Flow Meter - Outdoor

For clean, dry gas

Key Features

- Thermal Mass, insertion type sensor
- IP67 rating

About

measurement accuracy.

- Flow range: 0-250 Nm/s
- Accuracy: ±1.5% reading, ±0.3% full scale
- Touch screen display
- Power Supply: 18 to 30 vDC
- Two outputs as standard:
 - Digital Modbus RTU 0
 - Analog 4...20 mA + Pulse 0
- Measure: flow, consumption and temperature

The outdoor flow meter uses thermal mass technology which is

independent of pressure and temperature change. With no moving

parts, the flow meter has a stable signal, high reliability and long-term

The streamlined sensor tip ensures minimal impact on gas flow while

Innovative intelligent diagnostic technology can sense contamination of

the sensor in real time and protect the sensor from overheating and

The flow meter has digital signal processing, replacing the traditional analog bridge design. This makes the flow meter more accurate and has

The highly durable IP67 rated, powder-coated Aluminium housing ensured the sensor can withstand the harshest environments.





Manufacturing and industrial use

In-built Display

- Clean, dry compressed air and inert gases
- Temporary or permanent installation
- Outdoor environments
- Gas pressure up to 50 bar (725 psi)
- Pipe Sizes: DN20 to DN300
- Install on pressurised pipes



damage.

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Applications





maintaining accuracy over a wide flow range.

a wider range (range ratio of 1:2500).

Specifications

Measurement Range								
Flow Velocity 0.1 to 250 Nm/s (0.3 to 820 ft/sec)								
Gas Temperature	-40 to +150°C -40 to +302°F							
0 to 16 bar (232 psi) Gas Pressure Up to 50 bar (725 psi) if u retention cage								
Accuracy								
Flow Accuracy	±(1.5% RD + 0.3% FS)							
Reference Conditions: 20 °C, 1 bar(a) -ISO 1217								
The accuracy and response time of the sensor can be affected by the on-site conditions, contaminates in the gas and incorrect installation.								
Working Environment								
Ambient Temperature	-30 to +70°C -22 to +158°F							
Compressed air, nitrogen, Gas types oxygen, carbon dioxide and other non-condensable gases								
Gas Quality	Clean and dry gas							
Minimum flow velocity	0.1 Nm/s (0.3 ft/sec)							
Power Supply								
Power Requirement	18 to 30V DC/ 5W @ 24V							
Electrical Connection	Terminal Strip							
Electromagnetic Compatibility	Meets IEC 61326-1							
Output								
Analogue Output	4-20 mA (isolated) Pulse output							
Digital Output	put Modbus RTU (RS485)							
Output Signals	ow, Mass flow, Consumption, Temperature							



Display								
Display	2.0" IPS ultra-wide viewing angle LCD screen with capacitive touch							
Other								
Process Connection	ISO G1/2" thread							
Pipe Size	DN20 to DN300 0.75" to 12.0"							
Shaft Lengths	250 mm or 400 mm 9.8" or 15.7"							
IP Rating	IP67							
Housing Material	Powder-coated Aluminium							
Sensor Technology	Thermal Mass (not affected by temperature and pressure)							
Turndown Ratio	Ultra-wide, 1:2500							
Bi-directional	No							
Data Logger	No							
Installation	Permanent or Temporary							
Calibration	Every 2 years							
Annual calibration is required if the sensor is exposed to relative humidity above 85%.								
Warranty	12 months							
HS Code	9026.80.80							



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Flow Range

Pipe Size		Flow Range (Nm3/h)		Flow Range (cfm)		
DN	ID (mm)	Inches	Min Flow	Max Flow	Min Flow	Max Flow
20	20	3/4"	0.1	282	0.1	166
25	25	1″	0.2	441	0.1	259
32	32	1.25″	0.3	723	0.2	425
40	40	1.5″	0.5	1,131	0.3	665
50	50	2″	0.7	1,767	0.4	1,040
65	65	2.5″	1.2	2,986	0.7	1,757
80	80	3"	1.8	4,523	1.1	2,661
100	100	4″	2.8	7,068	1.6	4,158
125	125	5″	4.4	11,044	2.6	6,498
150	150	6″	6.4	15,904	3.8	9,357
200	200	8″	11.3	28,274	6.6	16,635
250	250	10"	17.7	44,178	10.4	25,991
300	300	12″	25.4	63,617	14.9	37,428

How to Order





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Pitot Tube Flow Meter

Ideal for wet, dirty and high velocity gases.

Flow Range 5 to 300 Nm/sec (17 to 984 ft/sec) Min Flow Velocity: 5 Nm/s (17 ft/sec)

0.1 to 250 Nm/sec (0.3 to 820 ft/sec)

Installation

Pressure Range 0 to 16 bar (232psi)

Thermal Mass

For clean, dry gas

Flow Range

Min Flow Velocity: 0.1 Nm/s (0.3 ft/sec)
Installation
Insertion
Inline – Flange or R-Thread connection
Pressure Range
Insertion: 0 to 50 bar (725psi)

Vortex Flow Meter

Inline: 0 to 40 bar (580psi)

For use in gas and steam systems

Flow Range 1.5 to 80 m/s (5 to 24 ft/sec) Min Flow Velocity: 1.5 Nm/s (4.9 ft/sec)

Installation

Inline – Flange or R-Thread connection

Pressure Range 0 to 63 bar (913psi)

Mini Flow Meter



For point of use applications Installation Inline Pressure Range 0 to 16 bar (232psi) Bi-directional Optional Gas Quality Clean, dry, wet or dirty gas. Outputs Modbus & 4-20mA Pipe Size DN25 to DN600 IP Rating IP65 (indoor use)

Bi-directional

No **Gas Quality** Clean dry gas Must be installed after a dryer

Outputs Modbus & 4-20mA

Pipe Size Insertion - DN20 to DN600 Inline – DN15 to DN80

IP Rating IP65 (indoor use) or IP67 (outdoor use)

Bi-directional

No Gas Quality Clean, dry, wet or dirty gas / steam Can be installed on the outlet of compressors

Outputs Modbus & 4-20mA

Pipe Size DN15 to DN300 IP Rating IP67

Bi-directional

No Gas Quality Clean dry gas Outputs Modbus & 4-20mA Pipe Size DN3 to DN40 IP Rating IP54



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