



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx BAS 17.0018X Issue No: 3 Certificate history:
Status: **Current** Page 1 of 4 Issue No. 3 (2019-04-11)
Date of Issue: **2019-04-11** Issue No. 2 (2018-02-12)
Issue No. 1 (2017-10-20)
Issue No. 0 (2017-05-05)
Applicant: **Emerson - Rosemount, Micro Motion Inc.**
12001 Technology Drive
Eden Prairie
MN 55344
United States of America
Equipment: **Model 8600D Vortex Flowmeter**
Optional accessory:
Type of Protection: **Protection by Enclosure 'tb'**
Marking: **Ex tb IIIC T85°C Db (-20°C ≤ Ta ≤ +70°C)**

Approved for issue on behalf of the IECEx
Certification Body:

R.S. Sinclair

Position:

Technical Manager

Signature:
(for printed version)

Date:

12-4-19

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 the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

SGS Baseefa Limited
Rockhead Business Park
Staden Lane
Buxton, Derbyshire, SK17 9RZ
United Kingdom





IECEX Certificate of Conformity

Certificate No: IECEX BAS 17.0018X Issue No: 3

Date of Issue: 2019-04-11 Page 2 of 4

Manufacturer: **Emerson - Rosemount, Micro Motion Inc.**
12001 Technology Drive
Eden Prairie
MN 55344
United States of America

Additional Manufacturing location(s):

SC Emerson SRL
Emerson Street No. 4
400641 Cluj-Napoca
Romania

**Emerson Process Management Flow
Technologies Co., Ltd.**
111, Xing Min South Road
Jiangning District, Nanjing
Jiangsu Province
211100
China

F-R Tecnologías De Flujo, S.A. De C.V.
Rosemount Flow Business Unit
Ave. Miguel de Cervantes 111
31136 Chihuahua
Mexico

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

*This Certificate **does not** indicate compliance with electrical 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:

[GB/BAS/ExTR17.0031/00](#)
[GB/BAS/ExTR19.0066/00](#)

[GB/BAS/ExTR17.0223/00](#)

[GB/BAS/ExTR17.0375/00](#)

Quality Assessment Report:

[NO/PRE/QAR15.0018/01](#)

[NO/PRE/QAR15.0031/01](#)

[NO/PRE/QAR16.0019/01](#)



IECEx Certificate of Conformity

Certificate No: IECEx BAS 17.0018X

Issue No: 3

Date of Issue: 2019-04-11

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Model 8600D Vortex Flowmeter is a two-wire, piezoelectric-based flowmeter designed to measure the flow of a fluid within a pipe.

It consists of a sensor board, 4-20mA HART output board, terminal board and optional Liquid Crystal Display (LCD) unit mounted within a coated aluminium alloy or stainless steel enclosure forming the transmitter assembly. This is either mounted on a stainless steel meter body or connected via a coaxial cable to a remote meter body, which contains the piezoelectric sensor. The transmitter converts the signal input to a 4-20mA HART digital output or pulse totalizer signal output.

Connection to the external circuits is achieved by the use of a 4-way terminal block within the transmitter enclosure, entry to which is gained by a threaded conduit entry point. The installation of external connections and the plugging of the unused entry must be carried out using appropriate Ex e or Ex t cable glands or blanking plug components with a minimum degree of protection of IP66 certified by an approved certification body.

Input Parameters

Maximum Working Voltage = 42V d.c.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The enclosure may be made from aluminium alloy with a protective polyurethane paint finish which may constitute a potential electrostatic ignition risk. Care should be taken to protect it from external conditions conducive to the build-up of electrostatic charge on such surfaces. The enclosure must not be rubbed or cleaned with a dry cloth.
2. When the equipment is installed, particular precautions must be taken to ensure, taking into account the effect of process fluid temperature, that the ambient temperature of the electrical housing of the equipment meets the marked protection type temperature range.



IECEx Certificate of Conformity

Certificate No: IECEx BAS 17.0018X

Issue No: 3

Date of Issue: 2019-04-11

Page 4 of 4

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Variation 3.1

To permit minor circuit and drawing changes not affecting the previous assessment.

Variation 3.2

To confirm the current designs of the Model 8600D Vortex Flowmeter have been reviewed against the requirements of IEC 60079-0: 2017 Edition 7 in respect of the differences from IEC 60079-0: 2011 Edition 6, and none of the differences affect the equipment. The standards listed on page 2 of the certificate were updated.

ExTR: **GB/BAS/ExTR19.0066/00**

File Reference: **19/0148**