

# Vibronic

## Point level detection

### Liquiphant FTL80

Point level switch for liquids for FailSafe overfill prevention



Thông tin thêm và mức tính giá hiện tại:  
[www.apsc.endress.com/FTL80](http://www.apsc.endress.com/FTL80)

#### Lợi ích:

- 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

#### Tổng quan về thông số kỹ thuật

- **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/cm<sup>3</sup> (0.4 SGU)

**Phạm vi ứng dụng:** Liquiphant FTL80 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.

## Tín năng và thông số kỹ thuật

### Point Level / Liquids

**Measuring principle**

Vibration Liquids

**Characteristic / Application**

Compact point level switch 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)

---

**Point Level / Liquids****Min. density of medium**

Density from 0.4 g/cm<sup>3</sup>  
(0.4 SGU)

---

**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**

Compact

---

**Communication**

2-wire 4...20 mA

---

**Certificates / Approvals**

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

---

**Safety approvals**

Overfill protection WHG

Leakage

SIL3

---

Point Level / Liquids

**Design approvals**

EN 10204-3.1

NACE MR0175, MR0103

ASME B31.3

AD2000

---

**Marine approval**

GL/ ABS/ LR/ BV/ DNV

---

**Options**

PWIS free

Pressure tight feed through

Weather protection

---

**Components**

Nivotester FTL825, Transmitter

---

Thông tin bổ sung [www.apsc.endress.com/FTL80](http://www.apsc.endress.com/FTL80)