

Liquiphant FTL64 – ensures long term reliable detection of hot liquids

Technical Information:

- Process temperature of -60 to +280°C (-76 to +536°F)
 - Stainless steel (316L): up to +280°C (+536°F)
 - Alloy C22: up to +280°C (+536°F)
 - Stainless steel, PFA coated: up to +230°C (+446°F)
- Process pressure up to 100bar
 - Stainless steel (316L): max. 100bar (1,450psi)
 - Alloy C22: max. 100bar (1,450psi)
 - Stainless steel, PFA coated: max. 40bar (580psi)
- Developed acc. IEC 61508 for SIL2/3
- Heartbeat Technology
- Optional PFA coating for aggressive media
- Sensor with extension tube up to 3m (9.8ft)
- Gas-tight feed through (2nd line of Defense)



Globally, Liquiphant is more than 6 million times in use. Endress+Hauser developed the proven, universal measuring principle back in the 80s and improved it continuously since then. Developed according to IEC 61508, the new generation of Liquiphant perfectly fits for direct usage in SIL2 and SIL3 applications.

The new Liquiphant model sets standards for the IIoT era. As first vibronic device with Heartbeat Technology it allows safe, continuous diagnostics and a simple verification. Customers can monitor the vibration frequency as up to eight frequencies are printed in the verification report. Trending this frequencies, changes of the sensor, e.g. corrosion can be detected at an early stage without removing the instrument from the tank. The verification report clearly shows upcoming corrosion and means the prerequisites for predictive maintenance with this.

Liquiphant FTL64 with strong focus on specific applications with high temperatures, which:

- **ensures highest safety** by the proven vibronic technology designed according to the latest SIL standard IEC 61508 (SIL2) with homogenous redundancy up to SIL3.
- **increases plant availability and improve productivity** by proven active sensor technology and an optimized predictive maintenance strategy by Heartbeat Technology.
- **save time and money in maintenance** by a guided proof test and an automatically generated test-protocol with the SmartBlue-App.



For high temperatures – Liquiphant FTL64

Benefits at a glance:

- Universal measuring principle for limit detection – proven vibronic technology
- Best fit sensor especially for hot liquids above 250°C. Optional PFA coating allows the use in aggressive media up to 230°C.
- Safety by Design: Developed according to IEC 61508 for usage in SIL2 and SIL3 (homogeneous redundancy) applications.
- Easy proof testing for SIL and WHG (Water Resources Act) with guided wizards and automatically generated proof test protocol
- Increased process safety by continuous self-diagnostics of the instrument for status notifications
- Verification of the instrument status without process interruptions via Heartbeat Technology including automatically generated verification report
- Reduction of unplanned plant-shutdowns by monitoring of fork condition (damaged coating/diffusion/corrosion of the fork)
- Access via Bluetooth® Technology from a mobile device to identify the device, check the status, use Wizards and get reports

Typical applications:

Liquiphant FTL64 is used in storage tanks, containers and pipes for point level detection of all kind of liquids. The pioneer of vibronic is the perfect substitute for float switches or optical sensors and works as allrounder even there, where other measuring principles come to their limits because of conductivity, deposits, turbulences, drifts or air bubbles.

The new model of Liquiphant has a strong focus on hot liquids. For temperatures above 150°C it is the right choice. Optional PFA coating allows the use of Liquiphant FTL64 in aggressive media up to 230°C.

The vibronic device ensures reliable and proven point level detection with active measuring technology for tank overfill protection (H-alarm and HH-alarm) as well as pump dry run protection (L-alarm) - without unplanned shut-downs. All kind of complex adjustments for various media or electronics is eliminated with Liquiphant. Developed according to IEC 61508 for SIL2 and SIL3 applications it offers highest reliability and safety with full compliance to API2350 and WHG.

The guided proof test Wizard in the SmartBlue-App offers outstanding simplicity in proof testing. Just connect the Liquiphant FTL64 via Bluetooth to the SmartBlue-App, select the proof test procedure, follow the step by step guidance and receive the test protocol automatically. This saves time and money for necessary maintenance. A test button or via magnetic pin from outside, initiates the instrument for a fast and easy testing of the safety loop.

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