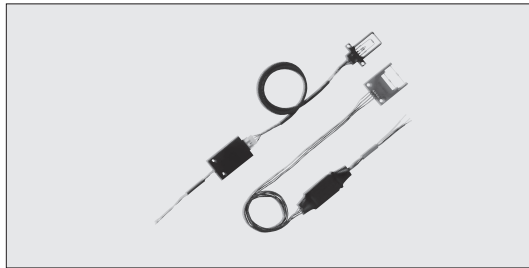
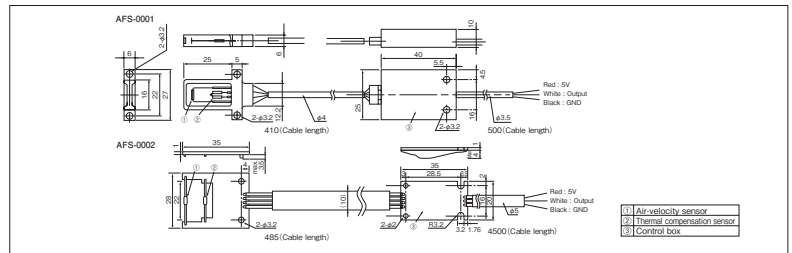


## AFS | Air Flow Sensor Units



### Construction

Unit : mm



### Features

- The platinum thin-film thermal sensor realizes high and long-term stability.
- The small platinum thin-film thermal sensor and an even temperature differential operating circuit ensure a quick response.
- The built-in temperature compensation circuit assures correct values regardless of air temperature. The air velocity sensor and air velocity temperature compensation sensor are sensors with the same characteristics to enable correct temperature compensation.
- Products have no rotating mechanism and are resistant to vibration.

### Ratings

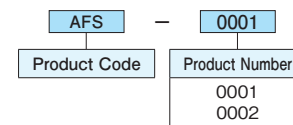
Items	AFS-0001	AFS-0002	Remarks	
Detection Object	Clean air, ordinary pressure			
Detection Range (m/s)	0~15			
Detection Accuracy	(m/s)	±0.3	±0.5	0.5~less than 1.0 m/s
	(m/s)	±0.5	±0.7	1.0~less than 4.0 m/s
	(m/s)	±1.5	±2	4.0~less than 12 m/s
	(m/s)	±1.5	±3	12~15m/s
	(m/s)	±1.5	±3	4.0~15m/s
Power Supply Voltage (V)	5±0.25			
Current Consumption (A)	0.2max.		Start-up time is excluded.	
Output Voltage (V)	1.8~3.2	1.9~3.5	Non-linear analog (see output characteristics diagram)	
Output Impedance (Ω)	100Typ.			
Start-Up Time (s)	15Typ.			
Operating Temperature Range (°C)	0~+60			
Operating Humidity Range (%RH)	30~85		Dew condensation not allowed	
Storage Temperature Range (°C)	-10~+70			
Storage Humidity Range (%RH)	30~85		Dew condensation not allowed	
Temperature Compensation Range (°C)	0~+60			

### Precautions in use

- The air-velocity detection sensor and temperature compensation sensor are calibrated as a single unit with the amplifier and must not be dismantled or replaced. Recalibration is required if the sensor is replaced.
- Mount the air-velocity sensor vertically to air direction.
- Do not apply a shock to, mount a cover on, or paint the air-velocity sensor.
- The air-velocity sensor is heated and must not be touched with fingers during its operation. Exercise care to combustible gas when mounting it.
- Dust, or waterdrop on air-velocity sensor section may cause an error.
- Refer to us if the length of the lead, which connects the probe of the sensor with the amp. section is to be changed.

### Type Designation

Example



### Applications

- Air flow control of hot water boilers.
- Air flow control of air conditioning systems for buildings.
- Air flow control and stoppage detection of fan motors.
- Air flow control of clean rooms and clean benches .
- Air velocity and air flow control of environmental equipment and apparatuses.
- Detection of clogging of filters.

### Output Characteristics Diagram

AFS Output Voltage (Typical Value)

