

Vibronic

Point level detection

Liquiphant FTL50

Compact vibration point level switch for liquids in all industries



Benefits:

- Use in safety systems requiring functional safety to SIL2/SIL3 in accordance with IEC 61508/IEC 61511-1
- International explosion protection certificates and overfill prevention certificate (WHG)
- No calibration required, easy to start up
- No mechanically moving parts: no maintenance, no wear, long operating life.
- Monitoring of fork for damage: guaranteed function
- Second line of defense to protect the environment
- Variety of standardized process connections for all applications
- Stainless steel (316L) and high-corrosion resistant sensor material (Alloy)

More information and current pricing:

www.ie.endress.com/FTL50

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/cm³(0.4g/cm³ option)

Field of application: Liquiphant FTL50 is a point level switch for use in hazardous areas with all international certificates. Useable in all industries. FTL50 offers functional safety SIL2/SIL3. With the second line of defense the highest degree of safety and availability of the device can be guaranteed. 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 housing concept
wide range of process connections
Analogue and bus interfaces
Extensive certificate range (e.g. Ex, WHG)
compact, e.g. pipes

Specialities

Foam detection
Detect a density change
second line of defense

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)

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

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

Min. density of medium

0.5g/cm³(0.4g/cm³ option)

Main wetted parts

316L, Alloy

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

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

Safety approvals

SIL2/ SIL3

Point Level / Liquids**Design approvals**

EN 10204-3.1
NACE MR0175, MR0103
ASME B31.3
AD2000

Marine approval

GL/ ABS/ DNV

Options

Heavy duty stainless steel housing mainly for the oil and gas industry

Components

FTL325P/FTL375P Interface PFM
FTL325N/FTL375N Interface NAMUR

Successor

Liquiphant FTL51B

Density**Measuring principle**

Vibration Density

Characteristic / Application

Liquiphant M Density
with Density Computer FML621
Temperature and pressure measurement
Modular housing concept
Wide range of process connections

Supply / Communication

Transmitter power supply (MUS)

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

0...25 bar

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

Wetted parts

316L/C4

Sensor length

Compact: 50.5 mm

Output

Pulse

Certificates / ApprovalsATEX, 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.ie.endress.com/FTL50