

# Vibronic

## Point level detection

### Liquiphant FTL51H

Point level switch with extension tube for liquids especially in the food and life sciences industry



#### 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

More information and current pricing:

[www.us.endress.com/FTL51H](http://www.us.endress.com/FTL51H)

#### Specs at a glance

- **Process temperature** -50 °C...+150 °C (-58 °F...+302 °F)
- **Process pressure / 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 FTL51H is a point level switch with extension tube 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). FTL51H 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

variable sensor length up to 3m (6m option)

#### Specialities

Foam detection

Detect changes of the density

#### Supply / Communication

PROFIBUS PA

19...253V AC

10...55V DC-PNP

19...253V AC bzw 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 / 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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**Sensor length**

Length 130mm (5.12") (Liquiphant II)

148mm...6000mm (5.83...236")

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**Communication**

PROFIBUS PA

19...253V AC

10...55V DC-PNP

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

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

NAMUR

PFM

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**Point Level / Liquids****Certificates / Approvals**

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

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**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 & completely welded housing concept  
Focus Food & Pharma  
Surface up to 0.3  $\mu$   
Variable sensor length up to 3 m (6 m option)

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**Supply / Communication**

Transmitter power supply (MUS)

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**Density****Ambient temperature**

-50...70°C

-50...60°C for hazardous applications

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**Process temperature**

0...80°C (validity of accuracy data)

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

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**Process pressure**

0...25 bar

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

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**Wetted parts**

316L

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**Hygienic**

3A

EHEDG

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**Sensor length**

115...3000 mm

&gt;3000...6000 mm (Option)

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**Output**

Pulse

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

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**Specialities**

Commissioning with ReadWin2000

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**Components**

Density Computer FML621

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**Other approvals and certificates**

SIL2/ SIL3

More information [www.us.endress.com/FTL51H](http://www.us.endress.com/FTL51H)