



LBV320-GXTGDTVMX05000

LBV3xx

LEVEL SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

| Type | part no. |
|-----------------------|----------|
| LBV320-GXTGDTVMX05000 | 6039282 |

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

Detailed technical data

Features

| | |
|------------------------------|---|
| Medium | Bulk solids |
| Measurement | Switch |
| Probe type | Tuning fork |
| Probe length | 5,000 mm |
| Process pressure | -1 bar ... 6 bar |
| Process temperature | -20 °C ... +80 °C |
| Fill material density | ≥ 0.008 g/cm ³ |
| Particle size | < 10 mm |
| Tensile strength | ≤ 3,000 N |
| 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 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 6 |
| Housing material | Stainless steel (investment casting) 316L |
| Sensor material | Stainless steel 316L, 318LN, PUR |

Ambient data

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

Classifications

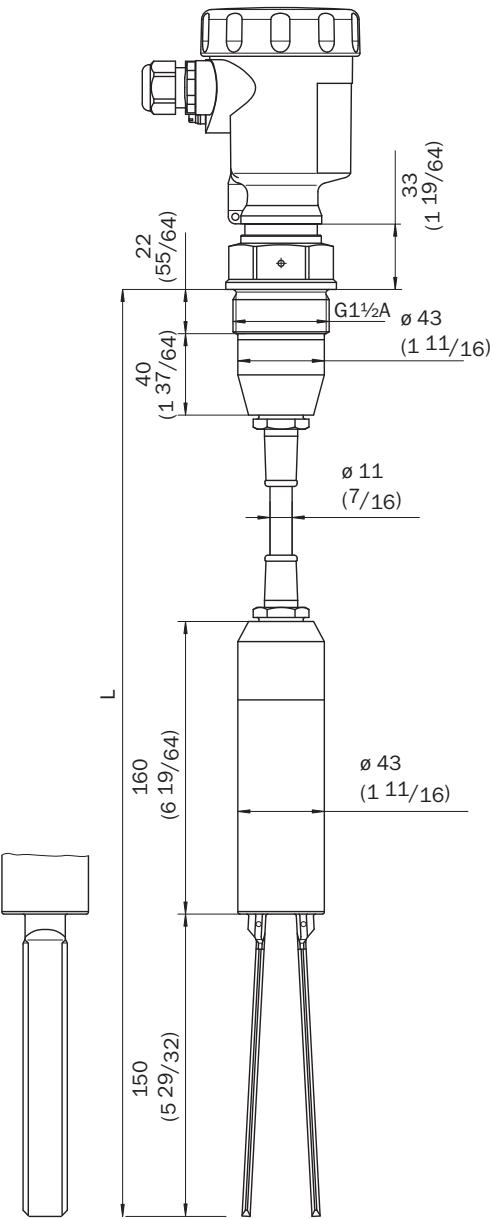
| | |
|-----------------------|----------|
| ECLASS 5.0 | 27273202 |
| ECLASS 5.1.4 | 27273202 |
| ECLASS 6.0 | 27273202 |
| ECLASS 6.2 | 27273202 |
| ECLASS 7.0 | 27273202 |
| ECLASS 8.0 | 27273202 |
| ECLASS 8.1 | 27273202 |
| ECLASS 9.0 | 27273202 |
| ECLASS 10.0 | 27273202 |
| ECLASS 11.0 | 27273202 |
| 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 | ✓ |
| UK declaration of conformity | ✓ |
| ACMA declaration of conformity | ✓ |
| China RoHS | ✓ |
| ATEX certificate | ✓ |

| | |
|-----------------------|---|
| EAC certificate / DoC | ✓ |
|-----------------------|---|

Dimensional drawing LBV320 with PUR suspension cable, threaded version G 1½ A (DIN ISO 228/1)



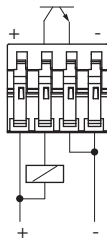
Dimensions in mm (inch)

Dimensional drawing Temperature adapter

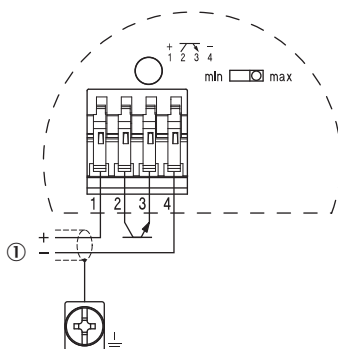


Dimensions in mm (inch)

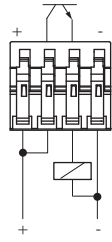
Connection diagram NPN action



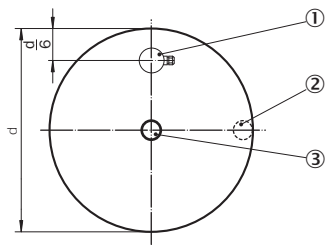
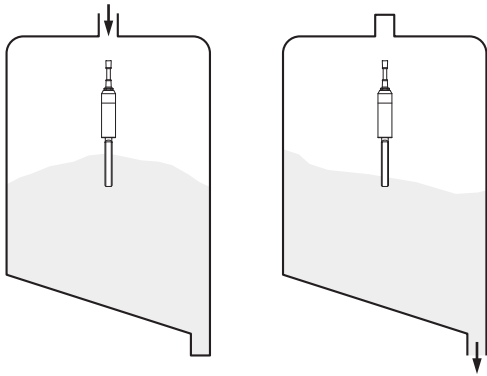
Connection diagram Transistor connection diagram



Connection diagram PNP action

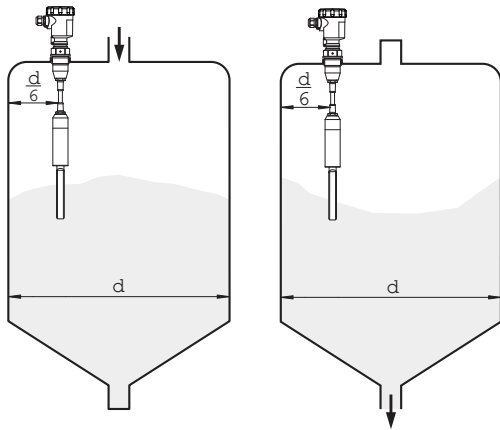


Instruction for installation Filling in the center, emptying laterally

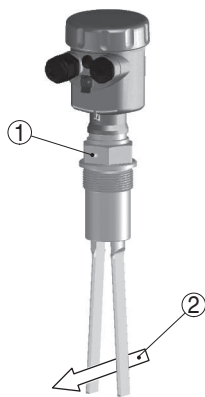


- ① LBV320
- ② Discharge opening
- ③ Filling opening

Instruction for installation LBV320 Filling and emptying centered

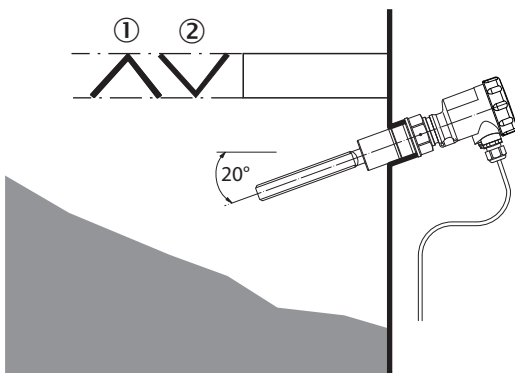


Instruction for installation Flow orientation of the tuning fork



- 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 | Type | part no. |
|---|---|---------------------|----------|
| Mounting systems | | | |
| | <ul style="list-style-type: none">• Description: Locking screw connection, process pressure –1 bar to 16 bar, process connection G 2 A, inner thread G 1 1/2 A• Material: Stainless steel• Details: Stainless steel 316L | BEF-MU-316G20-ALBV | 5322462 |
| Power supply units and power supply cables | | | |
|  | <ul style="list-style-type: none">• Description: Transistor (PNP/NPN): 10 V DC ... 55 V DC | ECD-RE-LB-VPNP-0001 | 6038667 |

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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.”

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