



FTM06C-A

Thermal Mass Air Velocity and Air Volume Transmitter



| Features |

- Thermal mass flow, quickly response, good sensitivity
- Turndown ratio 500 : 1, high precision & accurate sensing at lowest flow rate for metering applications
- Display Instantaneous flow, the cumulative flow can be displayed in the software
- Output : Analog / RS-485
- Use measured with square pipe or 2" pipe above
- IP rating : IP65
- Stainless steel casing, suitable for various severe environments, such as slightly corrosive air

| Applications |

Compressed air monitoring / Exhaust gas emission flow monitoring / Special gas process / Semiconductor / electronics factory / Industrial process air velocity and air volume measurement

| Specification |

Input

Input type	Pt20/Pt300 (Air velocity) / Pt1000 (Temp.)
Measuring range	0 ... 5 m/s ~ 0 ... 60 m/s
Min. measuring range	0.1 m/s
Turndown ratio	500 : 1
Installation angle effect	<3% of the measured value (When the installation angle < 10°)

Output

Output	4 ... 20 mA & RS-485 0 ... 10 V & RS-485 RS-485 & Impulse (1 ... 500 Hz)
Preset output	Out1 : Air velocity
Signal connection	3-wire
Warm-up time	<60 sec
Response time	t90 < 5 sec
Load resistance	Voltage output : $\geq 100 \text{ K}\Omega$ Current output : $\leq 500 \Omega$

Accuracy

Accuracy	$\pm 1.5\%$ F.S. (Option $\pm 1\%$)
Temp. influence	0.1% / °C
Repeatability	0.5%

Electrical

Power supply	DC 24 V $\pm 10\%$
Current consumption	<0.3 A
Electrical connections	M12 connector

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

Environmental

Measuring medium	Air
Operating Temp. (With body and display)	0 ... +50°C
Operating Humid. (With body and display)	20 ... 90%RH (Non-condensing)
Probe operating Temp.	0 ... +120°C (Increasing operating temperature will affect air velocity error)
Storage Temp.	-20 ... +60°C
Storage Humid.	0 ... 95% (Non-condensing)
Probe pressure	16 bar

Installation

Installation	Metal flange mount R1/2" movable thread Inline T type tube Flange pipe
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Certification

Certification	CE
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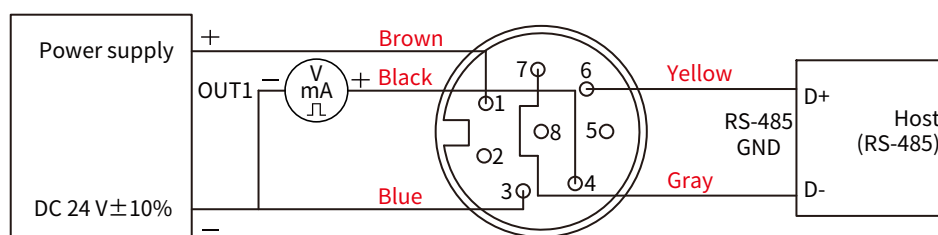
Protection

IP rating	IP65
Electrical protection	<input checked="" type="checkbox"/> Reverse polarity <input checked="" type="checkbox"/> Over-voltage <input checked="" type="checkbox"/> Short-circuit

Material

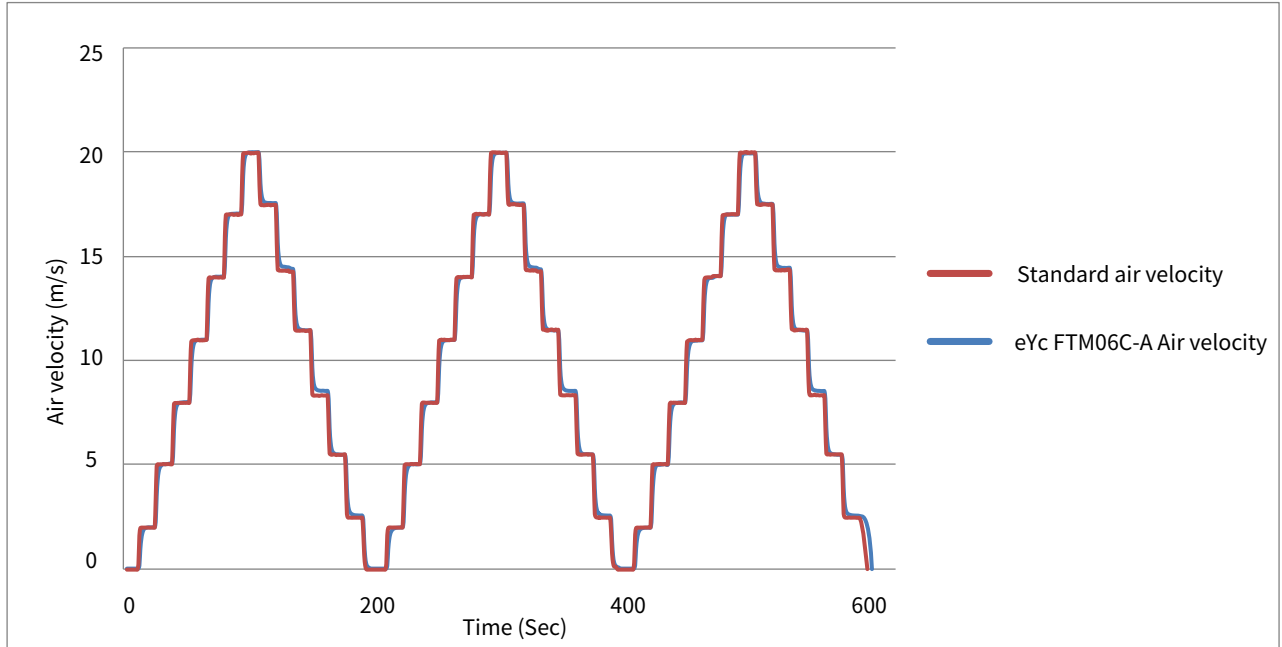
Cover	PC (Display) SUS 304 (No display)
Body (including probe)	SUS304
Filter	SUS304
Weight	500 g (w / o cable)

| Diagram |

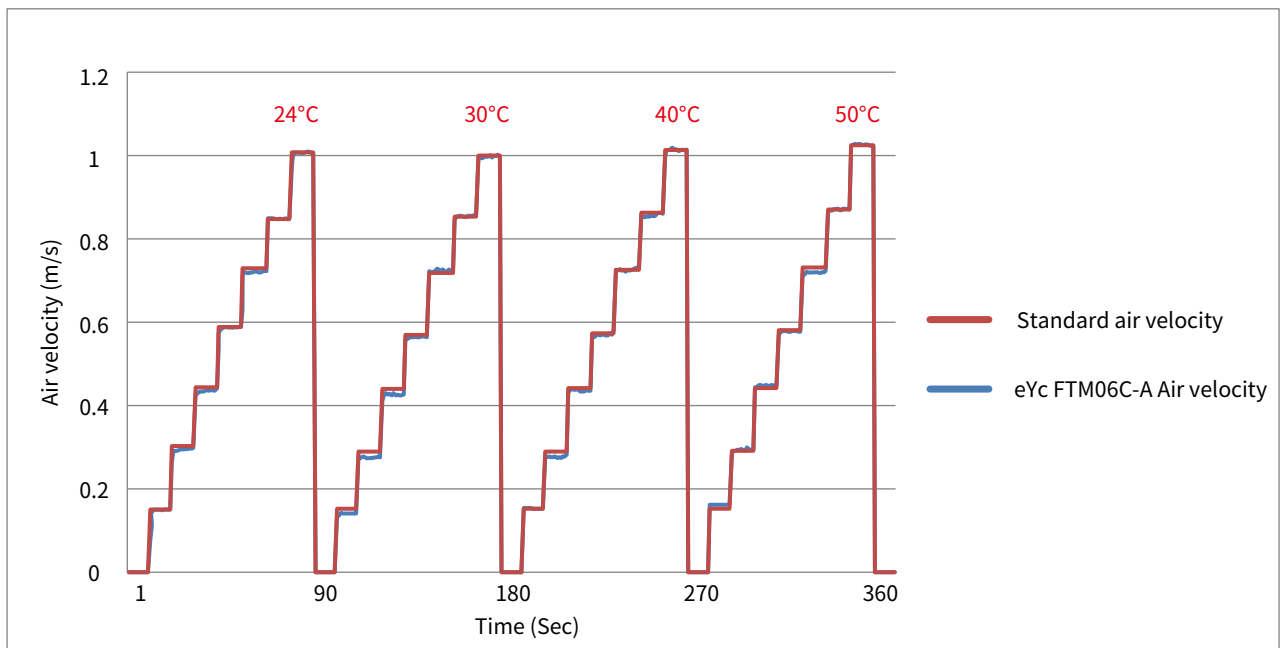


Analog+RS-485 / Impulse+RS-485

| 3-Cycle Linear Curve |



| Low Air Velocity Temperature Compensation Verification |

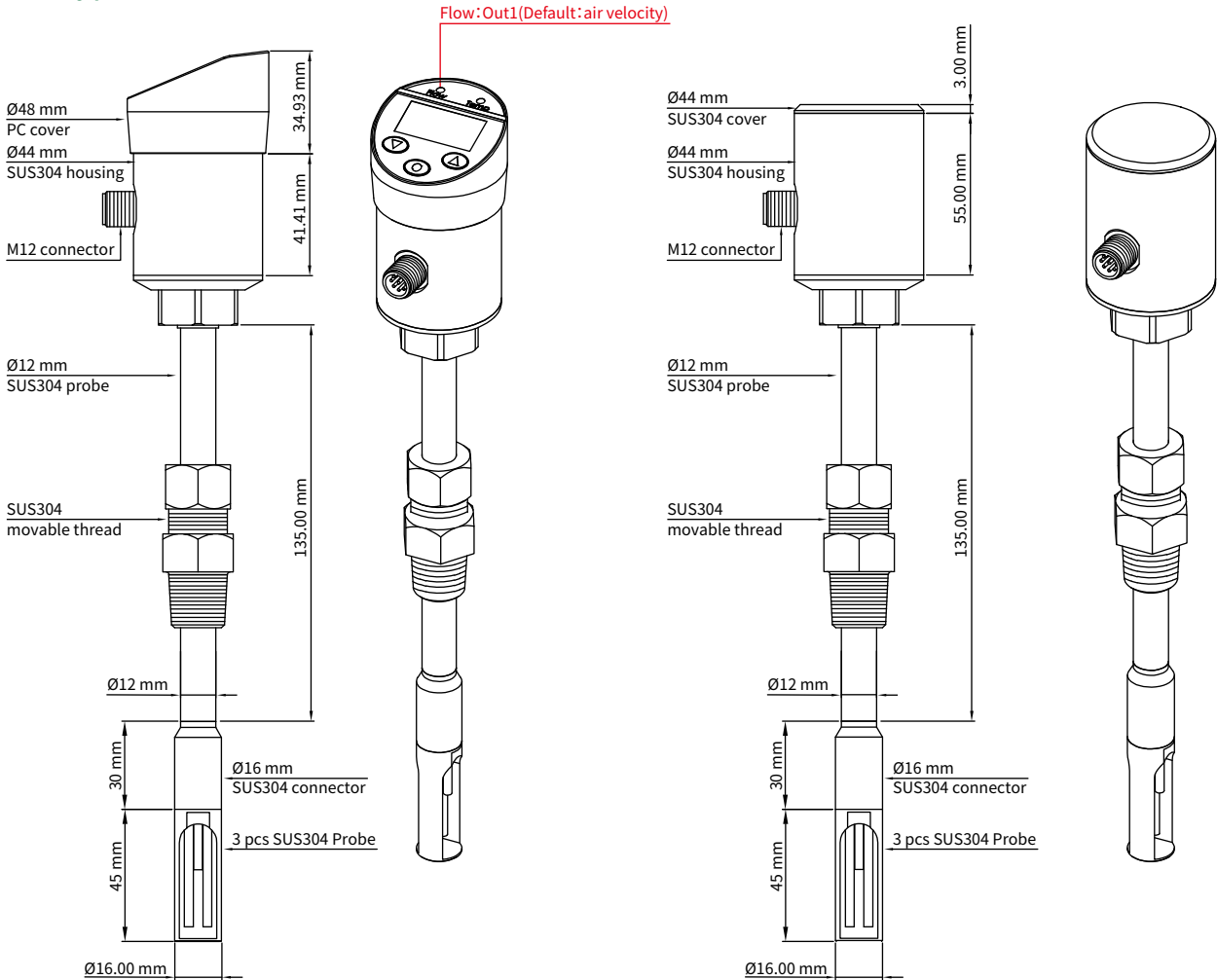


Dimension | Unit : mm

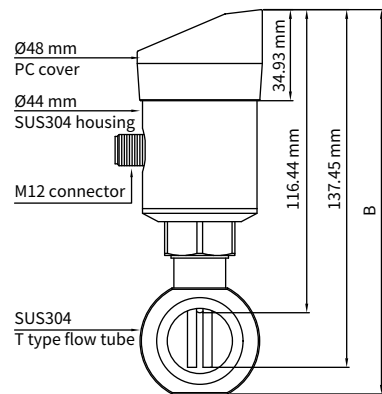
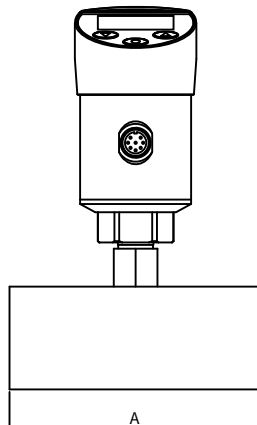
■ Duct type

Display type

No display type



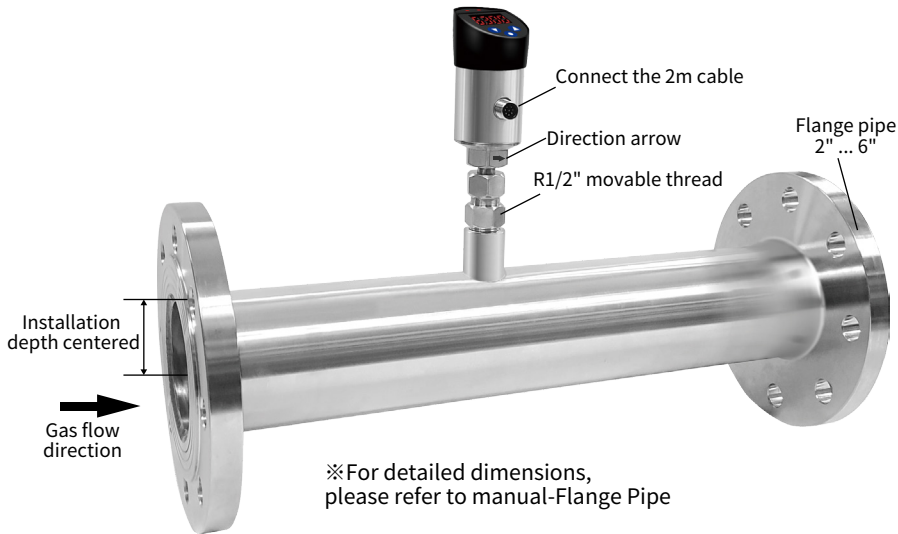
■ Inline type



	DN25(1"G)	DN40(1 1/2"G)	DN50(2"G)
A	100 mm	150 mm	150 mm
B	147.66 mm	161.54 mm	172.54 mm

※Tube diameter selection : DN25(1" G) / DN40(1 1/2" G) / DN50(2" G)

■ Flange pipe type



※For detailed dimensions, please refer to manual-Flange Pipe

| Ordering Guide |

FTM06C	—	<div style="border: 1px solid #76b82a; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;">A</div> <p style="text-align: center; font-size: small;">A : Air</p>	—	<div style="border: 1px solid #76b82a; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;">20</div> <p style="text-align: center; font-size: x-small;">05 : 0 ... 5 m/s 10 : 0 ... 10 m/s 20 : 0 ... 20 m/s 40 : 0 ... 40 m/s 60 : 0 ... 60 m/s</p>	—	<div style="border: 1px solid #76b82a; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;">2</div> <p style="text-align: center; font-size: x-small;">1 : RS-485 & 0 ... 10 V 2 : RS-485 & 4 ... 20 mA 3 : RS-485 & Impulse</p>	—	<div style="border: 1px solid #76b82a; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;">1</div> <p style="text-align: center; font-size: x-small;">1 : DC 24 V±10%</p>	—	<div style="border: 1px solid #76b82a; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;">3</div> <p style="text-align: center; font-size: x-small;">1 : Metal flange moun 3 : Ø12 Plus R1/2" movable thread 4 : Flange pipe(2" ... 6")(Customization) 5 : Inline type(1" ... 2")(Customization)</p>	—	<div style="border: 1px solid #76b82a; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;">D</div> <p style="text-align: center; font-size: x-small;">D : Display N : No display W : Customized</p>
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※Note 1: Each setting is according to actual purchase model, can not be changed after factory.
 ※Note 2: The analog output factory settings cannot be changed by the display side or set by the UI.

| Air Velocity / Volume Conversion Table |

ID of pipe	Air velocity inside pipe				
	5m/s	10m/s	20m/s	40m/s	60m/s
DN15 (1/2")	3.2 m ³ /h	6.4 m ³ /h	12.7 m ³ /h	25.4 m ³ /h	38.2 m ³ /h
DN25 (1")	8.8 m ³ /h	17.7 m ³ /h	35.3 m ³ /h	70.7 m ³ /h	106 m ³ /h
DN40 (1.5")	22.6 m ³ /h	45.2 m ³ /h	90.5 m ³ /h	181 m ³ /h	271.4 m ³ /h
DN50 (2")	35.3 m ³ /h	70.7 m ³ /h	141.4 m ³ /h	282.7 m ³ /h	424.1 m ³ /h
DN80 (3")	90.5 m ³ /h	181 m ³ /h	361.9 m ³ /h	723.8 m ³ /h	1085.7 m ³ /h
DN100 (4")	141.4 m ³ /h	282.7 m ³ /h	565.5 m ³ /h	1131 m ³ /h	1696.5 m ³ /h
DN125 (5")	220.9 m ³ /h	441.8 m ³ /h	883.6 m ³ /h	1767.2 m ³ /h	2650.7 m ³ /h
DN150 (6")	318.1 m ³ /h	636.2 m ³ /h	1272.3 m ³ /h	2544.7 m ³ /h	3817 m ³ /h

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

■ ILAC / TAF

YUDEN-TECH CO.,LTD. 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