Vibronic
Point level switch
Liquiphant FTL71

Point level switch with extension tube for liquids in high-temperature applications

More information and current pricing:
www.apsc.endress.com/FTL71

Benefits:

- Use in safety systems requiring functional safety to SIL2 in accordance with
  IEC 61508/IEC 61511-1
- With welded gas-tight feed-through maximum safety in the event of damaged sensor
- Wide variety of electronics, e.g. NAMUR, relay, thyristor, PFM signal output: the right connection for every process control system
- Large number of process connections to choose from: universal usage
- No calibration: quick, low-cost start-up
- No mechanically moving parts: no maintenance, no wear, long operating life.
  Monitoring of fork for damage: guaranteed function
- FDA approved materials (PFA Edlon)

Specs at a glance

- **Process temperature** -60 °C...+280 °C (-76 °F...+540 °F) (300°C / 572°F, 50h cumulated)
- **Process pressure absolute / max. overpressure limit**
  Vacuum...100 bar (Vacuum...1450 bar)
- **Min. density of medium** 0.5g/cm³ (0.4g/cm³ optional)

Field of application: Liquiphant FTL71 is a point level switch with extension tube for use in hazardous areas with all international certificates. FTL71 is especially designed for applications with high process temperatures up to 280°C and can be used up to SIL2, in homogeneous redundancy up to SIL3. An integrated second line of defense offers the highest degree of safety. 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
High process temperatures up to 280°C
wide range of process connections
Analogue and bus interfaces
Extensive certificate range (e.g. Ex,WHG)
compact, e.g. pipes
Dual Sealing / Second line of defense

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 bzw 10...55V DC
8/16mA, 11...36V DC
NAMUR
PFM

Ambient temperature
-50 °C...+70 °C
(-58 °F...+158 °F)

Point Level / Liquids

Process temperature

-60 °C...+280 °C
(-76 °F...+540 °F)
(300°C / 572°F, 50h cumulated)

Process pressure absolute / max. overpressure limit

Vacuum...100 bar
(Vacuum...1450 bar)

Min. density of medium

0.5g/cm³ (0.4g/cm³ optional)

Main wetted parts

316L / Alloy
PFA and Enamel on request

Process connection

Thread:

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

Flange:

DIN DN25...DN100,

ASME 1"...4",

JIS 25A...100A

Sensor length

Length 130mm (5.12") (Liquiphant II)
148mm...3000mm / 6000mm optional
(5.83"...118" / 236" optional)

Point Level / Liquids

Communication
PROFIBUS PA
19...253V AC
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NAMUR
PFM

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

Safety approvals
SIL

Design approvals
EN 10204-3.1

NACE MR0175, MR0103

ASME B31.3

AD2000

Marine approval
GL/ ABS

Options
Heavy duty stainless steel housing mainly for the oil and gas industry

Components
FTL325P/FTL375P Interface PFM
FTL325N/FTL375N Interface NAMUR

More information **www.apsc.endress.com/FTL71**

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