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 12.0053X

Issue No: 9

Status: **Current**

Date of Issue: **2019-04-11**

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: **Intrinsic Safety**

Marking:

Ex ia IIC T4 Ga (-60°C ≤ Ta ≤ +70°C)

Certificate history:
Issue No. 9 (2019-04-11)
Issue No. 8 (2018-02-12)
Issue No. 7 (2017-10-20)
Issue No. 6 (2017-05-05)
Issue No. 5 (2016-02-18)
Issue No. 4 (2015-03-09)
Issue No. 3 (2014-05-28)
Issue No. 2 (2013-06-06)
Issue No. 1 (2012-11-05)
Issue No. 0 (2012-05-08)

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.

Certificate issued by:

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

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Manufacturer:

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

Additional Manufacturing location(s):

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

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

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

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 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

*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/ExTR12.0102/00	GB/BAS/ExTR12.0266/00	GB/BAS/ExTR14.0123/00
GB/BAS/ExTR15.0055/00	GB/BAS/ExTR16.0044/00	GB/BAS/ExTR17.0041/00
GB/BAS/ExTR17.0223/00	GB/BAS/ExTR17.0375/00	GB/BAS/ExTR19.0066/00

Quality Assessment Report:

NO/PRE/QAR15.0018/01	NO/PRE/QAR15.0031/01	NO/PRE/QAR16.0019/01

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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 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 contain the piezoelectric sensor. The transmitter converts the sensor 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.

Input Parameters
Ui = 30V
Ii = 185mA
Pi = 1W
Ci = 0
Li = 0.97mH

SPECIFIC CONDITIONS OF USE: YES as shown below:

1) When fitted with the 90V transient suppressors, the equipment is not capable of passing the 500V insulation test. This must be taken into account upon installation.

2) The enclosure may be made from aluminium alloy with a protective polyurethane paint finish; however, care should be taken to protect it from impact or abrasion when located in Zone 0.

3) 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.

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

Variation 9.1

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

Variation 9.2

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**