Online data sheet



LFV310-XXNCVXPRX

LFV300

LEVEL SENSORS

SICK
Sensor Intelligence.



Illustration may differ

Ordering information

Type	Part no.
LFV310-XXNCVXPRX	6047624

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

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/cm³ ... 2.5 g/cm³
GOST approval	✓

Performance

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

Electronics

Power consumption	5 mA ... 30 mA
Initialization time	< 2 s
VDE protection class 1	✓
Electrical connection	M20 x 1.5
Supply voltage	Double relay (DPDT): 20 V DC ... 72 V DC / 20 V AC ... 253 V AC
Hysteresis	2 mm
Output current	> 10 µA; < 3A AC, 1A DC
Inductive load	750 VA 54 W
Capacitive load	750 VA 54 W
Contact load	Min. 50 mW / max. 750 VA, 54 W
Enclosure rating	IP 66 / IP 67
Temperature drift	0,03 mm/K

Mechanics

Wetted parts	Stainless steel 316L (optional Ra ≤ 0.8 µm)
Housing material	Plastic
Sensor material	Stainless steel 1.4404

Ambient data

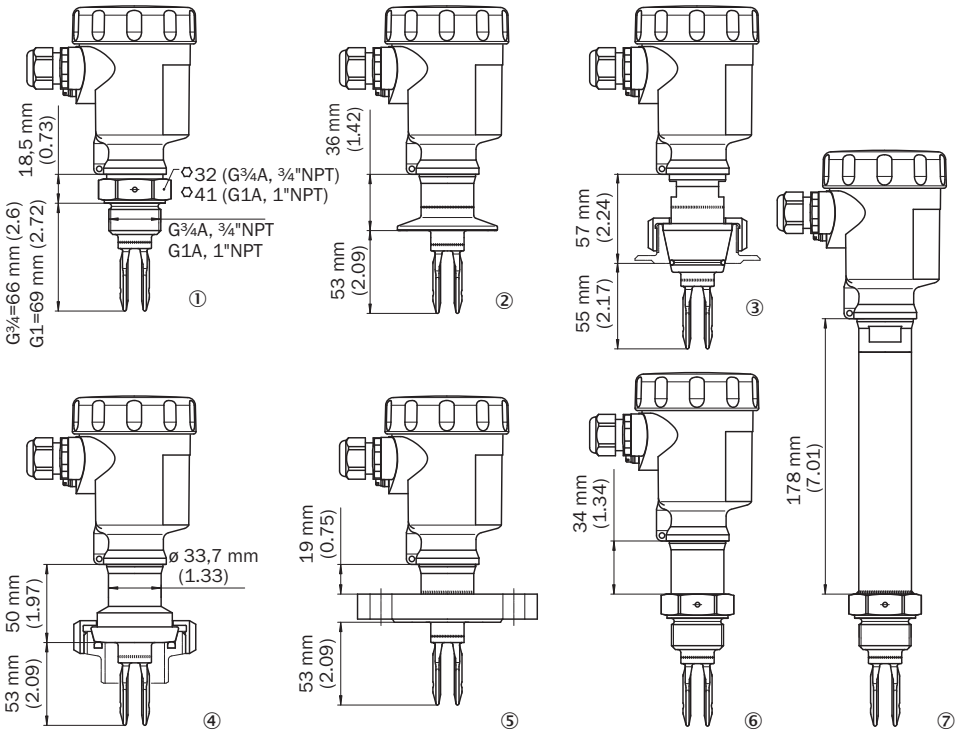
Ambient operating temperature	–40 °C ... +70 °C
Ambient storage temperature	–40 °C ... +80 °C

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

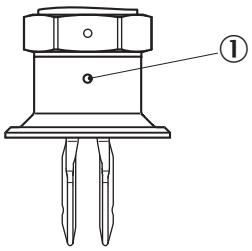
Dimensional drawing (Dimensions in mm (inch))

LFV310



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

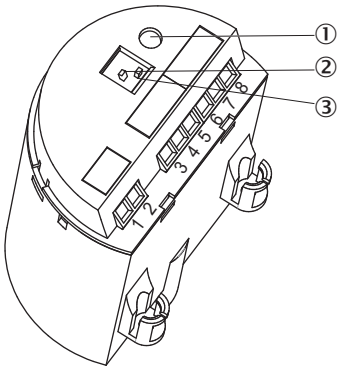
Marking on the welded flange



① Marking

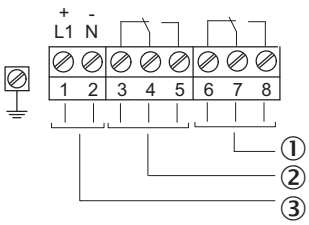
Connection diagram

Relay - electronic module



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

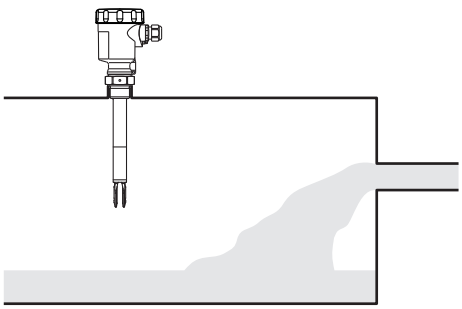
Relay connection diagram (single chamber housing)



① Relay output
② Relay output
③ Supply voltage

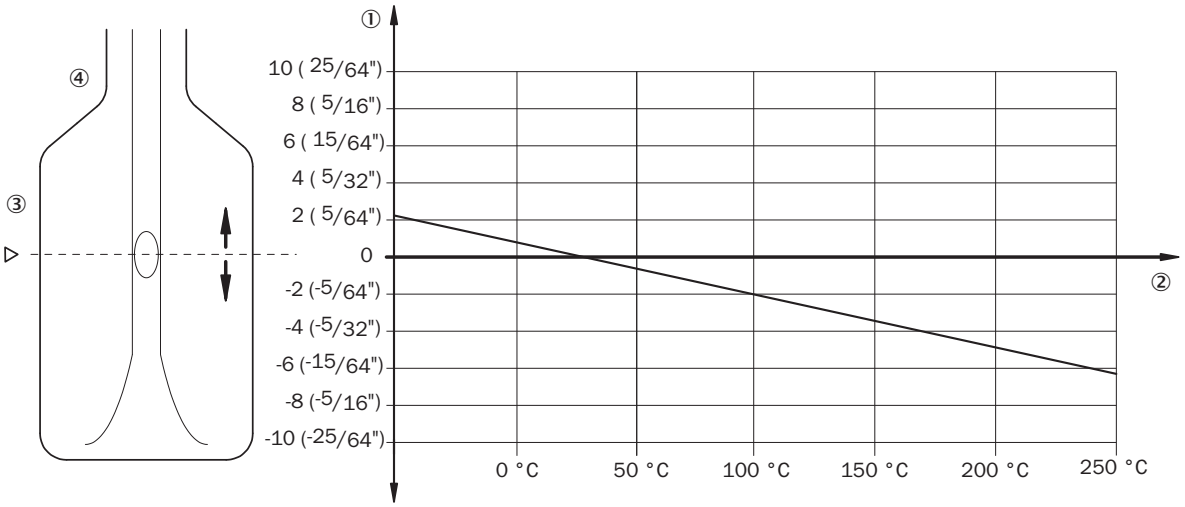
Instruction for installation

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			
	Double relay (DPDT): 20 V DC ... 72 V DC / 20 ... 250 V AC	ECD-RE-LFVREL-0001	6038671

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