

# LBV331-GXAGCTAMX1000

LBV3xx

**LEVEL SENSORS** 





#### Ordering information

Туре	part no.
LBV331-GXAGCTAMX1000	6076842

Other models and accessories → www.sick.com/LBV3xx

Illustration may differ



#### Detailed technical data

#### **Features**

Medium	Bulk solids
Measurement	Switch
Probe type	Rod probe
Probe length	1,000 mm
Process pressure	-1 bar 16 bar
Process temperature	-50 °C +150 °C
Fill material density	≥ 0.02 g/cm <sup>3</sup>
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 098 X

#### Performance

Accuracy of sensor element	± 10 mm
Reproducibility	≤ 5 mm
Response time	500 ms <sup>1)</sup> 100 ms <sup>2)</sup>
MTBF	4,17*10^6 h

<sup>1)</sup> When covered.

#### **Electronics**

Communication interface	-
Supply voltage	10 V DC 55 V DC
Residual ripple	≤ 5 V <sub>pp</sub>
Power consumption	≤ 10 mA
Initialization time	<2s
VDE protection class 2	<b>√</b>
Connection type	M20 x 1.5

<sup>&</sup>lt;sup>2)</sup> When uncovered.

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

#### Mechanics

Wetted parts	Stainless steel 1.4404 / 316L
Process connection	G 1, DIN 3852-A, PN 16 / 316L
Housing material	Aluminum
Sensor material	Stainless steel 316L, 318S

#### Ambient data

Ambient operating temperature	-40 °C +70 °C
Ambient temperature, storage	-40 °C +80 °C

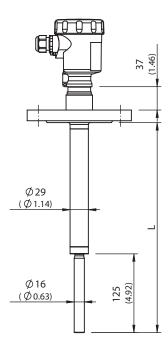
## Classifications

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

#### Certificates

EU declaration of conformity	1
UK declaration of conformity	1
ACMA declaration of conformity	1
China RoHS	1
ATEX certificate	1
EAC certificate / DoC	1

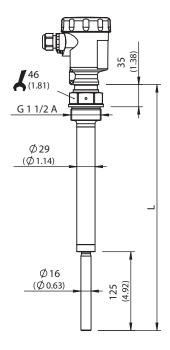
#### Dimensional drawing LBV331 flange



All dimensions in mm (inch)

Dimensions in mm (inch)

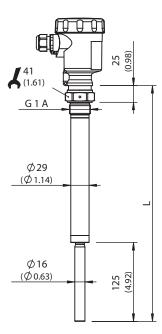
## Dimensional drawing LBV331 threaded version G 1 $\frac{1}{2}$ A



All dimensions in mm (inch)

Dimensions in mm (inch)

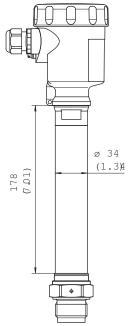
## Dimensional drawing LBV331 threaded version G 1 A



All dimensions in mm (inch)

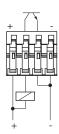
Dimensions in mm (inch)

## Dimensional drawing Temperature adapter

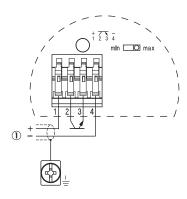


Dimensions in mm (inch)

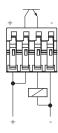
## Connection diagram NPN action



## Connection diagram Transistor connection diagram



## Connection diagram PNP action

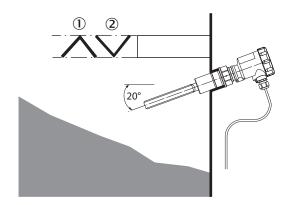


#### Instruction for installation Flow orientation of the tuning fork



- ① Marking with screwed version
- ② Direction of flow

## Instruction for installation Horizontal mounting



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

#### Recommended accessories

Other models and accessories → www.sick.com/LBV3xx

	Brief description	Туре	part no.
Mounting systems			
	<ul> <li>Description: Locking screw connection, process pressure -1 bar to 16 bar, process connection G 2 A, inner thread G 1 1/2 A</li> <li>Material: Stainless steel</li> <li>Details: Stainless steel 316L</li> </ul>	BEF-MU-316G20- ALBV	5322462

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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."

## **WORLDWIDE PRESENCE:**

Contacts and other locations -www.sick.com

