(1) # EU - Type Examination Certificate

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

(3) EU - Type Examination Certificate Number

EPS 19 ATEX 1 235 X **Revision 0**

(4) Equipment: Flow sensors type FS10-dbEX, FS20-dbEX, FC50-dbEX and FVone-dbEX

(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 19TH0424.

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

EN IEC 60079-0:2018 **EN 60079-1:2014**

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 construction 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 2G Ex db IIC T4 Gb

II 2D Ex tb IIIC T85°C ... T120°C Db (for FS10-dbEX and FS20-dbEX)

II 2D Ex tb IIIC T95°C ... T120°C Db (for FC50-dbEX)

II 2D Ex tb IIIC T75°C ... T105°C Db (for FVone-dbEX)

Certification department of explosion protection

Hamburg, 2020-02-06

H. Schaffer

BUREAU VERITAS
Consumer Products Services Germany GmbH
Oehleckerring 40, 22419 Hamburg, Germany
Phone: +49 40 74041-0
cps-hamburg@de.bureauveritas.com
www.bureauveritas.de/cps

(13) # Annex

(14) **EU - Type Examination Certificate EPS 19 ATEX 1 235 X** **Revision 0**

(15) Description of equipment:

The sensors FS10-dbEX, FS20-dbEX, FC50-dbEX and FVone-dbEX 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 a more or less strong cooling of this probe. This cooling is detected and evaluated by the integrated electronics. The housing is constructed in the ignition protection type "flameproof enclosure", the different types (plug-in, push-in and screw-in) can each be equipped with different electronics. The push-in housing is available with various shank lengths. The electrical connection is done via a permanently connected cable.

Electrical data:

Supply Voltage:	24 V DC (± 20 %)
Analogue Output:	0/4-20 mA
Pulse Output:	max. 500 mA
Relay Output:	max. 0,7 A

(16) Reference number: 19TH0424

(17) Special conditions for safe use:

A repair of flameproof joints is not allowed.

Ambient temperature range FS10-dbEX, FS20-dbEX, FC50-dbEX: -20 °C ≤ Ta ≤ +65 °C

Ambient temperature range FVone-dbEX: -20 °C ≤ Ta ≤ +50 °C

The max. surface temperature rating in dependence on the max. fluid temperature as given in the manufacturer's instructions shall be respected.

(18) Essential health and safety requirements:

Met by compliance with standards.

Certification department of explosion protection Hamburg, 2020-02-06

H. Schaffer

BUREAU VERITAS
Consumer Products Services Germany GmbH
Oehleckerring 40, 22419 Hamburg, Germany
Phone: +49 40 74041-0
cps-hamburg@de.bureauveritas.com
www.bureauveritas.de/cps