



DATA SHEET

LBV310-XXAGDTKMX

LBV3xx
Level sensors

SICK

Sensor Intelligence



Illustration may differ

LEVEL SENSORS

LBV310-XXAGDTKMX

ORDERING INFORMATION

Type	part no.
LBV310-XXAGDTKMX	6038016

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/cm ³
Particle size	< 10 mm

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	10 V DC ... 55 V DC
Residual ripple	≤ 5 V _{pp}
Initialization time	< 2 s
VDE protection class 2	✓
Connection type	M20 x 1.5

Output signal	1 x PNP/NPN
Electronics	Volt-free transistor output PNP/ NPN
Hysteresis	10 mm
Output current	< 300 mA
Inductive load	≤ 1 H
Capacitive load	100 nF
Enclosure rating	IP66 IP67

MECHANICS

Wetted parts	Stainless steel 1.4404 / 316L
Process connection	G 1½ A PN 25
Housing material	Plastic
Sensor material	Stainless steel 1.4404

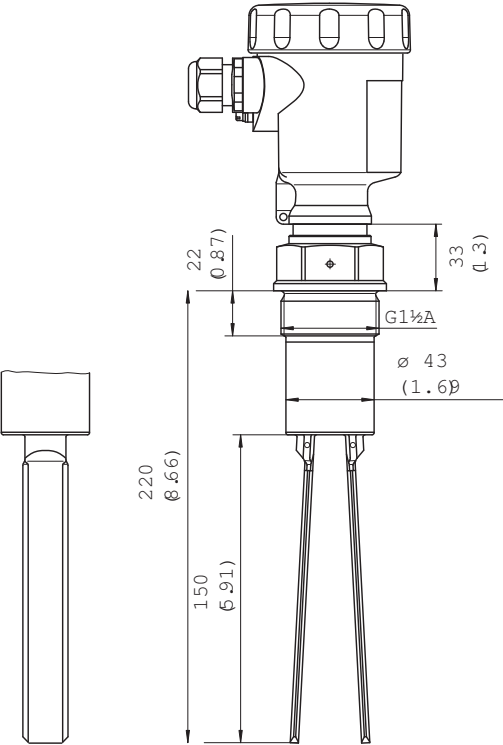
AMBIENT DATA

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

CERTIFICATES

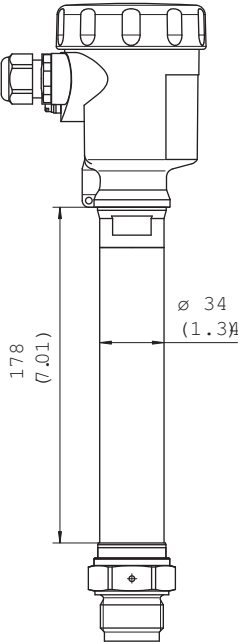
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
China RoHS	✓
FDA certificate	✓

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



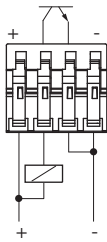
Dimensions in mm (inch)

DIMENSIONAL DRAWING TEMPERATURE ADAPTER

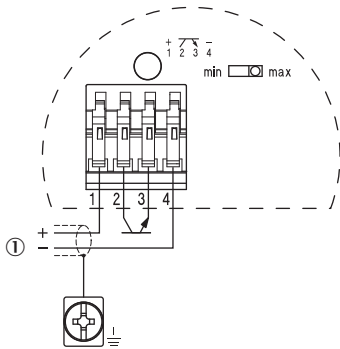


Dimensions in mm (inch)

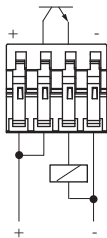
CONNECTION DIAGRAM NPN ACTION



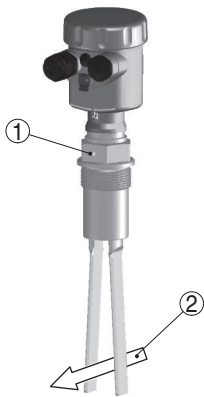
CONNECTION DIAGRAM TRANSISTOR CONNECTION DIAGRAM



CONNECTION DIAGRAM PNP ACTION

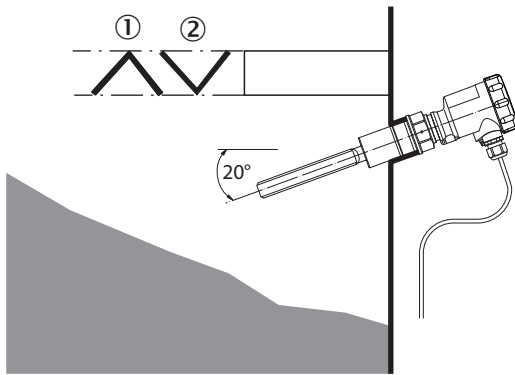


INSTRUCTION FOR INSTALLATION FLOW ORIENTATION OF THE TUNING FORK



- 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/6038016



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SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

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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