



## Level sensors Vibrating level switch, LFV330

LFV330-CAGAVXPN0550



**Model Name** > LFB330-CAGAVXPN0550  
**Part No.** > 6042300



*Illustration may differ*

#### 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:          | 550 mm                                                |
| Process pressure:      | -1 bar ... 64 bar                                     |
| Process temperature:   | -50 °C ... 150 °C                                     |
| Authorizations:        | WHG approval                                          |
| WHG approval:          | ✓                                                     |
| ATEX approval:         | ATEX II 1G, II 1/2G, II 2G Ex ia IIC T6 Ga, Ga/Gb, Gb |
| GOST approval:         | ✓                                                     |
| Fill material density: | 0.5 g/cm <sup>3</sup> ... 2.5 g/cm <sup>3</sup>       |
| Type examination:      | TÜV 09 ATEX 372528 X                                  |

#### Performance

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

## Mechanical data

|                     |                                                      |
|---------------------|------------------------------------------------------|
| Housing material:   | Plastic                                              |
| Process connection: | G 1 A PN 64                                          |
| Wetted parts:       | Stainless steel 316L (optional $Ra \leq 0.8 \mu m$ ) |
| Sensor material:    | Stainless steel 1.4404                               |

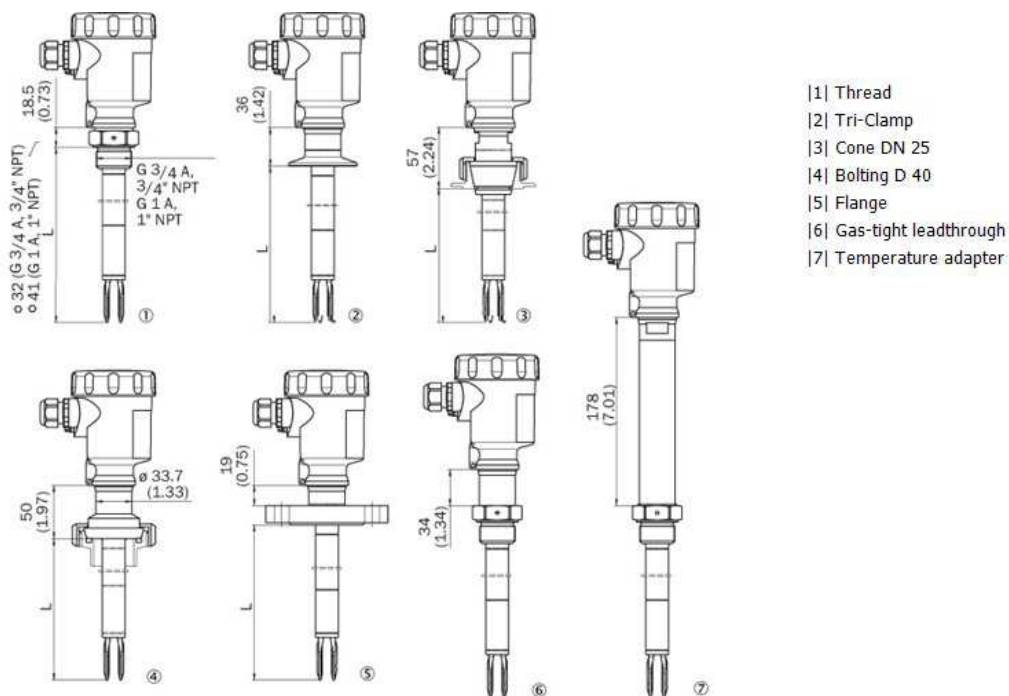
## Electrical data

|                         |                                    |
|-------------------------|------------------------------------|
| Temperature drift:      | 0,03 mm/K                          |
| Enclosure rating:       | IP 66/IP 67                        |
| Supply voltage:         | NAMUR signal: 4.5 V DC ... 12 V DC |
| Power consumption:      | 1 mA/2,5 mA                        |
| VDE protection class 1: | -                                  |
| VDE protection class 2: | ✓                                  |
| Initialization time:    | < 2 s                              |
| Hysteresis:             | 2 mm                               |
| Output current:         | 1 mA/2,5 mA                        |
| Electrical connection:  | M20 x 1.5                          |

## Ambient data

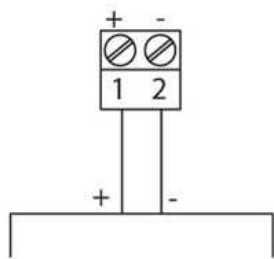
|                                |                  |
|--------------------------------|------------------|
| Ambient temperature operation: | -40 °C ... 70 °C |
| Ambient storage temperature:   | -40 °C ... 80 °C |

## Dimensional drawing



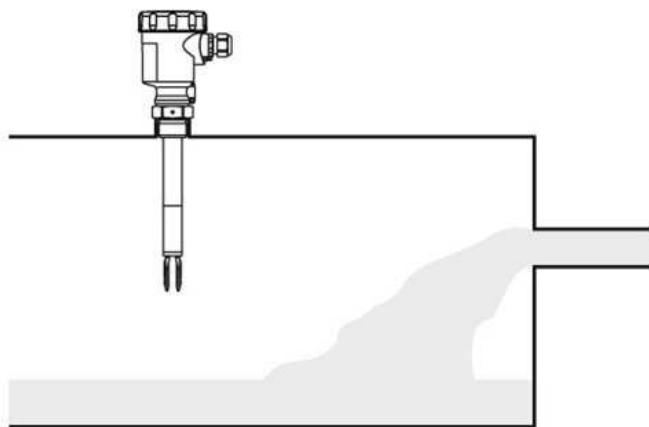
## Namur connection diagram

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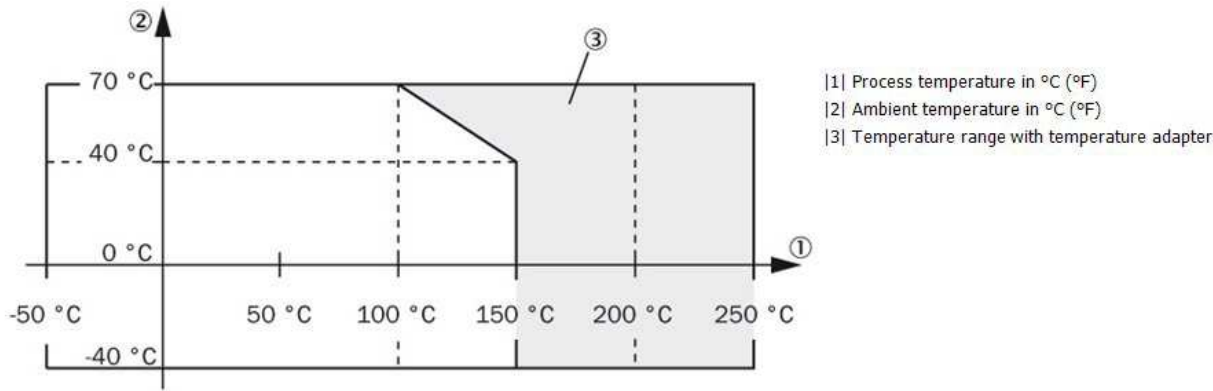


## Instruction for installation

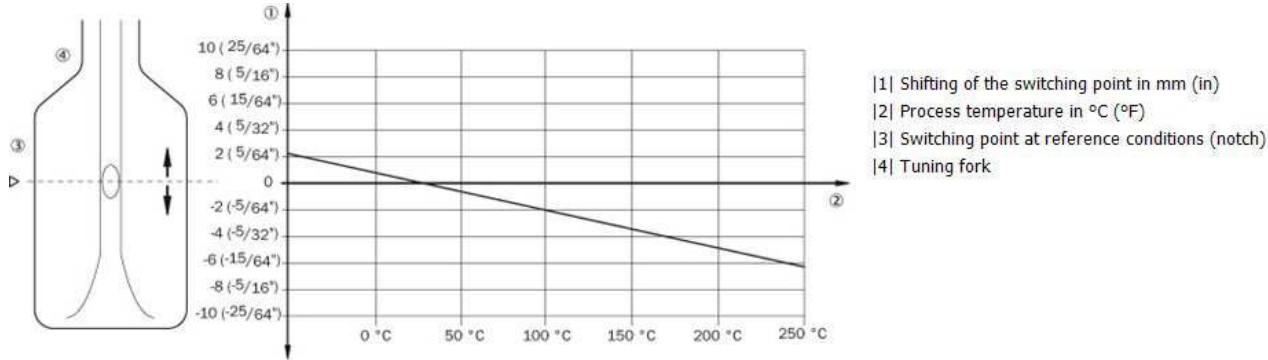
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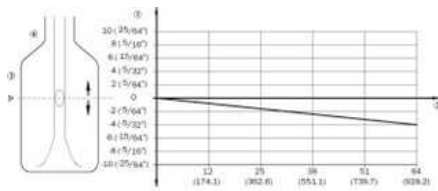
Ambient temperature - process temperature



Influence of the process temperature on the switching point

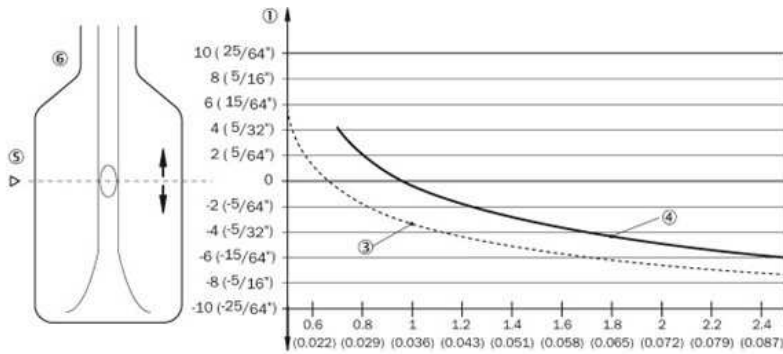


## Influence of the process temperature to the switching point



- |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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