

FDM06

Bi-directional Air Flow Transmitter



| Features |

- Based on the hot-wire principle, featuring bi-directional measurement.
- Measures low air velocity with dual-temperature sensing.
- 2" LCD color screen with easy settings via buttons.
- The screen displays airflow and air velocity, integrated with UI settings.
- Accuracy : $\pm 1.0\%$ F.S., pipeline withstand pressure of 16 bar
- Multiple Outputs: Analog output / Relay / RS-485

| Applications |

Semiconductor / Pharmaceutical / Food and Beverage / Laminar Flow Control / Overflow Control / Positive and Negative Pressure Control / Energy / Environmental Protection / Factory Automation / Pharmaceutical

| Specification |

Input

Sensor type	Hot-wire sensor
Turndown ratio	100 : 1
Measuring range	0.1 ... 10 m/s

*Negative air flow starting point : 0.5 m/s

Output

Output signal	4 ... 20 mA / 0 ... 10 V / Relay / RS-485
Signal connection	3-wire
Warm-up time	60 sec
Response time	$t_{90} \leq 5$ sec
Load resistance	Current output : $\leq 500 \Omega$ Voltage output : $\geq 10 K\Omega$

Communication

Communication methods & protocol	RS-485 Modbus RTU
RS-485 baud rate	9600~19200~38400~57600~115200 bps

Accuracy (at 25°C)

Accuracy	$\pm 1.0\%$ F.S.
Temp. influence	0.2% / °C
Repeatability	0.5%

Environmental

Medium	Air
Operating Temp. & Humid.	0 ... 50°C / 20 ... 90%RH(Non-condensing)
Storage Temp.	-25 ... +60°C
Operating pressure	16 bar

Electrical

Power supply	DC 24 V $\pm 10\%$
Current consumption	24 V : 110 mA
Relay capacity	Max current : 6 A Max voltage : DC 24 V (DC 36 V Max)
Electrical connection	M12 8P connector

Installation

Installation	PT 1/2" movable thread
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Display

Display readout	-99.99 ... +99.99 (Air velocity) 0 ... 99999 (Air volume)
Decimal point	Button
Sampling time	1 cycle/sec
Flow unit	m/s, ft/s, L/min, m ³ /min, m ³ /h
Response time adjustment range	0.5 ... 300 sec

Certification

Certification	CE
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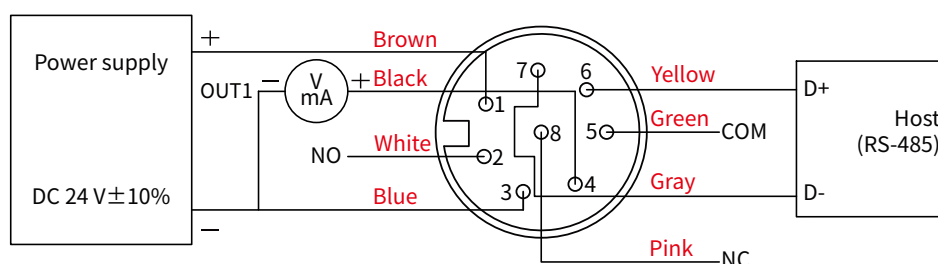
Protection

IP rating	IP65(Housing)
Electrical protection	■ Reverse polarity ■ Over-voltag

Material

Housing	Aluminum alloy / Plastic
Probe	SUS304
Probe head	PC with glass fiber
Weight	Duct type : 440g Remote type (2 m cable) : 525g

| Diagram |



*Please make sure the product and the device which connect with RS-485 are on common ground, avoid damaged product.

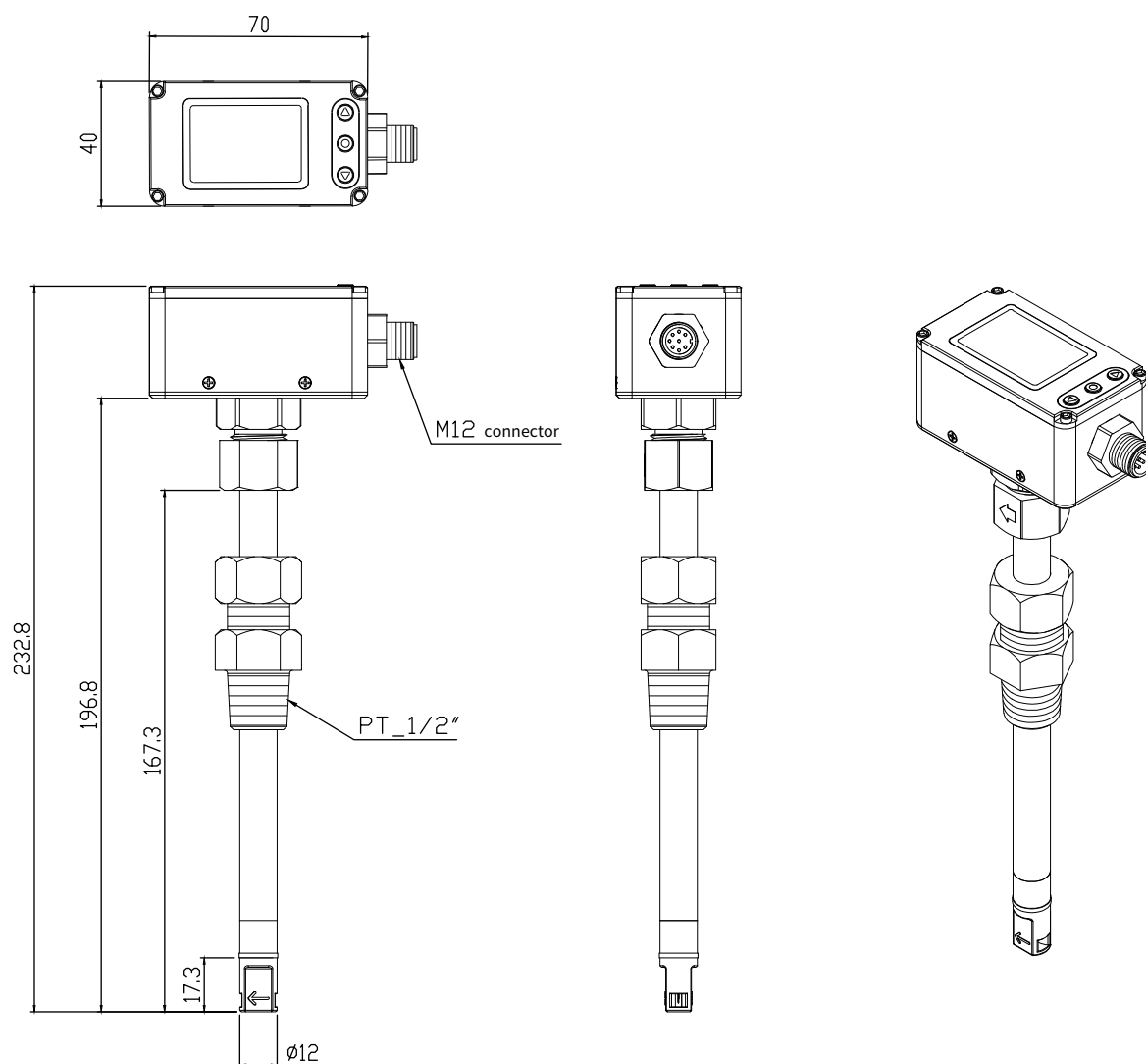
| Wind Tunnel Calibration System |



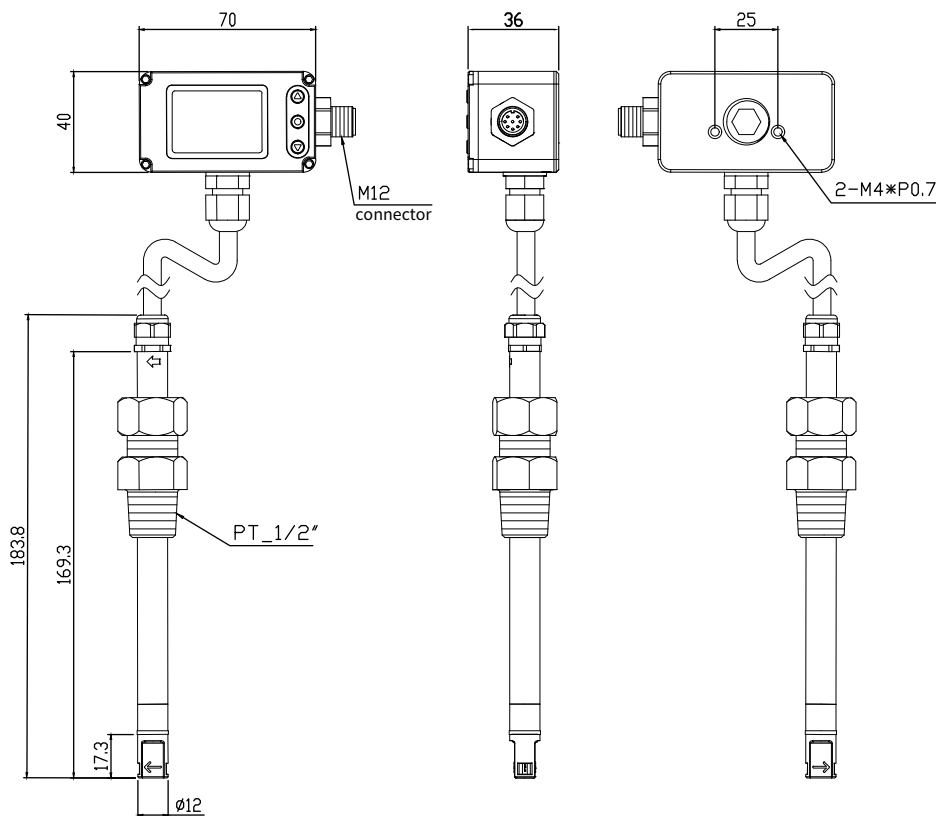
The wind tunnel calibration system provides a stable and standardized environment for calibration, is not affected by external factors, and has an automated detection system to greatly improve calibration accuracy and reliability. It follows the operating standards of ISO/IEC 17025 and a calibration report can be purchased separately.

| Dimension | Unit: mm

■ Duct type



Remote type



| Ordering Guide |

FDM06	—	<div style="border: 1px solid green; border-radius: 15px; padding: 5px; display: inline-block;">D</div>	<div style="border: 1px solid green; border-radius: 15px; padding: 5px; display: inline-block;">10</div>	<div style="border: 1px solid green; border-radius: 15px; padding: 5px; display: inline-block;">2</div>	<div style="border: 1px solid green; border-radius: 15px; padding: 5px; display: inline-block;">D</div>	<div style="border: 1px solid green; border-radius: 15px; padding: 5px; display: inline-block;">W</div>
		Installation	Range	Output	Remote probe cable	Display
		D : Duct type R : Remote type	01 : ± 1 m/s 02 : ± 2 m/s 05 : ± 5 m/s 10 : ± 10 m/s	2 : 4 ... 20 mA+RS-485+Relay 3 : 0 ... 10 V+RS-485+Relay	2 : 2 m — : Standard (Duct type)	D : Display W : Without display

| Additional Option Test Report | For more detailed information please contact us.

ILAC / TAF

Calibration Laboratory - (ILAC / TAF) Test report.
(TAF accreditation : 3032, complying with ISO / IEC 17025) TAF has mutual recognition arrangement with ILAC MRA

Project	Measurand level or range
Air velocity transmitter	0.2 m/s ... 60 m/s

ISO 9001

Project	Measurand level or range
Air velocity / Air volume	Air velocity : ≤ 120 m/s
	Air volume : 0.5 m ³ /h ... 1000 m ³ /h