

# Vibronic

## Point level detection

### Liquiphant FTL50H

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



More information and current pricing:

[www.si.endress.com/FTL50H](http://www.si.endress.com/FTL50H)

#### Benefits:

- International hygienic certificates (3-A, EHEDG, ASME BPE). FDA-conformed 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

measurement values, not affected by: changing media properties, flow, turbulences, gas bubbles, foam, vibrations or build-up.

## Features and specifications

### Point Level / Liquids

#### Measuring principle

Vibration 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

Foam detection

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)

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**Point Level / Liquids****Process pressure absolute / max. overpressure limit**

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

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**Min. density of medium**

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

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**Main wetted parts**

316L

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**Process connection**

Thread:

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

Flange:

DN25...DN100,

ASME 1"...4",

JIS 25A...100A

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**Process connection hygienic**

Tri-Clamp ISO2852

Dairy coupling

Aseptic

DRD

SMS

Varivent

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**Communication**

PROFIBUS PA

19 ..253V AC

10...55V DC-PNP

19...253V AC or 10...55V DC

8/16mA, 11...36V DC

NAMUR

PFM

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**Certificates / Approvals**

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

NEPSI

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**Point Level / Liquids****Safety approvals**

SIL2/ SIL3

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**Design approvals**

EN 10204-3.1

AD2000

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**Hygienic approvals**

CoC ASME-BPE

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**Marine approval**

GL/ ABS/ DNV

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**Components**

FTL325P/FTL375P Interface PFM

FTL325N/FTL375N Interface NAMUR

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**Density****Measuring principle**

Vibration Density

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**Characteristic / Application**

Liquiphant M Density

with Density Computer FML621

Temperature and pressure measurement

Modular &amp; completely welded housing concept

Focus Food &amp; Pharma

Surface up to 0.3  $\mu$ 

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**Supply / Communication**

Transmitter power supply (MUS)

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**Ambient temperature**

-50...70°C

-50...60°C for hazardous applications

## Density

**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

&gt;25...64 bar (with reduced technical data)

**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

More information [www.si.endress.com/FTL50H](http://www.si.endress.com/FTL50H)