



# FTE120 OEM Air Velocity Transmitter



## | Features |

- 0 ... 2 m/s, low wind speed measurement
- 4 ... 20 mA / 0 ... 10 V output
- Accuracy :  $\pm 2\%$  F.S.
- Compact size and light weight, can be installed fast and easily
- Polycarbonate housing, great electrical insulation and flame-retardant properties
- RS-485 programmable software : Data logger / Charts

## | Applications |

Air handling systems / Fume hood / Biological safety cabinets / Clean room / Laboratory / Industrial machinery and equipment

## | Specification |

### Input

Sensor	RTD Thermal mass flow sensor
Measuring range	0 ... 30 m/s
Minimum measuring range	0.2 m/s, 0.1 m/s(optional)

### Output

Signal	4 ... 20 mA / 0 ... 10 V / RS-485
Accuracy	±2% F.S.
Temp. influence	0.2% / °C
Response time	t90 ≤ 5 sec
Load resistance	Current output : ≤ 500 Ω Voltage output : ≥ 100 KΩ
Installation angle effect	<3% of the measured value (When the installation angle < 10°)
Warm-up time	< 2 min.

### Environmental

Medium	Air
Body operating Temp.	0 ... 50°C
Body operating Humid.	95%RH(Non-condensing)
Storage Temp.	-20 ... +60°C

### Electrical

Power supply	DC 24 V ±10%
Current consumption	100 mA
Overvoltage protection	DC : < 40V
Electrical connections	PVC cable

### Installation

Installation	PC nut type PT movable thread type Inline type
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### Protection

IP rating	IP 65
Electrical protection	<input checked="" type="checkbox"/> Reverse polarity <input checked="" type="checkbox"/> Over-voltage <input checked="" type="checkbox"/> Short-circuit

### Certification

Certification	CE
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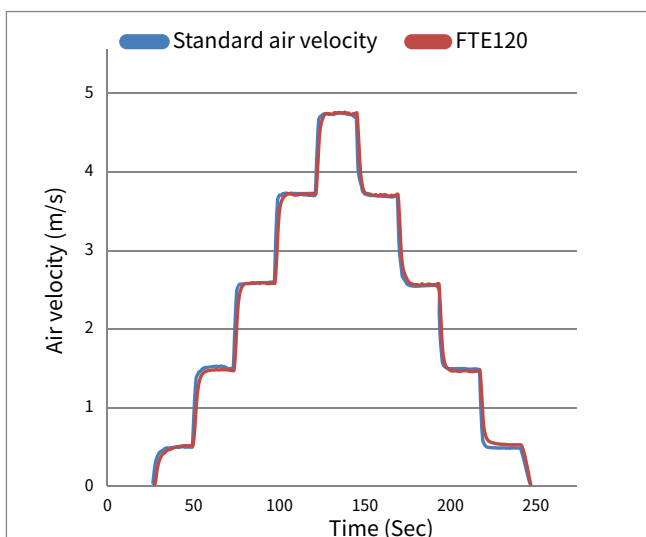
### Material

Housing	PC
Weight	133g

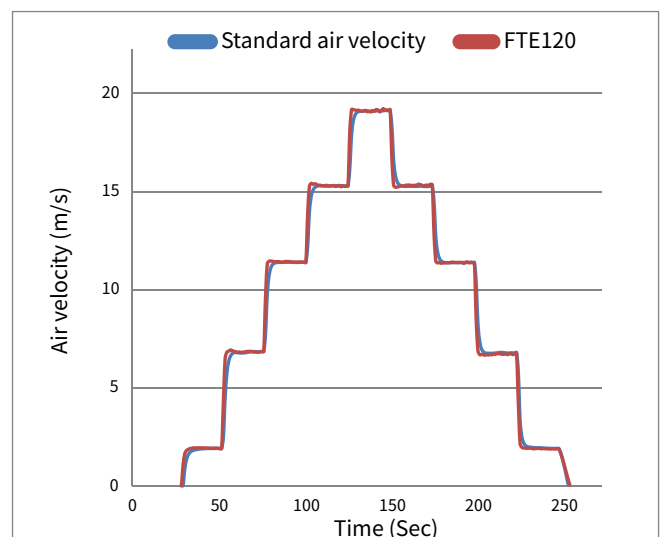
\*Please make sure the product and the device which connect with RS-485 are on common ground, avoid damaged product.

## | Measuring Curve |

### ■ Air velocity 5 m/s

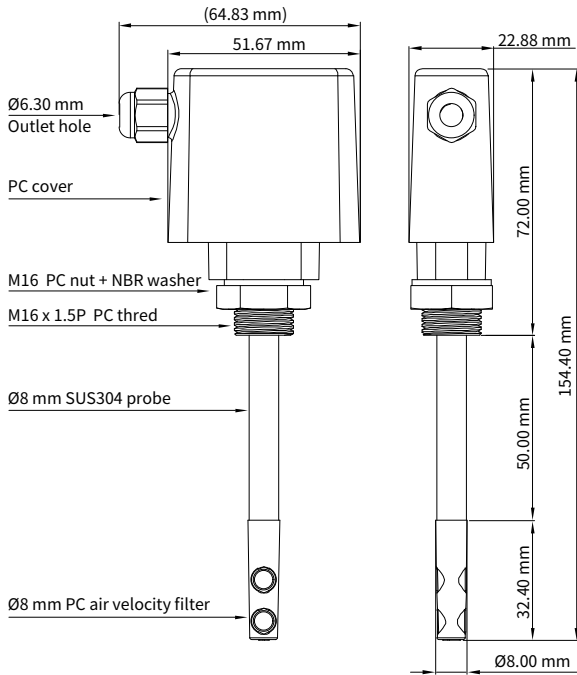


### ■ Air velocity 20 m/s

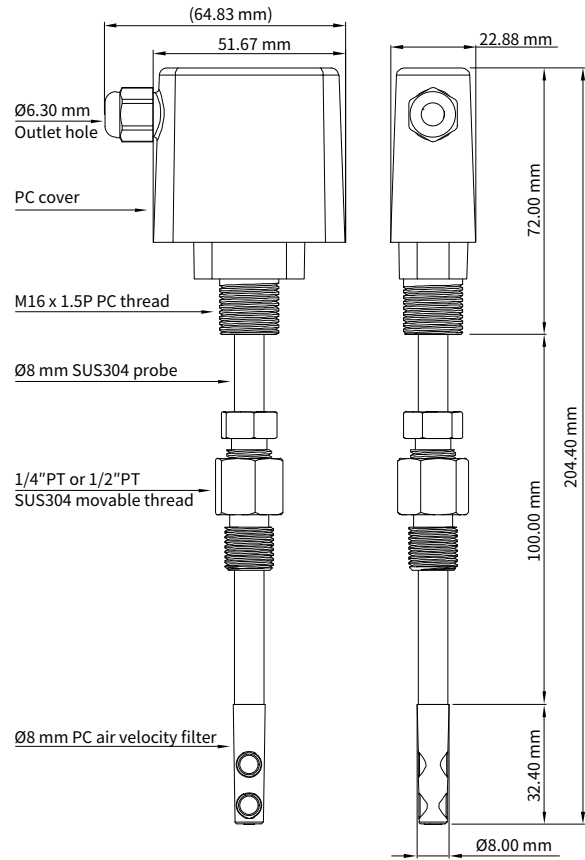


## Dimension

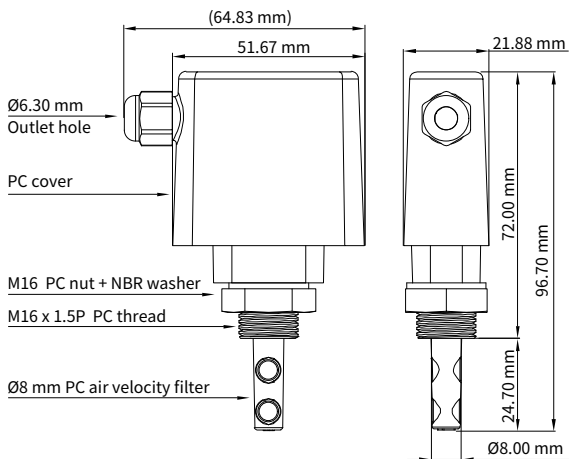
### ■ PC nut type-5 cm



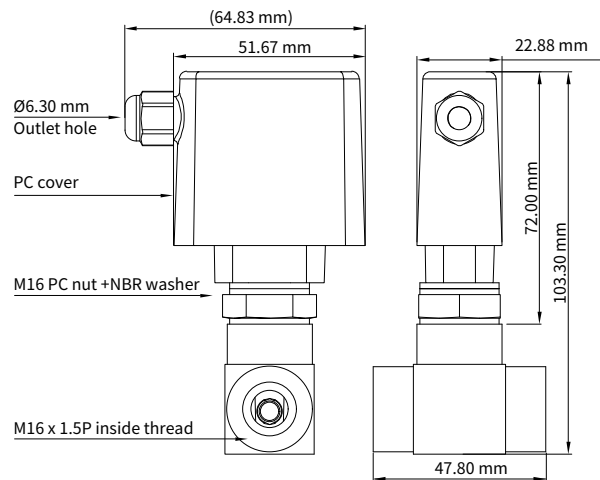
### ■ PT movable thread type-10 cm



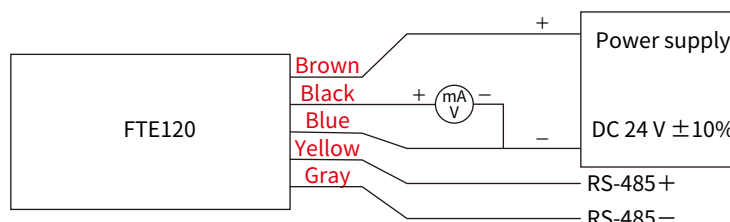
### ■ PC nut type-0 cm



### ■ Inline type

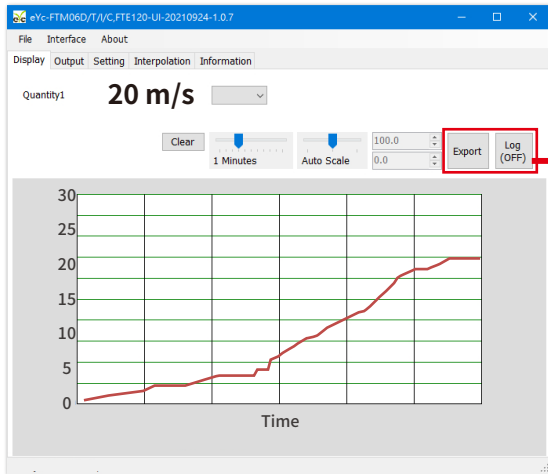


## Connection Diagram



## | With RS-485 Software |

### ■ Data logger and Charts



Charts

時間	標準風速#	數位溫度#	數位溫度#	數位CTA#	數位CTA#
1/9/2 下午 02:15:12	6.859	269.4632	269.3882	2.1243	2.287
1/9/2 下午 02:15:17	7.1227	269.4699	269.3876	2.1872	2.267
1/9/2 下午 02:15:22	7.2015	269.4835	269.3862	2.2139	2.253
1/9/2 下午 02:15:27	7.1837	269.4699	269.3854	2.2252	1.88
1/9/2 下午 02:15:32	7.2276	269.4835	269.3863	2.2304	1.679
1/9/2 下午 02:15:37	7.2223	269.4699	269.3863	2.2323	1.576
1/9/2 下午 02:15:42	7.195	269.4767	269.3866	2.2325	1.526
1/9/2 下午 02:15:47	7.2368	269.4632	269.3853	2.2326	1.503
1/9/2 下午 02:15:52	7.229	269.4699	269.3839	2.2328	1.489
1/9/2 下午 02:15:57	7.2038	269.4699	269.3835	2.2327	1.480
1/9/2 下午 02:16:02	7.2153	269.4767	269.3855	2.2324	1.473
1/9/2 下午 02:16:07	7.1916	269.4767	269.3834	2.2319	1.467
1/9/2 下午 02:16:12	7.2202	269.4699	269.3838	2.2313	1.462
1/9/2 下午 02:16:17	7.1827	269.4699	269.3858	2.2308	1.458
1/9/2 下午 02:16:22	7.1345	269.4699	269.3842	2.2291	1.454
1/9/2 下午 02:16:27	7.1859	269.4699	269.384	2.2283	1.450
1/9/2 下午 02:16:32	7.1961	269.4632	269.3856	2.2284	1.447
1/9/2 下午 02:16:37	7.2106	269.4767	269.3835	2.2284	1.44
1/9/2 下午 02:16:42	7.2078	269.4699	269.3847	2.2283	1.43
1/9/2 下午 02:16:47	7.1902	269.4767	269.3854	2.228	1.42

### ■ Offset adjustment

**Offset Adjustment**

Flow Offset (m/s)

Temperature Offset (°C)

Low Cut Off (m/s)

### ■ Adjustable range

File Interface About

Display Output Setting Interpolation Information

**OUT1**

Quantity **Flow Velocity**

Response Rate (0~100)

**Analog Range**

Upper Range

Lower Range

Alarm Mode

Upper Point

Lower Point

Upper Level

Lower level

### ■ Profile factor setting

**Process Parameters**

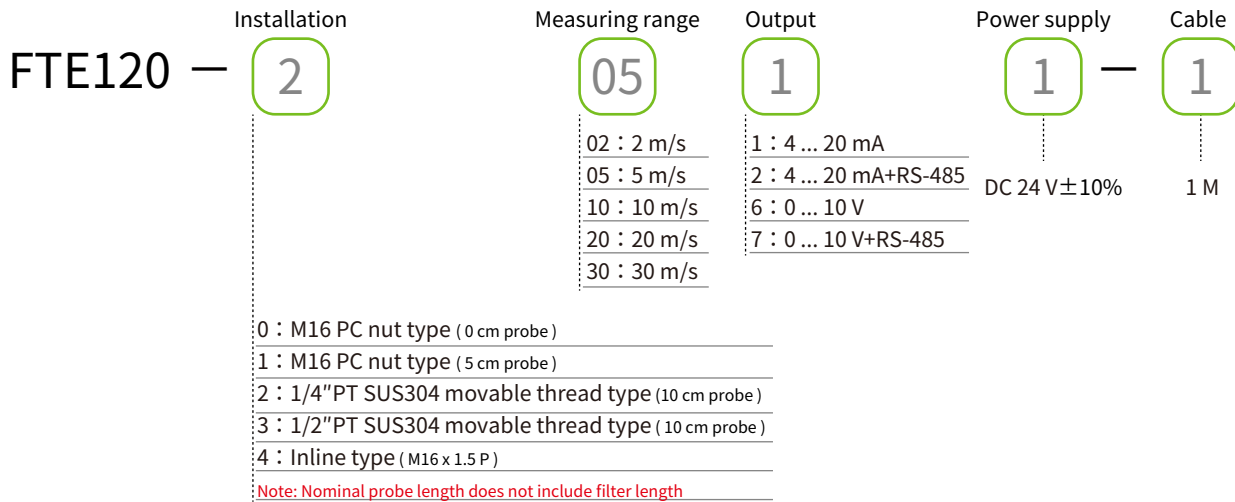
Temperature (°C)

Pressure (mBar)

Relative Humidity (%)

**Profile Factor**

## | Ordering Guide |



## | 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 : $\leq 120$ m/s
	Air volume : 0.5 m <sup>3</sup> /h ... 1000 m <sup>3</sup> /h