Data sheet



LBV320-XXTNDRAMX00480

LBV300

LEVEL SENSORS

SICK
Sensor Intelligence.



Illustration may differ

Ordering information

Type	part no.
LBV320-XXTNDRAMX00480	6038421

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

Detailed technical data

Features

Medium	Bulk solids
Measurement	Switch
Probe length	480 mm
Process pressure	–1 bar ... 6 bar
Process temperature	–20 °C ... +80 °C
Fill material density	≥ 0.008 g/cm³
Particle size	< 10 mm
Tensile strength	≤ 3,000 N

Performance

Accuracy of sensor element	± 10 mm
Reproducibility	≤ 5 mm
Response time	500 ms [1] 1,000 ms [2]
MTBF	4,61*10^6 h

[1] When covered.
[2] When uncovered.

Electronics

Communication interface	-
Supply voltage	20 V DC ... 72 V DC 20 V AC ... 253 V AC
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)
Electronics	Double relay (DPDT)
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	1 1/2" NPT PN 6 / stainless steel 316L
Housing material	Aluminum
Sensor material	Stainless steel 316L, 318LN, PUR

Ambient data

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

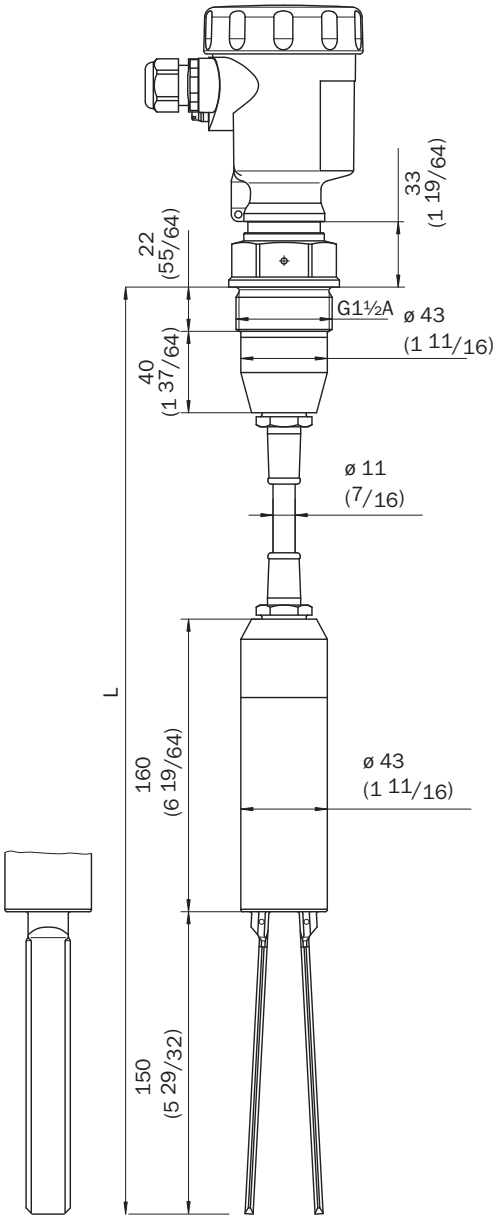
Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
China-RoHS	✓

Classifications

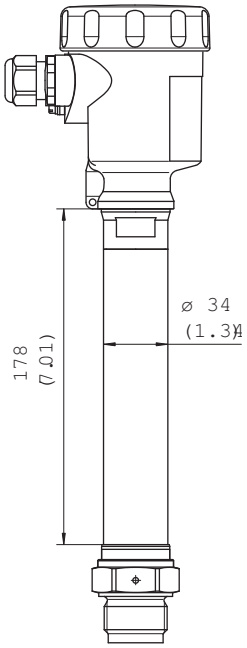
ECLASS 5.0	27273202
ECLASS 5.1.4	27273202
ECLASS 6.0	27273202
ECLASS 6.2	27273202
ECLASS 7.0	27273202
ECLASS 8.0	27273202
ECLASS 8.1	27273202
ECLASS 9.0	27273202
ECLASS 10.0	27273202
ECLASS 11.0	27273202
ECLASS 12.0	27273106
ETIM 5.0	EC002654
ETIM 6.0	EC002654
ETIM 7.0	EC002654
ETIM 8.0	EC002654
UNSPSC 16.0901	41111938

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



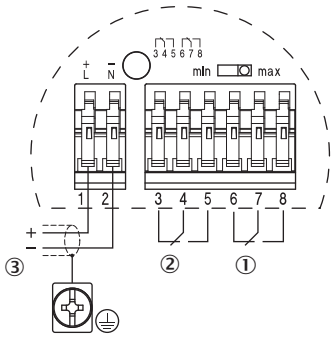
Dimensions in mm (inch)

Dimensional drawing Temperature adapter



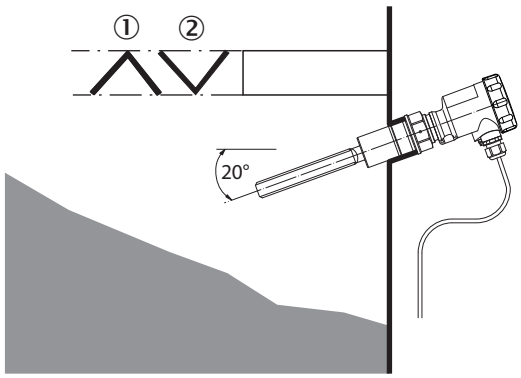
Dimensions in mm (inch)

Connection diagram Double relay connection diagram



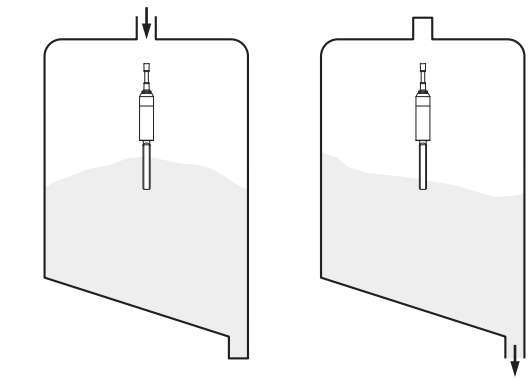
① Relay output
② Relay output
③ Power supply

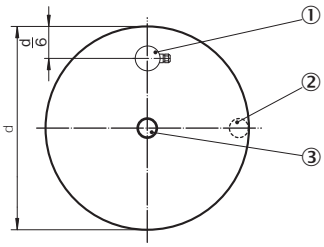
Instruction for installation Horizontal mounting



① Protective sheet
② Concave protective sheet for abrasive solids

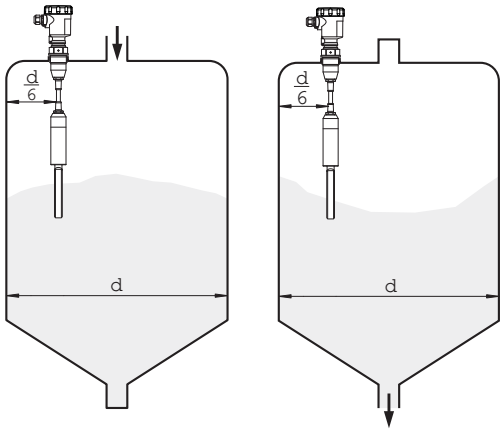
Instruction for installation Filling in the center, emptying laterally



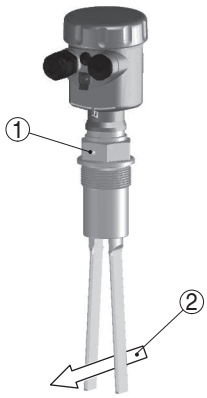


① LBV320
② Discharge opening
③ Filling opening

Instruction for installation LBV320 Filling and emptying centered



Instruction for installation 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 systems			
	• **Description:** Locking screw connection, process pressure –1 bar to 16 bar, process connection G 2 A, inner thread G 1 1/2 A • **Material:** Stainless steel • **Details:** Stainless steel 316L	BEF-MU-316G20-ALBV	5322462

	Brief description	Type	part no.
Power supply units and power supply cables			
	• **Description:** Double relay (DPDT): 20 V DC ... 72 V DC / 20 ... 250 V AC	ECD-RE-LB-VREL-0001	6038666

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.”

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