

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 IBE 12.0006

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Certificate history: Issue 0 (2012-02-08)

Status:

Current

Issue No: 1

Date of Issue:

2022-08-15

Applicant:

FLEXIM Flexible Industriemesstechnik GmbH

Boxberger Straße 4 12681 Berlin Germany

Equipment:

Ultrasonic flowmeter: 608-A, 608-B

Optional accessory:

Type of Protection:

Type of protection "n"; Protection by enclosure "t"; intrinsic safty "i"

Marking:

608-A

Ex tb IIIC T100 °C Db Ex nA nC ic IIC (T6)T4 Gc $-10 \text{ °C} \le T_a \le (+50)+60 \text{ °C}$

Ex tb IIIC T100 °C Db

Ex nA nC ic [ic] IIC (T6)T4 Gc $-10 \,^{\circ}\text{C} \le T_a \le (+50) + 60 \,^{\circ}\text{C}$

Approved for issue on behalf of the IECEx

Certification Body:

Alexander Henker

1. Hense

2022-08-15

Position:

Signature:

(for printed version)

(for printed version)

Deputy Head of department Certification Body

This certificate and schedule may only be reproduced in full.

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:

IBExU Institut für Sicherheitstechnik GmbH Fuchsmühlenweg 7 09599 Freiberg Germany





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Manufacturer: **FLEXIM Flexible Industriemesstechnik GmbH**

> Boxberger Straße 4 12681 Berlin Germany

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 Edition:6.0

Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

IEC 60079-15:2010 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Edition:4

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

Edition:2

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:

DE/IBE/ExTR12.0004/00 DE/IBE/ExTR12.0004/01

Quality Assessment Report:

DE/IBE/QAR11.0003/07



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The ultrasonic flowmeter is designed for the acquisition of flow rate in fluids (liquid or gaseous) in piping. It is a portable measuring device for the mobile and temporary duty in a plant. It can be used with an external power supply unit or with the internal battery. The energy emitted by the connected ultrasonic transducers is limited by the ultrasonic measuring device.

In gas atmospheres (group IIC environments) the transmitter may also be used with permanent power supply.

Technical data

Ambient temperature range -10 °C to +50 °C (T6) or +60 °C (T4)

Rated voltage 10.5 ... 15 V DC

Um 16 V

Power input < 18 W

Battery Li-lon, 7.2 V / 6.36 Ah

Connection for ultrasonic transducer

Output voltage ≤ 120 V (0.15...4 MHz)

Output power < 1 W

SPECIFIC CONDITIONS OF USE: NO



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Equipment (continued):

Communication interfaces type of protection Ex nA:

- RS232
- USB (only for use outside explosive atmospheres)

Signal Outputs type of protection Ex nA:

- Current active and passive
- Frequency
- Binary

Signal Inputs type of protection Ex ic (type 608-B):

- Temperature

 $\begin{array}{ccc} \mbox{U}_{\mbox{o}} & 22\mbox{ V} \\ \mbox{I}_{\mbox{o}} & 6\mbox{ mA} \\ \mbox{P}_{\mbox{o}} & 33\mbox{ mW} \\ \mbox{C}_{\mbox{o}} & 450\mbox{ nF} \\ \mbox{L}_{\mbox{o}} & 10\mbox{ mH} \\ \mbox{C}_{\mbox{i}} & 1.8\mbox{nF} \\ \mbox{L}_{\mbox{i}} & 10\mbox{ } \mu\mbox{H} \end{array}$

Standard Pt100 and Pt1000 sensors may be connected to the intrinsically safe temperature inputs as "simple apparatus" in accordance with EN/IEC 60079-11.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

The manufacturer address has been updated.

The Ex-marking has been updated.

The permission for mobile use is written into the manual. The name was changed from *60***-A2 to 608-A and 608-B.

Some constructive changes there done.

The summarizing of drawings was done.

The new standards IEC 60079-0 and IEC 60079-31 are used.