Vibronic
Point level detection
Liquiphant FTL50H

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

F L E X

More information and current pricing:

www.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 ℃...+150 ℃ (-58 ℉...+302 ℉)
- **Process pressure absolute / max. overpressure limit**
  Vacuum...64 bar (Vacuum...928 psi)
- **Min. density of medium** 0.5g/cm³(0.4g/cm³ 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

Endress+Hauser

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

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 ℃...+70 ℃
(-58 ℉...+158 ℉)

Process temperature

-50 ℃...+150 ℃
(-58 ℉...+302 ℉)

Point Level / Liquids

Process pressure absolute / max. overpressure limit

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

Min. density of medium

0.5g/cm³(0.4g/cm³ optional)

Main wetted parts

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

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 µ

Supply / Communication

Transmitter power supply (MUS)

Ambient temperature

-50...70°C
-50...60°C for hazardous applications

Density

Process temperature

0...80℃ (validity of accuracy data)

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

Process pressure absolute

0...25 bar

>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.endress.com/FTL50H**