



Level sensors Vibrating level switch, LBV310

LBV310-LKAGDTVMX



Model Name > **LBV310-LKAGDTVMX**
Part No. > **6039277**



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 1/2G, 2G Ex d IIC T6+ATEX II 1/2D, 2D IP6X
Particle size:	< 10 mm
Fill material density:	≥ 0.008
Type examination:	TÜV 09 ATEX 372526 X, TÜV 09 ATEX 555503

Performance

Accuracy of sensor element:	± 10 mm
Repeatability:	≤ 5 mm
Response time:	500 ms

Mechanical data

Housing material:	Stainless steel (casted) 316L
Process connection:	G 1½ A PN 25

Sensor material:

Stainless steel 1.4404

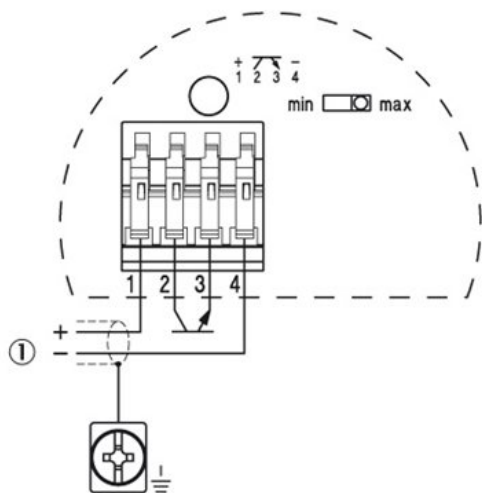
Electrical data

Enclosure rating:	IP 66
Ripple:	$\leq 5 \text{ Vpp}$
Power consumption:	$< 10 \text{ mA}$
VDE protection class 2:	✓
Initialization time:	2
Output signal:	Transistor output PNP/ NPN: 10 V DC ... 55 V DC
Hysteresis:	10 mm
Output current:	$< 300 \text{ mA}$
Signal voltage HIGH:	$U_v - 3 \text{ V}$
Signal voltage LOW:	$< 1 \text{ V}$
Capacitive load:	100
Inductive load:	1 H
Connection type:	M20 x 1.5

Ambient data

Ambient operating temperature:	$-40 \text{ }^{\circ}\text{C} \dots 80 \text{ }^{\circ}\text{C}$
Ambient storage temperature:	$-40 \text{ }^{\circ}\text{C} \dots 80 \text{ }^{\circ}\text{C}$

Transistor connection diagram

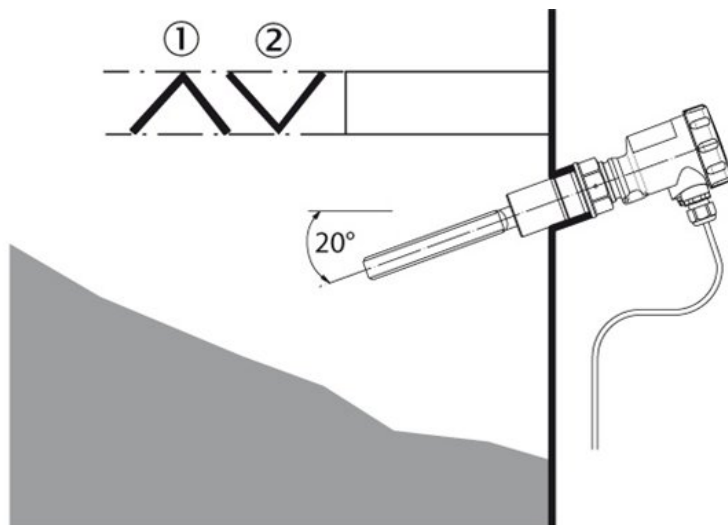


Flow orientation of the tuning fork



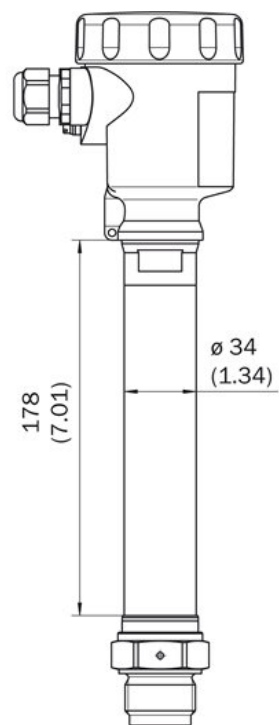
- |1| Marking with screwed version
- |2| Direction of flow

Horizontal mounting

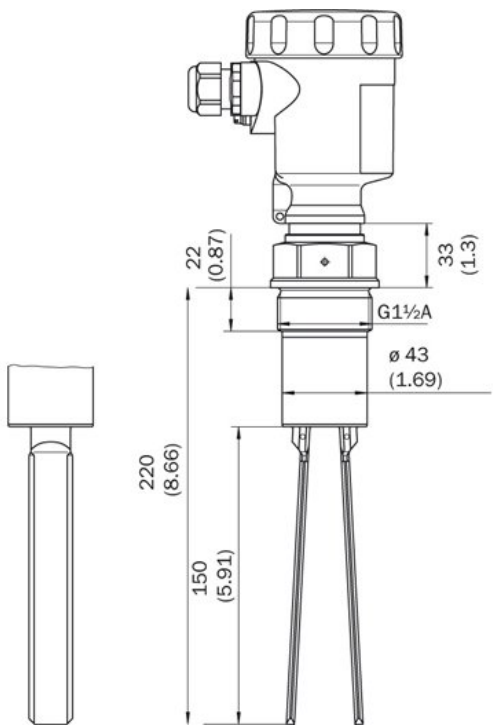


- |1| Protective sheet
- |2| Concave protective sheet for abrasive solids

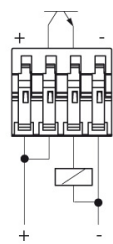
Temperature adapter



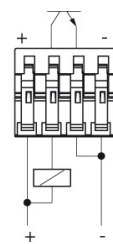
Dimensional drawing



PNP action



NPN action



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