

Vibronic

Point level switch

Liquiphant FTL71

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



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)

More information and current pricing:

www.th.endress.com/FTL71

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)

Communication

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19...253V AC
10...55V DC-PNP
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PFM

Point Level / Liquids

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.th.endress.com/FTL71