

(1) EC-TYPE EXAMINATION CERTIFICATE



- (2) Equipment and Protective Systems intended for use in Potentially Explosive Atmosphere - **Directive 94/9/EC**
- (3) EC-Type-Examination Certificate Number

TÜV 12 ATEX 7167 X

- (4) Equipment: **Sage Rio Gas Flow Meter SIX or SRX**
- (5) Manufacturer: **Sage Metering, Inc.**
- (6) Address: **8 Harris Ct. Bldg D1, Monterey, CA 93940, USA**
- (7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The TÜV Rheinland Notified Body for ex-protected products of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies 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 atmosphere, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report 557/Ex167.00/12

- (9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN 60079-0: 2009

EN 60079-1:2007

- (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 and specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.
- (12) The marking of the equipment shall include the following:

 **II 2 G Ex d IIB + H2 T6 Gb**

TÜV Rheinland Certification Body for explosion protected equipment

Cologne, 27th November 2012


Dipl.-Ing. Klaus Peter Graff

(Translation)

This EC-Type-Examination Certificate without signature and stamp shall not be valid.
It may be circulated only without alteration.

Extracts or alterations are subject to approval by the:
TÜV Zertifizierungsstelle für Ex-Schutz-Produkte

TÜV Rheinland Industrie Service GmbH, Am Grauen Stein, 51105 Köln
Tel. +49 (0) 221 806-0 Fax. + 49 (0) 221 806 114

(13) Annex

(14) **EC - Type Examination Certificate**
TÜV 12 ATEX 7167 X

(15) Description of equipment:

15.1 Equipment and type:

Sage Rio Gas Flow Meter SIX or SRX

The SIX and SRX Gas Flow Meters are mounted in a component flameproof enclosure, certified under DEMKO 07 ATEX 0622294U.

The used body types are:

-XIHX

-XDHMX

The probe which was added and extends from the certified enclosures was subject of the explosion proof testing. It consists of a length up to 36" with a diameter of 1/2" or 1/4".

15.2 Description

The Rio Gas Flow Meter is a thermal anemometer used to measure gas flow such as natural gas, methane, hydrogen, air, etc. It is powered by 24 VDC (or 110/230 VAC). It is mounted directly into a pipe where the gas is measured (Insertion Style), or it is inserted into a special defined tube which leads the gas flow past the sensor (In-Line Style).

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15.3 Technical Data

General Data

Type of protection by IEC 60529:	IP 66
Ambient temperature:	-40°C...+50°C

SIX / SRX	24 VDC	110 VAC	230 VAC
I_{max}	100 mA	88 mA	44 mA
P_{max}	2,4 W	10,1 W	10,1 W
I_{nominal}	64 mA	54 mA	27 mA
P_{nominal}	1,5 W	6,2 W	6,2 W

Spreadsheet: Ratings depending on model

(16) Test Report No. 557/Ex 167.00/12

(17) Special Conditions for safe use / Remarks for safe usage:

- The cable entry holes shall be fitted with suitably certified cable glands that are capable of maintaining the rating of the equipment.
- Do not open when energized.
- Do not open when an explosive atmosphere might be present.
- Only use Silicone O-Rings for -40°C which are certified under DEMKO 07 ATEX 0622294U.

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(18) Basic Safety and Health Requirements

Fulfilled by the afore mentioned standards.

TÜV Rheinland Certification Body
for explosion protected equipment

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