

# CERTIFICATE

## (1) EU-Type Examination

(2) **Equipment or protective systems intended for use in potentially explosive atmospheres - Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number: **KEMA 99ATEX0523 X** Issue Number: **7**

(4) Product: **Liquid Level Switch Liquiphant M Type FTL50(H)-...., Type FTL51(H)-.... and Type FTL51C-.... and Liquiphant S Type FTL70-.... and Type FTL71-....**

(5) Manufacturer: **Endress+Hauser SE+Co. KG**

(6) Address: **Hauptstraße 1, 79689 Maulburg, Germany**

(7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) DEKRA Certification B.V., Notified Body number 0344 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential test report number NL/DEK/ExTR15.0036/02.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN IEC 60079-0 : 2018**  
**EN 60079-26 : 2015**

**EN 60079-1 : 2014**  
**IEC 60079-26 : 2021**

**EN 60079-11 : 2012**

except in respect of those requirements listed at item 18 of the Schedule.

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

(12) The marking of the product shall include the following:



**Refer to Annex 1 for detailed marking**

Date of certification: 7 July 2021

DEKRA Certification B.V.

R. Schuller  
Certification Manager

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(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate KEMA 99ATEX0523 X**

Issue No. 7

(15) **Description**

Liquid Level Switches Liquiphant M Type FTL50 (H)-...., Type FTL51 (H)-.... and Type FTL51 C-.... and Liquid Level Switches Liquiphant S Type FTL70-.... and Type FTL71-...., for use in explosive atmospheres caused by the presence of combustible gases, fluids, vapours or dusts, directly detect a liquid level by means of a symmetrical vibrating fork and convert it into an electrical signal. Depending on the applied electronics insert, the Liquid level Switch provides a 8/16 mA current output signal (electronics insert type FEL55), a NAMUR signal (electronics insert type FEL56 or type FEL58, inverse signal), a digital signal (electronics insert type FEL57) or a connection to a Fieldbus (electronics insert type FEL50A).

The Liquid Level Switches Liquiphant M and Liquiphant S are used for the measurement of the density or concentration of a process fluid, if provided with the electronics insert type FEL50D and connected to the Endress+Hauser Interface type FML621.

The electronics enclosure is made of aluminium or stainless steel. Depending on the version, the stainless steel sensor is mounted directly to the enclosure (compact versions, type FTL50 (H) and type FTL70) or via an extension tube (type FTL51 (H), type FTL51 C and type FTL71).

The Liquid Level Switches Liquiphant M type FTL 5. (H)-.... and Liquiphant S type FTL7.-.... are also available in completely stainless steel versions, electrically identical with the versions with electronics insert type FEL58 (inverted NAMUR output signal).

The process contacting parts of Liquid Level Switch Liquiphant M type FTL51 C-.... are provided with a protective coating.

For model code break down, marking, electrical data and thermal data, refer to attached Annex 1 to Report No. NL/DEK/ExTR15.0036/02.

**Installation instructions**

The instructions provided with the product shall be followed in detail to assure safe operation.

(16) **Report Number**

No. NL/DEK/ExTR15.0036/02.

(17) **Specific conditions of use**

If adhesive labels are used, electrostatic charging shall be avoided. For details, refer to the equipment specific Safety Instructions.

For Liquid Level Switch Liquiphant M Type FTL50(H)-...., Type FTL51(H)-.... and Type FTL51C-.... with an aluminium enclosure, when used as EPL Ga equipment, shall be installed in such a way that, even in the event of rare incidents, ignition sources due to impact and friction between the enclosure and iron or steel are excluded.

For the Liquid Level Switch Liquiphant M Type FTL51C provided with a protective coating of non-conductive PFA or ECTFE, precautions shall be taken to minimize the risk from electrostatic discharge or propagating brush discharges of the coated sensor surface.

For the Liquid Level Switch Liquiphant M Type FTL50H, FTL51H with Basic specification, Position 5, 6 = xD only; the probe shall not be subjected to abrasive or corrosive medium that may adversely affect the partition wall for zone separation.

(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate KEMA 99ATEX0523 X**

Issue No. **7**

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at item (9).

(19) **Test documentation**

As listed in Report No. NL/DEK/ExTR15.0036/02.

(20) **Certificate history**

Issue 1	99612901	initial certificate
Issue 1	200255900	Addition FTL51C, T13 enclosure, electronics FEL58
Amendment1		
Issue 1	200976700	Addition 1/2 D, FTL7x
Amendment2		
Issue 1	201389600	Addition electronics FEL50A
Amendment3		
Issue 1	203649500	Addition FEL58 stainless steel housing compact
Amendment4		
Issue 2	210859300	Addition electronics FEL50D
Issue 3	212774300	Update electronics FEL50A
Issue 4	213835000	Addition F27 enclosure, reassessment according to 60079-11+27 standard
Issue 5	217562600	Models from other certificates added and assessment according to latest editions of the standards
Issue 6	221566500	Editorial changes in approval codes.
Issue 7	225613200	Evaluation to EN IEC 60079-0 : 2018 and IEC 60079-26 : 2021 and minor constructional changes