



Level sensors  
Vibrating level switch, LBV310

LBV310-GXAGDTAMX



**Model Name** > [LBV310-GXAGDTAMX](#)  
**Part No.** > [6042031](#)



*Illustration may differ*

**At a glance**

- Rugged device design
- Several housing materials and electrical outputs available
- Immune to deposit formation
- Commissioning without filling
- Process temperature up to 250 °C
- Very high repeatability
- ATEX versions (1D/2D/1G/2G) available
- Tube extensions (LBV330) and rope extensions (LBV320) available for vertical mounting up to 80 m distance

**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



**Features**

Medium:	Bulk solids
Measurement:	Switch
Probe length:	220 mm
Process pressure:	-1 bar ... 25 bar
Process temperature:	-50 °C ... 150 °C
ATEX approval:	ATEX II 1D, 1/2D, 2D Ex t IIIC T... Da, Da/Db, Db IP66
Particle size:	< 10 mm
Fill material density:	≥ 0.008
Type examination:	TÜV 09 ATEX 555503

**Performance**

Accuracy of sensor element:	± 10 mm
Repeatability:	≤ 5 mm
Response time:	500 ms when covered / 1000 ms when uncovered

**Mechanical data**

Housing material:	Aluminum
Process connection:	G 1½ A PN 25

Sensor material:

Stainless steel 1.4404

### Electrical data

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Enclosure rating:	IP 66/IP 67
Supply voltage:	Transistor output PNP/ NPN: 10 V DC ... 55 V DC
Residual ripple:	$\leq 5$ Vpp
Power consumption:	$< 10$ mA
VDE protection class 2:	✓
Initialization time:	$< 2$ s
Hysteresis:	10 mm
Output current:	$< 300$ mA
Signal voltage HIGH:	$U_v - 3$ V
Signal voltage LOW:	$< 1$ V
Capacitive load:	100 nF
Inductive load:	$\leq 1$ H
Electrical connection:	M20 x 1.5

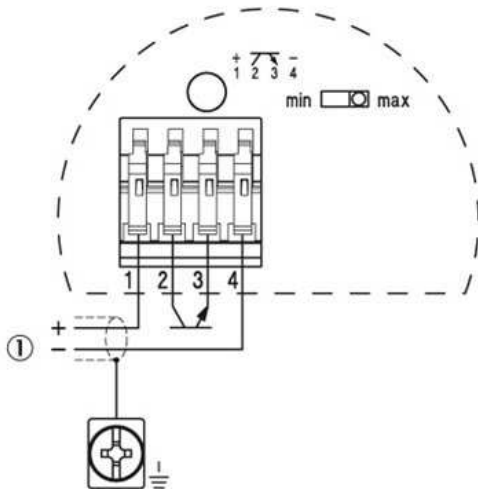
### Ambient data

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Ambient temperature operation:	$-40$ °C ... $80$ °C
Ambient storage temperature:	$-40$ °C ... $80$ °C

### Transistor connection diagram

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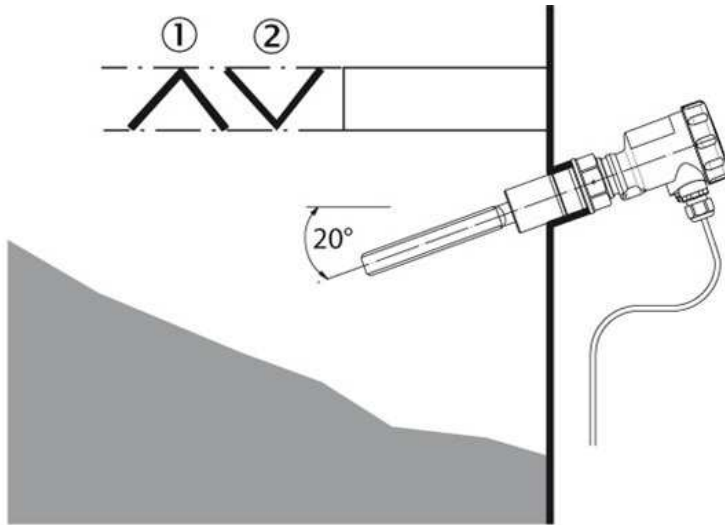


## Flow orientation of the tuning fork



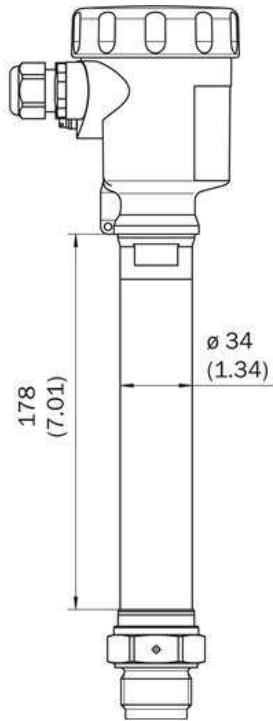
- |1| Marking with screwed version
- |2| Direction of flow

## Horizontal mounting

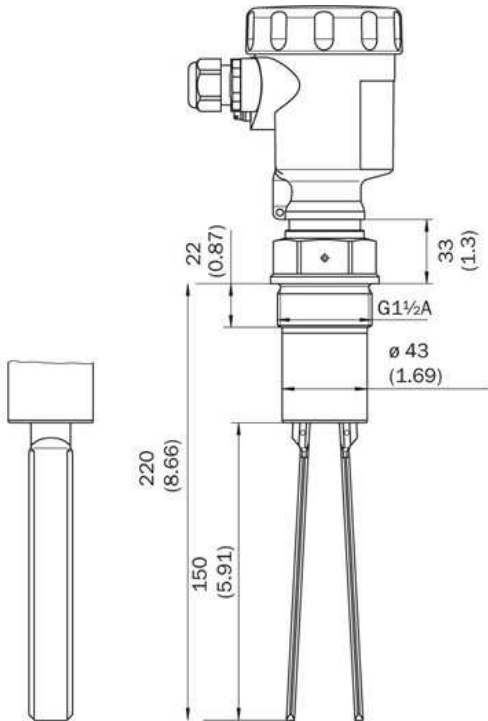


- |1| Protective sheet
- |2| Concave protective sheet for abrasive solids

Temperature adapter

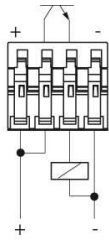


Dimensional drawing



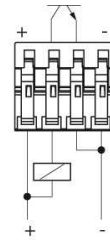
**PNP action**

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**NPN action**

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