Pietro Fiorentini

RSE

RSE meters are the outcome of the integration between the traditional Pietro Fiorentini gas meter and the new generation of smart electronic modules. The mechanical measuring group, already deployed and tested over millions of residential customers, it is well known for its proven accuracy and high reliability over time. This device is used in residential environment, for dry gas volume measurement. The replaceable communication module allows the flexibility to change network in the field, either for technology evolutions or to leverage different communication networks options keeping the same meter asset.

Residential users

Features	Values	
Minimum Flow rate (Qmin)	**RSE / 1,2 LA** G1.6 = 0.016 m³/h | 0.6 cfh G2.5 = 0.025 m³/h | 0.9 cfh G4 = 0.04 m³/h | 1.4 cfh	**RSE / 2,4 LA** G4 = 0.04 m³/h | 1.4 cfh G6 = 0.06 m³/h | 2.1 cfh
Maximum Flow rate (Qmax)	**RSE / 1,2 LA** G1.6 = 2.5 m³/h | 88.3 cfh G2.5 = 4 m³/h | 141.3 cfh G4 = 6 m³/h | 211.9 cfh	**RSE / 2,4 LA** G4 = 6 m³/h | 211.9 cfh G6 = 10 m³/h | 353.1 cfh
Start Flow rate (Qstart)	**RSE / 1,2 LA** G1.6 = 3 dm³/h | 0.10 cfh G2.5 = 5 dm³/h | 0.17 cfh G4 = 5 dm³/h | 0.17 cfh	**RSE / 2,4 LA** G4 = 5 dm³/h | 0.17 cfh G6 = 8 dm³/h | 0.28 cfh
Maximum Operating Pressure*	up to 50 kPa | up to 500 mbar	
Pressure drop	≤ 0.2 kPa @Qmax | ≤ 2 mbar @Qmax	
Ambient temperature*	from -25 °C to 55 °C | from -13 °F to 131 °F	
Gas temperature range*	from -25 °C to 55 °C | from -13 °F to 131 °F	
Accuracy class	1.5 (class 1 on request)	
Ingress protection	Compliant to IP55	
Metrological power supply and operating lifetime	Lithium battery: 15-20 years (non-replaceable).	
Remote communication power supply and operating lifetime	Lithium battery Up to 20 years (field replaceable) depending on remote communcation interface	
Remote communication interface	NB-IoT, GPRS, RF Wireless M-Bus @169 MHz mode N and 868 MHz	
Local interface	Infrared optical door ZVEI in accordante to norm EN 62056-21	
Communication application protocol	DLMS, UNI/TS 11291 compliant	
Measuring Gas	Natural Gas (2nd family - group H, L and E and 3rd family - according to EN 437)	
Environment classes	M2/E2	
Open location marking	H3	
High Ambient Temperature approved	T	
ATEX classification	II 3G Ex ic IIB T3 Gc	
Gas volume compensation	• Temperature Compensated (TC): RSE version • Non Temperature Compensated (NTC): RSV version	
Connections	1" 1/4 ISO 228, 2" ISO 228 mono pipe (others on request)	

(*) REMARK: Different functional features and/or extended temperature ranges available on request. Stated temperature ranges are the maximum for which the equipment's full performance, including accuracy, are fulfilled. Standard product may have a narrower range.

Table 1 Features

Materials and **Approvals**

Part	Material
Body	Zinc-coated pressed steel plate
Electronic enclosure	Plastic polycarbonate
REMARK: The materials indicated above refer to the standard models. Different materials can be provided according to specific needs.	

Table 2 Materials

The RSE - RSV are designed to meet OIML R137, UNI EN 1359:1998/A1:2006 and UNI/TS 11291. The products are certified according to European Directives 2014/32/EU (MID), 2014/34/EU (ATEX) and 2014/53/EU (RED).

OIML R137   EN 1359   UNI/TS 11291   MID   RED

The products are certified for hazardous area installation.

ATEX

RSE - RSV competitive advantages

- Temperature compensation (RSE only)
- Advanced diagnostic
- Integrated shut off valve
- World-wide standard communication protocol

- 15-20 years metrological battery
- Up to 20 years communication battery life depending on radio interface installed
- Biomethane compatible and 20% Hydrogen blending compatible. Higher blending available on request

RSE
FY0081ENG