

Sonix Metric Gas Meters

Sonix 12 · Sonix 16 · Sonix 25

Introduction

Sensus is one of the leading global exponents of the design, manufacture and supply of metering solutions to gas, water and electricity utilities.

Sensus looks beyond the simple physical metrological needs of its customer base, by supplying cutting-edge, technology-driven solutions. The Sensus product portfolio encompasses all aspects of measurement, accuracy, data collection, automated meter reading (AMR) and more importantly the in-built provision of added value intelligence.

The Gas Products range includes Diaphragm, Ultrasonic and Turbine meters, designed to meet the exacting needs of utilities worldwide. Sensus has incorporated the latest systems of automation and electronic testing to ensure a high standard of quality control and meter accuracy.

The Sonix range of ultrasonic meters offers a superior level of metering performance across all currently required parameters with integral features to meet future demands of the Sensus client base.



Technical Data

	Sonix 12	Sonix 16	Sonix 25
Rated Capacity Q max at 1.25 mbar differential	12.0 m ³ /h	16.0 m ³ /h	25.0 m ³ /h
Rated Capacity Q max at 5.0 mbar differential	22.7 m ³ /h	32.0 m ³ /h	46.0 m ³ /h
Rated Capacity Q min	0.16 m ³ /h	0.16 m ³ /h	0.22 m ³ /h
Typical Accuracy	0.16 m ³ /h to 0.70 m ³ /h ±2%	0.16 m ³ /h to 0.70 m ³ /h ±2%	0.22 m ³ /h to 1.13 m ³ /h ±2%
	0.70 m ³ /h to 22.7 m ³ /h ±1%	0.70 m ³ /h to 32.0 m ³ /h ±1%	1.13 m ³ /h to 46.0 m ³ /h ±1%
Low Flow Cut Off	0.006 m ³ /h	0.006 m ³ /h	0.006 m ³ /h
Temperature Range	Operation -35°C to +65°C; Correction -35°C to +55°C		
Display	Can be set to display a temperature and/or fixed factor pressure converted index		
Pressure Rating	Maximum operating pressure 1.4 bar		
Speed of Sound Range	300m/s to 500 m/s		
Weight	5.0 kg		
Power Supply	Replaceable lithium thionyl chloride battery 3.6V 'D' cell battery back		

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Features

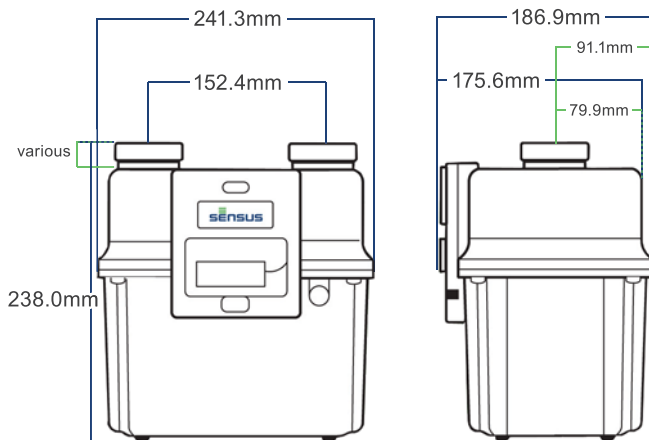
Sonix gas meters are members of the Sensus range of ultrasonic gas meters, for use on Natural Gas, having flow capacities of 12 m³/h, 16 m³/h and 25 m³/h respectively.

Sonix gas meters are designed to suit the needs of the commercial and light industrial market and they offer significant advantages over conventional diaphragm meters, including:

- Improved accuracy
- Effective elimination of accuracy drift with time and temperature
- Compact size
- 10 year battery life minimum
- 15 year meter life minimum
- Reduced through life costs
- No moving parts
- Logs data hourly and has a capacity of 60 days of data stored in EEPROM
- Stored data comprises meter index, operational and diagnostic information
- Temperature conversion
- Fixed factor pressure conversion

Optional Features:

- Pulsed output interface
- Imperial display units also available



For pulse output version the recommended clearance required at the back of the meter for the output cable is 105mm from the center line of the gas connections

Standards

Sonix gas meters are designed in accordance with the following standards:

Construction and Performance

Construction to relevant sections of:

- OIML R6:1989 General Provisions for Gas Volume Meters
- ANSI B109.2 Diaphragm Type Gas Displacement Meters
- Measurement Canada PS-G-06 approval AG-0514

Electrical Safety

- UL1604, Third Edition: Electrical Equipment for Use in Class I and Class II, Division 2, and Class III Hazardous Classified Locations, Rev. 1995
- CSA C22.2 No. 213, First Edition: Non-Incentive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations, Rev. 1999

Ingress Protection

- NEMA 3R enclosure rating (IP22)

Immunity (Magnetic and Radiated)

- IEC 61000-4-8:1993 for Magnetic Immunity
- IEC 61000-4-3:1995 for Radiated Immunity.

Vibration and Shock

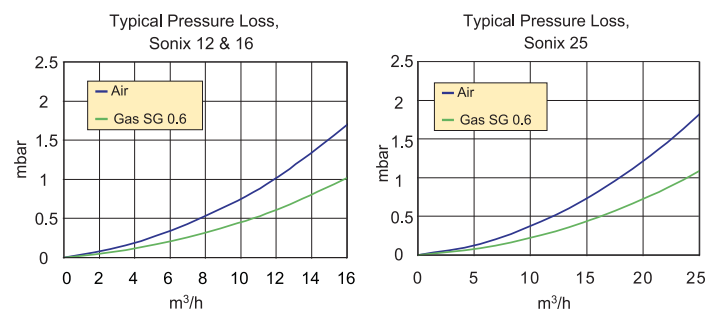
- IEC 60068/2-6 and IEC 60068-2-31

EMC Emissions

- Title 47 of the CFR, Part 18 Subpart C – 18.309(a) and 18.311 Radiated Emission Limits for Industrial, Scientific, and Medical (ISM) Equipment, Ultrasonic Devices.

Communications

- BS EN 61107 1996, Data Exchange for Meter Reading, Tariff and Load Control - Direct Local Data Exchange



For more information, visit us at sensus.com

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