



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 BVS 11.0017X

Issue No: 1

Certificate history:

[Issue No. 1 \(2019-05-16\)](#)

[Issue No. 0 \(2011-03-11\)](#)

Status: **Current**

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Date of Issue: **2019-05-16**

Applicant: **ifm electronic gmbh**
Friedrichstrasse 1
45128 Essen
Germany

Equipment: **Flow sensor type SF*1*A**

Optional accessory:

Type of Protection: **Protection by intrinsic safety "i", With equipment protection level (EPL) Ga**

Marking:
Ex ia IIC T4 Ga/Gb

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

Jörg Koch

Position:

Head of Certification Body

*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:

DEKRA Testing and Certification GmbH
Certification Body
Dinnendahlstrasse 9
44809 Bochum
Germany

 **DEKRA**
On the safe side.



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Manufacturer: **ifm prover gmbh**
Waldesch 9
88069 Tettnang
Germany

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 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 : 2007-10 Edition:5	Explosive atmospheres - Part 0:Equipment - General requirements
IEC 60079-11 : 2006 Edition:5	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-26 : 2006 Edition:2	Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga

*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:

[DE/BVS/ExTR11.0033/01](#)

Quality Assessment Report:

[DE/BVS/QAR06.0010/09](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Description

In conjunction with an evaluation amplifier the flow sensor monitor flows in liquids and gases and detects whether a preset flow has been reached.

The electrical components of the sensor are fixed in a metal enclosure; the electrical connection is made via a permanently connected cable. The flow sensor is suitable for installation in a wall separating Zone 0 from Zone 1.

Parameters

Voltage	U_i	DC	16 V
Current	I_i		100 mA
Power	P_i		680 mW
Effective internal inductance	L_i		6 μ H
Effective internal capacitance	C_i		1.2 nF

The values for the effective internal inductance and capacitance apply to permanently connected cables with a length up to 6 m; for longer cables the following values have to be added:

Inductance per meter	0.68 μ H/m
Capacitance per meter	95 pF/m

Ambient temperature range T_a -20 °C up to +60 °C

SPECIFIC CONDITIONS OF USE: YES as shown below:

Steps must be taken to ensure the potential equalisation of the flow sensor.

For mounting the unit in the wall between Zone 0 and Zone 1 the manufacturer's instructions contain notes for the safe separation of areas.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

The reason of the supplement is the change of the QAR.