



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

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|---------------------|---|-------------|--|
| Certificate No.: | IECEx CES 13.0021X | Page 1 of 5 | <u>Certificate history:</u> |
| Status: | Current | Issue No: 2 | Issue 1 (2018-08-21) Issue 0 (2013-11-11) |
| Date of Issue: | 2023-11-28 | | |
| Applicant: | Piusi S.p.A. Via Antonio Pacinotti, 16A I-46029 Suzzara (MN) Italy | | |
| Equipment: | Electronic turbine meters K24, model F00408 N NN | | |
| Optional accessory: | | | |
| Type of Protection: | Intrinsic Safety "ia" | | |
| Marking: | Ex ia IIB T4 Gb | | |

Approved for issue on behalf of the IECEx
Certification Body:

Alessandro Fedato

Position:

Head of IECEx CB

Signature:
(for printed version)

Date:
(for printed version)



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:

CESI
Centro Elettrotecnico
Sperimentale Italiano S.p.A.
Via Rubattino 54
20134 Milano
Italy

CESI



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Manufacturer: **Piusi S.p.A.**
Via Antonio Pacinotti, 16A
I-46029 Suzzara (MN)
Italy

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 Reports:

[IT/CES/ExTR13.0022/00](#) [IT/CES/ExTR13.0022/01](#)

Quality Assessment Report:

[DE/TPS/QAR18.0005/03](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The electronic turbine meters **K24** are apparatus, designed and manufactured, for digital and bi-directional low viscosity liquids measurement. The **K24** compatible liquids are: diesel fuel, kerosene, gasoline. The **K24** series meters are connected directly to the pipes, they are manufactured in two versions: **Meter** (for direct measurement with LCD display); **Pulser** (for remote measurement). The **Meter** version has self-powered by a Lithium battery pack; the **Pulser** version via certified barrier.

The housing of the **K24** apparatus is made of aluminum with two protective rubber guards, a plastic display cover and stainless steel back closure. The degree of protection of the equipment is IP65.

Electrical characteristics

Version **K24 Meter**: lithium battery pack cod. PIUSI 018021000 (VARTA CR 1/2 AA - 3V; 950mAh)

Version **K24 Pulser**: $U_i = 12 \text{ V}$, $I_i = 100 \text{ mA}$, $P_i = 0.3 \text{ W}$

Tamb.: from -10°C up to $+50^\circ\text{C}$

The **K24 Pulser** shall be supplied and interfaced with certified apparatus according to IEC 60079-0 and IEC 60079-11 complying with the limits of the above electrical characteristics.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- The conditions of the installation, use and maintenance of the **K24** meters, are included within the Safety Instruction. For a safe use these Instruction are to be followed precisely.
- Use only low viscosity compatible liquids.
- Replace the internal battery pack in a non-hazardous area, and exclusively with **PIUSI** model n.018021000.
- The complementary parts of the **K24** meters system such as pipes, nozzle, etc. shall guarantee the continuity of the ground connection.



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Equipment (continued):

K24 equipment Identification

The **K24** meters are characterized by the following code: F00408 N NN

F00408 - Electronic turbine meter **K24**

N - **X** - Meter version ATEX or IECEx certificated

- **Y** - Pulser version ATEX or IECEx certificated

- **U** - Meter version UL certificated

- **Z** - Pulser version UL certificated

- **other letters** version not covered by any certification

NN - (alphanumeric) not safety relevant; eg. inlet and outlet thread of connection pipes (BSP or NPT), color of the front cover, etc.

Warning labels

Adhesive label on equipment enclosure:

!WARNING!

ALUMINIUM BODY: AVOID IGNITION DUE TO IMPACT OR FRICTION

SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY

Adhesive label on the battery pack PIUSI 018021000:

To reduce the risk of ignition of a flammable or explosive atmosphere, batteries must only be changed in a location be non-hazardous.

To prevent ignition of flammable or combustible atmosphere, disconnect power before servicing



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Variation 1.

Update QAR details: replaced IT/CES/QAR12.0004 with DE/TPS/QAR18.0005/00.

Variation 2.

The equipment previously assessed in compliance with standard IEC 60079-0:2011 have been re-assessed on the basis of the new issue of IEC 60079-0:2017.