



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.: IECEx EXV 17.0016X Issue No: 0 Certificate history:
Issue No. 0 (2017-09-07)

Status: **Current**

Date of Issue: **2017-09-07** Page 1 of 4

Applicant: **Deeter Electronics Ltd**
Deeter House, Valley Road, Hughenden Valley, High Wycombe, Bucks, HP14 4LW
United Kingdom

Equipment: **HFS Ex Horizontal Level Switch**
Optional accessory:

Type of Protection: **Equipment protection by flameproof enclosure "d", Equipment with EPL Ga and Equipment dust ignition protection by enclosure "t"**

Marking:
Ex db IIC T* Ga/Gb
Ex tb IIIC T*°C Db

*Approved for issue on behalf of the IECEx
Certification Body:*

Sean Clarke CEng MSc MIET

Position:

Certification Manager

*Signature:
(for printed version)*

Date:

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 the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

ExVeritas Limited
Units 16-18 Abenbury Way
Wrexham Ind. Est.
Wrexham LL 139UZ
United Kingdom





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Manufacturer: **Deeter Electronics Ltd**
Deeter House, Valley Road, Hughenden Valley, High Wycombe, Bucks, HP14 4LW
United Kingdom

Additional Manufacturing location(s):

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 electrical apparatus 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 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-26 : 2014-10 Edition:3.0	Explosive atmospheres – Part 26: Equipment with Equipment Protection Level (EPL) Ga
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*This Certificate **does not** indicate compliance with electrical 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:

[GB/EXV/ExTR17.0014/00](#)

Quality Assessment Report:

[GB/SIR/QAR12.0004/05](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Deeter HFS Ex is a liquid level switch with volt free terminals for use in a potentially explosive atmosphere. The liquid level is detected when the float arm is raised and aligns a magnet with a SPST or SPDT reed switch sealed inside a stainless steel housing.

The switch can be mounted horizontally in the side of a vessel via a flange or threaded plug and has the option to fit floats of different materials, sizes and specific gravity. The length between the mounting face and float can be varied dependent upon the application. An optional extension bar may be added between the mounting and the terminal head.

The following temperature classes are applicable based on the process temperature which the equipment is connected to:

Process Temperature	Temperature class for gas	Temperature class for dust
≤85°C	T5	T100°C
≤125°C	T4	T135°C
≤190°C	T3	T200°C

Rating:

0 to 240Vac. 1A 50W Max

0 to 50Vdc. 0.25A 20W Max

SPECIFIC CONDITIONS OF USE: YES as shown below:

- When intended to be operating with process temperatures above 85°C, the sensor head shall be sufficiently cooled to keep it below 80°C. See installation manual for details.



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Additional information:

Routine tests:

1. Routine tests on production in accordance with clause 16 of IEC 60079-1 to a pressure of at least 64.8 Bar.
2. The equipment covered under this certificate incorporates previously certified components, it is therefore the responsibility of the manufacturer to monitor the status of the certification of these components and inform ExVeritas of any changes that may affect the explosion safety design of their products.

Technical Documents:

Title:	Drawing No.:	Rev. Level:	Date:
HFS-Ex all versions – Sheet 1 of 3	D600798	Rev 1	2017/02/21
HFS-Ex all versions – Sheet 2 of 3	D600798	Rev 1	2017/02/21
HFS-Ex all versions – Sheet 3 of 3	D600798	Rev 1	2017/02/21
Adaptor ½"NPT long thread to 12mm – Sheet 1 of 2	Dwg 950553	Rev 2	2017/08/11
HFS Ex Manual – Sheets 1 to 10	HFS Ex Manual	-	2017/7/10