



LBV320-GXTGDRAMX01500

LBV300

LEVEL SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
LBV320-GXTGDRAMX01500	6048784

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

Detailed technical data

Features

Medium	Bulk solids
Measurement	Switch
Probe length	1,500 mm
Process pressure	-1 bar ... 6 bar
Process temperature	-20 °C ... +80 °C
Fill material density	≥ 0.008
Particle size	< 10 mm
Tensile strength	≤ 3,000 N
ATEX approval	ATEX II 1D, 1/2D, 2D Ex ta ta/tb tb IIIC Tx Da, Da/Db, Db
Type examination	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 316L, 318LN, PUR

Ambient data

Ambient operating temperature	-40 °C ... +80 °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
ECl@ss 10.0	27273202
ECl@ss 11.0	27273202
ETIM 5.0	EC002654
ETIM 6.0	EC002654
ETIM 7.0	EC002654
UNSPSC 16.0901	41111938

Type code

LBV320 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 1/2D IP6X T
GX	ATEX II ½ D IP6X T

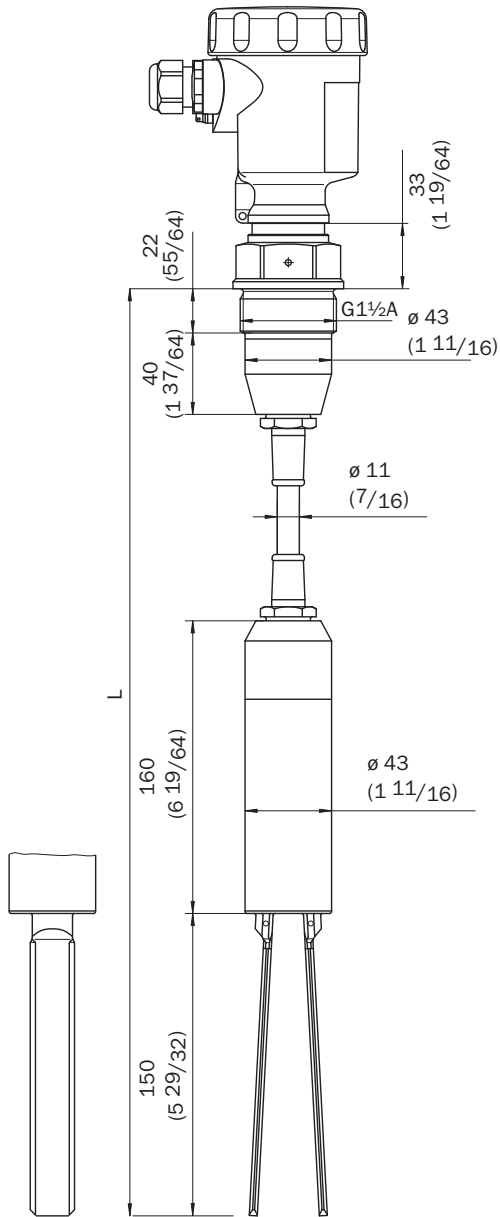
Execution / Process temperature

C	Cable PUR, detection of solids in water / -20 °C... +80 °C
H	Cable FEP / -40 °C ... +150 °C
T	Cable PUR / -20 °C ... +80 °C

Process connection / Material

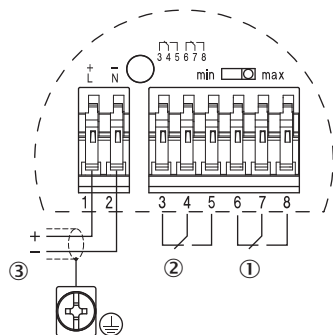
XX	Without / 316L
GD	Thread G 1 ½ A, PN 16 / 316L
ND	Thread 1 ½" NPT, PN 16 / 316L
EF	Flange DN 50, PN 40, form C, DIN 2501 / 316L
No error	Flange DN 80, PN 40, form C, DIN 2501 / 316L
ZF	Flange DN 100, PN 6, form C, DIN 2501 / 316L
MF	Flange DN 100, PN 16, form C, DIN 2501 / 316L
OF	Flange DN 100, PN 40, form C, DIN 2501 / 316L
QF	Flange DN150, 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
IA	Flange 2", 300 lb RF, ANSI B16.5 / 316L

LBV320 with PUR suspension cable, threaded version G 1½ A (DIN ISO 228/1)



Connection diagram

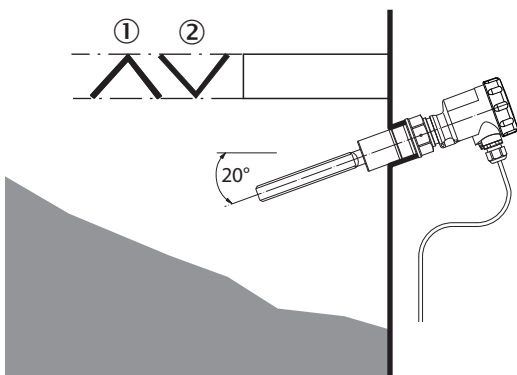
Double relay connection diagram



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

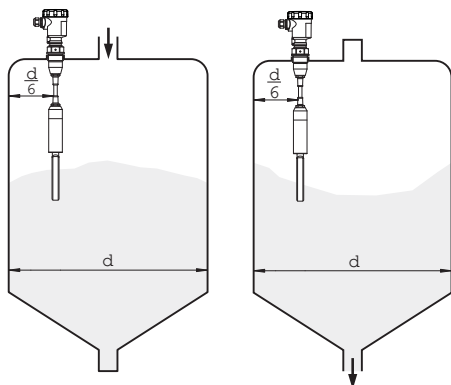
Instruction for installation

Horizontal mounting

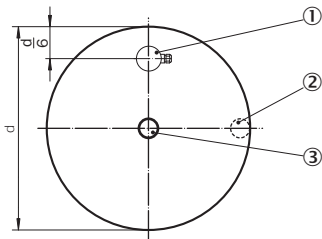
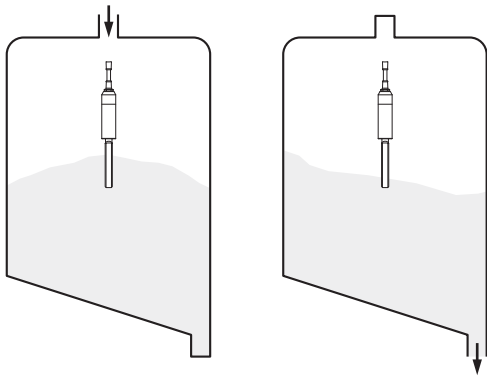


- ① Protective sheet
- ② Concave protective sheet for abrasive solids

LBV320 Filling and emptying centered

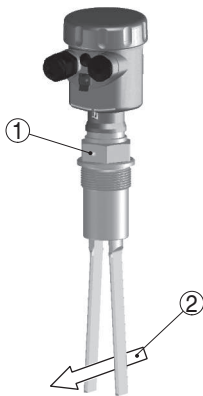


Filling in the center, emptying laterally



- ① LBV320
- ② Discharge opening
- ③ Filling opening

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

	Brief description	Type	Part no.
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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