Vibronic
Point level detection
Liquiphant FTL51H

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

More information and current pricing:
www.lasc.endress.com/FTL51H

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/cm³ (0.4g/cm³ 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

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

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)

Wetted parts
316L

Hygienic
3A
EHEDG

Density

Sensor length
115...3000 mm
>3000...6000 mm (Option)

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

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
Foamdetection
Detect changes of the density

Point Level / Liquids

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)

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

Point Level / Liquids

Process connection hygienic
Tri-Clamp ISO2852
Dairy coupling
Aseptic
DRD
SMS
Varivent

Sensor length
Length 130mm (5.12") (Liquiphant II)
148mm...6000mm (5.83...236")

Communication
PROFIBUS PA
19...253V AC
10...55V DC-PNP
19...253V AC bzw 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

Design approvals
EN 10204-3.1
AD2000

Hygienic approvals
CoC ASME-BPE

Marine approval
GL/ ABS/ DNV

Point Level / Liquids

Components

FTL325P/FTL375P Interface PFM
FTL325N/FTL375N Interface NAMUR

More information **www.lasc.endress.com/FTL51H**

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