



FDM06S

Differential Pressure Type Air Flow Transmitter

Air flow / Air velocity-FDM06S

www.eyc-tech.com

| Features |

- Adopting the differential pressure principle for air flow measurement
- Enable bi-direction air flow measurement
- Measures differential pressure, pressure, and temperature simultaneously
- Special diversion design reduces the impact of air flow turbulence
- Calculate medium density and mass flow rate
- Rugged and durable design for high temperature and high-pressure environment

| Applications |

Air compressor system / Industrial process / Exhaust system

Specification

Input

Sensor type	Differential pressure sensor
Measuring range	Standard version : $\pm (0.8 \dots 40 \text{ m/s})$ High-pressure version : $\pm (20 \dots 200 \text{ m/s})$
Installation angle effect	$< 3\%$ of the measured value (When the installation angle $< 10^\circ$)

Output

Output	4 ... 20 mA + RS-485 0 ... 10 V + RS-485 Frequency (0 ... 100 Hz) + RS-485 Pulse (Option) + RS-485
Preset output	Out1 : Air velocity
Signal connection	3-wire
Warm-up time	$< 60 \text{ sec}$
Response time	$t_{90} < 5 \text{ sec}$
Load resistance	Current output : $\leq 500 \Omega$ Voltage output : $\geq 10 \text{ K}\Omega$

Accuracy

Accuracy	$\pm 1.5\% \text{ F.S. (Option } \pm 1\% \text{ F.S.)}$
Temp. influence	$0.05\% / ^\circ\text{C}$

Electrical

Power supply	DC 24 V $\pm 10\%$
Current consumption	$< 0.1 \text{ A}$
Overvoltage protection	DC : $< 30 \text{ V}$
Electrical connections	M12 connector

Environmental

Measuring medium	Air
Operating Temp.	-20 ... +60°C (Display) -20 ... +80°C (No display)
Operating Humid.	0 ... 95%RH (Non-condensing)
Probe operating Temp.	100°C (Optional 200°C)
Storage Temp.	-20 ... +80°C
Storage Humid.	0 ... 95%RH (Non-condensing)
Probe pressure	Standard version : 2 bar High-pressure version : 10 bar

Installation

Duct type	3/4" PT movable thread
Flange pipe type	2" ... 6"
Inline type	2"

Certification

Certification	CE
---------------	----

Protection

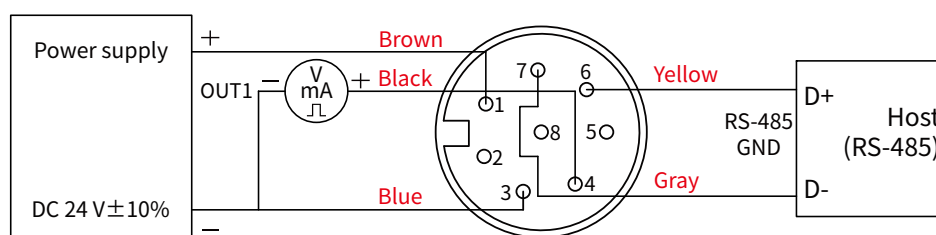
IP rating	IP65 (Body) / IP20 (Probe head)
Electrical protection	■ Reverse polarity ■ Over-voltage ■ Short-circuit

Material

Display	PC with glass fiber
Housing	SUS304
Probe	SUS304
Probe head	SUS304

Weight (without cable)	Standard version		High-pressure version	
Probe length	Display	No display	Display	No display
180 mm	575 g	602 g	766 g	793 g
330 mm	692 g	719 g	883 g	910 g

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 |

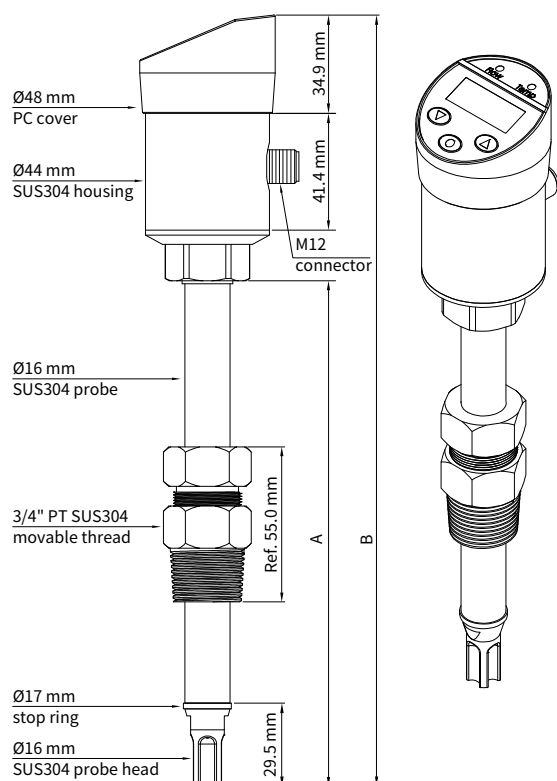


The wind tunnel calibration system provides a stable and standardized environment for calibration, is not affected by external factors, and has an automated detection system to greatly improve calibration accuracy and reliability. It follows the operating standards of ISO/IEC 17025 and a calibration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

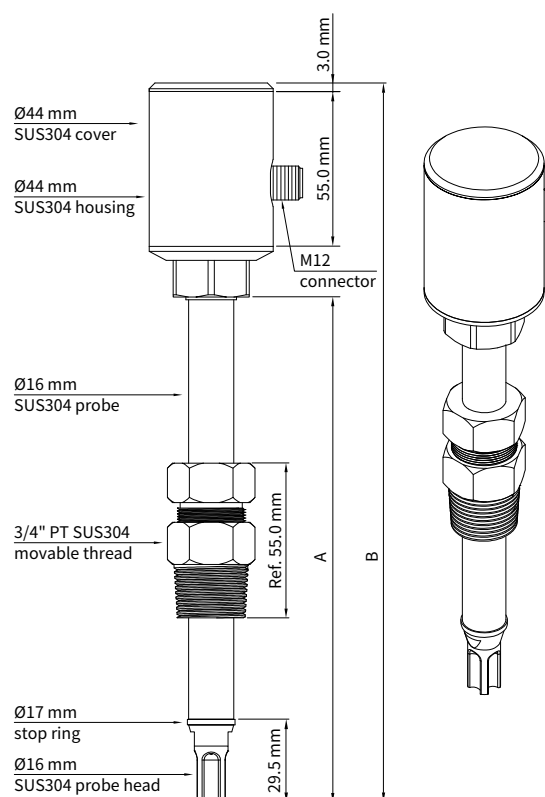
| Dimension | Unit : mm

■ Standard version

Display type



No display type

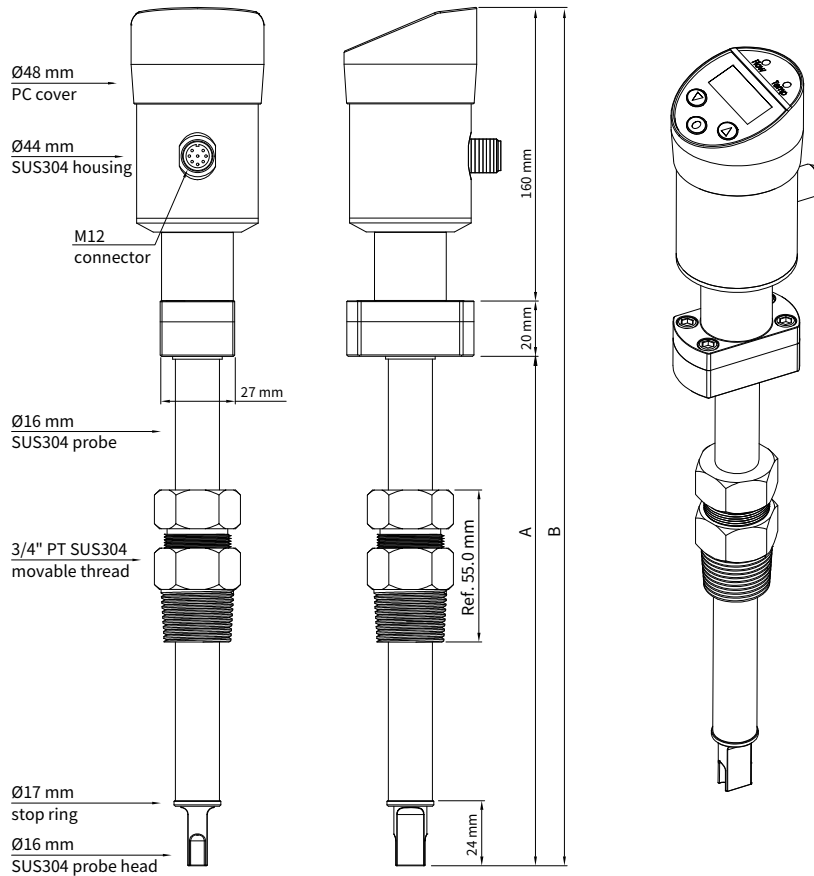


	Display type	
A Probe length	180 mm	330 mm
B Product length	273.9 mm	423.8 mm

	No display type	
A Probe length	180 mm	330 mm
B Product length	255.5 mm	405.5 mm

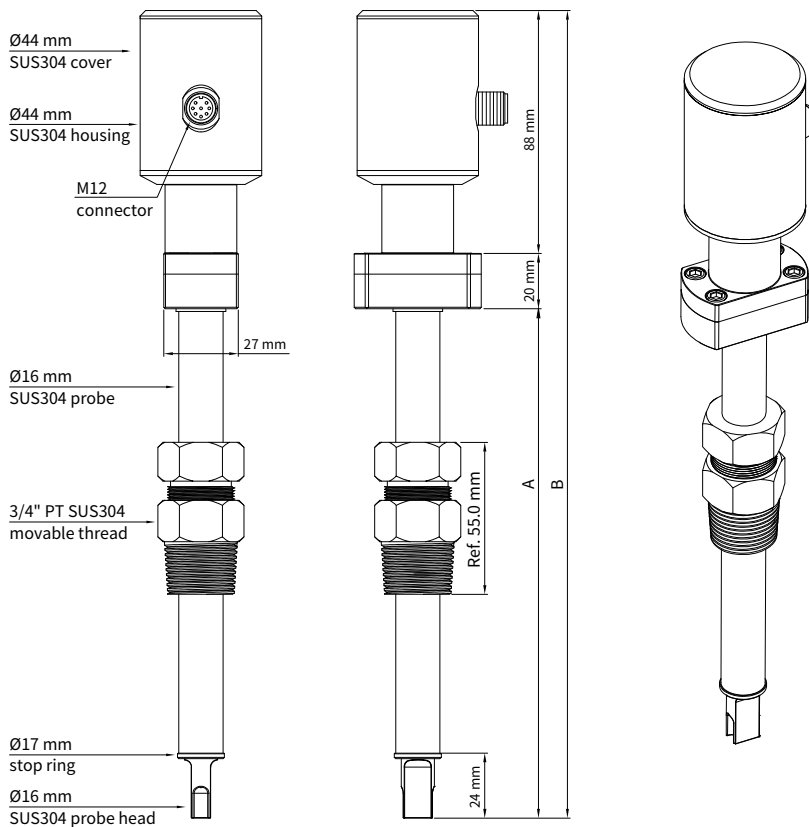
Dimension | Unit : mm

■ High-pressure version



Display type

	Display type	
A Probe length	180 mm	330 mm
B Probe length	306 mm	455 mm



No display type

	No display type	
A Probe length	180 mm	330 mm
B Probe length	288 mm	437 mm

| Diameter Coefficient Table |

Diameter	Diameter Coefficient PF	
	Standard version : $\pm (0.8 \dots 40 \text{ m/s})$	High-pressure version : $\pm (20 \dots 200 \text{ m/s})$
DN100	0.727	0.840
DN150	0.780	0.840
DN200 or more	0.816	0.843

| Ordering Guide |

	Range	Output	Probe length	Installation	Display
FDM06S	04	2	1	3	D
	Standard version 04 : $\pm 40 \text{ m/s}$	2 : 4 ... 20 mA + RS-485 3 : 0 ... 10 V + RS-485 4 : Frequency + RS-485 5 : Pulse (Option) + RS-485	Duct type 1 : 180 mm 2 : 330 mm W : Customization	3 : Duct type (3/4"PT movable thread) 4 : Flange pipe type (2" ... 6")(Customization) 5 : Inline type (2")(Customization)	N : Without display D : Display
	High-pressure version 20 : $\pm 200 \text{ m/s}$		Flange pipe type & Inline type N : Not applicable		

*The default output is unidirectional and in the positive direction.

| Additional Option Test Report |

For more detailed information please contact us.

■ ILAC / TAF certification (ISO/ IEC 17025)

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 : $\leq 120 \text{ m/s}$
	Air volume : 0.5 m ³ /h ... 1000 m ³ /h