



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 FMG 17.0009X** Page 1 of 4 Certificate history:
Status: **Current** Issue No: 6 Issue 5 (2020-04-20)
Date of Issue: 2020-10-26 Issue 4 (2019-11-08)
Applicant: **Azbil Vortek, LLC** Issue 3 (2019-09-09)
8475 West interstate 25 Issue 2 (2019-06-04)
Frontage Road, Suite 300 Issue 1 (2018-11-11)
Longmont, CO 80504 Issue 0 (2018-02-02)
United States of America
Equipment: **Pro V Multi-Parameter VorTex & Pro T Multi-Parameter Turbine Mass Flow Meters**
Optional accessory: Pro V Vortex Models AX22, M22, AX23, M23, AX24, AX24R, M24, M24R and Pro T Turbine Mass Flowmeters
Type of Protection: **Ex db, Ex tb**
Marking: Pro V and Pro T (ST) Pro V (HT)
Ex db IIB + H2 T6...T2 Gb Ex db IIB + H2 85°C ...405°C Gb
Ex tb IIIB T85°C Db Ex tb IIIB T85°C Db
Ta = -40°C to 60°C; IP66 Ta = -40°C to 60°C; IP66
Pro T (HT)
Ex db IIB + H2 85°C ...459°C Gb
Ex tb IIIB T85°C Db
Ta = -40°C to 60°C; IP66

Approved for issue on behalf of the IECEx
Certification Body:

J. E. Marquedant

Position:

VP, Manager - Electrical Systems

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 www.iecex.com or use of this QR Code.



Certificate issued by:

FM Approvals LLC
1151 Boston-Providence Turnpike
Norwood, MA 02062
United States of America





IECEx Certificate of Conformity

Certificate No.: **IECEx FMG 17.0009X**

Page 2 of 4

Date of issue: 2020-10-26

Issue No: 6

Manufacturer: **Vortek Instruments, LLC**
8475 West interstate 25
Frontage Road, Suite 300
Longmont, CO 80504
United States of America

Additional manufacturing locations: **Azbil Vortek, LLC**
8475 West interstate 25
Frontage Road, Suite 300
Longmont, CO 80504
United States of America

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

IEC 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

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 Reports:

[US/FMG/ExTR17.0027/00](#)
[US/FMG/ExTR17.0027/03](#)
[US/FMG/ExTR17.0027/06](#)

[US/FMG/ExTR17.0027/01](#)
[US/FMG/ExTR17.0027/04](#)

[US/FMG/ExTR17.0027/02](#)
[US/FMG/ExTR17.0027/05](#)

Quality Assessment Report:

[GB/FME/QAR16.0013/05](#)



IECEx Certificate of Conformity

Certificate No.: **IECEx FMG 17.0009X**

Page 3 of 4

Date of issue: 2020-10-26

Issue No: 6

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Refer to Attachment

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Contact Manufacturer regarding flamepath information.
2. Clean with a Damp cloth only to avoid build-up of electrostatic charge
3. The Model Pro-T Multivariable Mass Turbine Flowmeters standard temperature option (ST) process temperature range is -40°C to +238°C. The high temperature option (HT) process temperatures range is -40°C to +454°C.

The Model Pro-T Multivariable Mass Turbine Flowmeters

TMax (Process)	Temperature Class Value (Gas)	
	ST Version	HT Version
80°C	T6	85°C
95°C	T5	100°C
130°C	T4	135°C
195°C	T3	200°C
238°C	T2	300°C
445°C	N / A	450°C
454°C	N / A	459°C

4. The Pro-VTM Multivariable Mass Vortex Flowmeters Models AX22, M22, AX23, M23, AX24 AX24R0 M24 and M24R standard temperature option (ST) process temperature range is -40°C to 260°C. The high temperature option (HT) process temperature range is -40°C up to +400°C.

Model AX22, M22, AX23, M23, AX24, M24 and Pro-VTM Multivariable Mass Vortex Flowmeters

TMax (Process)	Temperature Class Value (Gas)	
	ST Version	HT Version
80°C	T6	85°C
95°C	T5	100°C
130°C	T4	135°C
195°C	T3	200°C
260°C	T2	300°C
400°C	N / A	405°C



IECEx Certificate of Conformity

Certificate No.: **IECEx FMG 17.0009X**

Page 4 of 4

Date of issue: 2020-10-26

Issue No: 6

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Updates were made to the drawings that do not impact previous evaluations.