

Hot Wire Air Velocity Transmitter

**FTS140**

Using Mass flow principle
A better choice for HVAC
engineering

| Features |

- Hot wire mass flow transmitter
- IP rating: IP54
- Linear adjustment function
- Switching analog output by dip switch
- Off set function by button
- The housing and probe material are PC fire-proof

| Introduction |

FTS140 hot wire air velocity transmitter, using mass flow measuring principle, stable electrical bridge with good accuracy, simple structure, stable performance and low flow sensitivity.

It is suitable for use in HVAC air conditioning environment measurement, optimization and adjustment of system performance, ventilation control.

Duct type, easy installation, suitable is used extensively in environmental engineering projects, as facility and factory maintenance.

**Applications:**

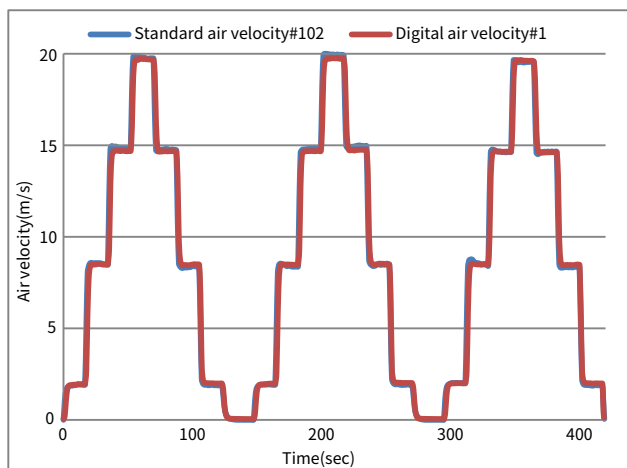
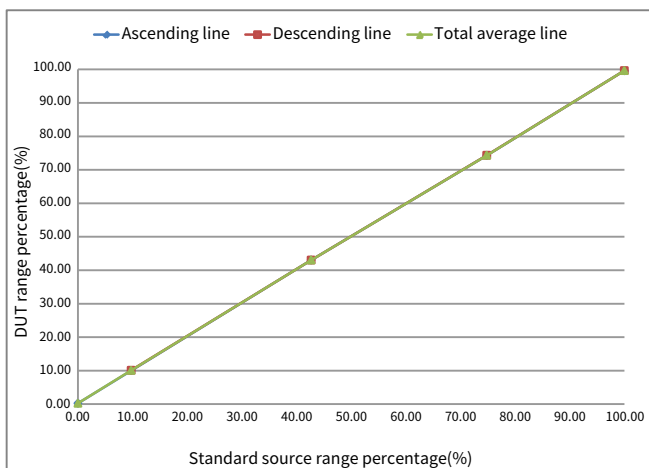
Monitoring air and flow for industrial process
HVAC / Building / Factory

Hot Wire Air Velocity Transmitter

| Specification |

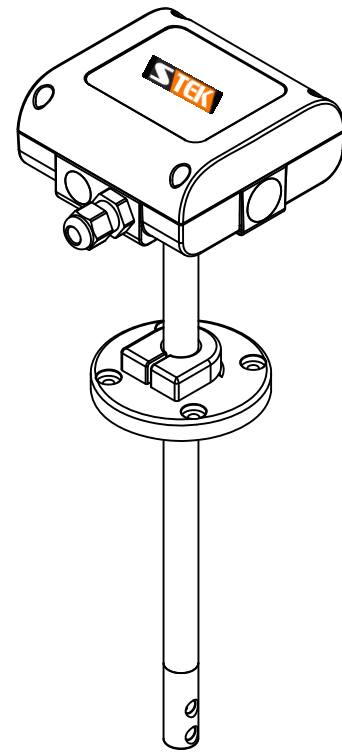
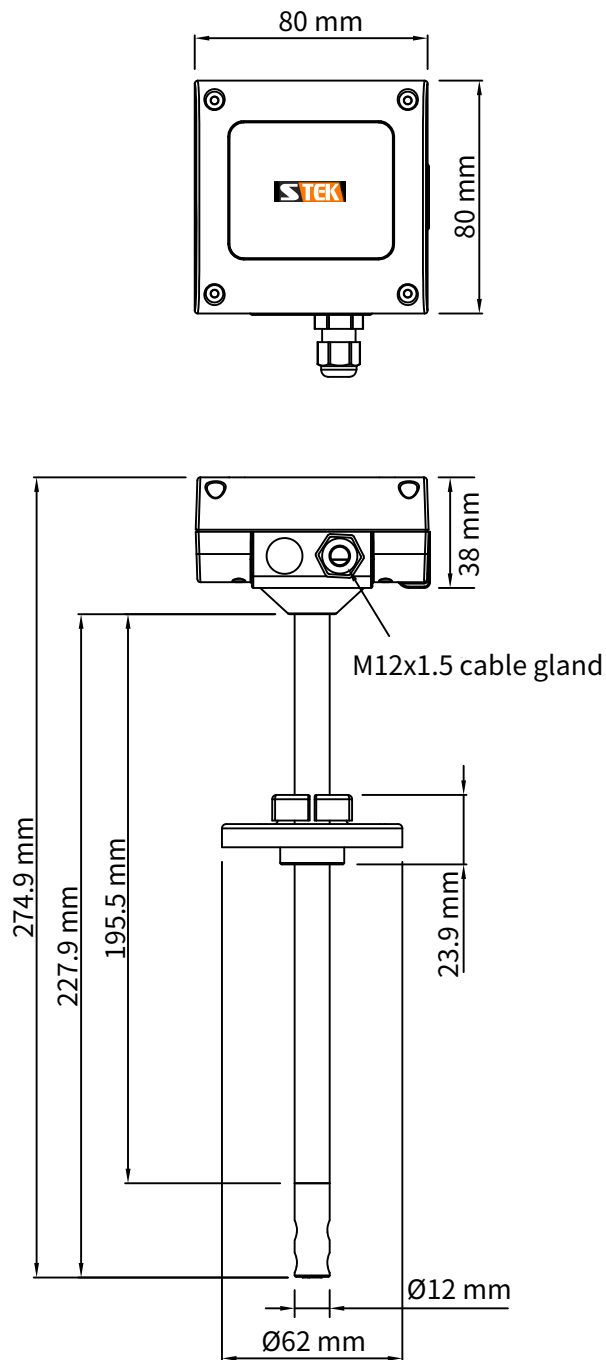
Item	Function & Parameter	
Input	Sensor	Hot wire mass flow transmitter
	Measuring range	0 ... 20 m/s
	Minimum measuring range	0.2 m/s
Output	Signal	4 ... 20 mA / DC 0 ... 10 V
	Signal connection	3-wire
	Load resistance	Current output: $\leq 500 \Omega$ / Voltage output: $\geq 10 K\Omega$
	Reaction time	$t_{90} \leq 5 \text{ sec} (\tau: 90\%)$
	Installation angle effect	$< 3\%$ of the measured value (When the installation angle $< 10^\circ$)
	Accuracy(+25°C)	$\pm 3\%$ F.S. (Nonlinear error, Hysteresis error, Repeatability error)
	Temp. effect	0.3% / °C
Environmental	Medium & Temp.	Air; 0 ... 50°C
	Body operating Temp.	0 ... 50°C
	Body operating Humid.	95%RH (Non-condensing)
	Storage Temp.	-20 ... +60°C
Electrical	Power supply	DC 24 V & AC 12 ... 30 V
	Current consumption	DC 24 V: 120 mA / AC 12 V: 350 mA, AV 24 V: 180 mA
	Overvoltage protection	DC: $< 40 \text{ V}$ / AC: $< 40 \text{ V}$
	Electrical connections	Terminal
Installation & Protection	Installation	Duct type / Flange type
	IP rating	IP54
	Electrical protection	■ Polarity protection ■ Over-voltage ■ Short-circuit
Certification	CE	Emission EN 61326-1:2006 Class B EN 55011:2009 / A1:2010 Group 1 Class B
		Immunity EN 61326-1:2006 EN 61000-4-2:2009 EN 61000-4-3:2006 / A2:2010 EN 61000-4-8:2010
Material	Housing / Probe	PC fire-proof (UL94V-2) / PC fire-proof
	Probe head / Wire	PC
	Weight	~150 g

| 3-Cycle curve |



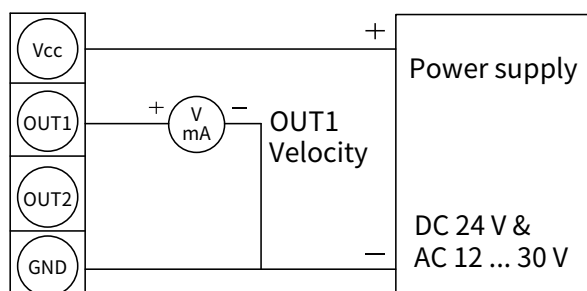
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| Dimension |



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| Connection Diagram |



4P Terminal

| DIP Switch |

Position	1	2
Function	Enable / Disable	Output type
Status	ON	0 ... 10 V
	OFF	4 ... 20 mA

| Ordering Guide |

Installation	Measuring range	Output	Power	Electrical connector / Option
FTS 140 Duct	— 20 0 ... 20 m/s	1 1:4 ... 20 mA 6:0 ... 10 V	1 DC 24 V & AC 12 ... 30 V	— N Plastic cable gland

| 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)