

## Vibrating Level Indicator

ILV



## PRECISE AND RELIABLE DETECTION FOR ALL POWDERS AND GRANULAR MATERIALS

The piezo-electrically stimulated oscillating fork vibrates at its mechanical resonance frequency. If the probe is covered by the bulk material, the damping thus generated is registered electronically and a corresponding signal output is actuated.

The top or side-mounted indicators are commonly used for materials having a bulk density ranging from 0.06 t/m<sup>3</sup> (0.002 lbs per cu in).

### Features

- Voltages available: 19 V .....230 V AC, 50-60 Hz; (absorption 22 VA)  
19 V....40 V DC; (absorption 2 W)
- Signal output: Floating relay DPDT, max. 250 V AC, 8 A – max 30 V; DC, 5 A – non-inductive
- Standard connection: thread G 1½"
- Enclosure: IP 66
- Working temperature inside vessel:  
ILVA-ILVB: - 40 °C to 150 °C (- 40° F to 302° F)  
ILVC: - 25°C to 80°C (- 13°F to 176°F)
- Ambient temperature:  
ILVA-ILVB: - 40°C to + 60°C (- 40°F to 140°F)  
ILVC: - 25°C to + 60°C (- 13°F to 140°F)
- Vessel maximum pressure:  
ILVA-ILVB: min. – 1 bar - max. 16 bar (- 14.5 to 232 PSI)  
ILVC: min. – 1 bar – max. 6 bar (- 14.5 to 87 PSI)
- Threaded fittings material: 304 stainless steel
- Vibrating Forks material: 316 stainless steel
- Casing material: Aluminium alloy
- Maximum Oscillation: 7 V DC
- Measuring Frequency: 200 Hz
- Sensitivity: Adjustable at two levels (max. 0.06 t/m<sup>3</sup> – min. 0.15 t/m<sup>3</sup>)
- Rain shield cover as option
- Flanged connection as option

### Accessories

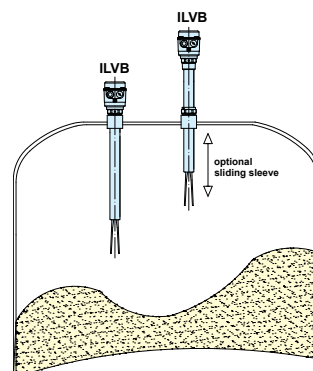
#### Threaded Bushes



Made from carbon steel, can be supplied to be welded on to the silo/hopper wall for quick installation of ILV.

Thread: 1½" ISO 228

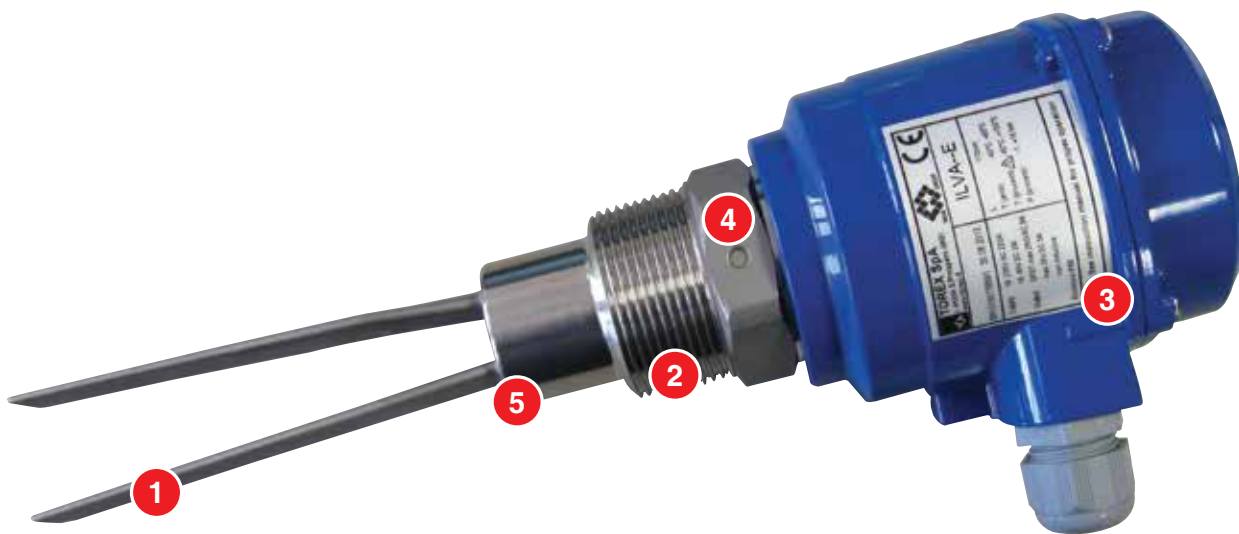
#### Sliding Sleeve (for ILVB only)



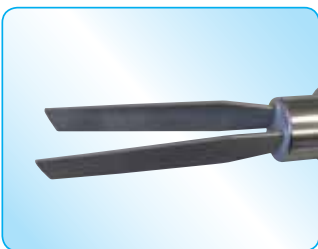
G1½" ISO 228 or  
1½" NPT ANSI B 1.20.1  
Material: 304 SS  
Sealing material to the extension tube: NBR

## Benefits

- ✓ No product contamination due to the 304 stainless steel forks and fittings;
- ✓ No product contact with casing;
- ✓ Oscillation of forks ensures self-cleaning;
- ✓ Zone 20/21 ATEX-certified;
- ✓ Suitable for particularly light materials;
- ✓ Use with different materials in one configuration only;
- ✓ Quick installation and replacement;
- ✓ Compact overall dimensions and lightweight due to casing in aluminium alloy;
- ✓ Rotating casing and orientation marking of oscillating rods;
- ✓ Maintenance-free;
- ✓ Cost-effective.



1 VIBRATING FORKS



Made from 316 Stainless Steel

2 THREADED FITTING



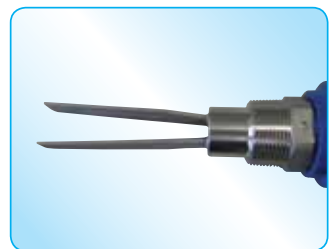
Thread: 1½" ISO 228  
Construction: 304 Stainless Steel

3 CASING



Made from cast aluminium  
Protection IP66  
Including Electronic Panel  
The casing can be rotated against the threaded connection after mounting

4 ORIENTATION MARKING OF VIBRATING FORKS



It shows the orientation of the vibrating forks after mounting. The mark have to be positioned face up, once installed on the side wall of the container. In case the orientation marking faces sideways, the working surface is too large:

- overload, if material is discharged
- danger of caking or crust deformation

5 LEVEL INDICATOR SHAFT



Standard shaft 30 mm long.  
Typically fitted on the vertical walls of a bin, silo or hopper at the desired maximum or minimum level

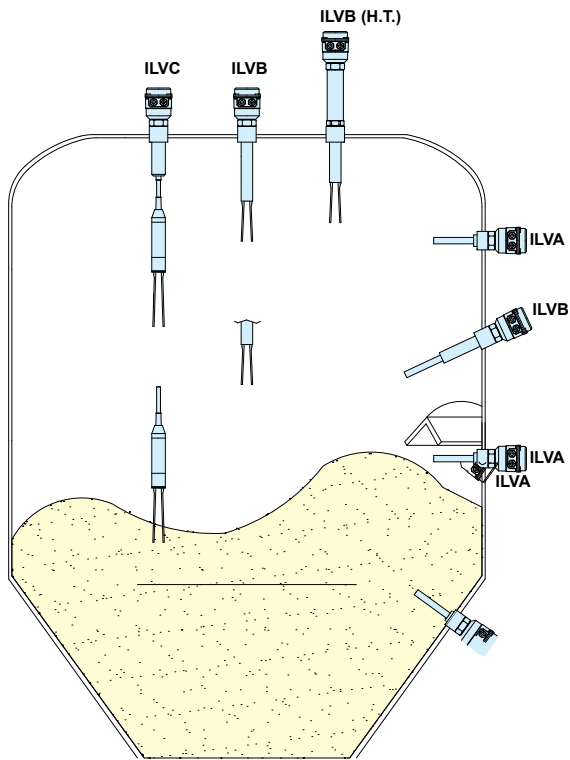


Modular shaft extension min. 300 mm up to 4000 mm in 100 mm steps. Equipped with an extension rod apart from the vertical wall of a container, they can also be mounted vertically into the roof plate



Modular cable extension min. 750 mm up to 20000 mm in 500 mm steps. Equipped with an extension electric cable, mounted vertically into the roof plate

# Application



ILV Vibrating Level Indicators are fitted on the walls of a bin, silo or hopper, depending on the type of detection they have been installed for.



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