



LFBV330-XXGAVTMC0310

LFBV300

LEVEL SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
LFV330-XXGAVTMC0310	6071506

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

Detailed technical data

Features

Medium	Fluids
Measurement	Switch
Probe length	310 mm
Process pressure	-1 bar ... 64 bar
Process temperature	-50 °C ... +250 °C
Fill material density	0.5 g/cm³ ... 2.5 g/cm³

Performance

Accuracy of sensor element	± 2 mm
Reproducibility	≤ 1 mm
Viscosity	0.1 mPas ... 10,000 mPas
Response time	500 ms

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)
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Process connection	G 1 A PN 64
Housing material	Aluminum
Sensor material	Stainless steel 1.4404

Ambient data

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

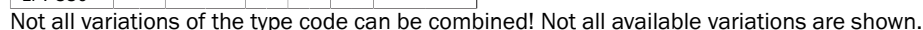
Classifications

ECI@ss 5.0	27273202
ECI@ss 5.1.4	27273202
ECI@ss 6.0	27273202
ECI@ss 6.2	27273202
ECI@ss 7.0	27273202
ECI@ss 8.0	27273202
ECI@ss 8.1	27273202
ECI@ss 9.0	27273202
ECI@ss 10.0	27273202
ECI@ss 11.0	27273202
ETIM 5.0	EC002654
ETIM 6.0	EC002654
ETIM 7.0	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
8	Stainless steel (electro buffed) 316L IP 66, IP 67 / M20 x 1,5
9	Stainless steel (electro buffed) 316L IP 66, IP 67 / ½" NPT
Electronics	
C	Contactless switch 20...253VAC(DC)
R	Relais (DPDT) 20...72 V DC/20...253VAC(3A)
T	Transistor (NPN/PNP) 10...55VDC
N	NAMUR signal
Length 80 to 6,000 mm	

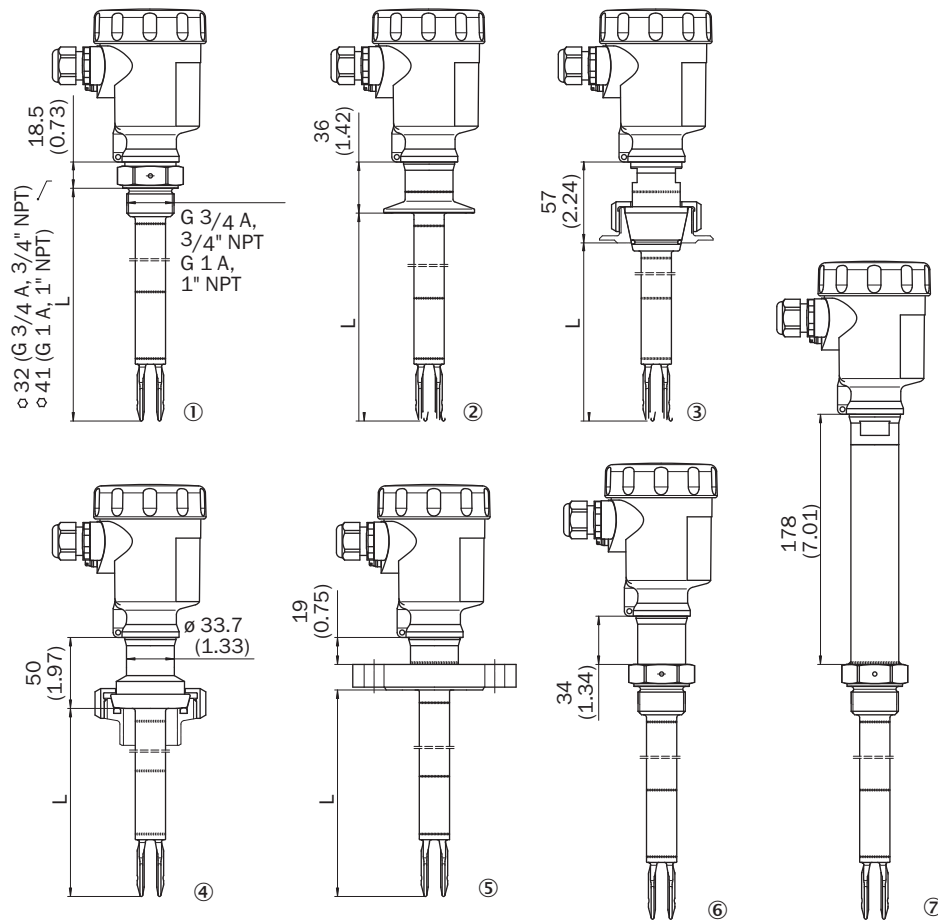


GBV	Thread G 3/4 A PN 64 / 316L
GBP	Thread G 3/4 A PN 64 / 316L Ra<0,8µm
NBV	Thread 3/4" NPT PN 64 / 316L
NBP	Thread 3/4" NPT PN 64 / 316L Ra<0,8µm
GAV	Thread G 1 A PN 64 / 316L
GAP	Thread G 1 A PN 64 / 316L Ra<0,8µm
NAV	Thread 1" NPT PN 64 / 316L
NAP	Thread 1" NPT PN 64 / 316L Ra<0,8µm
GCV	Thread G 1 1/2 A PN 64 / 316L
NCV	Thread 1 1/2" NPT PN 64 / 316L
TAP	Varivent N50-40 / 316L Ra<0,8µm ZB3052
TNP	Varivent N25-100 / 316L Ra<0,8µm ZB3052
CCP	Tri-Clamp 1" PN 16 / 316L Ra<0,8µm
CBP	Tri-Clamp 1 1/2" PN 16 / 316L Ra<0,8µm
CAP	Tri-Clamp 2" PN 16 / 316L Ra<0,8µm
CDP	Tri-Clamp 2 1/2" PN 10 / 316L Ra<0,8µm
CEP	Tri-Clamp 3" PN 10 / 316L Ra<0,8µm

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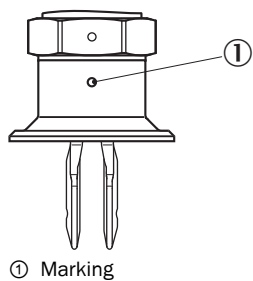
Dimensional drawing (Dimensions in mm (inch))

LFV330



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

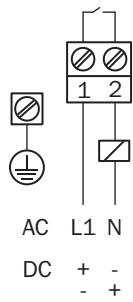
Marking on the welded flange



- ① Marking

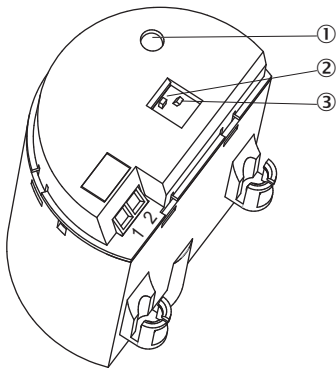
Connection diagram

Contactless electronic switch connection diagram



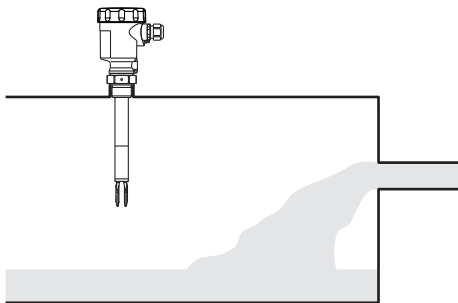
Connection type

LFV300 Contactless electronic switch - electronic module



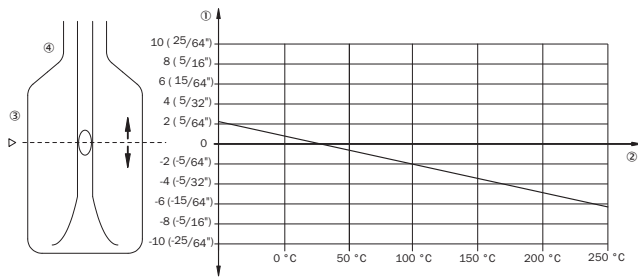
Instruction for installation

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.
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
Electronic modules			
	Contactless switch: 20 V AC/DC ... 250 V AC/DC	ECD-RE-LFKOS-0001	6038669

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.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com