



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx DEK 15.0060X	Page 1 of 4	Certificate history:
Status:	Current	Issue No: 2	Issue 1 (2018-09-24) Issue 0 (2016-10-19)
Date of Issue:	2021-08-30		
Applicant:	Endress+Hauser SE+Co. KG Hauptstraße 1 79689 Maulburg Germany		
Equipment:	Liquid Level Switches Liquiphant M, type FTL50-..., type FTL50H-..., type FTL51-..., type FTL51H-... and type FTL51C-... and Liquid Level Switches Liquiphant S, type FTL70-... and type FTL71-...		
Optional accessory:			
Type of Protection:	Ex d e		
Marking:	Ex db or Ex db eb Refer to Annex 1 for detailed marking.		

Approved for issue on behalf of the IECEx
Certification Body:

L.G. van Schie

Position:

Certification Manager

Signature:
(for printed version)

Date:

2021-08-30

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

DEKRA Certification B.V.
Meander 1051
6825 MJ Arnhem
Netherlands





IECEX Certificate of Conformity

Certificate No.: **IECEX DEK 15.0060X**

Page 2 of 4

Date of issue: 2021-08-30

Issue No: 2

Manufacturer: **Endress+Hauser SE+Co. KG**
Hauptstraße 1
79689 Maulburg
Germany

Additional
manufacturing
locations:

**Endress+Hauser (Suzhou) Automation
Instrumentation Co. Ltd.**
China – Singapore Industrial Park (SIP)
Su-Hong-Zhong-Lu, No. 491
Jiangsu Province, 215021 Suzhou
China

**Endress+Hauser (India) Automation
Instrumentation Pvt. Ltd.**
M-192, Waluj MIDC, Aurangabad - 431 136
Maharashtra State
India

**Endress+Hauser (USA) Automation
Instrumentation Inc.**
2340 Endress Place
Greenwood, Indiana 46143
United States of America

**Endress+Hauser (Brasil) Instrumentação e
Automação Ltda.**
Avenida Antonio Sesti
600, Itatiba/SP
Brazil

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

IEC 60079-26:2021-02 Explosive atmospheres - Part 26: Equipment with Separation Elements or combined Levels of Protection
Edition:4.0

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

[NL/DEK/ExTR15.0080/02](#)

Quality Assessment Report:

[DE/TUN/QAR06.0003/08](#)



IECEX Certificate of Conformity

Certificate No.: **IECEX DEK 15.0060X**

Page 3 of 4

Date of issue: 2021-08-30

Issue No: 2

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Liquid Level Switches Liquiphant M type FTL50-..., type FTL50H-..., type FTL51-..., type FTL51H-... and type FTL51C-... and Liquid Level Switches Liquiphant S type FTL70-... and type FTL71-... for use in explosive atmospheres caused by the presence of combustible gases, fluids or vapours. The Liquid Level Switch consists of a sensor which directly detect a liquid level by means of a symmetrical vibrating fork. The different electronic inserts in the transmitter enclosure, converts the fork frequency into an electrical signal.

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.

Depending on the version, the sensor is mounted directly to the enclosure (compact versions, type FTL50, type FTL50H and type FTL70) or via a temperature spacer and / or extension tube (type FTL51, type FTL51H, type FTL51C and type FTL71).

The process contacting parts of Liquid Level Switch Liquiphant M type FTL51C are provided with a protective coating.

For type designation, marking, thermal data and technical data refer to Annex 1 to Report No. NL/DEK/ExTR15.0080/02. See safety instructions XA00031F, XA00108F, XA00114F and XA00115F for thermal derating tables.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- Liquiphant M FTL51C which are provided with a non-conductive coating are only suitable for group IIC, if it is assured that electrostatic charging of the sensor is avoided. See "Special conditions" in the Safety instructions XA00031F, XA00108F, XA00114F and XA00115F.
- The flameproof joints are not intended to be repaired.



IECEX Certificate of Conformity

Certificate No.: **IECEX DEK 15.0060X**

Page 4 of 4

Date of issue: 2021-08-30

Issue No: 2

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

1. Assessed per IEC 60079-0 Ed. 7, IEC 60079-7 Ed. 5.1 and IEC 60079-26 Ed.4
2. Change of temperature derating tables
3. Minor changes to the construction and documentation

Annex:

[224049100-Annex 1 to ExTR15.0008.02.pdf](#)