

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

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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.

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