Vibronic
Point level detection
Liquiphant FTL51C

Point level switch for liquids with highly corrosion-resistant coating

Benefits:

- Use in safety systems requiring functional safety to SIL2/SIL3 in accordance with IEC 61508/IEC 61511-1
- Different plastic coating (PFA) and enamel coating for applications with aggressive medias
- 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

Specs at a glance

- **Process temperature** -50 °C...+150 °C (-58 °F...+302 °F) up to 230 °C / 450°F on request
- **Process pressure / max. overpressure limit** Vacuum...40 bar (Vacuum...580 psi)
- **Min. density of medium** 0.5 g/cm³ (0.4 g/cm³ optional)

Field of application: Liquiphant FTL51C is a point level switch with extension tube and highly corrosion resistant coating. 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

More information and current pricing: [www.endress.com/FTL51C](http://www.endress.com/FTL51C)
media properties, flow, turbulences, gas bubbles, foam, vibrations or build-up.

### Features and specifications

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<td>-50 °C...+70 °C</td>
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</table>
**Point Level / Liquids**

**Process temperature**

-50 °C...+150 °C  
(-58 °F...+302 °F)  
up to 230 °C / 450°F on request

**Process pressure / max. overpressure limit**

Vacuum...40 bar  
(Vacuum...580 psi)

**Min. density of medium**

0.5g/cm³ (0.4g/cm³ optional)

**Main wetted parts**

ECTFE  
PFA (Edlon)  
PFA (Rubyred)  
PFA (conductive)  
Enamel

**Process connection**

Flange:  
DN25...DN100,  
ASME 1"...3",  
JIS RF10 K 50

**Process connection hygienic**

FDA conform with PFA (Edlon)

**Sensor length**

ECTFE, PFA 130mm, 148mm...3000mm  
(ECTFE, PFA 5.12", 5.83"...118")  
Enamel 130mm, 148mm...1200mm  
(Enmal 5.12", 5.83"...47.24")
Liquiphant M FTL51C

Point Level / Liquids

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

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

Density

Measuring principle
- Vibration Density
Density

**Characteristic / Application**
Liquiphant M Density
with Density Computer FML621
Temperature and pressure measurement
High protection against aggressive media by using antistatic coating
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...80°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**
0...25 bar
>25...40 bar (with reduced technical data)

**Wetted parts**
ECTFE, PFA and Enamel

**Sensor length**
115...3000 mm
(depends by the covering)

**Output**
Pulse

**Certificates / Approvals**
ATEX, FM, CSA C/US, IEC Ex, TIIS, INMETRO, NEPSI
Density

Specialities
Commissioning with ReadWin2000

Components
Density Computer FML621

Measuring range
Density range: 0.3 to 2 g/cm³

Other approvals and certificates
SIL2/ SIL3

More information www.endress.com/FTL51C