# Vibronic Point level detection Liquiphant FTL50H

Compact vibration point level switch for liquids especially in the food and life sciences industry

# Benefits:

- International hygienic certificates (3-A, EHEDG, ASME BPE). FDAconformed material
- Electro-polished and passivated surface finishing
- International explosion protection certificates and overfill prevention certificate (WHG)
- No mechanically moving parts: no maintenance, no wear, long operating life.

Monitoring of fork for damage: guaranteed function

 Use in safety systems requiring functional safety to SIL2/SIL3 in accordance with

IEC 61508/IEC 61511-1

- No calibration required, easy to start up
- Variety of standardized hygienic process connections for hygiene sensitive applications

# Specs at a glance

- Process temperature -50 °C...+150 °C (-58 °F...+302 °F)
- Process pressure absolute / max. overpressure limit
  Vacuum...64 bar (Vacuum...928 psi)
- Min. density of medium 0.5g/cm<sup>3</sup>(0.4g/cm<sup>3</sup> optional)

**Field of application:** Liquiphant FTL50H is a point level switch for use in hazardous areas with all international certificates. Especially useable in the food and life sciences industry with hygienic certificates (3-A, EHEDG, ASME BPE). FTL50H offers functional safety SIL2/SIL3. Reliable





More information and current pricing: www.uk.endress.com/FTL50H measurement values, not affected by: changing media properties, flow, turbulences, gas bubbles, foam, vibrations or build-up.

# Features and specifications

# Density

Measuring principle Vibration Density

**Characteristic / Application** Liquiphant M Density with Density Computer FML621 Temperature and pressure measurement

Modular & completely welded housing concept

Focus Food & Pharma

Surface up to 0.3  $\mu$ 

Supply / Communication Transmitter power supply (MUS)

Ambient temperature -50...70°C

-50...60°C for hazardous applications

**Process temperature** 0...80°C (validity of accuracy data)

-50...0°C/80...150°C (with reduced technical data)

#### Process pressure absolute

0...25 bar

>25...64 bar (with reduced technical data)

# Density

## Wetted parts

316L

**Hygienic** 3A

EHEDG

Sensor length Compact: 50.5 mm

# Output

Pulse

Certificates / Approvals

ATEX, FM, CSA C/US, IEC Ex, TIIS, INMETRO, NEPSI

## Specialities

Commissioning with ReadWin2000

## Components

Density Computer FML621

# **Other approvals and certificates** SIL2/SIL3

Point Level / Liquids

**Measuring principle** Vibration Liquids

# Point Level / Liquids

### Characteristic / Application

Modular & completely welded housing concept Focus Food & Pharma surface up to 0,38µm electro polished wide range of process connections Analogue and bus interfaces Extensive certificate range (e.g. EHEDG,3A) Compact, e.g. pipes

#### Specialities

Foamdetection Detect changes of the density

#### Supply / Communication

PROFIBUS PA 19...253V AC 10...55V DC-PNP 19...253V AC or 10...55V DC 8/16mA, 11...36V DC NAMUR PFM

#### Ambient temperature

-50 °C...+70 °C (-58 °F...+158 °F)

#### **Process temperature**

-50 °C...+150 °C (-58 °F...+302 °F)

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

Vacuum...64 bar (Vacuum...928 psi)

#### Min. density of medium

0.5g/cm<sup>3</sup>(0.4g/cm<sup>3</sup> optional)

Point Level / Liquids

Main wetted	parts
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316L

#### **Process connection**

Thread:

G3/4A, G1A, R3/4", R1, NPT3/4, NPT1

Flange:

DN25...DN100,

ASME 1"...4",

JIS 25A...100A

### Process connection hygienic

Tri-Clamp ISO2852 Dairy coupling Aseptic DRD SMS Varivent

#### Communication

PROFIBUS PA 19 ..253V AC 10...55V DC-PNP 19...253V AC or 10...55V DC 8/16mA, 11...36V DC NAMUR PFM

## Certificates / Approvals

ATEX, FM, CSA C/US, IEC Ex, TIIS, INMETRO, NEPSI

Point Level / Liquids

Safety approvals SIL2/SIL3

Design approvals EN 10204-3.1

AD2000

Hygienic approvals CoC ASME-BPE

Marine approval

GL/ ABS/ DNV

# Components

FTL325P/FTL375P Interface PFM FTL325N/FTL375N Interface NAMUR

More information www.uk.endress.com/FTL50H

