



Air Velocity-FTM06 Series

Hot Wire Thermal Air Velocity Transmitter



Micro-corrosion air measurement.
Strong housing with analog and
RS-485 output

FTM06

| Features |

- IP67
- Resistance temperature detector
- Analog and RS-485 output
- Applicable micro corrosion air
- Strong stainless steel housing, for a variety of harsh environments
- Built-in with temperature compensation, accommodate quickly any environment

| Introduction |

FTM06 is based on thermodynamic principle, there are 2 temperature sensors inside the probe : one for temperature measurement, the other one as a measuring conveyor after heated.

Temperature difference between the two as a basis for measuring flow rate. When the medium flow rate increases, the temperature difference decreases.

The temperature difference converted to standard signal output after processed that is why flow rate can be measured by these two sensors. All-metal housing, suitable for a variety of pipe diameters.



Applications :

Industrial process gas supply / Consumption and dry flow monitoring / Compressed air consumption measurement / Buildings / Factories / Clean rooms / Hospitals / Semiconductors / Electronics / Paper / Printing / Textiles / Steel / Food / Chemicals / Pharmaceuticals / Biotechnology industries

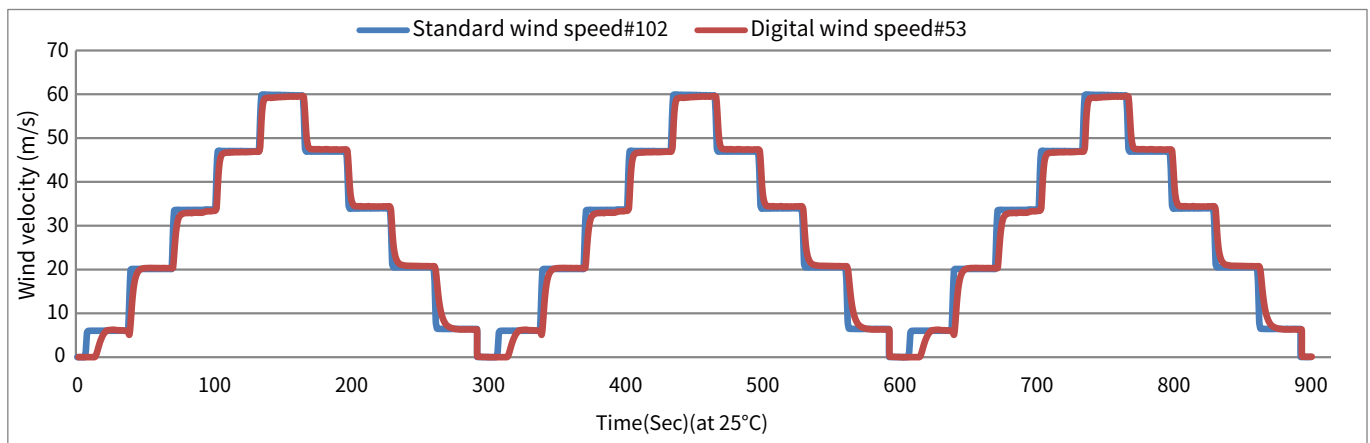


| Specification |

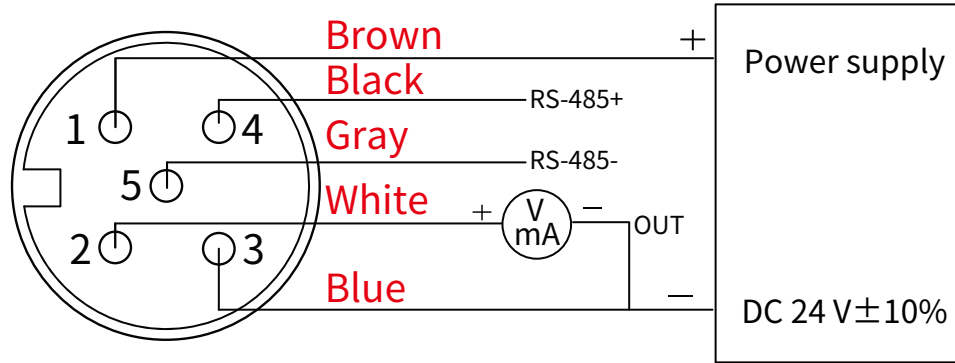
Item	Function & Parameter	
Input	Type	Resistance temperature detector (RTD)
	Range	Air : 0 ... 40 m/s
	Minimum initial value	0.2 m/s
	Installation angle effect	<5% of the measured value (When the installation angle $\leq \pm 3$ degrees)
Output	Signal	Analog : 4 ... 20 mA / 0 ... 10 V ; RS-485
	Signal connection	3-wire
	Product accuracy	Air (at 25°C) : $\pm 10\%$ F.S.(Option 5%) (Because the probe is affected by the operating Temp., there will be some error)
	Warm-up time	About 120 sec
	Response time	t90>90 sec
	Load resistance	Voltage output : $\geq 10\text{ K}\Omega$; Current output : $\leq 250\ \Omega$
	Medium	Gas which is compatible with stainless steel
Environmental	Operating Temp. & Humid.	0 ... 50°C ; 20 ... 90%RH(Non-condensing)
	Storage Temp.	- 20 ... 85°C
	Power supply	DC 24 V $\pm 10\%$
Electrical	Current consumption	24 V : 110 mA
	Electrical connection	M12 Metal quick connector
	Flange or thread	Metal flange mount or metal quick connector
Protection	IP rating	IP67
	Electrical protection	■ Polarity protection ■ Over-voltage ■ Short-circuit
Material	Housing	SUS304
	Weight	Metal : 480 g (without wire, with metal quick connector)

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

| 3-Cycle curve |

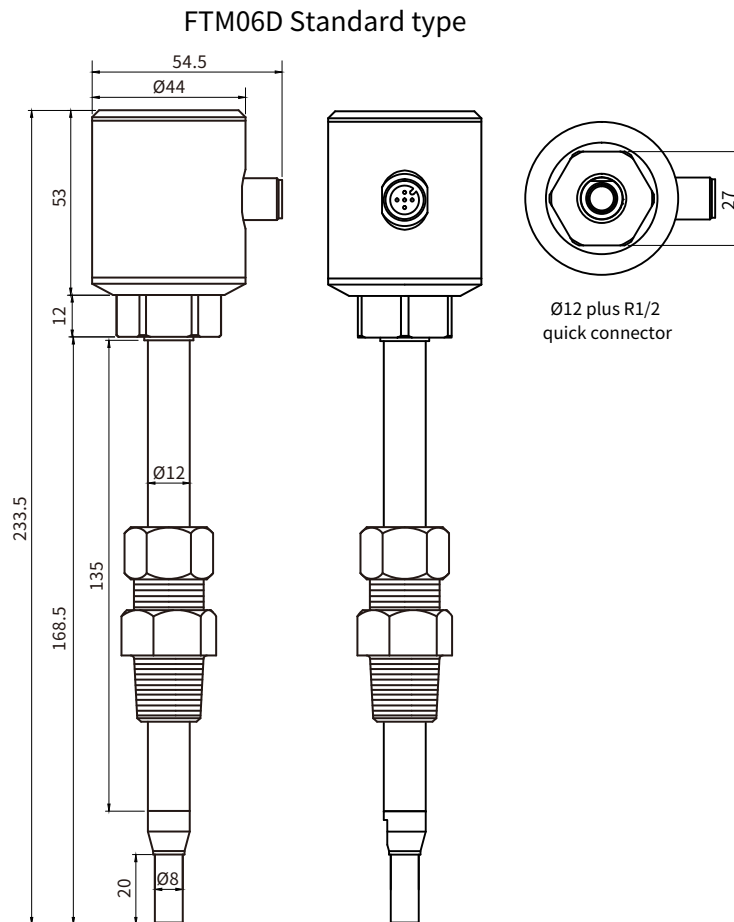


| Connection Diagram |



Analog with RS-485 output

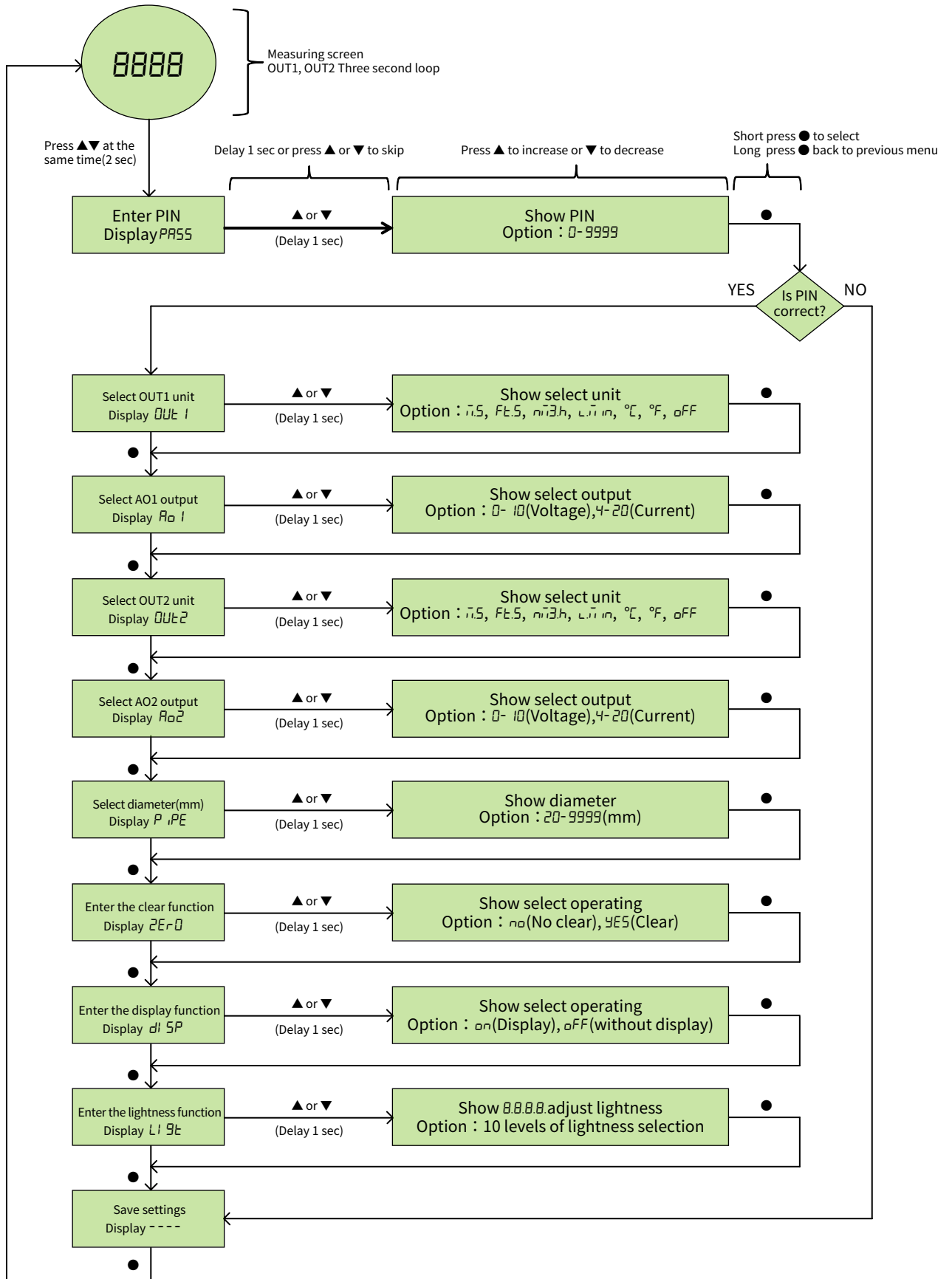
| Dimension | Unit : mm



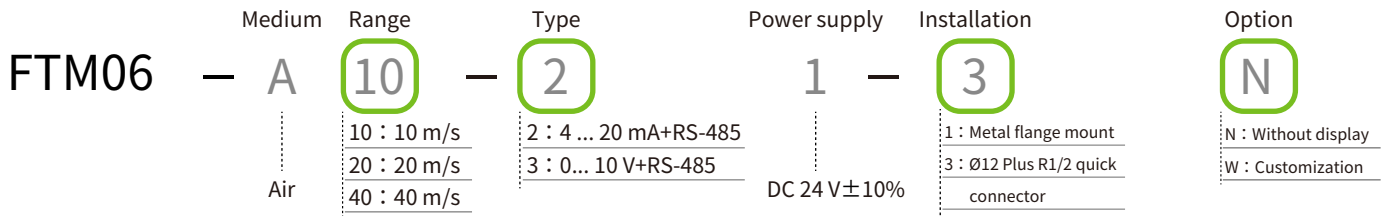
| Comparison Chart |

Type	FTM06 Hot Wire Thermal Air Velocity Transmitter	FTM06T Thermal Mass Flow Transmitter	FTM06D Thermal Mass Flow Transmitter
Probe			
Measuring range	0 ... 40 m/s	0 ... 40 m/s	0 ... 60 m/s
PCB type	Flexible Print Circuit, FPC	Flexible Print Circuit, FPC	Module
Sensor	Heating : 1 KΩx2(Parallel connection) Bridge circuit : Pt1000x2 Temp. : Pt1000	Parallel connection : H=Pt50 Ω F=Pt1000 Ω Temp. : Pt1000	Parallel connection : H=Pt45 Ω F=Pt1200 Ω Temp. : Pt1000
Technology	CVA(Constant voltage anemometer)	CTA(Constant temperature anemometer)	CTA(Constant temperature anemometer)
Output	1 Analog+RS-485	1 Analog+RS-485	1 Analog+RS-485
Response time	Slow	Medium	Fast
Temp. compensation	Yes	Yes	Yes
Display	No	Yes	Yes
Accuracy	±10%F.S.(Option 5%)	±5%F.S.(Option 3%)	±3%F.S.(Option 1.5%)
Electrical connection	M12 Metal connector	M12 Metal connector	M12 Metal connector
Features	<ul style="list-style-type: none"> ● IP67 ● Aluminum alloy case ● Fit in variety harsh environment 	<ul style="list-style-type: none"> ● IP65 ● Aluminum alloy case ● Fit in variety harsh environment 	<ul style="list-style-type: none"> ● IP65 ● Easy installation ● Compact design and easy to install
Material	Stainless steel	Stainless steel+plastic	Stainless steel+plastic
Differential	Applicable micro corrosion air	Applicable micro corrosion air	Applicable clean air
Other	None	Support flow rate to flow volume	Support flow rate to flow volume

Operation Form



| Ordering Guide |



Note 1. Probe at most 1000 mm, please contact us for delivery and price.

| Additional Option (ILAC / TAF) Test Report |



Additional option : (ILAC / TAF) Test report - Standard calibration laboratory (TAF accreditation : 3032, complying with ISO / IEC 17025)
 TAF has mutual recognition arrangement with ILAC MRA

Project	Measurand level or range
Anemometer	0.2 ... 60 m/s (8 basic points on average or specified by customer)