



## Level sensors Vibrating level switch, LFV330

LFV330-XXGBVX8RX0300



**Model Name** > LFB330-XXGBVX8RX0300  
**Part No.** > 6039664



*Product may differ  
from illustration*

#### At a glance

- Several housing materials and electrical outputs available
- Commissioning without filling
- Process temperature up to 250 °C
- Tube extension up to 6 m
- 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 robust system for a multitude of applications
- Tube extension allows for safe vertical mounting
- Universal technology works in all kinds of liquids



#### Features

|                        |                   |
|------------------------|-------------------|
| Medium:                | Fluids            |
| Measurement:           | Switch            |
| Probe length:          | 300 mm            |
| Process pressure:      | -1 bar ... 64 bar |
| Process temperature:   | -50 °C ... 150 °C |
| WHG approval:          | -                 |
| ATEX certification:    | -                 |
| 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:   | Stainless steel (electropolished) 316L      |
| Process connection: | G ¾ A PN 64/316L                            |
| Wetted parts:       | Stainless steel 316L (optional Ra ≤ 0.8 µm) |
| Sensor material:    | Stainless steel 1.4404                      |

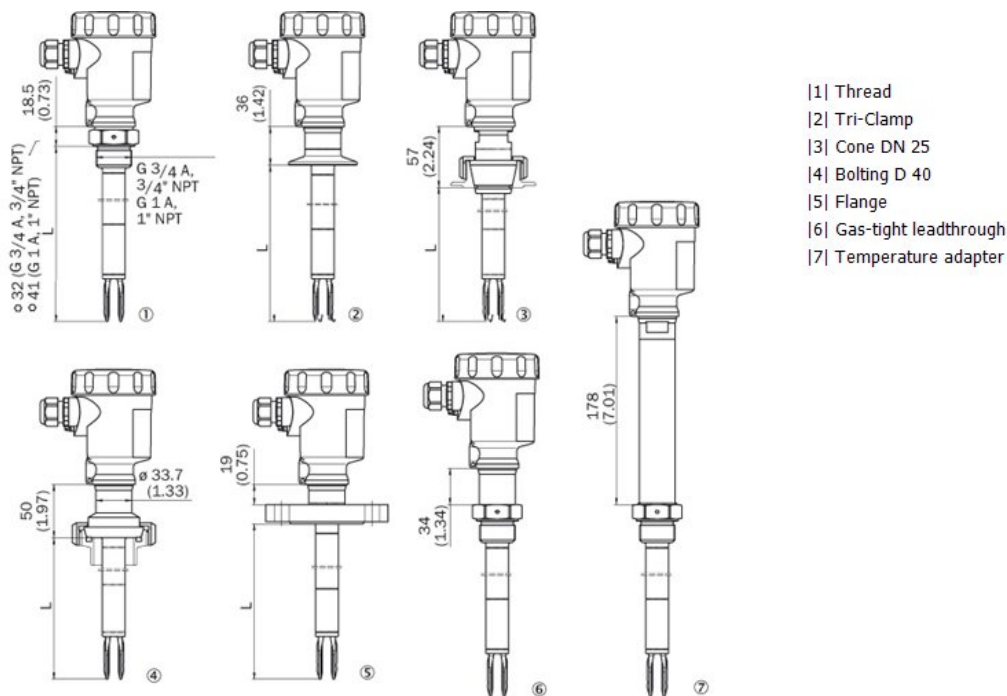
#### Electrical data

|                      |                                                            |
|----------------------|------------------------------------------------------------|
| Temperature drift:   | 0,03 mm/K                                                  |
| Enclosure rating:    | IP 66                                                      |
| Power consumption:   | 5 mA ... 30 mA                                             |
| Protection class:    | 0, 1                                                       |
| Initialization time: | 2                                                          |
| Output signal:       | Double relay (DPDT): 20 V DC ... 72 V DC / 20 ... 253 V AC |
| Hysteresis:          | 2 mm                                                       |
| Output current:      | > 10 UA, 3A AC, 1A DC                                      |
| Capacitive load:     | 750 VA 54 W                                                |
| Inductive load:      | 750 VA 54 W                                                |
| Connection type:     | M20 x 1.5                                                  |

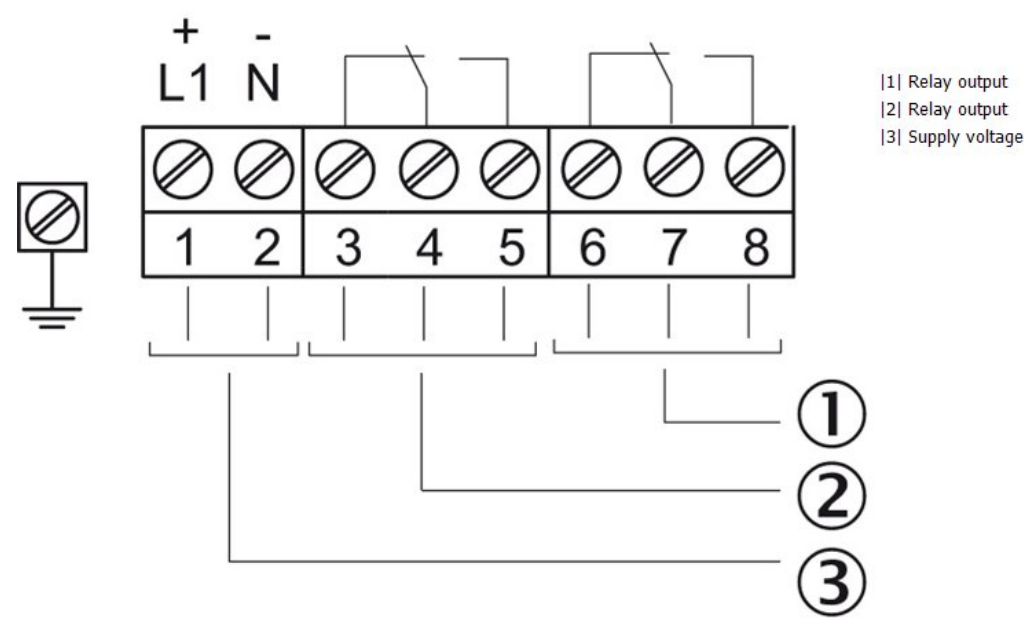
#### Ambient data

|                                |                  |
|--------------------------------|------------------|
| Ambient operating temperature: | -40 °C ... 70 °C |
| Ambient storage temperature:   | -40 °C ... 80 °C |

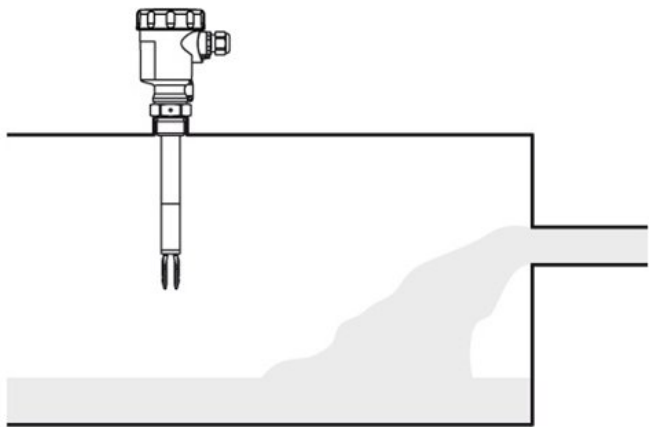
#### Dimensional drawing



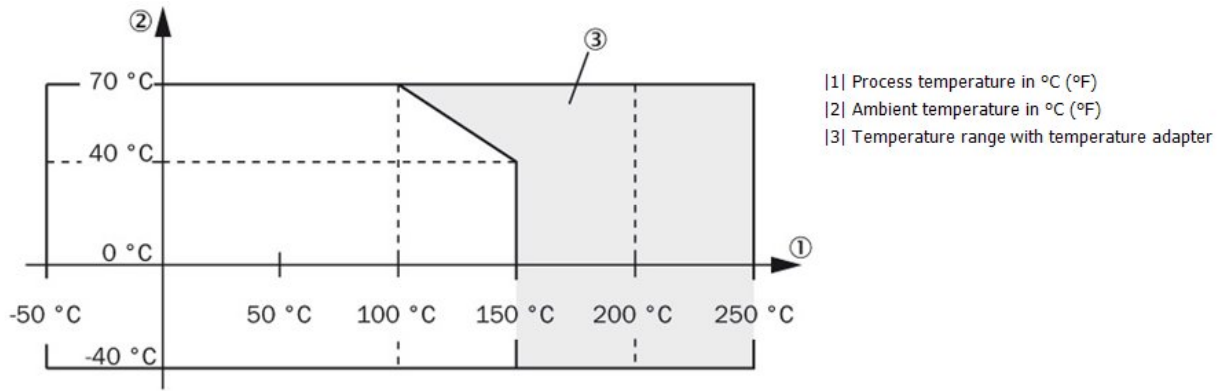
Double relay connection diagram



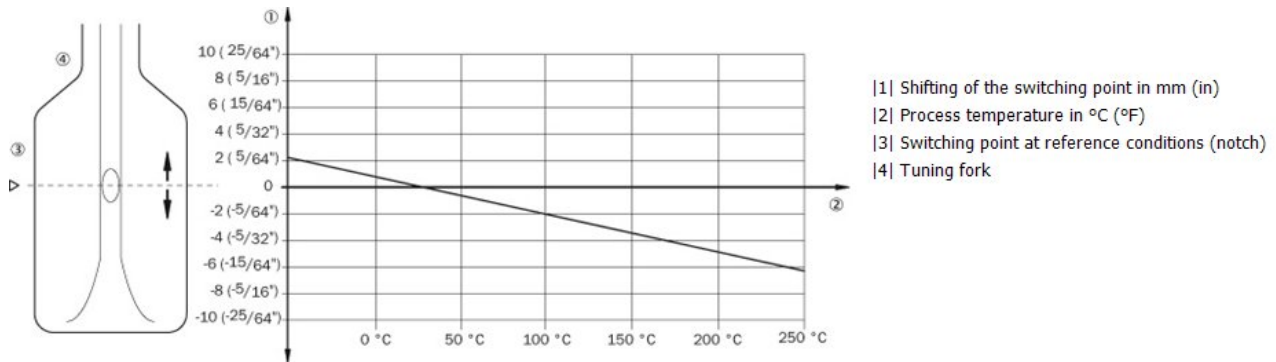
Instruction for installation



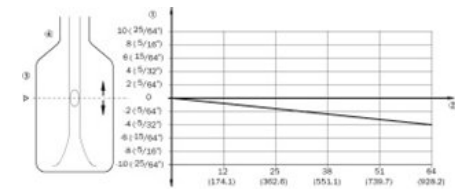
## Ambient temperature - process temperature



## Influence of the process temperature on the switching point

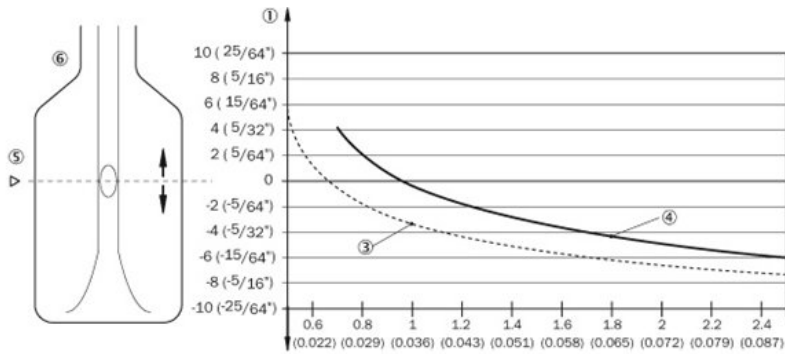


### Influence of the process temperature to the switching point



- |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

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