

# LBV330-GXAGDTAMX1000

LBV3xx

**LEVEL SENSORS** 





## Ordering information

| Туре                 | part no. |
|----------------------|----------|
| LBV330-GXAGDTAMX1000 | 6062649  |

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

Illustration may differ



#### Detailed technical data

#### **Features**

| Medium                | Bulk solids   |
|-----------------------|---|
| Measurement           | Switch  |
| Probe type            | Tuning fork   |
| Probe length          | 1,000 mm  |
| Process pressure      | -1 bar 25 bar   |
| Process temperature   | -50 °C +150 °C  |
| Fill material density | ≥ 0.008 g/cm <sup>3</sup>                                 |
| Particle size         | < 10 mm   |
| 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 099   |

#### Performance

| Accuracy of sensor element | ± 10 mm  |
|----------------------------|--|
| Reproducibility            | ≤ 5 mm   |
| Response time              | 500 ms <sup>1)</sup><br>1,000 ms <sup>2)</sup> |
| MTBF                       | 4,61*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> |
| Initialization time     | < 2 s               |
| VDE protection class 2  | ✓                   |
| 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<br>IP67                         |

#### Mechanics

| Wetted parts       | Stainless steel 1.4404 / 316L |
|--------------------|-------------------------------|
| Process connection | G 1½ A 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 |

#### 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 |

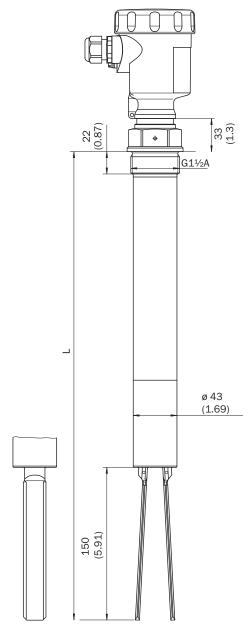
#### Certificates

| EU declaration of conformity   | J .      |
|--------------------------------|----------|
| UK declaration of conformity   | 1        |
| ACMA declaration of conformity | <b>√</b> |
| China RoHS                     | <b>√</b> |
| FDA certificate                | 1        |
| ATEX certificate               | 1        |

EAC certificate / DoC

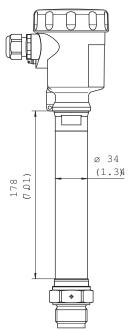
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## Dimensional drawing LBV330 threaded version G 1½ A (DIN ISO 228/1)



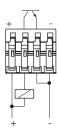
Dimensions in mm (inch)

## Dimensional drawing Temperature adapter

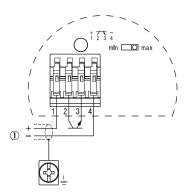


Dimensions in mm (inch)

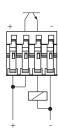
## Connection diagram NPN action



## Connection diagram Transistor connection diagram



### Connection diagram PNP action

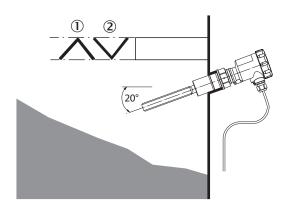


## Instruction for installation Flow orientation of the tuning fork



- ① Marking with screwed version
- ② Direction of flow

## Instruction for installation Horizontal mounting



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

#### Recommended accessories

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

|               | Brief description  | Туре                    | part no. |  |
|---------------|--|-------------------------|----------|--|
| Mounting syst | 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-<br>ALBV  | 5322462  |  |
| Power supply  | units and power supply cables  |                         |          |  |
|               | Description: Transistor (PNP/NPN): 10 V DC 55 V DC   | ECD-RE-LB-<br>VPNP-0001 | 6038667  |  |

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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

