

Vibronic

Point level detection

Liquiphant FTL51

Point level switch with extension tube for liquids in all industries



More information and current pricing:

www.ie.endress.com/FTL51

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)

Specs at a glance

- **Process temperature** -50 °C...+150 °C (-58 °F...+302 °F)
- **Process pressure / max. overpressure limit** Vacuum...100 bar
- **Min. density of medium** 0.5g/cm³(0.4g/cm³ optional)

Field of application: Liquiphant FTL51 is a point level switch with extension tube for use in hazardous areas with all international certificates. Useable in all industries. FTL51 offers functional safety SIL2/SIL3. With the second line of defense 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)
pipe extension up to 3m (6m option)

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)

Process pressure / max. overpressure limit

Vacuum...100 bar

Point Level / Liquids**Min. density of medium**0.5g/cm³(0.4g/cm³ optional)

Main wetted parts316L / Alloy

Process connection

Thread:

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

Flange:

DN25...DN100,

ASME 1"...4",

JIS 25A...100A

Process connection hygienicTri-Clamp ISO2852

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

Safety approvalsSIL2/ 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
Pipe extension up to 3 m (6 m option)

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..100 bar (with reduced technical data)

Wetted parts

316L/C4

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

More information www.ie.endress.com/FTL51