

## Liquiphant FailSafe

Point level switch for the maximum degree of safety

- For high degree of failure safety: Safety Integrity Level up to SIL3 according to IEC 61508/IEC 61511 with only one instrument (internal redundancy)
- Safe function due to permanent self-monitoring SFF (Safe Failure Fraction) > 99%
- Proof test interval may be extended to up to 12 years, independent of sensor covered (pump protection) or uncovered (overflow prevention)
- Significantly simplified proof test according to WHG guidelines (Water Resource Law) or IEC 61508/IEC 61511 functional safety requirements
- 4...20mA output according to NAMUR NE06 / NE43 for an easy integration with Nivotester FTL825 or directly to a (safety) PLC
- Additional, dynamic LIVE-signal



**ANACE**  
THE CORROSION SOCIETY

WHG



Endress+Hauser 

People for Process Automation

## Liquiphant FailSafe



FTL80



FTL81



FTL85



FTL825

The point level switches for liquids of the Liquiphant family have convinced customers for three decades by now. The new Liquiphant FailSafe of Endress+Hauser sets standards in terms of safety and high availability. The point level switch is used in pump dry-run protection and overflow prevention, predominantly in the chemical, oil & gas as well as energy industry.

Endress+Hauser is able to cover all requirements of modern process industry with the new Liquiphant FailSafe and introduces an instrument for the highest degree of product and plant safety. As a matter of course, the general advantages of the vibration measuring principle are also applicable: E.g. measurements unaffected by the physical properties of the medium like conductivity, dielectric constant or also density changes. Foam and turbulence do not influence the measurement. A calibration for the respective medium is also superfluous.

### Technical data

|                     |   |
|---------------------|---|
| Process temperature | -60...+280°C/-76...+536°F                                   |
| Process pressure    | -1...+100bar/-14.5...1,450psi                               |
| Sensor materials    | 316L, 318L, Alloy C22, Enamel, PFA, ECTFE, PFA-conductive   |
| Approvals           | ATEX, IEC Ex, FM, CSA, CRN, NEPSI, TIIS, SIL, WHG, VdTÜV100 |

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