



Level sensors  
Vibrating level switch, LBV310

LBV310-XXANDT8NX



**Model Name** > [LBV310-XXANDT8NX](#)  
**Part No.** > [6038045](#)



*Product might differ from illustration*

**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 certification:	-
Particle size:	< 10 mm
Fill material density:	0.008 g/cm <sup>3</sup>

**Performance**

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

**Mechanical data**

Housing material:	Stainless steel (electropolished) 316L
Process connection:	1 1/2" NPT PN 25/316L
Sensor material:	Stainless steel 1.4404

## Electrical data

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Enclosure rating:	IP 66
Ripple:	$\leq 5$ Vpp
Power consumption:	$< 10$ mA
VDE protection class 2:	✓
Initialization time:	2 s
Output type:	Transistor output PNP/ NPN: 10 V DC ... 55 V DC
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:	1 H
Connection type:	$\frac{1}{2}$ " NPT

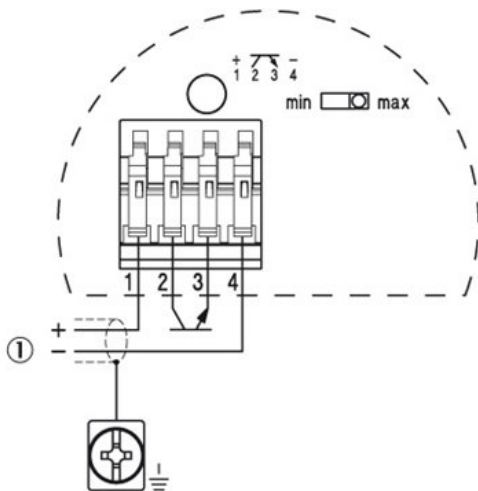
## Ambient data

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

## Transistor connection diagram

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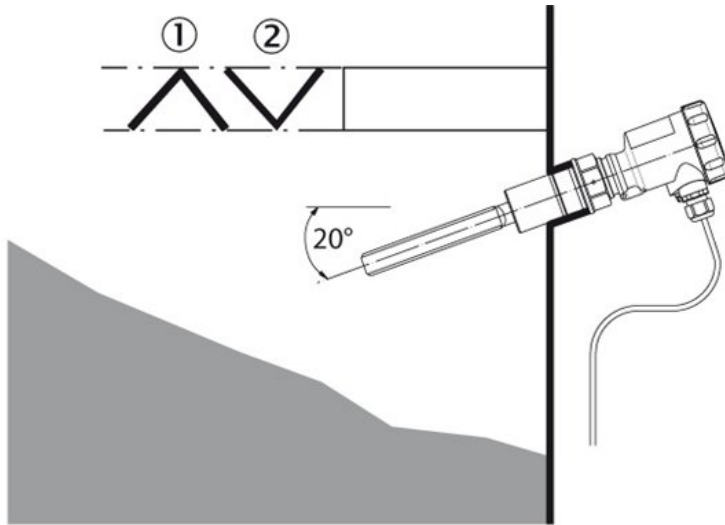


## Flow orientation of the tuning fork



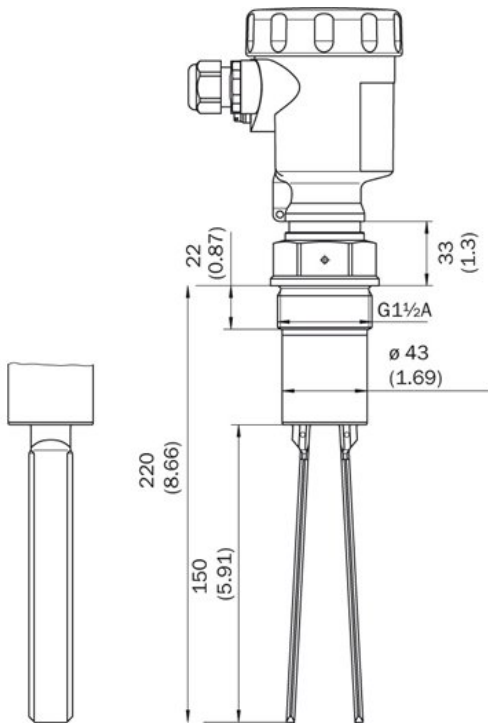
- |1| Marking with screwed version
- |2| Direction of flow

## Horizontal mounting

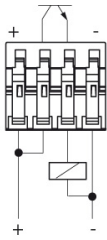


- |1| Protective sheet
- |2| Concave protective sheet for abrasive solids

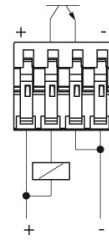
**Dimensional drawing**



**PNP action**



**NPN action**



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