Vibronic
Point level detection
Liquiphant FTL51

Point level switch with extension tube for liquids in all industries

More information and current pricing:
www.us.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 protection 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
Foamdetection
Detect a densitychange
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 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

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

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.us.endress.com/FTL51**