



LBV310-LKAGDRAMX

LBV300

LEVEL SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
LBV310-LKAGDRAMX	6052998

Other models and accessories → www.sick.com/LBV300

Detailed technical data

Features

Medium	Bulk solids
Measurement	Switch
Probe length	220 mm
Process pressure	-1 bar ... 25 bar
Process temperature	-50 °C ... +150 °C
Fill material density	≥ 0.008
Particle size	< 10 mm
ATEX approval	ATEX II 1/2G, 2G Ex db IIC T6...T1 Ga/Gb, Gb, ATEX II 1D, 1/2D, 2D Ex ta tb/tb IIIC Tx Da, Da/Db, Db
Type examination	PTB 17 ATEX 1002 X, BVS 17 ATEX E 099

Performance

Accuracy of sensor element	± 10 mm
Reproducibility	≤ 5 mm
Response time	500 ms when covered / 1,000 ms when uncovered

Electronics

Power consumption	5 mA ... 30 mA
Initialization time	< 2 s
VDE protection class 1	✓
Connection type	M20 x 1.5
Output signal	Double relay (DPDT)
Supply voltage	Double relay (DPDT): 20 V DC ... 72 V DC / 20 V AC ... 253 V AC
Hysteresis	10 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	IP66 / IP67

Mechanics

Process connection	G 1½ A PN 25
Housing material	Aluminum
Sensor material	Stainless steel 1.4404

Ambient data

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

LBV310 type code

Certification

XX	without
CX	ATEX II 1G, ½ G, 2G Ex ia IIC T6
CK	ATEX II 1G, ½ G, 2G Ex ia IIC T6+ATEX II 1/2 D IP6X T
LX	ATEX II 1G, ½ G, 2G Ex d IIC T6
LK	ATEX II ½ G, 2G Ex d IIC T6+ATEX II 1/2 D, 2D IP6X
GX	ATEX II ½ D IP6X T

Execution / Process temperature

A	Standard / -50 °C ... +150 °C
B	With spacer / -50 °C ... +250 °C
C	Detection of solids in water / -50 °C ... +150 °C

Process connection / Material

GD	Thread G 1 ½ A, PN 25 / 316L
ND	Thread 1 ½" NPT, PN 25 / 316L
EF	Flange DN 50, PN 40, form C, DIN 2501 / 316L
No er- ror	Flange DN 80, PN 40, form C, DIN 2501 / 316L
ZF	Flange DN 100, PN 6, form C, DIN 2501 / 316L
MF	Flange DN 100, PN 16, form C, DIN 2501 / 316L
OF	Flange DN 100, PN 40, form C, DIN 2501 / 316L
QF	Flange DN 150, PN 16, form C, DIN 2501 / 316L
2F	Flange DN 200, PN 10, form C, DIN 2501 / 316L
EB	Flange DN 50, PN 40, EN 1092-1 Form B1 / 316L
HA	Flange 2", 150 lb RF, ANSI B16.5 / 316L
HE	Flange 2", 150 lb FF, ANSI B16.5 / 316L

Electronics

Housing / Enclosure rating

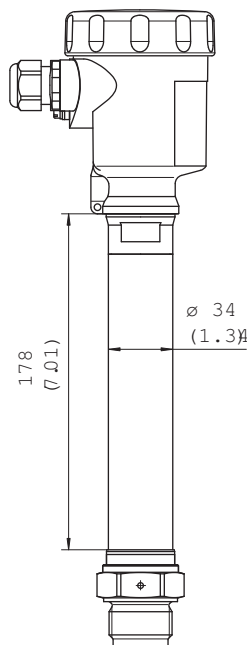
Cable entry / Male connector connection

N	1/2" NPT / Without
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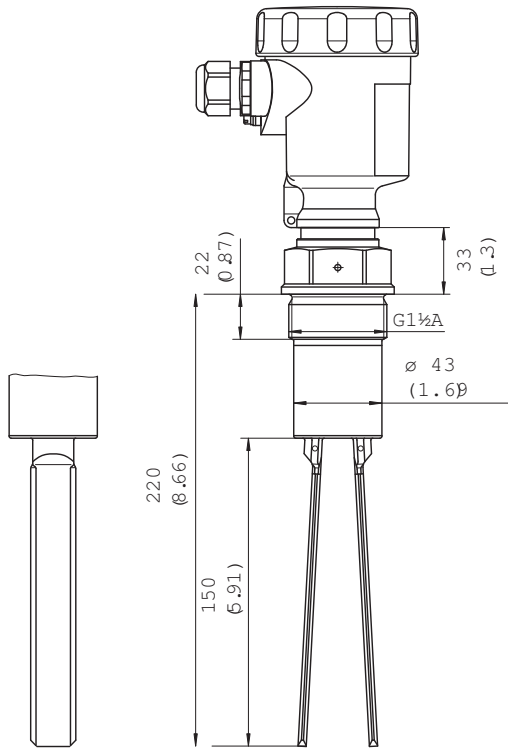
Not all variants of the type code can be combined!

Dimensional drawing (Dimensions in mm (inch))

Temperature adapter

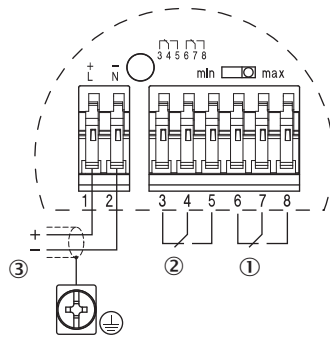


LBV310 threaded version G 1½ A (DIN ISO 228/1)



Connection diagram

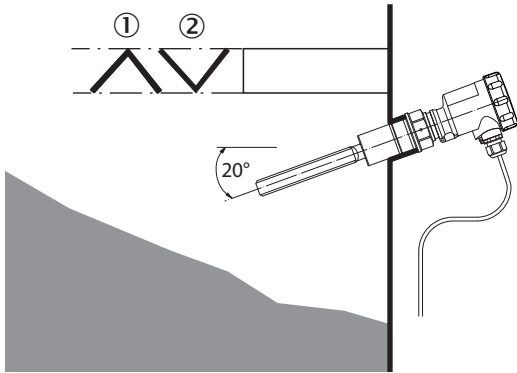
Double relay connection diagram



- ① Relay output
- ② Relay output
- ③ Power supply

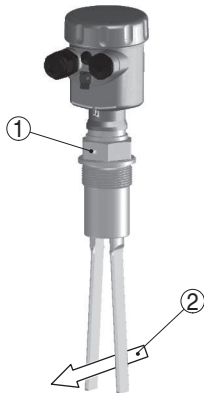
Instruction for installation

Horizontal mounting



- ① Protective sheet
- ② Concave protective sheet for abrasive solids

Flow orientation of the tuning fork



- ① Marking with screwed version
- ② Direction of flow

Recommended accessories

Other models and accessories → www.sick.com/LBV300

	Brief description	Type	Part no.
Mounting brackets and plates			
	Locking screw connection, process pressure -1 bar to 16 bar, process connection G 2 A, inner thread G 1 1/2 A, stainless steel 316L	BEF-MU-316G20-ALBV	5322462
Electronic modules			
		ECD-RE-LB-VREL-0001	6038666

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

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