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 BVS 17.0038X**

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Certificate history:

Status: **Current**

Issue No: 1

Issue 0 (2017-05-15)

Date of Issue: 2022-05-17

Applicant: **TST electronics GmbH**
Berliner Straße 42
58135 Hagen
Germany

Equipment: **Sensor type VFS**-***A1 or FLP**-***A1**

Optional accessory:

Type of Protection: **Intrinsic Safety "i"**

Marking: Ex ia IIB T4 Ga

Approved for issue on behalf of the IECEx Certification Body:

Dr Franz Eickhoff

Position:

Lead Auditor and officially recognised expert

Signature:
(for printed version)

Date:
(for printed version)

2022-05-17

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:

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

DEKRA
On the safe side.

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Certificate No.: **IECEx BVS 17.0038X**

Issue No: 1

Date of issue: 2022-05-17

Manufacturer: **TST electronics GmbH**
Berliner Straße 42
58135 Hagen
Germany

Manufacturing locations: **TST electronics GmbH**
Berliner Straße 42
58135 Hagen
Germany

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 Edition:7.0 — Explosive atmospheres - Part 0: Equipment - General requirements

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

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:

DE/BVS/ExTR17.0038/01

Quality Assessment Report:

DE/BVS/QAR17.0006/04

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

Subject and type

See Annex

Description

The sensor is used for flow measurement and for the conversion of the flow rate into an electrical signal.

The sensor will be mounted in a pipe system. The electrical connection of the sensor is carried out via a permanently connected cable (L ≤ 50 m).

Parameters

Circuit 1 (strands brn + wht) and Circuit 2 (strands yew + gre) values each				
Voltage	U_i	DC	10	V
Current	I_i		200	mA
Power	P_i		0.5	W

Both circuits are connected internally; the following resulting values apply:				
Voltage	U_i	DC	10	V
Current	I_i		400	mA
Power	P_i		1	W
Effective internal capacitance (incl. 50 m cable)	C_i		2.02	µF
Effective internal inductance (cable inductance for 50 m)	L_i		50	µH
Ambient temperature range	T_a		-40 °C up to +60 °C	

SPECIFIC CONDITIONS OF USE: YES as shown below:
Metallic process connections have to be connected electrostatically conductive (< 1 MΩ) to the local equipotential bonding.

The sensor may only be used in areas, in which intensive electrostatic charging caused by the process are not expected.

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Date of issue: 2022-05-17 Issue No: 1

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

- The equipment has been assessed in accordance with current standard versions.
- A self-adhesive type label can now be used (formerly the marking was printed directly on the enclosure).
- Another connecting cable can be used.
- A new "Condition of Use" has been added.
- The schematic and the layout have changed slightly.

Annex:

BVS_17_0038X_TST_Annex_issue1.pdf

IECEx Certificate of Conformity

Certificate No.: **IECEx BVS 17.0038X issue No: 1**
Annex

Subject and type

Sensor type VFS**-***A1 or type FLP**-***A1
Instead of the **-*** in the complete name letters and numerals will be inserted, which identify different types.