on the welded flange



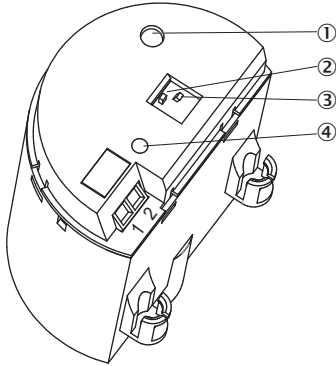
- ① Marking

Connection diagram

Namur connection diagram



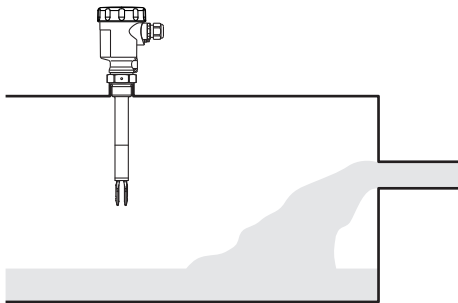
Namur - electronic module



- ① Signal lamp (LED)
- ② DIL switch for characteristics reversal
- ③ DIL-switch for sensitivity adjustment
- ④ Simulation key

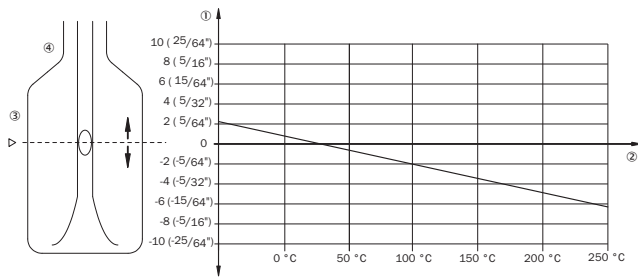
Instruction for installation

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			
	Namur signal: 4.5 V DC ... 12 V DC	ECD-RE-LFV-NAM-0001	6038670
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

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

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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