Pietro Fiorentini

FioSonic Mini

Fiosonic Mini is Pietro Fiorentini's **industrial ultrasonic gas flow meter** designed for custody transfer applications in gas distribution networks. Its multi-path chordal technology provides real-time diagnostics, high accuracy, and redundancy. Fiosonic Mini is suitable for use with dry gases and is also Hydrogen Ready for NG-H2 blending up to 30%.

Heavy industry

Medium/small industry

District stations

City gates

Features	Values	
Design pressure*	Up to 2 MPa(a) Up to 290 psi(a)	
Ambient temperature*	• **Ambient Temperature for Non custody Transfer:** from -40 °C to +60 °C from -40 °F to +140 °F • **Ambient Temperature Custody Transfer (MID and OIML certified):** from -25 °C to +55 °C from -13 °F to +131 °F	
Operating (gas) temperature*	From -30 °C to +75 °C From -22 °F to +167 °F	
Accuracy	Class 1 (Qmin ≤ Q < Qt ±2% & Qt ≤ Q ≤ Qmax ±1%) with air calibration	
Rangeability	Up to 1:67	
Repeatability	Better than 0.1%	
Ingress Protection	IP 66 / NEMA 4X	
Applicable metrology standards	AGA-9; OIML R137-1&2 ; MID 2014/32/EU	
Power supply and consumption	Main power supply	Voltage: 14 VDCmin Power: 710 mWmax
	Optional I/O board power supply	Voltage: 10,8 VDCmin Power: 1626 mWmax
Hazardous area certification	• ATEX II 1 G Ex ia IIC/IIB T4 Ga (intrinsically safe) • IECEx Ex ia IIC/IIB T4 Ga (intrinsically safe) • CQPSUS Class 1 Div.1 Gr. ABCD T4-T1(intrinsically safe)	
Accessories	Flow conditioner TI-TWIN (material: SS316)	
Nominal sizes DN	DN 80 | 3", DN 100 | 4"	
Connections*	Class 150 RF / RTJ according to ASME B 16.5 or PN 16 according to EN 1092-1	

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

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Materials and Approvals

Part	Material
Body	Aluminium 6082
Electronic enclosure	Anodized aluminum alloy Stainless Steel 316, on request
Transducers	Titanium ASTM B348 Ti GR.2
Sealing ring	FKM or other material according to process conditions

NOTE: The materials indicated above refer to the standard models. Different materials can be provided according to specific needs.

Table 2 Materials

The **FioSonic Mini** is designed to meet AGA report N.9, ISO 17089-1, OIML R137-1&2 requirements.

AGA9 ISO17089-1

The product is certified according to European Directives 2014/68/EU (PED) as well as 2014/32/EU (MID), OIML R137 -1&2, ATEX, IECEx, CSA, UL (cQPSus).

PED-CE MID OIML R137-1&2 ATEX IECEx cQPSus

FioSonic Mini competitive advantages

- Titanium transducers for long durability
- Low voltage sensors
- No moving parts
- Bi-directional flow measurements
- BCW processing for reduction of noise interferences
- Easy mantenance
- 30% Hydrogen blending compatible. Higher blending available on request
- Metallic wetted parts
- Light weight aluminium body

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