Biscuit Processing

ILV Vibrating Level Indicators

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ILVA

ILVB

Description

ILV-type Vibrating Level Indicators have been designed for electric signalling by vibrating action of minimum or maximum material level inside bins, hoppers or silos.

Function

The piezo-electrically stimulated oscillating fork vibrates at its mechanical resonance frequency. If the probe is covered by bulk material, the damping thus generated is registered electronically and a corresponding signal output is actuated.
The oscillation of the fork ensures a certain degree of self-cleaning.
The top or side-mounted indicators are commonly used for materials having a bulk density starting from 0.06 t/m³ (0.002 lb per cu in).

Application

Typically ILV Vibrating Level Indicators are fitted on the vertical walls of a bin, silo or hopper at the desired maximum or minimum level (ILVA). Equipped with an extension rod, it can also be mounted vertically into the roof plate (ILVB).

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Benefits

- ✓ No product contamination due to 304 stainless steel forks and fittings;
- ✓ No contact between material and casing;
- ✓ Zone 20 /21 ATEX-certified;
- ✓ Suitable for very light materials;
- ✓ Use with different materials in one single configuration;
- ✓ Easy and quick installation and replacement;
- ✓ Compact overall dimensions and lightweight due to aluminium alloy casing;
- ✓ Rotatable casing orientation marking of oscillating rods;
- ✓ Maintenance-free;
- ✓ Cost-effective.

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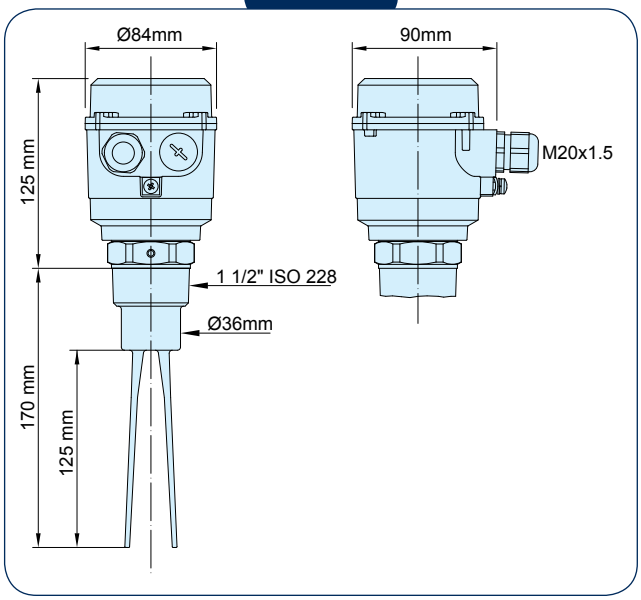
ILV Vibrating Level Indicators

Technical Features / Performance

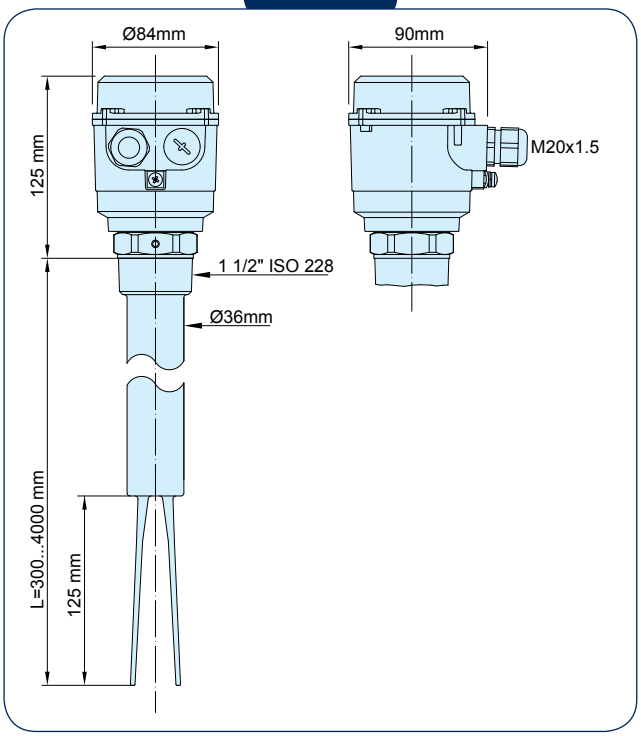
- Voltages available: 19 V …..230 V AC, 50-60 Hz; (absorption 22 VA)
  19 V….40 V DC; (absorption 2 W)
- Signal output: DPDT, max. 250 V AC, 8 A – max 30 V DC, 5 A – Non inductive
- Standard connection: thread G 1½"
- Enclosure: IP 66
- Working temperature inside vessel: - 40 °C to 150 °C (- 40° F to 302° F)
- Ambient temperature: - 40°C to + 60°C (- 40°F to 140°F)
- Vessel maximum pressure: min. - 1 bar - max. + 16 bar (- 14.5 to 232 PSI)
- Threaded fittings material: 304 stainless steel
- Vibrating fork material: 304 stainless steel
- Casing material: aluminium alloy
- Maximum oscillation: 7 Vss DC
- Measuring frequency: 200 Hz
- Sensitivity: adjustable at two levels (max. 0.06 t/m^3 – min. 0.15 t/m^3)
- ILVB modular shaft extension min. 300 mm up to 4,000 mm in 100 mm steps
- Optional rain shield
- Optional flanged connection

Overall Dimensions

ILVA



ILVB



This datasheet might not show the complete range but only the models specialised for the application.