



LBV320-GXTGDNAMX15000

LBV300

LEVEL SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

| Type | Part no. |
|-----------------------|----------|
| LBV320-GXTGDNAMX15000 | 6055560 |

Other models and accessories → www.sick.com/LBV300

Detailed technical data

Features

| | |
|------------------------------|---|
| Medium | Bulk solids |
| Measurement | Switch |
| Probe length | 15,000 mm |
| Process pressure | -1 bar ... 6 bar |
| Process temperature | -20 °C ... +80 °C |
| Fill material density | ≥ 0.008 |
| 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 when covered / 1,000 ms when uncovered |

Electronics

| | |
|-------------------------------|------------------------------------|
| 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 |
| Supply voltage | NAMUR signal: 4.5 V DC ... 12 V DC |
| Hysteresis | 10 mm |
| Output current | 1 mA / 2,5 mA |
| Enclosure rating | IP66 / IP67 |

Mechanics

| | |
|---------------------------|--------------|
| Process connection | G 1½ A PN 25 |
|---------------------------|--------------|

| | |
|-------------------------|----------------------------------|
| Housing material | Aluminum |
| Sensor material | Stainless steel 316L, 318LN, PUR |

Ambient data

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

Classifications

| | |
|-----------------------|----------|
| ECl@ss 5.0 | 27273202 |
| ECl@ss 5.1.4 | 27273202 |
| ECl@ss 6.0 | 27273202 |
| ECl@ss 6.2 | 27273202 |
| ECl@ss 7.0 | 27273202 |
| ECl@ss 8.0 | 27273202 |
| ECl@ss 8.1 | 27273202 |
| ECl@ss 9.0 | 27273202 |
| ECl@ss 10.0 | 27273202 |
| ECl@ss 11.0 | 27273202 |
| ETIM 5.0 | EC002654 |
| ETIM 6.0 | EC002654 |
| ETIM 7.0 | EC002654 |
| UNSPSC 16.0901 | 41111938 |

Type code

LBV320 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 1/2D IP6X T |
| GX | ATEX II ½ D IP6X T |

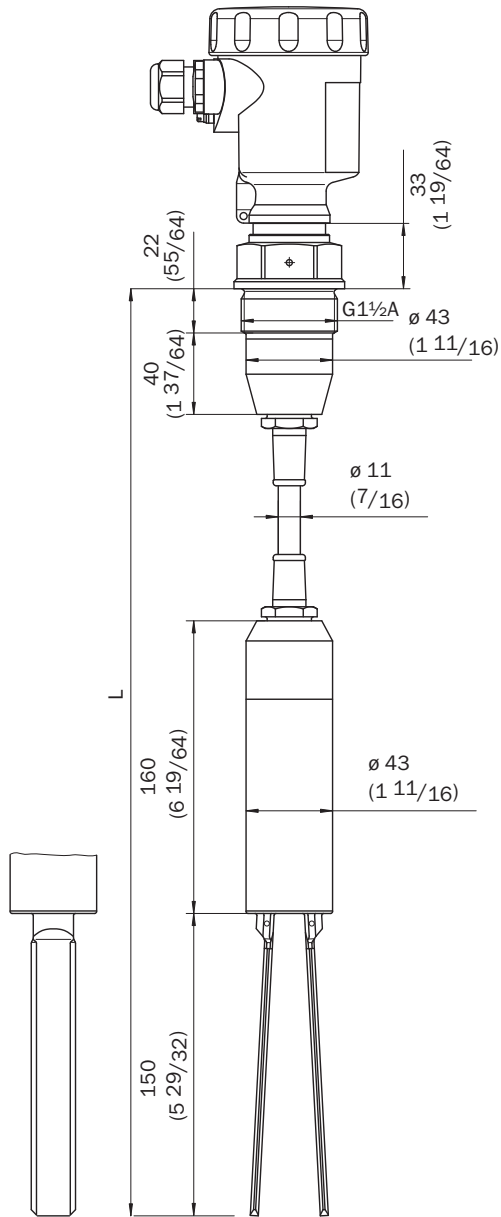
Execution / Process temperature

| | |
|---|---|
| C | Cable PUR, detection of solids in water / -20 °C ... +80 °C |
| H | Cable FEP / -40 °C ... +150 °C |
| T | Cable PUR / -20 °C ... +80 °C |

Process connection / Material

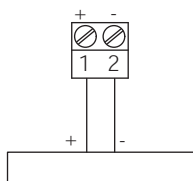
| | |
|-----|--|
| XX | Without / 316L |
| GD | Thread G 1 ½ A, PN 16 / 316L |
| ND | Thread 1 ½" NPT, PN 16 / 316L |
| EF | Flange DN 50, PN 40, form C, DIN 2501 / 316L |
| No | Flange DN 80, PN 40, form C, DIN 2501 / 316L |
| er- | |
| ror | |
| ZF | Flange DN 100, PN 6, form C, DIN 2501 / 316L |
| MF | Flange DN 100, PN 16, form C, DIN 2501 / 316L |
| OF | Flange DN 100, PN 40, form C, DIN 2501 / 316L |
| QF | Flange DN150, 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 |
| IA | Flange 2", 300 lb RF, ANSI B16.5 / 316L |
| OA | Flange 3", 150 lb RF, ANSI B16.5 / 316L |
| OE | Flange 3", 150 lb FF, ANSI B16.5 / 316L |
| PA | Flange 3", 300 lb RF, ANSI B16.5 / 316L |

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



Connection diagram

Namur connection diagram



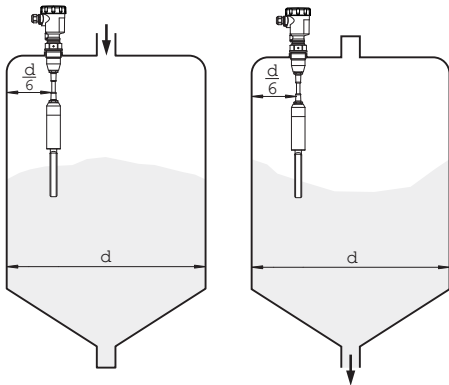
Instruction for installation

Horizontal mounting

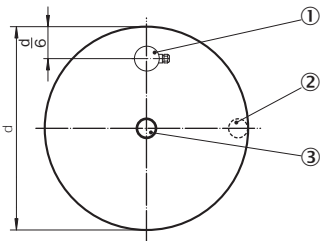


- ① Protective sheet
- ② Concave protective sheet for abrasive solids

LBV320 Filling and emptying centered



Filling in the center, emptying laterally



- ① LBV320
- ② Discharge opening
- ③ Filling opening

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

| | Brief description | Type | Part no. |
|------------------------------|---|--------------------|----------|
| Mounting brackets and plates | | | |
| | Locking screw connection, process pressure -1 bar to 16 bar, process connection G 2 A, inner thread G 1 1/2 A, stainless steel 316L | BEF-MU-316G20-ALBV | 5322462 |

| | Brief description | Type | Part no. |
|---|---|---------------------|----------|
| Electronic modules | | | |
|  |  | ECD-RE-LB-VNAM-0001 | 6038668 |

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

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Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

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