



# LBV330-XXAGDRAMX2700

LBV300

VIBRATING LEVEL SWITCH

**SICK**  
Sensor Intelligence.



Illustration may differ



### Ordering information

| Type                 | Part no. |
|----------------------|----------|
| LBV330-XXAGDRAMX2700 | 6039695  |

Other models and accessories → [www.sick.com/LBV300](http://www.sick.com/LBV300)

### Detailed technical data

#### Features

|                              |                           |
|------------------------------|---------------------------|
| <b>Medium</b>                | Bulk solids               |
| <b>Measurement</b>           | Switch                    |
| <b>Probe length</b>          | 2,700 mm                  |
| <b>Process pressure</b>      | -1 bar ... 25 bar         |
| <b>Process temperature</b>   | -50 °C ... +150 °C        |
| <b>Fill material density</b> | ≥ 0.008 g/cm <sup>3</sup> |
| <b>Particle size</b>         | < 10 mm                   |

#### Performance

|                                   |   |
|-----------------------------------|---|
| <b>Accuracy of sensor element</b> | ± 10 mm                                       |
| <b>Reproducibility</b>            | ≤ 5 mm  |
| <b>Response time</b>              | 500 ms when covered / 1,000 ms when uncovered |
| <b>MTBF</b>                       | 4,61*10 <sup>6</sup> h                        |

#### Electronics

|                               |   |
|-------------------------------|---|
| <b>Power consumption</b>      | 5 mA ... 30 mA  |
| <b>Initialization time</b>    | < 2 s   |
| <b>VDE protection class 1</b> | ✓   |
| <b>Connection type</b>        | M20 x 1.5   |
| <b>Output signal</b>          | Double relay (DPDT)   |
| <b>Supply voltage</b>         | Double relay (DPDT): 20 V DC ... 72 V DC / 20 V AC ... 253 V AC |
| <b>Hysteresis</b>             | 10 mm   |
| <b>Output current</b>         | > 10 µA; < 3A AC, 1A DC   |
| <b>Inductive load</b>         | 750 VA 54 W   |
| <b>Capacitive load</b>        | 750 VA 54 W   |
| <b>Contact load</b>           | Min. 50 mW / max. 750 VA, 54 W                                  |
| <b>Enclosure rating</b>       | IP66 / IP67   |

#### Mechanics

|                           |              |
|---------------------------|--------------|
| <b>Process connection</b> | G 1½ A PN 25 |
|---------------------------|--------------|

|                         |                        |
|-------------------------|------------------------|
| <b>Housing material</b> | Aluminum               |
| <b>Sensor material</b>  | Stainless steel 1.4404 |

Ambient data

|                                      |                   |
|--------------------------------------|-------------------|
| <b>Ambient operating temperature</b> | -40 °C ... +80 °C |
| <b>Ambient temperature, storage</b>  | -40 °C ... +80 °C |

Classifications

|                       |          |
|-----------------------|----------|
| <b>ECLASS 5.0</b>     | 27273202 |
| <b>ECLASS 5.1.4</b>   | 27273202 |
| <b>ECLASS 6.0</b>     | 27273202 |
| <b>ECLASS 6.2</b>     | 27273202 |
| <b>ECLASS 7.0</b>     | 27273202 |
| <b>ECLASS 8.0</b>     | 27273202 |
| <b>ECLASS 8.1</b>     | 27273202 |
| <b>ECLASS 9.0</b>     | 27273202 |
| <b>ECLASS 10.0</b>    | 27273202 |
| <b>ECLASS 11.0</b>    | 27273202 |
| <b>ECLASS 12.0</b>    | 27273106 |
| <b>ETIM 5.0</b>       | EC002654 |
| <b>ETIM 6.0</b>       | EC002654 |
| <b>ETIM 7.0</b>       | EC002654 |
| <b>ETIM 8.0</b>       | EC002654 |
| <b>UNSPSC 16.0901</b> | 41111938 |

Type code

LBV330 type code

**Certification**

|    |   |
|----|---|
| XX | without   |
| CX | ATEX II 1G, ½ G, 2G Ex ia IIC T6                      |
| CK | ATEX II 1G, ½ G, 2G Ex ia IIC T6+ATEX II 1/2 D IP6X T |
| LX | ATEX II 1G, ½ G, 2G Ex d IIC T6                       |
| LK | ATEX II ½ G, 2G Ex d IIC T6+ATEX II 1/2 D, 2D IP6X    |
| GX | ATEX II ½ D IP6X T                                    |

**Execution / Process temperature**

|   |   |
|---|---|
| A | Standard / -50 °C ... +150 °C                     |
| B | With spacer / -50 °C ... +250 °C                  |
| C | Detection of solids in water / -50 °C ... +150 °C |

**Process connection / Material**

|     |  |
|-----|--|
| GD  | Thread G 1 ½ A, PN 25 / 316L                   |
| ND  | Thread 1 ½" NPT, PN 25 / 316L                  |
| EF  | Flange DN 50, PN 40, form C, DIN 2501 / 316L   |
| No  | Flange DN 80, PN 40, form C, DIN 2501 / 316L   |
| er- |  |
| ror |  |
| ZF  | Flange DN 100, PN 6, form C, DIN 2501 / 316L   |
| MF  | Flange DN 100 PN 16 form C, DIN2501 / 316L     |
| OF  | Flange DN 100, PN 40, form C, DIN 2501 / 316L  |
| QF  | Flange DN 150, PN 16, form C, DIN 2501 / 316L  |
| 2F  | Flange DN 200, PN 10, form C, DIN 2501 / 316L  |
| EB  | Flange DN 50, PN 40, EN 1092-1, form B1 / 316L |
| HA  | Flange 2", 150 lb RF, ANSI B16.5 / 316L        |
| HE  | Flange 2", 150 lb FF, ANSI B16.5 / 316L        |

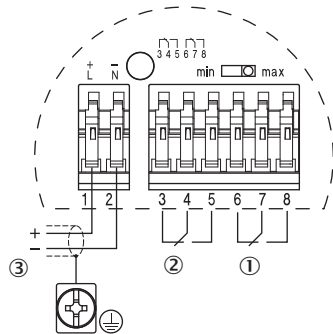


LBV330 threaded version G 1½ A (DIN ISO 228/1)



### Connection diagram

Double relay connection diagram



- ① Relay output
- ② Relay output
- ③ Power supply

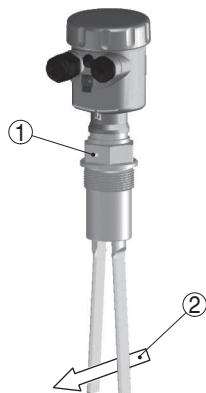
### Instruction for installation

Horizontal mounting



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

Flow orientation of the tuning fork



- ① Marking with screwed version
- ② Direction of flow

## Recommended accessories

Other models and accessories → [www.sick.com/LBV300](http://www.sick.com/LBV300)

|   | Brief description  | Type                | Part no. |
|---|--|---------------------|----------|
| Electronic modules  |  |                     |          |
|  | Double relay (DPDT): 20 V DC ... 72 V DC / 20 ... 250 V AC | ECD-RE-LB-VREL-0001 | 6038666  |
| Mounting brackets and plates  |  |                     |          |
|   | BEF-MU-316G20-ALBV   | BEF-MU-316G20-ALBV  | 5322462  |

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