



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 EESF 19.0002X** Page 1 of 5 [Certificate history:](#)
Issue 0 (2019-02-28)

Status: **Current** Issue No: 1

Date of Issue: 2021-01-11

Applicant: **Labkotec Oy**
Myllyhaantie 6
FI-33960 Pirkkala
Finland

Equipment: **idOil-LIQ**

Optional accessory: n/a

Type of Protection: **Intrinsically safe**

Marking: Ex ia IIB T5 Ga

Approved for issue on behalf of the IECEx
Certification Body:

Ilkka Riihimäki

Position:

Senior Expert

Signature:
(for printed version)

2020-01-11

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 www.iecex.com or use of this QR Code.



Certificate issued by:

Eurofins Expert Services Oy
Kivimiehentie 4
FI-02150 Espoo
Finland

 **eurofins** | Expert Services



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Manufacturer: **Labkotec Oy**
Myllyhaantie 6
FI-33960 Pirkkala
Finland

Additional
manufacturing
locations:

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 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

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:

[FI/EESF/ExTR19.0002/01](#)

Quality Assessment Report:

[FI/EESF/QAR19.0001/01](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

idOil-LIQ is a piezoelectric vibration based level probe for fluids. The probe is equipped with a permanently connected cable with a maximum length of 15 m. The probe enclosure is a PVC tube with machined PVC end pieces. The sensor consists of a piezoelectric element mounted on a short anodized aluminum rod protruding 25 mm out of the tube. The maximum input values of the intrinsically safe circuit are (with 15 m cable):

$U_i = 16 \text{ V}$

$I_i = 80 \text{ mA}$

$P_i = 400 \text{ mW}$

$C_i \leq 5.2 \text{ nF}$

$L_i \leq 1.6 \text{ mH}$

The nominal voltage of the probe is $U_n = 8 \dots 16 \text{ V}$.

SPECIFIC CONDITIONS OF USE: YES as shown below:

The allowed ambient temperature range is $-30 \text{ }^\circ\text{C} \dots +60 \text{ }^\circ\text{C}$.

The probe is equipped with a permanent connected cable without connector.

The cable shall be installed according to the manufacturer's instructions.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Alternative piezo elements introduced.



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Additional information:

Certificate history:

IECEx VTT 17.0003X: Prime certificate

IECEx EESF 19.0002X: NB name changed from VTT Expert Services to Eurofins Expert Services. New certificate template. Safety related component changes. Alternative PCB introduced. Documents updated accordingly.