

# Vibronic

## Point level detection

### Liquiphant FTL33

Point level switch for liquids in compact  
hygienic design for the food industry



More information and current pricing:

[www.jp.endress.com/FTL33](http://www.jp.endress.com/FTL33)

#### Benefits:

- Designed for hygienic applications especially in the food industry - hygienic process connections and approvals available. IO-Link reduces costs and complexity due to easy configuration of the devices via engineering tools
- CIP and SIP cleanability ensured - up to protection class IP69k
- Designed according to highest requirements to quality and environmental sustainability, the self-monitoring Liquiphant offers safe switching also in case of power supply loss
- Independent of changing media properties an accurate switching point is offered
- A real plug & play sensor is offered without any need for adjustment even with changing media. Measurement is unaffected by conductivity, build-up, turbulence, flows or air bubbles
- No calibration is required, no specific know-how or tools (e.g. software) necessary
- Robust design made of stainless steel (316L) assures highest durability - no mechanically moved parts, free of maintenance

#### Specs at a glance

- **Process temperature** -40 °C ... 150 °C (-40 °F ... 302 °F)
- **Process pressure absolute / max. overpressure limit** Vacuum ... 40 bar (Vacuum ... 580 psi)
- **Min. density of medium** >0,7g/cm<sup>3</sup> (>0,5g/cm<sup>3</sup> optional)

**Field of application:** Liquiphant FTL33 is a point level switch for liquids. The FTL33 is especially designed for food & beverage applications where hygienic requirements are requested. The Liquiphant is used for overfill

prevention or pump dry-run protection. The IO-Link capability allows easy parameter setting. **Compact:** - Smallest vibronic sensor in the market **Safe:** - Continuous self-monitoring - Reliable switching independent of media properties **Easy:** - No calibration - Plug & play -IO-Link connectivity

## Features and specifications

### Point Level / Liquids

#### Measuring principle

Vibration Liquids

#### Characteristic / Application

Point level switch for liquids  
in the food sector

#### Supply / Communication

20 ... 253V AC/DC, 2-wire  
10 ... 30V DC-PNP, 3-wire

#### Ambient temperature

40 °C ... 70 °C  
(-40 °F ... 158 °F)

#### Process temperature

-40 °C ... 150 °C  
(-40 °F ... 302 °F)

#### Process pressure absolute / max. overpressure limit

Vacuum ... 40 bar  
(Vacuum ... 580 psi)

#### Min. density of medium

>0,7g/cm<sup>3</sup>  
(>0,5g/cm<sup>3</sup> optional)

#### Main wetted parts

316L

**Point Level / Liquids****Process connection**

Threads:

G1/2, G3/4, G1, MNPT1/2, MNPT3/4, MNPT1, R1/2, R3/4, R1

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**Process connection hygienic**

Flush mount by use of weld in adapter

DIN11851

Tri-Clamp

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**Communication**AC/DC, DC-PNP, IO-Link

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**Certificates / Approvals**CSA C/US, EAC

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**Safety approvals**

Overfill protection WHG

Leakage

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**Design approvals**EN 10204-3.1

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**Hygienic approvals**3A, EHEDG

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**Options**

Switching delay

Cleaned from oil+grease,

Surface finish measurement

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