Sagemcom



Siconia® EG6 EV0 PLUS

Residential gas smart meter for amr system

Description

The Siconia® EG6 EVO PLUS meter is a volumetric measuring instrument with deformable walls for natural gas, manufactured gas, LPG, and technical gases, designed for residential use. It is designed and built according to the highest standards, and in compliance with the ENI359 norm and the MID directive. Measurement precision and accuracy are guaranteed by the production and control process, and by an automated calibration system, which is used at the internal Metrological Laboratory upon 100% of the meters produced.

The quality of the plastic and metal components makes the meters highly sensitive, even with a minimal gas flow, and ensures excellent performance over time. The accuracy and reliability of the measurement over time is guaranteed by the consolidated mechanical principle, which is based on a membrane and spool valve system. The EG6 EVO PLUS model is the "electronic" version of Sagemcom's traditional mechanical meter, and has an integrated electronic module with the following features and functions:

- LCD display with multilevel menu
- logging of consumption values
- remote transmission of the readings (compensated by temperature)
- remote control valve for gas flow management.

The integrated valve with integral passage is positioned on the meter's inlet and inside the casing; it can be controlled remotely for both closing and re-opening (in this case, after remote enabling and on-site activation). The use of a full-bore valve eliminates the possibility of any additional pressure loss. The EG6 EVO PLUS is part of Siconia® Smart Gas metering solution including central Head End System and Meter Data Management system.

REFERENCES

European Directive 2014/32/EU (MID) European Directive 2014/34/EU (ATEX) EN 1359:2017 standard OIML R137-1&2:2012 WELMEC 7.2 TALIAN AUTHORITY FOR ELECTRICITY C.

ITALIAN AUTHORITY FOR ELECTRICITY, GAS AND WATER'S RESOLUTION 631-15

Product details

Model	EG6 EVO PLUS
Meter Class	C6
Max. operating pressure (mbar)	500
Min. flow rate (m³/h)	0,06
Max. flow rate (m³/h)	10
Standard connection (according to ISO 228-1)	DN32
Spacing distance	250 mm
Operating temperature range	-25 °C / + 55 °C
Cyclic volume	2.4 dm³ (multi-chamber complex consisting of two 1.2 dm³ chambers)
Precision class	1.5
Maximum totalizable volume	9999999999999 m³
Minimum reading value	0,0001 m³
Base temperature conditions	15 °C (other temperatures upon request)
Protection rating	IP66
Dimensions	A: 250mm, B: 247mm, C: 341mm, D: 165mm, E: 71mm
Weight	3,3 kg



- Membrane in synthetic material
- Casing in galvanized sheet steel with polyester paint, providing excellent protection against corrosion, and resistance to high temperatures, in accordance with the EN1359: 2007 standard
- Metallic casing colour: RAL 9002 standard colours (other colours available upon request)
- The meter is designed for installation in "H3" outdoor environments, in accordance with the EN1359: 1998/ A1:2017 norm
- High stability of measurement
- Alphanumeric LCD display with two lines of 16 characters
- Integrated tamper and electromagnetic interference protection
- User button for data reading
- Internal valve reset button
- ATEX Zone 2-----II 3G Ex ic IIA T3 Gc
 (- 25°C ≤Tamb ≤ + 55°C)

Data communication

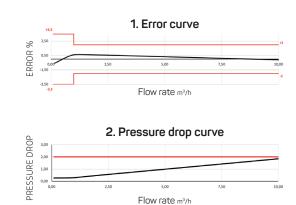
- Point to Point cellular communication : GSM/CPRS, 3G, NB1
- Point to Multipoint RF communication : WmBUS 169MHz
- Local link RF communication : WmBUS 868MHz
 DLMS or OMS Primary Communication
- V4.1.2 protocol
- UNI TS 11291, AEEG resolution 155/08

Functionality

The pressure difference between the meter's intake and outlet results in the cyclic filling and emptying of the measuring chamber via the alternating movement of the deformable membrane.

The motion is converted into electrical pulse signals via the kinematic measuring system, which consists of spool valves with a connecting rod/crank coupling, and an electronic transducer module. These signals are then transmitted to the metrology card.

The temperature sensor for volume correction is installed on the transducer module, and is equipped with an effective fraud detection system.



All rights reserved. The information and specifications included are subject to change without prior notice. Sagemcom Energy & Telecom tries to ensure that all information in this document is correct, but does not accept liability for error or omission. Non contractual document. All trademarks are registered by their respective owners. Simplified joint stock company Capital 25 605 811,80 Euros - 518 250 337 RCS Nanterre. 11/2021

Sagemcom Energy & Telecom SAS

Headquarters : 250, route de l'Empereur 92848 Rueil-Malmaison Cedex - FRANCE Tel : +33 (0)1 57 61 10 00 - Fax : +33 (0)1 57 61 10 01

www.sagemcom.com

Sagemcom