



# 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](http://www.iecex.com)

Certificate No.: IECEx LCIE 16.0031X

Issue No: 0

Certificate history:

[Issue No. 0 \(2017-07-10\)](#)

Status: **Current**

Page 1 of 3

Date of Issue: **2017-07-10**

Applicant: **TTK S.A.S**  
19, Rue du Général Foy  
75008 Paris  
**France**

Equipment: **Sensing cable - Type: FG-ODP**

*Optional accessory:*

Type of Protection: **Ex ia**

Marking:

Ex ia IIB T4 Ga

(Refer to Schedule for full marking)

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

Certification Officer

*Position:*

Julien GAUTHIER

*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](#).

Certificate issued by:

**Laboratoire Central des Industries Electriques (LCIE)**

**33 Avenue du General Leclerc**

**FR-92260 Fontenay-aux-Roses**

**France**





# IECEX Certificate of Conformity

Certificate No: IECEx LCIE 16.0031X Issue No: 0  
Date of Issue: 2017-07-10 Page 2 of 3  
Manufacturer: **TTK S.A.S**  
19, Rue du Général Foy  
75008 Paris  
**France**

Additional Manufacturing location(s):

**MEM**

Le Bois du May  
45700 Chevillon sur Huillard  
France

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** Explosive atmospheres - Part 0: General requirements  
Edition:6.0  
**IEC 60079-11 : 2011** Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"  
Edition:6.0

*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:

[FR/LCIE/ExTR16.0049/00](#)

Quality Assessment Report:

[FR/LCIE/QAR14.0009/03](#)



# IECEX Certificate of Conformity

Certificate No: IECEx LCIE 16.0031X

Issue No: 0

Date of Issue: 2017-07-10

Page 3 of 3

## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The apparatus is a sensing cable for detection and location of hydrocarbon or solvent liquid leakage. It is composed of a length of sensing element and an encapsulated electronic board mounted inside a plastic housing. The apparatus is equipped with a length of cable of 1300 m maximum for external connection.

### Full marking:

TTK or TTK S.A.S

Address: ...

Type: FG-ODP

Serial number: ...

Year of construction: ...

Ex ia IIB T4 Ga

IECEX LCIE 16.0031X

$-30^{\circ}\text{C} \leq T_{\text{amb}} \leq +100^{\circ}\text{C}$

Ui: 10 V; Ii: 200 mA; Pi: 500 mW; Ci: 0.32  $\mu\text{F}$ ; Li/Ri: 29  $\mu\text{H}/\Omega$

Uo: 10 V; Io: 200 mA; Po: 500 mW; Co: 19.68  $\mu\text{F}$ ; Lo/Ro: 554  $\mu\text{H}/\Omega$

### Ratings:

Ui: 10 V; Ii: 200 mA; Pi: 500 mW; Ci: 0.32  $\mu\text{F}$ ; Li/Ri: 29  $\mu\text{H}/\Omega$

Uo: 10 V; Io: 200 mA; Po: 500 mW; Co: 19.68  $\mu\text{F}$ ; Lo/Ro: 554  $\mu\text{H}/\Omega$

### Instructions:

Instruction manual for FG-ODP sensor dated 2017-06-21

### SPECIFIC CONDITIONS OF USE: YES as shown below:

The apparatus shall only be connected to intrinsically safe certified equipment or simple apparatus. This combination must be compatible as regard intrinsic safety rules (see electrical parameters).