SICK.COM



DATA SHEET

LBV331-CKACTNVMX0300

LBV3xx
Level sensors

SICK
Sensor Intelligence



Illustration may differ

LEVEL SENSORS

LBV331-CKACTNVMX0300

ORDERING INFORMATION

Type	part no.
LBV331-CKACTNVMX0300	6089258

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

DETAILED TECHNICAL DATA

FEATURES

Medium	Bulk solids
Measurement	Switch
Probe type	Rod probe
Probe length	300 mm
Process pressure	–1 bar ... 16 bar
Process temperature	–50 °C ... +150 °C
Fill material density	≥ 0.02 g/cm³
ATEX approval	ATEX II 1G, 1/2G, 2G Ex ia IIC T6 Ga, 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 2016 X, BVS 17 ATEX E 098

PERFORMANCE

Accuracy of sensor element	± 10 mm
Reproducibility	≤ 5 mm
Response time	500 ms [1] 100 ms [2]
MTBF	4,17*10^6 h

[1] When covered.

[2] When uncovered.

ELECTRONICS

Communication interface	-
Supply voltage	4.5 V DC ... 12 V DC
Power consumption	1 mA / 2,5 mA
Initialization time	< 2 s
VDE protection class 2	✓

Connection type	M20 x 1.5
Output signal	NAMUR signal
Electronics	NAMUR signal
Hysteresis	10 mm
Output current	1 mA / 2,5 mA
Enclosure rating	IP66 IP67

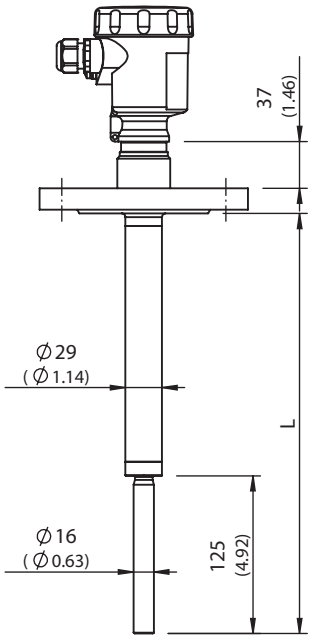
MECHANICS

Wetted parts	Stainless steel 1.4404 / 316L
Surface roughness	Ra ≤ 0,8 µm
Process connection	Tri-clamp 1 ½" (316L, Ra < 0.8 µm)
Housing material	Stainless steel (investment casting) 316L
Sensor material	Stainless steel 316L, 318S

AMBIENT DATA

Ambient operating temperature	–40 °C ... +70 °C
Ambient temperature, storage	–40 °C ... +80 °C

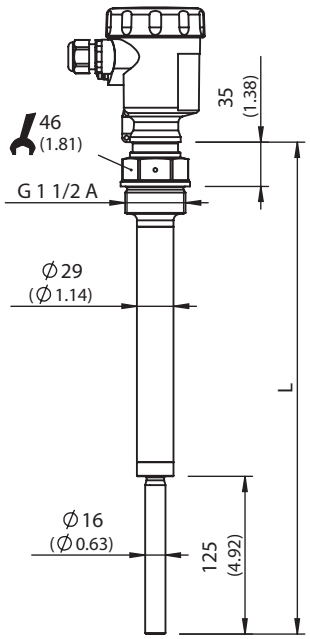
DIMENSIONAL DRAWING LBV331 FLANGE



All dimensions in mm (inch)

Dimensions in mm (inch)

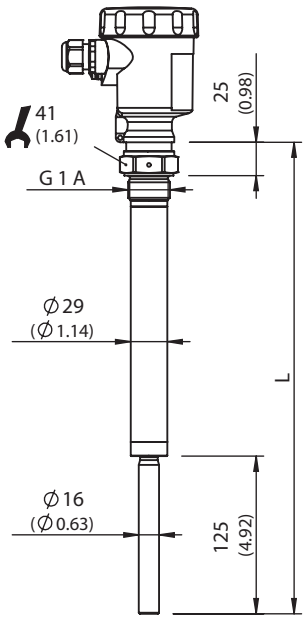
DIMENSIONAL DRAWING LBV331 THREADED VERSION G 1 ½ A



All dimensions in mm (inch)

Dimensions in mm (inch)

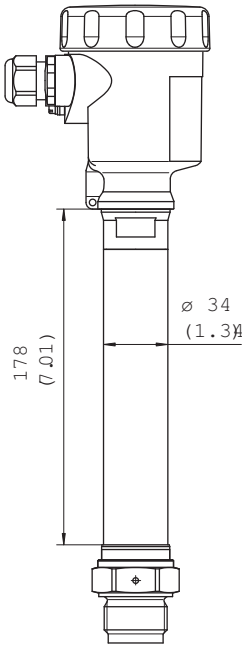
DIMENSIONAL DRAWING LBV331 THREADED VERSION G 1 A



All dimensions in mm (inch)

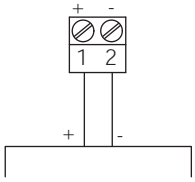
Dimensions in mm (inch)

DIMENSIONAL DRAWING TEMPERATURE ADAPTER

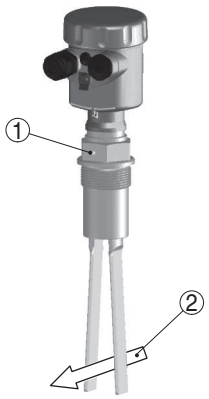


Dimensions in mm (inch)

CONNECTION DIAGRAM NAMUR CONNECTION DIAGRAM

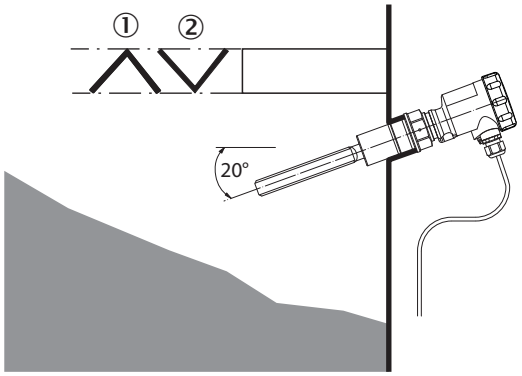


INSTRUCTION FOR INSTALLATION FLOW ORIENTATION OF THE TUNING FORK



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/6089258

SICK AG
WALDKIRCH
GERMANY
SICK.COM

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

SICK

Sensor Intelligence