



Level sensors
Vibrating level switch, Lfv310

LFV310-XXGBVTMTX



Model Name > LFB310-XXGBVTMTX
Part No. > 6037994



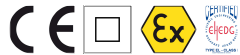
Product may differ from illustration

At a glance

- Several housing materials and electrical outputs available
- Commissioning without filling
- Process temperature up to 250 °C
- Immune to deposit formation
- Very high repeatability
- Aseptic versions according to EHEDG and FDA available, CIP and SIP resistant
- ATEX and marine certifications 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
- Universal technology works in all kinds of liquids



Features

Medium:	Fluids
Measurement:	Switch
Probe length:	66 mm
Process pressure:	-1 bar ... 64 bar
Process temperature:	-50 °C ... 250 °C
Fill material density:	0.5 ... 2.5

Performance

Accuracy of sensor element:	± 2 mm
Repeatability:	1
Viscosity:	0.1 mPas ... 10,000 mPas
Response time:	500 ms

Mechanical data

Housing material:	Aluminum
Process connection:	G ¾ A PN 64/316L
Wetted parts:	Stainless steel 316L (optional Ra ≤ 0.8 µm)
Sensor material:	Stainless steel 1.4404

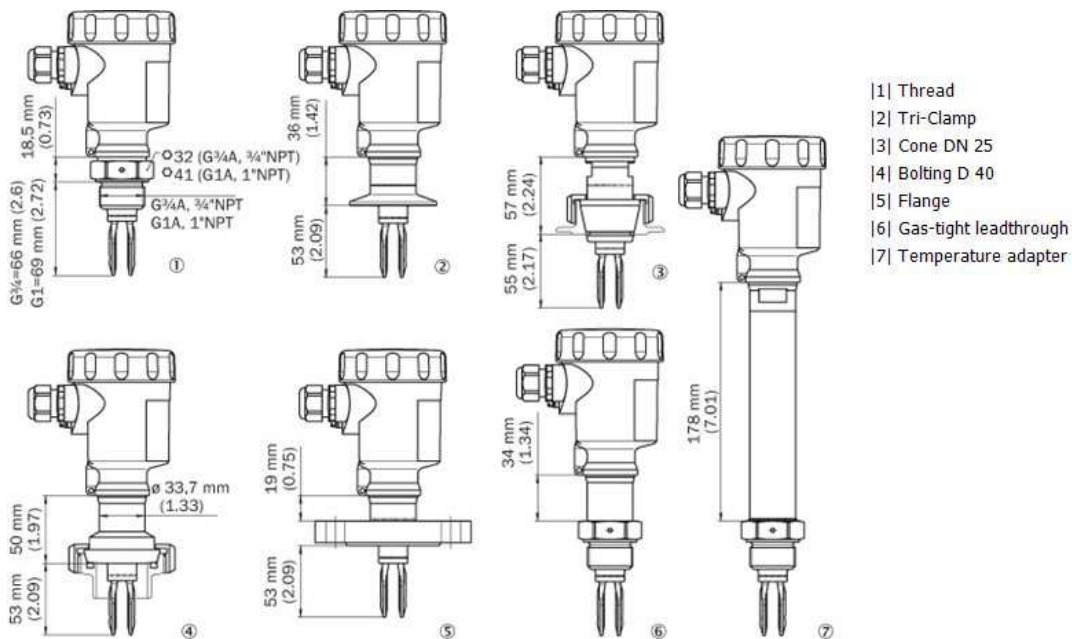
Electrical data

Temperature drift:	0,03 mm/K
Enclosure rating:	IP 66
Residual ripple:	≤ 5 Vpp
Power consumption:	< 10 mA
Protection class:	0, 1
Initialization time:	2
Output signal:	Transistor output PNP/ NPN: 10 V DC ... 55 V DC
Hysteresis:	2 mm
Output current:	< 300 mA
Signal voltage HIGH:	Uv - 3 V
Signal voltage LOW:	< 1 V
Capacitive load:	100
Inductive load:	1 H
Electrical connection:	M20 x 1.5

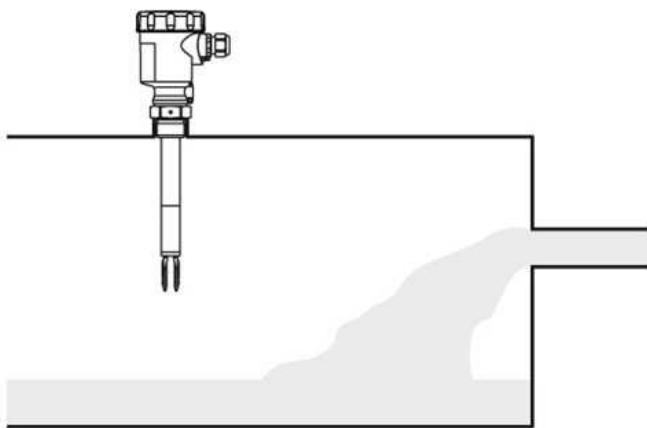
Ambient data

Ambient temperature operation:	-40 °C ... 70 °C
Ambient storage temperature:	-40 °C ... 80 °C

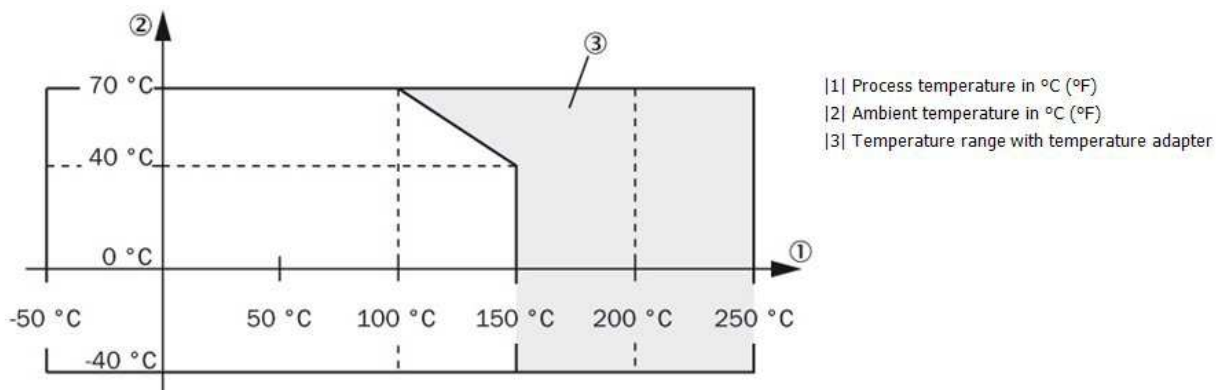
Dimensional drawing



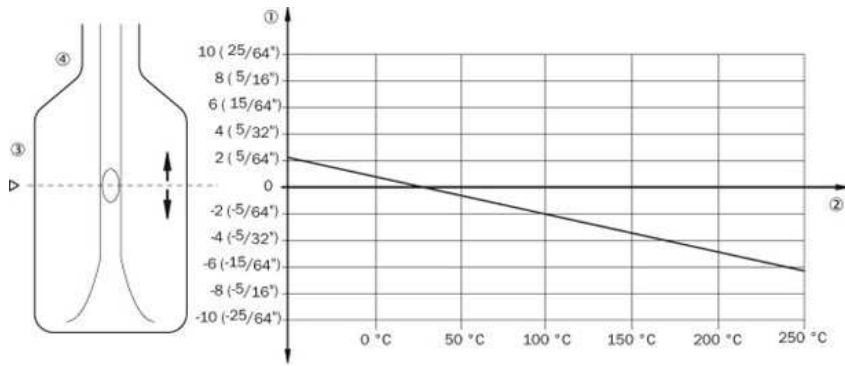
Instruction for installation



Ambient temperature - process temperature

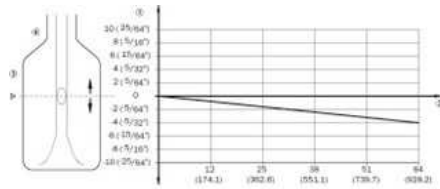


Influence of the process temperature on the switching point



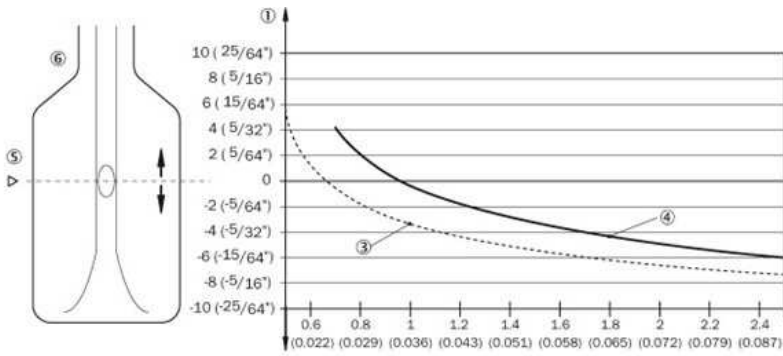
- |1| Shifting of the switching point in mm (in)
- |2| Process temperature in °C (°F)
- |3| Switching point at reference conditions (notch)
- |4| Tuning fork

Influence of the process temperature to the switching point



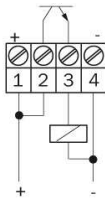
- |1| Shifting of the switching point in mm (in)
- |2| Process pressure in bar (psig)
- |3| Switching point at reference conditions (notch)
- |4| Tuning fork

Influence of the product density on the switching point

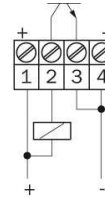


- |1| Shifting of the switching point in mm (in)
- |2| Product density in g/cm³ (lb/in³)
- |3| Switch position 0.5 g/cm³ (0.018 lb/in³)
- |4| Switch position 0.7 g/cm³ (0.025 lb/in³)
- |5| Switching point at reference conditions (notch)
- |6| Tuning fork

PNP action



NPN action



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