Vibronic
Point level detection
Liquiphant FTL81

Point level switch for liquids for FailSafe overfill prevention

More information and current pricing:
www.jp.endress.com/FTL81

Benefits:

- Use in safety systems requiring functional safety to SIL3 in accordance with IEC 61508 Ed.2.0/ IEC 61511-1/ISA 84-1 and DIN EN ISO 13849
- Proof test: proof testing interval up to 12 years, Slave devices tested at the press of a button
- Permanent self-monitoring/internal redundancy
- 4-20mA interface (acc. to NAMUR NE 06/NE 43): easy integration via the switching unit (Nivotester FailSafe FTL825) with a two-channel output (safety contacts) and locking function or direct integration into a safety PLC
- No adjustment: quick, low-cost startup
- No mechanically moving parts: no maintenance, no wear, long operating life
- Monitoring of fork for damage, corrosion, build-up and mechanical blocking

Specs at a glance

- **Process temperature** -60°C...+280°C (-76°F...+540°F)
- **Process pressure absolute / max. overpressure limit** Vacuum...100 bar (1450 psi)
- **Min. density of medium** Density from 0.4 g/cm3 (0.4 SGU)

Field of application: Liquiphant FTL81 is a point level switch for use in hazardous areas with all international certificates. FailSafe overfill prevention in applications with functional safety up to SIL3 with one

device. 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
Reliable point level switch with extension pipe for MIN and MAX safety applications up to SIL3.
Dual Sealing / Second line of defense
Modular housing concept

Specialities
Outstanding features:
- permanent LIVE signal
monitors function safety
- failsafe design and
- high availability of the measuring values

Supply / Communication
2-wire 4...20 mA

Ambient temperature
-60°C...+70°C
(-76°F...+160°F)

Process temperature
-60°C...+280°C
(-76°F...+540°F)

Process pressure absolute / max. overpressure limit
Vacuum...100 bar
(1450 psi)

Min. density of medium
Density from 0.4 g/cm3
(0.4 SGU)

Point Level / Liquids

Main wetted parts
316L
Alloy C

Process connection
Flange:
DN25...DN100,
ASME 1"...4",
JIS 10K...20K
Thread:
G3/4, G1, R3/4,
R1, MNPT3/4, MNPT1

Sensor length
Extension pipe up to 3 m (9.8 ft)

Communication
2-wire 4...20 mA

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

Safety approvals
Overfill protection WHG
Leakage Detection
SIL3

Design approvals
EN 10204-3.1
NACE MR0175, MR0103
ASME B31.3
AD2000

Marine approval
GL/ ABS/ LR/ BV/ DNV

Point Level / Liquids

Options

PWIS free
Pressure tight feed through
Weather protection

Components

Nivotester FTL825, Transmitter

More information **www.jp.endress.com/FTL81**

エンドレスハウザー ジャパン株式会社
Japan
addresses.endress.com
info.jp.sc@endress.com

Endress+Hauser