

**(1) EC-TYPE EXAMINATION CERTIFICATE****(2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC**

(3) EC-Type Examination Certificate Number: **KEMA 08ATEX0143** Issue Number: 1

(4) Equipment: **Mass Flow Meters Series 240 and 241**

(5) Manufacturer: **Sierra Instruments Inc.**

(6) Address: **5 Harris Court, Building L, Monterey, CA 93940, USA**

(7) This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) KEMA Quality B.V., notified body number 0344 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, 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 to the directive.

The examination and test results are recorded in confidential test report number 211923100.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN 60079-0 : 2006**  
**EN 61241-1 : 2004**

**EN 60079-1 : 2007**

**EN 61241-0 : 2006**

(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 schedule to this certificate.

(11) This EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment according to the Directive 94/9/EC. Further requirements of the directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

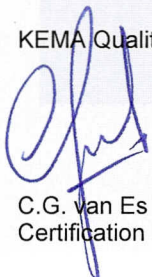
(12) The marking of the equipment shall include the following:



**II 2 G Ex d IIB + H<sub>2</sub> T6**  
**II 2 D Ex tD A21 IP66 T85 °C**

This certificate is issued on November 28, 2008 and, as far as applicable, shall be revised before the date of cessation of presumption of conformity of (one of) the standards mentioned above as communicated in the Official Journal of the European Union.

KEMA Quality B.V.



C.G. van Es  
Certification Manager

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(13) **SCHEDULE**

(14) **to EC-Type Examination Certificate KEMA 08ATEX0143**

Issue No. 1

(15) **Description**

Mass Flow Meters Series 240 and 241 measure the 5 parameters mass flow, volumetric flow, temperature, pressure and fluid density.

Ambient temperature range -40 °C to +60 °C.

**Electrical data**

Supply voltage: ..... 18 to 36 Vdc or 100 to 240 Vac

Analog output: ..... 4 to 20 mA

**Installation instructions**

The cable entry device shall be of a certified flameproof type, suitable for the conditions of use and correctly installed.

The degree of protection of at least IP6X to EN 60529 is only achieved if certified cable entries are used that are suitable for the application and correctly installed. Unused apertures shall be closed with suitable blanking elements.

**Routine tests**

Each welded sensor shall be submitted to the routine test of clause 16.1 of EN 60079-1 at a test pressure of 1600 kPa (16 bar) for at least 10 seconds. No leakage or damage shall occur.

(16) **Test Report**

KEMA No. 211923100.

(17) **Special conditions for safe use**

None.

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at (9).

(19) **Test documentation**

As listed in Test Report No. 211923100.