



Level sensors
Vibrating level switch, LBV320

LBV320-XXHNDRANX03000



Model Name > **LBV320-XXHNDRANX03000**
Part No. > **6038501**



Product may differ from illustration

At a glance

- Rugged device design with suspension cable up to 80 m
- Several housing materials and electrical outputs available
- Immune to deposit formation
- Commissioning without filling
- Process temperature up to 150 °C
- Very high repeatability
- ATEX versions (1D/2D/1G/2G) available
- Short versions (LBV310) and tube-extended devices (LBV330) available

Your benefits

- Easy installation and commissioning, no calibration necessary
- Easy operation and integration, saves time
- Maintenance-free sensor, reduces downtime
- Testing in place possible - no mounting required, which reduces installation time
- Flexible and tough system for a multitude of applications
- Solutions for vertically mounted switches in difficult installation conditions



Features

| | |
|------------------------|-------------------------|
| Medium: | Bulk solids |
| Measurement: | Switch |
| Probe length: | 3,000 mm |
| Process pressure: | -1 bar ... 6 bar |
| Process temperature: | -40 °C ... 150 °C |
| ATEX certification: | - |
| Particle size: | < 10 mm |
| Fill material density: | 0.008 g/cm ³ |
| Tensile strength: | ≤ 3,000 N |

Performance

| | |
|----------------|---------|
| Accuracy: | ± 10 mm |
| Repeatability: | ± 5 mm |
| Response time: | 500 ms |

Mechanical data

| | |
|---------------------|-----------------------|
| Housing material: | Aluminum |
| Process connection: | 1 1/2" NPT PN 25/316L |

Sensor material:

Stainless steel 316L, 318LN, PUR

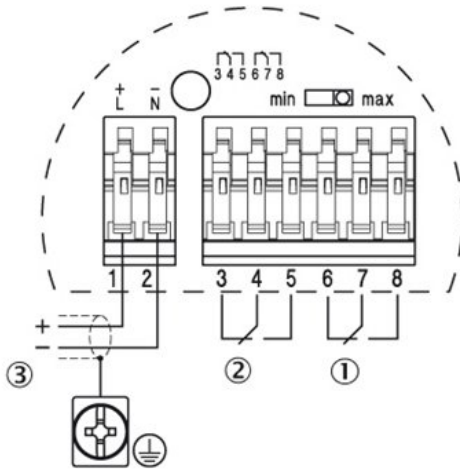
Electrical data

| | |
|-------------------------|----------------------------------------------------------|
| Enclosure rating: | IP 66 |
| Power consumption: | 5 mA ... 30 mA |
| VDE protection class 1: | ✓ |
| Initialization time: | 2 s |
| Output type: | Double relay (DPDT): 20 V DC ... 72 V DC/20 ... 253 V AC |
| Hysteresis: | 10 mm |
| Output current: | > 10 UA, 3A AC, 1A DC |
| Capacitive load: | 750 VA 54 W |
| Inductive load: | 750 VA 54 W |
| Connection type: | ½" NPT |

Ambient data

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

Double relay connection diagram



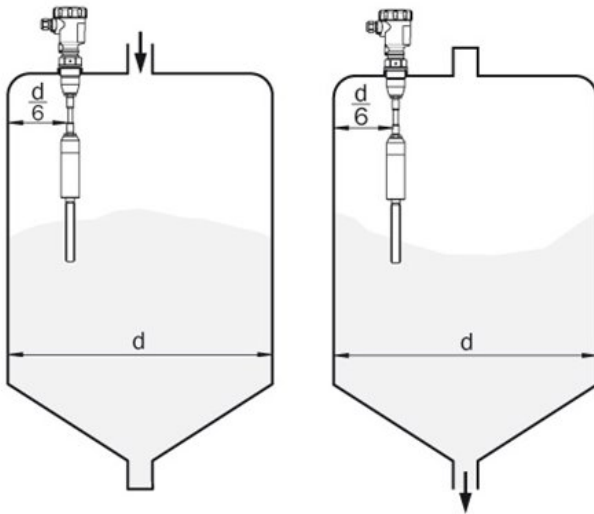
- [1] Relay output
- [2] Relay output
- [3] Power supply

Flow orientation of the tuning fork

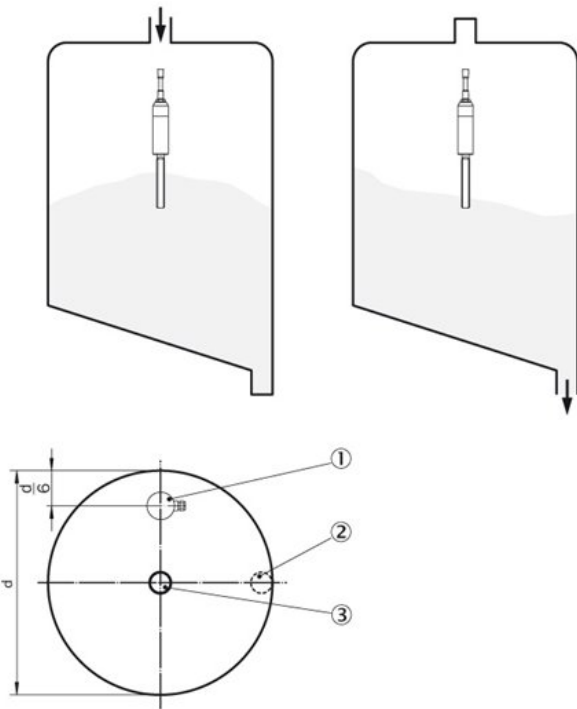


- |1| Marking with screwed version
- |2| Direction of flow

Mounting instruction: filling / emptying

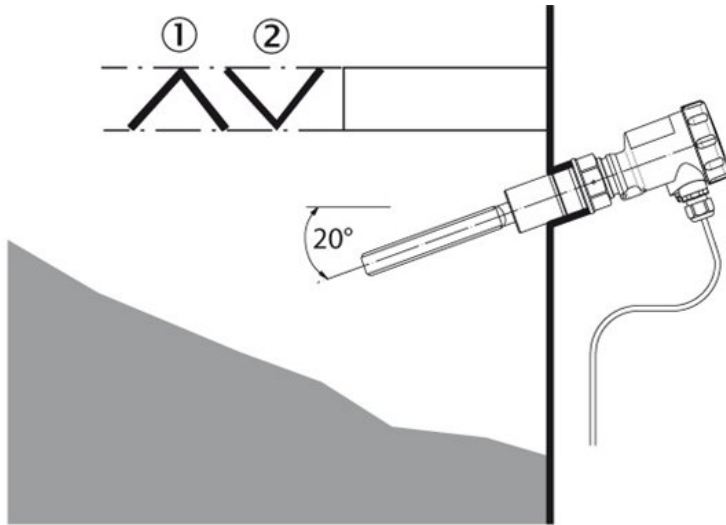


Mounting instruction: filling / emptying (side view)



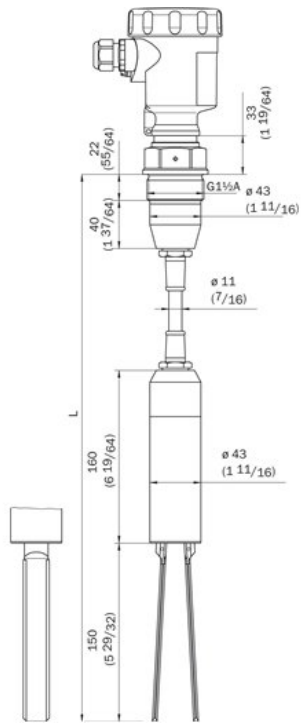
- |1| LBV320
- |2| Discharge opening
- |3| Filling opening

Horizontal mounting



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

Dimensional drawing



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