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DATA SHEET

LBV310-LKANDRANX

LBV3xx
Level sensors

SICK
Sensor Intelligence



Illustration may differ

LEVEL SENSORS

LBV310-LKANDRANX

ORDERING INFORMATION

Type	part no.
LBV310-LKANDRANX	6073585

Further device versions and accessories at www.sick.com/LBV3xx

DETAILED TECHNICAL DATA

FEATURES

Medium	Bulk solids
Measurement	Switch
Probe type	Tuning fork
Probe length	220 mm
Process pressure	–1 bar ... 25 bar
Process temperature	–50 °C ... +150 °C
Fill material density	≥ 0.008 g/cm³
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 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 [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	½" NPT
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

Wetted parts	Stainless steel 1.4404 / 316L
Process connection	1 1/2" NPT PN 25
Housing material	Aluminum
Sensor material	Stainless steel 1.4404

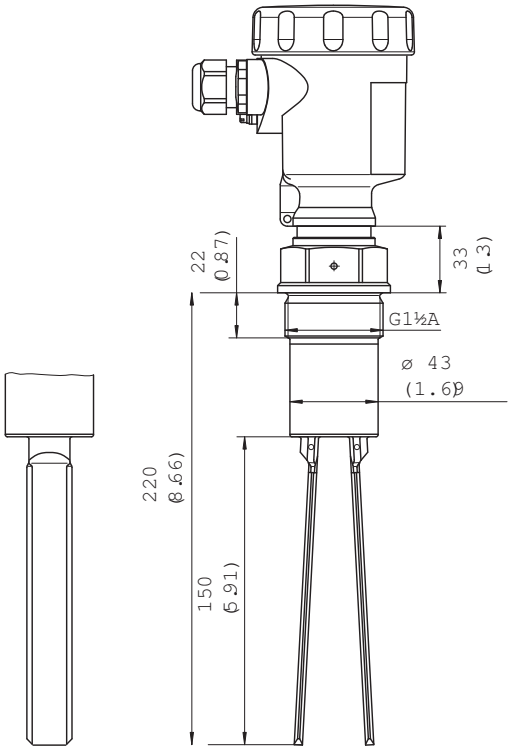
AMBIENT DATA

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

CERTIFICATES

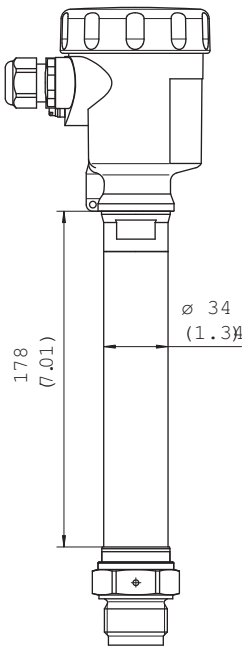
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
FDA certificate	✓
ATEX certificate	✓

DIMENSIONAL DRAWING LBV310 THREADED VERSION G 1½ A (DIN ISO 228/1)



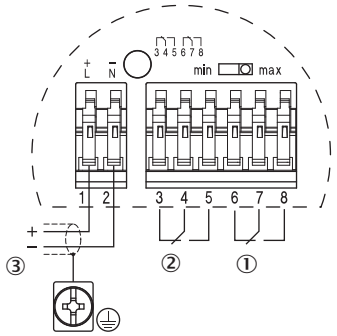
Dimensions in mm (inch)

DIMENSIONAL DRAWING TEMPERATURE ADAPTER



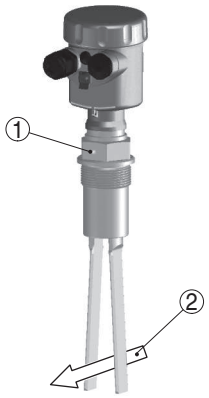
Dimensions in mm (inch)

CONNECTION DIAGRAM DOUBLE RELAY CONNECTION DIAGRAM



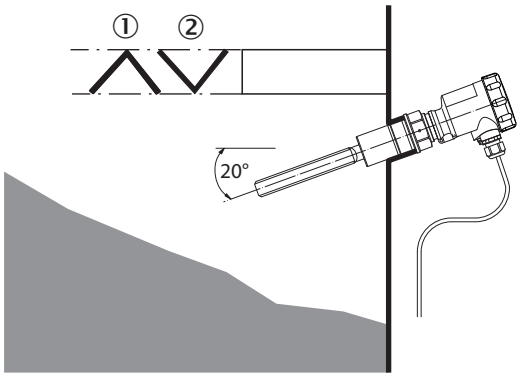
① Relay output
② Relay output
③ Power supply

INSTRUCTION FOR INSTALLATION FLOW ORIENTATION OF THE TUNING FORK



① Marking with screwed version
② Direction of flow

INSTRUCTION FOR INSTALLATION HORIZONTAL MOUNTING



① Protective sheet
② Concave protective sheet for abrasive solids

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/6073585

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SICK AT A GLANCE

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SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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