



LBV300

Tuning forks – tough and flexible in bulkSolids

SICK
Sensor Intelligence.



Technical data overview

Measurement principle	Vibrating level switch
Detection principle	Contact
Medium	Bulk solids
Measurement	Switch
Process temperature	-50 °C ... +250 °C, detection of solids in water, Temperature range with temperature adapter (depending on type)
Process pressure	-1 bar ... 25 bar (depending on type)
Output signal	Non-contact switch Double relay (DPDT) 1 x PNP/NPN NAMUR signal (depending on type)
Accuracy of sensor element	± 10 mm

Product description

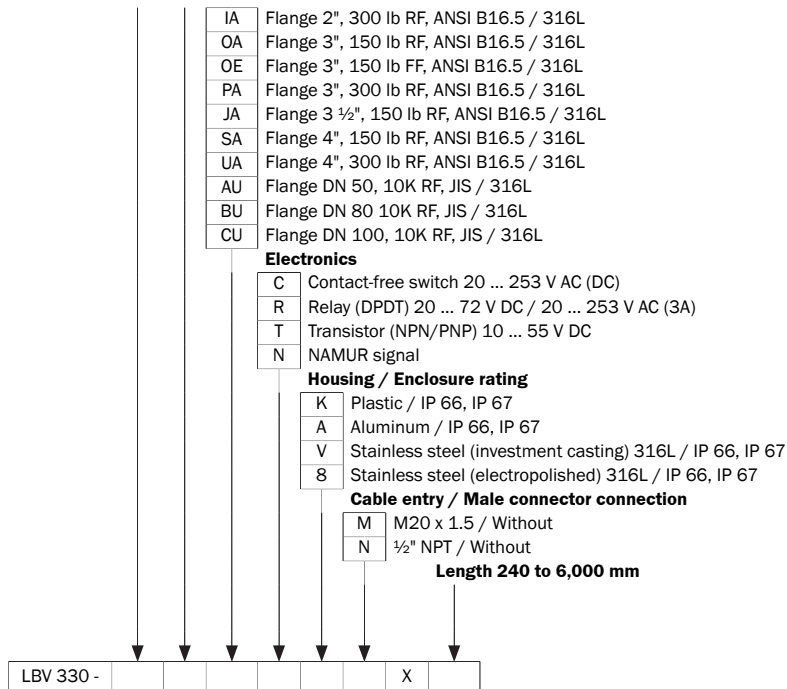
The rugged, reliable, and highly accurate vibrating level switches in the LBV300 product family signal full, empty, or demand states in bulk materials. The tuning fork reacts to changes in density, and thus operates independently of silo shape or the tank material used. The rugged stainless steel tuning fork is piezo-electrically energized and vibrates at its resonance frequency when it is covered by bulk materials. This change is detected and converted into a switching signal. While the LBV310 compact device is used for horizontal mounting and to signal full states, the LBV320 cable-extended switch and the LBV330 tube-extended switch are used for vertical mounting in silos and bridge sensing ranges of up to 80 m and 6 m respectively. With a wide variety of thread and flange connections, and several electronic variants, the LBV330 offers a solution for almost all applications, even in potentially explosive atmospheres.

At a glance

- Tough device design
- Several housing materials and electrical outputs available
- Immune to deposit formation
- Commissioning without filling
- Process temperature up to 250 °C
- Very high repeatability
- ATEX versions (1D/2D/1G/2G) available
- Tube-extended version (LBV330) up to 6 m and rope extensions version (LBV320) up to 80 m available for vertical mounting

Your benefits

- Easy installation and commissioning, no pre-calibration necessary
- Easy operation and integration
- Maintenance-free system
- Sensors can be tested while installed
- Flexible, reliable measurement system suitable for many types of applications
- Vertical mounting, even in difficult installation and ambient conditions



Not all variants of the type code can be combined!

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com