



Level sensors Vibrating level switch, LBV320

LBV320-XXTGDTVMX05000



Model Name > **LBV320-XXTGDTVMX05000**
Part No. > **6039279**



*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:	5,000 mm
Process pressure:	-1 bar ... 6 bar
Process temperature:	-20 °C ... 80 °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:	Stainless steel (casted) 316L
Process connection:	G 1½ A PN 25/316L

Sensor material:

Stainless steel 316L, 318LN, PUR

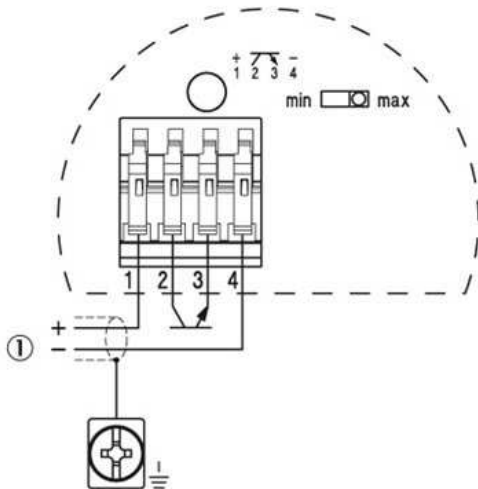
Electrical data

Enclosure rating:	IP 66
Residual ripple:	$\leq 5 \text{ Vpp}$
Power consumption:	$< 10 \text{ mA}$
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:	$< 300 \text{ mA}$
Signal voltage HIGH:	$U_v - 3 \text{ V}$
Signal voltage LOW:	$< 1 \text{ V}$
Capacitive load:	100 nF
Inductive load:	1 H
Electrical connection:	M20x1,5

Ambient data

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

Transistor connection diagram

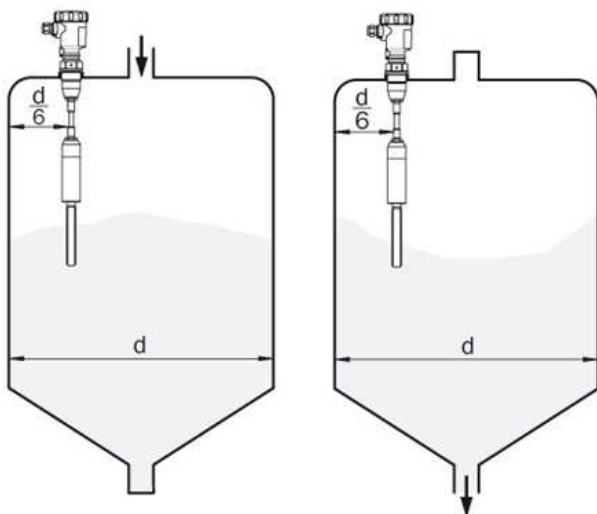


Flow orientation of the tuning fork

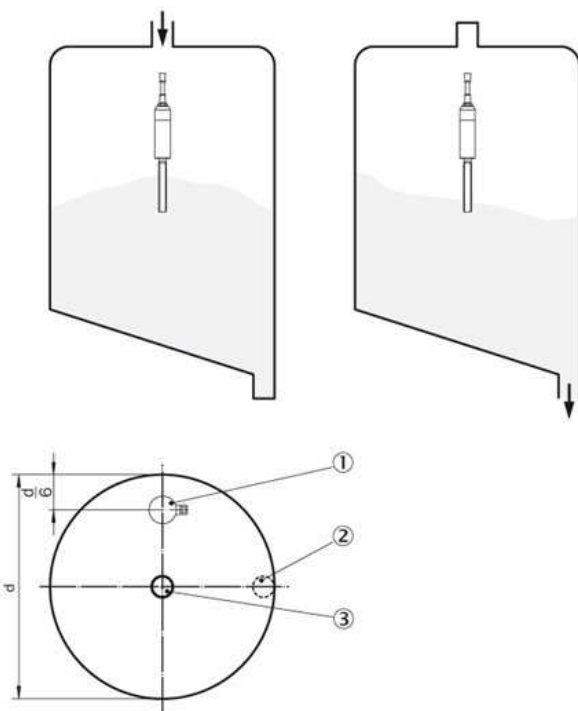


- |1| Marking with screwed version
- |2| Direction of flow

Mounting instruction: filling / emptying

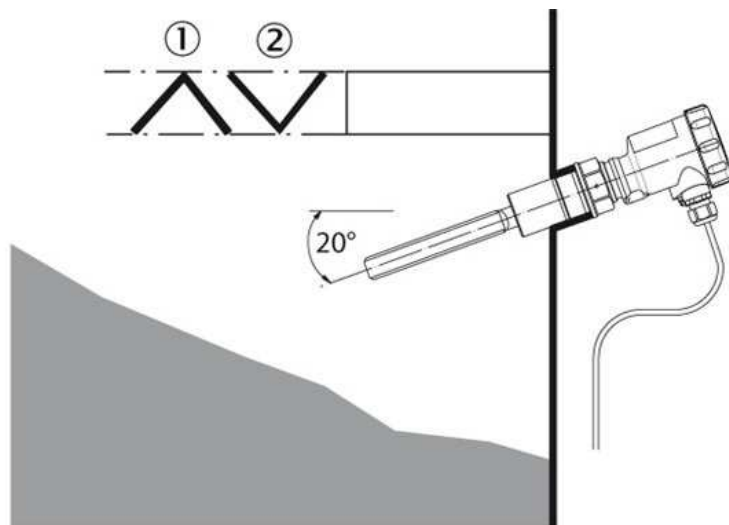


Mounting instruction: filling / emptying (side view)



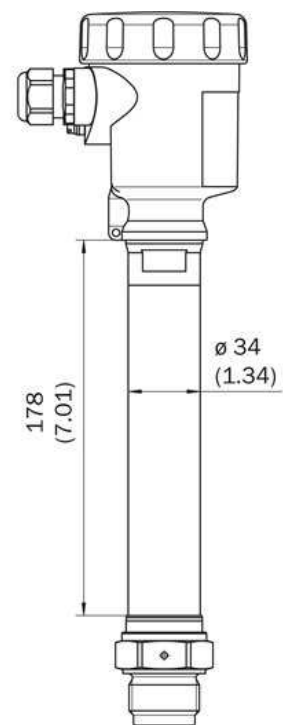
- |1| LBV320
- |2| Discharge opening
- |3| Filling opening

Horizontal mounting

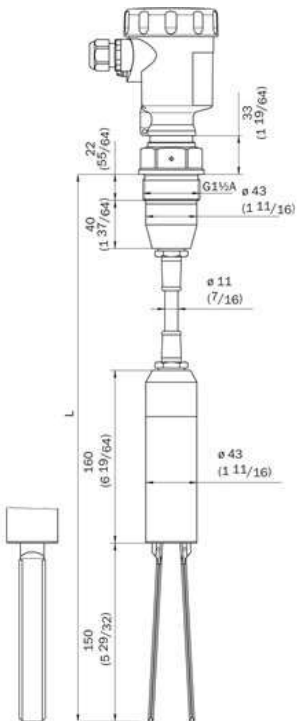


- |1| Protective sheet
- |2| Concave protective sheet for abrasive solids

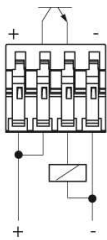
Temperature adapter



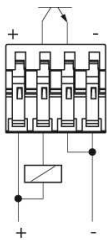
Dimensional drawing



PNP action



NPN action



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