



## Level sensors Vibrating level switch, LFV310

LFV310-XXNAVTNCX



**Model Name** > LFV310-XXNAVTNCX  
**Part No.** > 6039843



*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:   | Plastic                                     |
| Process connection: | 1" NPT PN 64                                |
| Wetted parts:       | Stainless steel 316L (optional Ra ≤ 0.8 µm) |
| Sensor material:    | Stainless steel 1.4404                      |

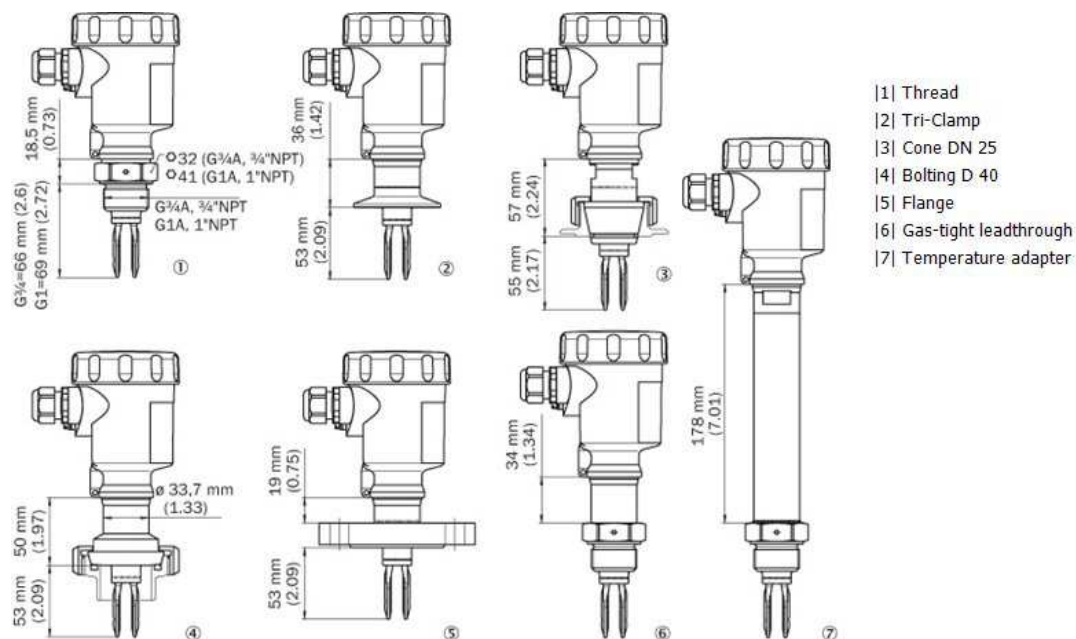
## Electrical data

|                        |                                                           |
|------------------------|-----------------------------------------------------------|
| Temperature drift:     | 0,03 mm/K                                                 |
| Enclosure rating:      | IP 66                                                     |
| Power consumption:     | < 4.2 mA                                                  |
| Protection class:      | 0, 1                                                      |
| Initialization time:   | 3                                                         |
| Output signal:         | Contactless electronic switch: 20 V AC/DC ... 253 V AC/DC |
| Hysteresis:            | 2 mm                                                      |
| Output current:        | < 400 mA                                                  |
| Capacitive load:       | 100                                                       |
| Inductive load:        | 1 H                                                       |
| Electrical connection: | ½" NPT                                                    |

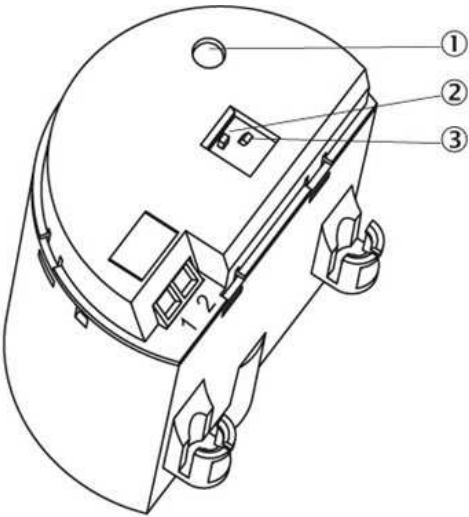
## Ambient data

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

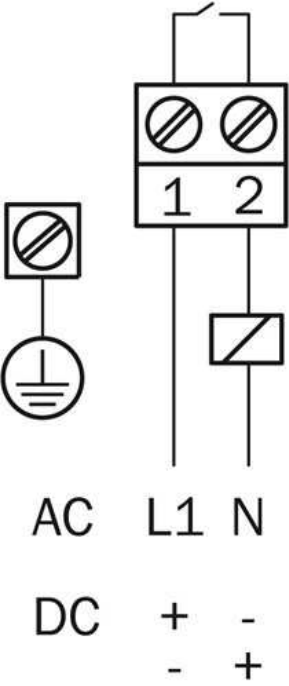
## Dimensional drawing



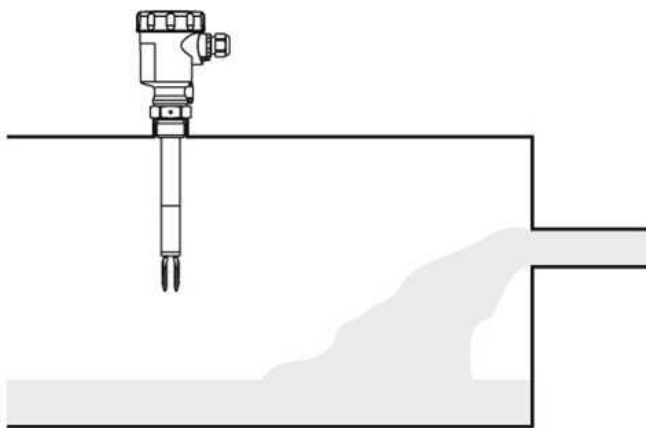
Electronic module



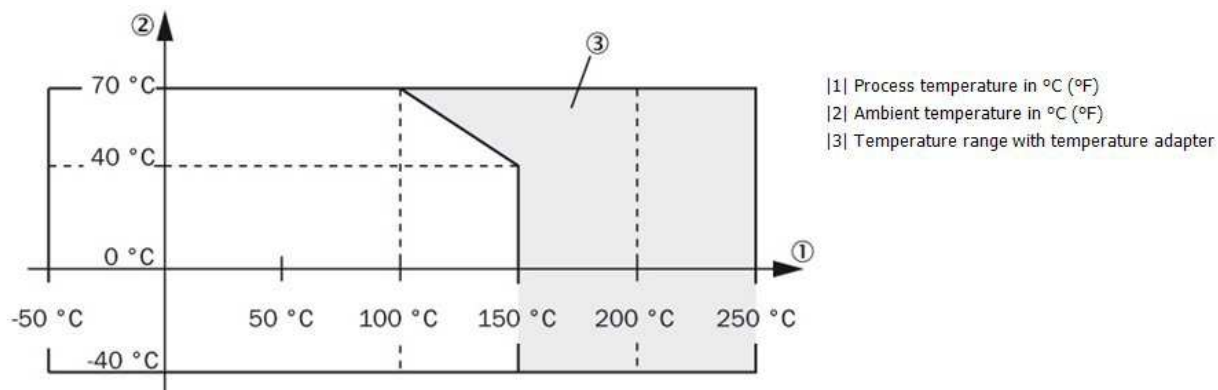
Contactless electronic switch connection diagram



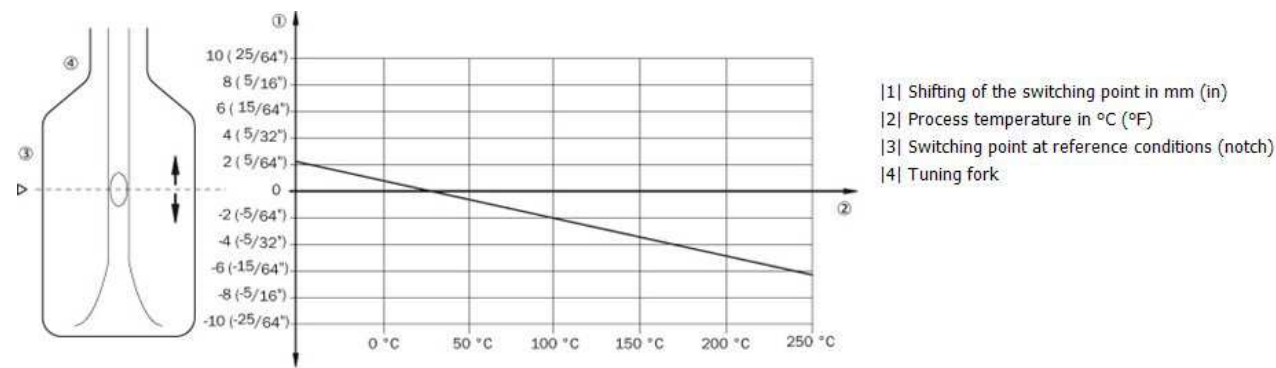
## Instruction for installation



## Ambient temperature - process temperature



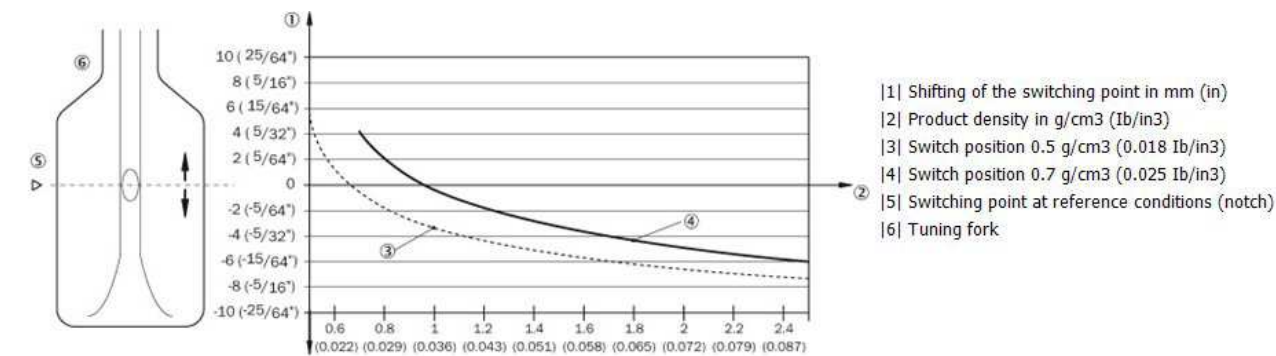
Influence of the process temperature on the switching point



Influence of the process temperature to the switching point



Influence of the product density on the switching point



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