



LFBV310-XXCAPX8TX

LFBV300

LEVEL SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
LFV310-XXCAPX8TX	6058968

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

Illustration may differ



Detailed technical data

Features

Medium	Fluids
Measurement	Switch
Probe length	66 mm
Process pressure	-1 bar ... 64 bar
Process temperature	-50 °C ... +150 °C
Fill material density	0.5 g/cm ³ ... 2.5 g/cm ³
GOST approval	✓

Performance

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

Electronics

Residual ripple	≤ 5 V _{pp}
Power consumption	< 10 mA
Initialization time	< 2 s
VDE protection class 2	✓
Electrical connection	M20 x 1.5
Supply voltage	Volt-free transistor output PNP/ NPN: 10 V DC ... 55 V DC
Hysteresis	2 mm
Signal voltage HIGH	U _v -3 V
Signal voltage LOW	< 1 V
Output current	< 300 mA
Inductive load	1 H
Capacitive load	100 nF

Enclosure rating	IP 66 / IP 67
Temperature drift	0,03 mm/K

Mechanics

Wetted parts	Stainless steel 316L (optional Ra ≤ 0.8 µm)
Process connection	Triclamp 2" (PN 16, 316L, Ra < 0.8µm)
Housing material	Stainless steel (electropolished)
Sensor material	Stainless steel 1.4404

Ambient data

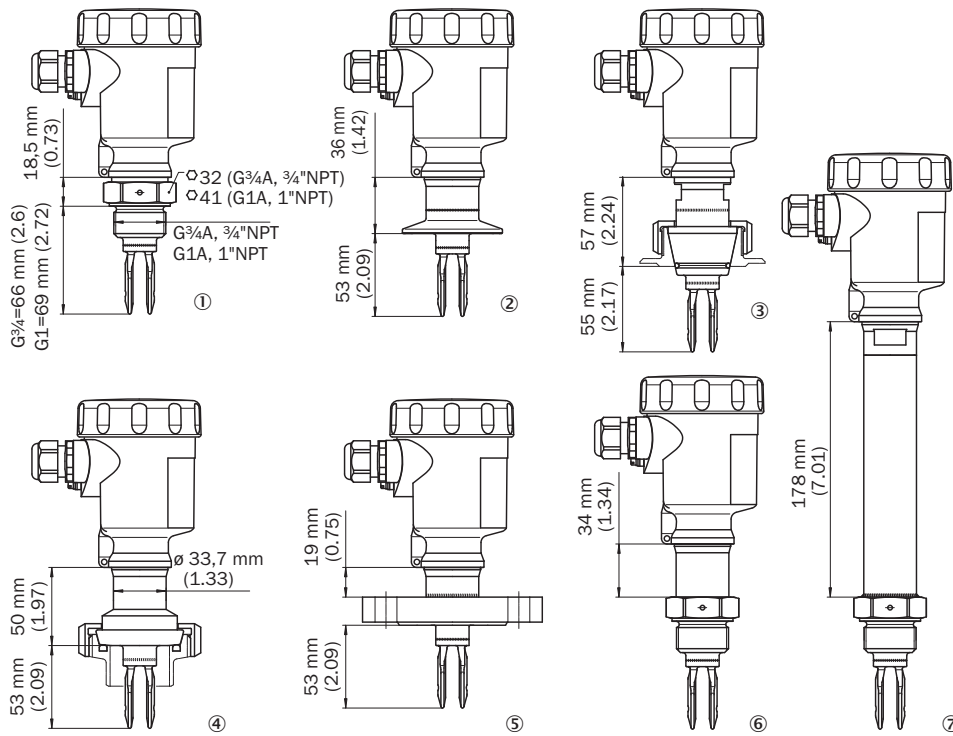
Ambient operating temperature	-40 °C ... +70 °C
Ambient storage temperature	-40 °C ... +80 °C

Classifications

ECl@ss 5.0	27273202
ECl@ss 5.1.4	27273202
ECl@ss 6.0	27273202
ECl@ss 6.2	27273202
ECl@ss 7.0	27273202
ECl@ss 8.0	27273202
ECl@ss 8.1	27273202
ECl@ss 9.0	27273202
ETIM 5.0	EC002654
ETIM 6.0	EC002654
UNSPSC 16.0901	41111938

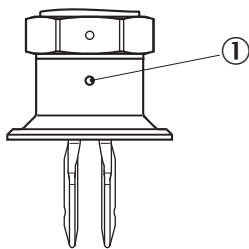
Dimensional drawing (Dimensions in mm (inch))

LFV310



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

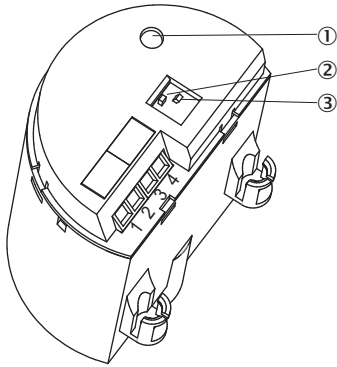
Marking on the welded flange



- ① Marking

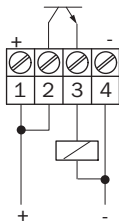
Connection diagram

Transistor - electronic module

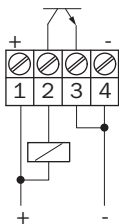


- ① Signal lamp (LED)
- ② DIL switch for mode adjustment
- ③ DIL-switch for sensitivity adjustment

PNP action

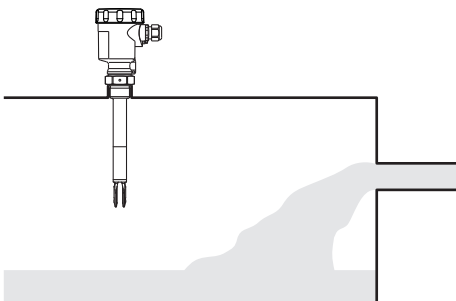


NPN action



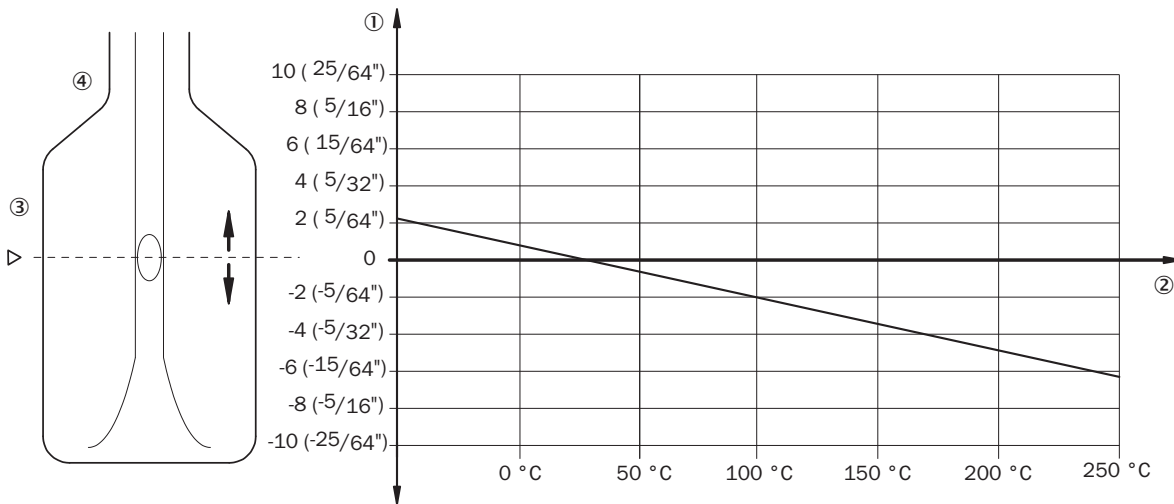
Instruction for installation

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 mounting plates			
	Lock nut fitting, process pressure - 1 bar to 64 bar, G 1 A process connection, G 3/4 A female thread, stainless steel 316L	BEF-MU-316G10-ALFV	5322463
Electronic modules			
	Transistor (PNP/NPN): 10 V DC ... 55 V DC	ECD-RE-LFVP-NP-0001	6038672

SICK AT A GLANCE

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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:

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