

EU-Konformitätserklärung Nr. E.010.054

Declaration of Conformity No. E.010.054

Wir FlowVision GmbH

We (Name des Anbieters / supplier's name)

Im Erlet 6
D-90518 Altdorf
Germany

(Anschrift / address)

erklären in alleiniger Verantwortung, dass die Produkte
declare under our sole responsibility that the products

Diese Konformitätserklärung entspricht der Europäischen Norm EN 45014 „Allgemeine Kriterien für Konformitätserklärungen von Anbietern“. Die Grundlage der Kriterien sind internationale Dokumente, insbesondere ISO/IEC-Leitfaden 22, 1982, „Informations on manufacturer's declaration of conformity with standards or other technical specifications“.

This Declaration of Conformity is suitable to the European Standard EN 45014. „General criteria for supplier's declaration of conformity“. The basis for the criteria has been found in international documentation, particularly in: ISO/IEC Guide 22, 1982, „Informations on manufacturer's declaration of conformity with standards or other technical specifications“.

Strömungswächter

Typ: FS10-EX...

(Bezeichnung, Typ oder Modell, Los-, Chargen- oder Serien-Nr. möglichst Herkunft und Stückzahl / name, type or model, batch or serial number, possibly sources and number of items)

auf die sich diese Erklärung bezieht, mit der/den folgenden Norm(en) oder normativen Dokument(en) übereinstimmt.

to which this declaration relates is in conformity with the following standard(s) or other normative document(s).

EN IEC 60079-0:2018
EN 60079-7:2015
EN 60079-31:2014

(Titel und/oder Nr. sowie Ausgabedatum der Norm(en) oder der anderen normativen Dokumente / Title and/or number and date of issue of the standard(s) or other normative document(s))

Gemäß den Bestimmungen der Richtlinie(n)

Following the provisions of Directive(s) (falls zutreffend / if applicable)

2014/34/EU ATEX-Richtlinie
2014/34/EU ATEX directive

EU Baumusterprüfbescheinigung Nummer
EU-Type Examination Certificate Number

EPS 11 ATEX 1 365 X **Revision: 4**

Benannte Stelle Qualitätssicherung Produktion / Kennnummer
Notified body quality management production / Identification number

TÜV Rheinland / 0035

Altdorf, 09.10.2019


.....
Norbert Gliedstein
Geschäftsführer
Managing Director


.....
Oliver Amm
Ex-Beauftragter
Ex-Representative

Anhang zur EU-Konformitätserklärung Nr. E.010.054
Annex to Declaration of Conformity No. E.010.054

Europäische Normen:
European standards:

EN IEC 60079-0:2018

*Explosionsgefährdete Bereiche - Teil 0:
Betriebsmittel - Allgemeine Anforderungen
Explosive atmospheres - Part 0:
Equipment - General requirements*

EN 60079-7:2015

*Explosionsgefährdete Bereiche - Teil 7:
Geräteschutz durch erhöhte Sicherheit "e"
Explosive atmospheres - Part 7:
Equipment protection by increased safety "e"*

EN 60079-31:2014

*Explosionsfähige Atmosphäre - Teil 31:
Geräte-Staubexplosionsschutz durch Gehäuse "t"
Explosive atmospheres - Part 31:
Equipment dust ignition protection by enclosure "t"*

EU - Type Examination Certificate

(1)

(2) Equipment and protective systems intended for use in potentially explosive atmospheres – Directive 2014/34/EU

(3) EU - Type Examination Certificate Number

EPS 11 ATEX 1 365 X

Revision 4

(4) Equipment: Flow Sensor type: FS10-EX, FS20-EX, FC50-EX and FVone-EX

(5) Manufacturer: FlowVision GmbH

(6) Address: Im Erlet 6
90518 Altdorf
Germany

(7) This equipment and any acceptable variation thereto are specified in the annex to this certificate and the documentation therein referred to.

(8) Bureau Veritas Consumer Products Services Germany GmbH, notified body No. 2004 in accordance with Article 21 given in the Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014, certifies that this equipment has been found to comply with the essential health and safety requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II of the Directive. The examination and test results are recorded in the confidential documentation under the reference number 11TH0246.

(9) Compliance with the essential health and safety requirements has been assured by compliance with:

EN IEC 60079-0:2018

EN 60079-7:2015

EN 60079-15:2010

EN 60079-31:2014

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the annex to this certificate.

(11) This EU - Type Examination Certificate relates only to the design and examination of the specified equipment in accordance with Directive 2014/34/EU. Further requirements of this Directive apply to the manufacture of this equipment and its placing on the market. Those requirements are not covered by this certificate.

(12) The marking of the equipment shall include the following:

 II 3G Ex ec IIC T4 Gc (FS10-EX, FS20-EX, FC50-EX)

 II 3G Ex ec nC IIC T4 Gc (FVone-EX)

 II 2D Ex tb IIC T120°C Db (All devices)

Certification department of explosion protection

Hamburg, 2019-09-30

H. Schaffer

Page 1 of 2

Certificates without signature and seal are void. This certificate is allowed to be distributed only if not modified. Extracts or modifications must be authorized by Bureau Veritas Consumer Products Services Germany GmbH. EPS 11 ATEX 1 365 X, Revision 4.

(13) **Annex**

(14) **EU - Type Examination Certificate EPS 11 ATEX 1 365 X**

Revision 4

(15) Description of equipment:

The sensors FS10-EX, FS20-EX, FC50-EX and FVone-EX monitor and measure flows using the calorimetric principle. One of the two probes is heated for this purpose. Depending on the flow velocity, the flow causes more or less cooling of this probe. This cooling is detected and evaluated by the integrated electronics.

The flow monitors FS10-EX and FS20-EX have a transistor output. The FC50-EX has a transistor output and an analogue output. The FVone-EX has two analogue outputs (flow and temperature), two relay outputs, a pulse output and an error indication output. The FVone-EX is configured via USB.

Electrical data:

Supply voltage: 24 V DC ($\pm 20\%$)

Max. load: 500 mA

(16) Reference number: 11TH0246

(17) Special conditions for safe use:

Maximum permitted temperature range:

FS10-EX, FS20-EX, FC50-EX: $-10\text{ }^{\circ}\text{C} \leq T_{\text{amb}} \leq +65\text{ }^{\circ}\text{C}$

FVone-EX: $-10\text{ }^{\circ}\text{C} \leq T_{\text{amb}} \leq +50\text{ }^{\circ}\text{C}$

Maximum fluid temperature:

FS10-EX, FS20-EX: $+100\text{ }^{\circ}\text{C}$

FC50-EX: $+90\text{ }^{\circ}\text{C}$

FVone-EX: $+80\text{ }^{\circ}\text{C}$

The following warning marking similar to 29.12 a) of EN IEC 60079-0:2018 shall be attached to the devices FC50-EX and FVone-EX:

WARNING – If used in zone 21 or 22 (dust) wait 1 minute after switching off before opening.

(18) Essential health and safety requirements:

Met by compliance with standards.

Certification department of explosion protection

Hamburg, 2019-09-30



H. Schaffer

Certificate

Quality Assurance Notification



Directive 2014/34/EU

Registration No.: **01 220 186517**

The Certification Body for Explosion Protection
of TÜV Rheinland Industrie Service GmbH
Reported under no. 0035
certifies:

Certificate Holder:



FlowVision GmbH
Im Erlet 6
90518 Altdorf
Germany

Scope:

Production, final equipment inspection and testing of
sensors and devices for signal processing

Types of protection: d, ia, t

An audit was performed, Report No. 186517. Proof has
been furnished that the requirements according to
Directive 2014/34/EU Annex IV are fulfilled.

The due date for all future audits is 10th of February

Validity:

The certificate is valid from 2024-02-16 until 2027-02-15
First certification 2009



Köln, 2024-02-08

TÜV Rheinland Industrie Service GmbH
Am Grauen Stein, D-51105 Köln
Dipl.-Ing. (FH) Ralf Biegalla