Liquiphant FTL63 – hygienic point level switch for liquids

Proven in the field, easy to use and perfectly suitable for hygienic applications.

More information and current pricing:
www.endress.com/FTL63

Benefits:

- Universal use in all pumpable liquids without media adjustment - proven vibronic measurement technology
- High process and product safety through certified hygienic design (3-A, EHEDG, ASME BPE) as well as proven material conformity and traceability through declarations and certificates (e.g. EC1935/2004, FDA and cGMP)
- Easy commissioning with plug & play functionality and minimized maintenance effort thanks to function test via test button or magnetic pin
- Continuous diagnostics as well as traceable and documented on-demand verification without process interruption thanks to Heartbeat Technology
- Intuitive operation via Bluetooth® Technology as well as optical process status indication via colored and bright LED

Specs at a glance

- **Process temperature** -50 °C...+150 °C (-58 °F...+302 °F)
- **Process pressure / max. overpressure limit** Vacuum...64 bar (Vacuum...928 psi)
- **Min. density of medium** 0.5 g/cm³ (0.4 g/cm³ optional)

Field of application: Specifically developed for the food and beverage and life sciences industries, the Liquiphant FTL63 is compliant to all their hygienic requirements. The proven vibronic technology works reliably in all pumpable liquids, even where other measuring principles reach their limits due to changes in conductivity or dielectric constant (DC value), deposits, foam, turbulences or air bubbles. Therefore, the technology is the perfect substitute for float switches, capacitive or optical sensors.

Features and specifications

Point Level / Liquids

Measuring principle

Vibration Liquids

Characteristic / Application

Premium device for point level detection
in hygienic/aseptic applications.
Focus Food & Beverage and Life Sciences.
Compact sensor version with an optional pipe extension up to 3 m (9,85 ft).
Modular housing concept.
Wide range of certificates.

Specialities

Plug and play functionalities,
Heartbeat Technology,
LED Module,
Bluetooth® Operation and maintenance,
Surface finish: mechanical or electro-polished,
Density/Concentration measurement,
SIL 2/3 according to IEC 61508.

Supply / Communication

19 ..253V AC,
10...55V DC-PNP,
9...20V DC with relay DPDT,
19...253V AC or 19...55V DC with relay DPDT,
8/16mA HART,
NAMUR,
PFM

Ambient temperature

-50 °C...+70 °C
(-58 °F...+158 °F)

Point Level / Liquids

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

Process pressure / max. overpressure limit
Vacuum...64 bar
(Vacuum...928 psi)

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

Main wetted parts
316L

Process connection
Threads (for weld-in adapter):
G3/4A, G1A

Process connection hygienic
Tri-Clamp,
DIN 11851, DIN11864-1
Ingold,
Flush mount,
DRD,
SMS1145,
Varivent (Varinline)

Sensor length
Compact sensor
Short tube (Liquiphant II)
148mm...3000mm (6,00...118")

Communication
HART
Bluetooth® wireless technology

Point Level / Liquids

Certificates / Approvals

ATEX, IEC Ex, CSA C/US, JPN Ex, KC Ex,
INMETRO Ex, NEPSI Ex/CCC, UK Ex

Safety approvals

Overfill protection WHG;
SIL 2/ SIL 3

Design approvals

Inspection certificate 3.1, EN10204,
CoC ASME BPE,
Conformity to cGMP,
EU Food Contact Material (EC) 1935/2004,
US Food Contact Material FDA CFR 21,
CN Food Contact Material GB 4806,
Declaration of Conformity ASME B31.3,
AD2000,
CRN approval

Hygienic approvals

3-A,
EHEDG,
CoC-ASME BPE

Options

LED module,
Bluetooth module,
Graphic touch display,
Customized settings,
Weld-in adapter

Components

FTL325P Interface PFM
FTL325N Interface NAMUR
FML621 Density controller

Density

Measuring principle
Vibration Density

Product Headline
Hygienic point level switch for liquids.
Point level detection in process and storage tanks as well as in pipelines in hygienic and aseptic applications.

Characteristic / Application
Premium device for density measurement in hygienic/aseptic applications.
Focus Food & Beverage and Life Sciences.
Compact sensor version with an optional pipe extension up to 3 m (9,85 ft).
Modular housing concept.
Wide range of certificates

Supply / Communication
via density controller FML621

Ambient temperature
-40 °C...+70 °C
(-40...+158 °F)

Process temperature
0...+80 °C (+32...+176 °F)

Process pressure
0...25 bar (0...362 psi)

Wetted parts
316L

Hygienic
3-A,
EHEDG,
CoC-ASME BPE

Density

Sensor length

Compact sensor
Short tube (Liquiphant II)
148mm...3000mm (6,00...118")

Output

Pulse

Certificates / Approvals

ATEX, IEC Ex, CSA C/US, JPN Ex, KC Ex,
INMETRO Ex, NEPSI Ex/CCC, UK Ex

Specialities

Density/Concentration measurement in
combination with density controller FML621,
Surface finish: mechanical polished (up to 0.3 µm)

Components

Density Computer FML621

More information **www.endress.com/FTL63**