YUA
Fast · Accurate · Managing

Auto-drain function
Anti-condensate
Anti-pollution

5 Nm/s
very low
measuring limit

Online auto-calibration reduces data drift



F201x-W Series

Pitot Tube Flow Meter

Pitot Tube FlowMeter

PITOT TUBE FLOWMETER

Product Overview

Performance:

Auto-drain: Pitot tube differential pressure measurement principle, which is usually limited by the influence of condensate, dirty air pollution and clogging,The F201x-W, as the new generation flow meter, has an Auto-Drain function; it can realize pollution resistance

Auto-heating: Accurate measurements in the moisture-saturated gas

Ultra-wide measurement range: The very low measuring limit which can reach 5 Nm/s, and turndown ratio 1:60

Online auto-calibration: Automatic compensates the impacts of temperature change, pressure change, and sensor pollution

Excellent vibration resistance: It is not affected by pipeline vibration

Installation:

Suitable for different pipe size: One flow meter can use in various diameter pipe

Install under pressure: Non-intrusive installation without downtime

Install at outlet of the compressor: Outstanding adaptability to working conditions

Powerful working condition adaptability: Applicable for most pipe-lines, avoding pipe rework

Product Advantages

Anti-pollution

Auto-heating and auto-cleaning functions, applicable to various harsh pipeline working conditions

Online Auto-calibration

Online auto-calibration reduces measuring data drift from sensor aging

Smart Terminal

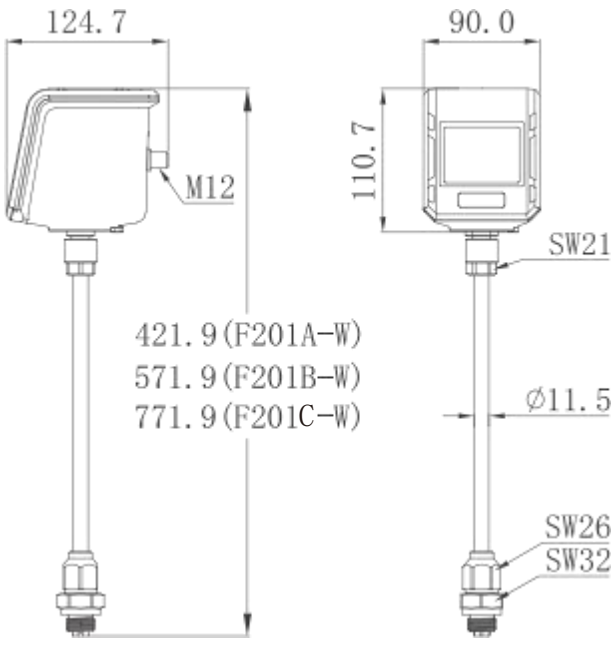
Mobile APP via Bluetooth to view data and do configuration remotely

Data Logging

Data recording and analysis via IoT or USB memory stick

- Applicable to the measurement of dirty and wet air, e.g. at the outlet of compressor
- Super high sensitivity, the lower limit is down to 5 Nm/s
- Bidirectional flow measurement
- Integrates pressure and temperature sensors to monitor online gas pressure and temperature
- The fully isolated electrical structure can completely filter out field disturbance
- The capacitive touch 2.8" IPS LCD with an ultra-wide viewing angle
- No moving parts, low pressure drop
- Data logging function with max. 10,000,000 values
- Bluetooth function for wireless flowmeter configuration and data transmission
- Standard Modbus RTU (RS485) interface, 4 to 20 mA current and pulse output
- Insert type enables the flowmeter to be installed on different pipe diameters under pressure via 1/2" ball valve

Product Dimensions



Measuring Range

英寸 (Inch)	DN	ID (mm)	Min Flow (Nm³/h)	Max Flow (Nm³/h)
1	25	25	8.8	530
1 1/4	32	32	14.5	868
1 1/2	40	40	22.6	1357
2	50	50	35.3	2120
2 1/2	65	65	59.7	3583
3	80	80	90.5	5428
4	100	100	141.4	8482
5	125	125	220.9	13253
6	150	150	318.1	19085
8	200	200	565.5	33929
10	250	250	883.6	53014
12	300	300	1272.3	76340

* For more pipe sizes and flow ranges, please consult sales

Technical Data

Flow

Measuring Range	5 … 300 Nm/s
Accuracy	±(1.5% RD + 0.3% FS) [1% RD Option]
Medium	Dry / wet air and non-corrosive gases
Reference Conditions	20 °C, 1 bar(a) - ISO 1217 (Configurable)

Pressure

Measuring Range	0 … 1.7 MPa(a)
Accuracy	±0.5% FS

Temperaure

Measuring Range	-40 … +150 °C
Accuracy	±0.5 °C

Output

4~20 mA Output (Standard)	Flow rate / Temperature / Pressure (Configurable)
Pulse (Standard)	Consumption / Alarm
Digital Output	Modbus RTU (RS485)
Wireless Communication (Choose one of three)	Bluetooth (Default) Wi-SUN (Option) IOT-4G (Option)
Connector	2 × 5pin M12, Female

Power

Measuring Stage	18 … 30VDC 6.5W @ 24VDC
Pre-warming Stage	18 … 30VDC 24W @ 24VDC

Display & Data Log

Display	2.8" IPS LCD with capacitive touch
Data Log	max. 10,000,000 values

Operating Environment

Environment Temperature	-20 … +60 °C
Medium Temperature	-40 … +150 °C
Operating Pressure	0 … 1.7 MPa(a)

Other

Process Connection	G1/2" (ISO 228-1)
EMC	Compliant with IEC 61326-1
Pole Section Material	SUS304 (Standard) SUS316 (Option)

Order Information

Model	Process Connection	Digital Output	Analog Output	Flow Range	Wireless Comm.	Gas type	Accuracy	Monitor	Description
F201A-W									Pitot Tube Flow Meter, Insert type, 250 mm pole length (Suitable for pipe diameter up to DN250)
F201B-W									Pitot Tube Flow Meter, Insert type, 400 mm pole length (Suitable for pipe diameter up to DN600)
F201C-W									Pitot Tube Flow Meter, Insert type, 600 mm pole length (Suitable for pipe diameter up to DN1000)
F201A-W-B									Pitot Tube Flow Meter, Insert type, 250 mm pole length bi-directional flow measurement (Suitable for pipe diameter up to DN250)
F201B-W-B									Pitot Tube Flow Meter, Insert type, 400 mm pole length bi-directional flow measurement (Suitable for pipe diameter up to DN600)
F201C-W-B									Pitot Tube Flow Meter, Insert type, 600 mm pole length bi-directional flow measurement (Suitable for pipe diameter up to DN1000)
	1								ISO G1/2" Screw
		1							Modbus RTU (RS485)
			1						4 … 20 mA + Pulse Output
				1					Flow range (5 ... 300 Nm/s)
					V0013 0001				None (Defalt)
					S1701 0010				IOT-4G Module
					S1701 0023				Built-in Wi-SUN Sub-module, 470 frequency band, mainly applicable to China
					S1701 0024				Built-in Wi-SUN Sub-module, 915 frequency band, mainly suitable for Asia, America and Australia
					S1701 0025				Built- in Wi-SUN Sub-module, 868 frequency band, mainly suitable for Europe and the Middle East
						V0202 0001			Air
						V0202 0002			Oxygen (O_2)
						V0202 0003			Nitrogen (N_2)
						V0202 0004			Hydrogen (H_2), Real Gas Calibration
						V0202 0005			Nitroous Oxide (N_2O)
						V0202 0006			Carbon Dioxide (CO_2)
						V0202 0007			Natural Gas (NG)
						V0202 0008			Argon (Ar)
						V0202 0009			Helium (He), Real Gas Calibration
						V0202 0010			Other Specified Gases (Specify Gas or Gas Mix)
							V0204 0001		Standard accuracy calibration ±(1.5% RD + 0.3% FS)
							V0204 0002		High accuracy calibration ±(1% RD + 0.3% FS)
								S0105 0001	The capacitive touch 2.8" IPS LCD with an ultra-wide viewing angle + Data logging function
								S0105 0001A	Without LCD version

* For more pole length, please consult sales
* Portable protective case is available as an option. Please consult sales staff for details
* There are difference in regulations and standards between contuntries and regions. Please select according to the local Wi-SUN frequency band

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