Sagemcom

Siconia® ES4 EVO MP 868 & ES6 EVO MP 868

Multirange domestic ultrasonic monopipe smart gas meter

Description

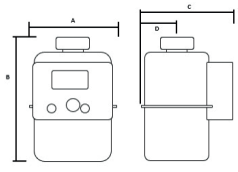
The Siconia® ES4-EVO-MP 868 and ES6-EVO-MP 868 are ultrasonic measuring instruments for H, L, E families of gas, designed for residential use. They are designed and built according to the highest standards, in compliance with the EN 14236, EN 16314 norms and the MID directive.

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 measurement precision and accuracy are guaranteed by the production, control process and by an automated calibration system, which is used at the internal Metrological Laboratory upon 100% of the meters manufactured. This accuracy and reliability of the measurement over time is guaranteed by the high precision ultrasonic sensor that is integrated into the electronics of the meter.

The ES4-EVO-MP 868 and ES6-EVO-MP 868 have an integrated electronic module with the following features and functions :
- Dot matrix LCD display with multilevel menu and high refresh rate
- Logging of consumption values in both Vc and Vb
- Remote transmission of the readings
- Remote control of the valve for gas flow management
- Remote firmware update (both legally and non-legally relevant firmware)
- Display repayment credit (managed by Siconia®)

The integrated valve is positioned on the meter's outlet 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 ES4-EVO-MP 868 and ES6-EVO-MP 868 are part of Siconia® Smart Gas metering solution, when paired with a gateway, including the central Head End System and Meter Data Management system.

Product details

Model	ES4 EVO MP 868	ES6 EVO MP 868
Type	Smart ultrasonic	
Class	G4*	G6*
Max. operating pressure (mbar)	500	
Min. flow rate (m^3/h)	0,04	0,06
Max. flow rate (m^3/h)	6	10
Starting flow (m^3/h)	0,005	
Connection type	Monopipe	
Operating temperature range	-25 °C / + 55 °C	
Base and specific temperatures	Tb : 0°C / Tc : 20°C	
Precision class	1.5	
Maximum computable volume	99999.9999 m^3	
Minimum reading value	0.0001 m^3	
Protection rating	IP54	
Environmental class	M2/E1	
Dimensions	A: 183mm, B: 250mm, C: 67mm, D: 167mm 	
Gewicht	2,3 Kg	

*It is possible to have a multi range meter capable of covering both G4 and G6 ranges with one meter.

VERWEISE
EWG-Richtlinien:
- 2014/32/UE MID
- 2014/34/UE ATEX (II 3G Ex ic IIA T3 Gc)
- 2014/53/UE RED
- 2011/65/UE RoHs

Characteristics

- Casing in galvanized steel sheet with polyester powder paint
- Metallic casing colour: RAL 9002 standard colours
- "H3" outdoor environments, in accordance with the EN1359: 2017 standard
- Class 1.5 with high stability of measurement
- Gas temperature detection for base volume conversion
- Ability to compensate gas composition, including presence of Hydrogen
- Integrated mechanical tamper and electromagnetic interference protection
- 2 batteries for metrological unit and communication module (lifetime > 15 years)
- Equipped with a shut off valve meeting EN16314 standard with safe management software
- User buttons for data reading and valve reset
- ATEX Zone 2-II 3G Ex h ic IIA T3 Gc (- 25°C ≤Tamb ≤ + 55°C)

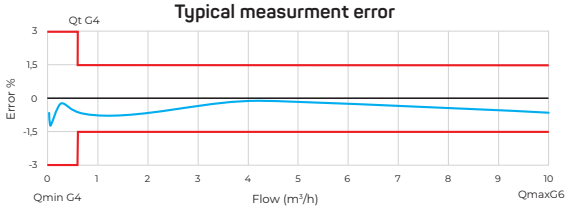
Data communication

Radio: W-MBus OMS 4.2.1 (868 MHz) EN 13757-7
Optical interface ZVEI

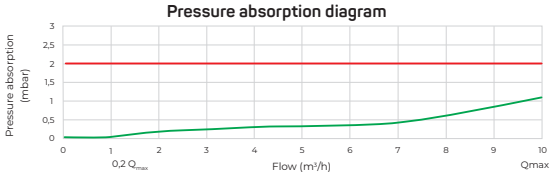
Functionality

The ultrasonic gas meters calculate the volume flow of the gas by measuring the transit times of high-frequency sound waves. Transit times are measured from pulses propagating up and downstream across the gas flow at an angle with respect to the pipe axis. These transit times, together with the meter geometry, are used to calculate the average gas velocity.

Typical measurment error



Pressure absorption diagram



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