Liquiphant FTL51B - digital, simple and safe

Point level switch for all liquid media

Benefits:
- Universal measuring principle for limit detection – proven vibronic technology
- Developed according IEC 61508 for highest safety – SIL2/3 applications (3rd party approved)
- Periodic proof testing is quickly and simple organized with guided wizards via the SmartBlue-App or via a test button or magnetic pin from outside. Via digital communication you can initiate the device for a fast and easy testing of the safety loop.
- **Heartbeat Technology** allows safe, continuous diagnostics and a simple verification, without process interruption
- Centralized asset management with easy online access to all device information thanks to digital communication
- Second line of defense to protect the environment

Specs at a glance
- **Process temperature** -50 °C...+150 °C (-58 °F...+302 °F)
- **Process pressure / max. overpressure limit** Vacuum...100 bar Vacuum...1450 psi
- **Min. density of medium** 0.5 g/cm³ (0.4 g/cm³ optional)

Field of application: The Liquiphant FTL51B is specialized for the process industry and developed to be used directly in SIL2 and SIL3 applications. You conduct periodic proof tests according to SIL or WHG mobile with an intuitive wizard. At the end you receive an automated documentation. Liquiphant measures reliably and is not affected by changing media properties, flow, turbulences, gas bubbles, foam, vibrations or build-up. The device is easy to use, has a digital connection and gives real-time data at hand.

More information and current pricing: [www.us.endress.com/FTL51B](http://www.us.endress.com/FTL51B)
# Features and specifications

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### Point Level / Liquids

**Process pressure / max. overpressure limit**
- Vacuum...100 bar
- Vacuum...1450 psi

**Min. density of medium**
- 0.5 g/cm³
- (0.4 g/cm³ optional)

**Main wetted parts**
- 316L
- Alloy

**Process connection**
- Threads: G3/4A, G1A, R3/4", R1, NPT3/4, NPT1
- Flanges: DN25...DN100
- ASME 1"...4"
- JIS 25A...100A

**Process connection hygienic**
- Tri-Clamp ISO2852

**Sensor length**
- Up to 6 m (19.7 ft)

**Communication**
- 2-wire direct load
- HART
- DC-PNP 3-wire
- Relays
- NAMUR
- PFM
- Bluetooth® wireless technology

**Certificates / Approvals**
- ATEX, IEC Ex, CSA, NEPSI, KC, JPN Ex, INMETRO, UK Ex
Point Level / Liquids

Safety approvals
Overfill protection WHG
SIL2/ SIL 3 according to IEC 61508

Design approvals
EN 10204-3.1
NACE MR0175, MR0103
ASME B31.3 Process Piping
AD2000
CRN
AD 2000

Marine approval
ABS/ LR/ BV/ DNV

Options
Heavy duty stainless steel housing

Components
FTL325P Interface PFM
FTL325N Interface NAMUR

Density

Measuring principle
Vibration Density

Product Headline
Vibronic point level switch with optional extension tube for liquid applications in hazardous areas.
Reliable measurement values not affected by: changing media properties, gas bubbles, foam, build-up, flow or turbulences.

Characteristic / Application
Compact vibronic device with an optional pipe extension up to 6 m (19.7 ft),
Modular housing concept,
Wide range of certificates
Density

**Ambient temperature**
-60 °C...+70 °C  
(-51 °F...+158 °F)

**Process temperature**
-50 °C...+150 °C  
(-58 °F...+302 °F)

**Process pressure**
Vacuum...100 bar  
Vacuum...1450 psi

**Wetted parts**
316L  
Alloy

**Sensor length**
Up to 6 m (19.7 ft)

**Certificates / Approvals**
ATEX, IEC Ex, CSA, NEPSI, KC, JPN Ex, INMETRO

**Specialities**
Heartbeat Technology,  
Bluetooth® Operation and maintenance SmartBlue App,  
LED Module,  
RFID TAG for easy identification,  
Second line of defense,  
Ambient temperature down to -50°C (-60°C optional),  
Temperature spacer for high process temperature,  
Plug and play functionalities

**Components**
Density Computer FML621

**Measuring range**
Density range: 0.3 to 2 g/cm³
Density

Other approvals and certificates
Overfill protection WHG
SIL2/ SIL 3 according to IEC 61508

More information [www.us.endress.com/FTL51B](http://www.us.endress.com/FTL51B)