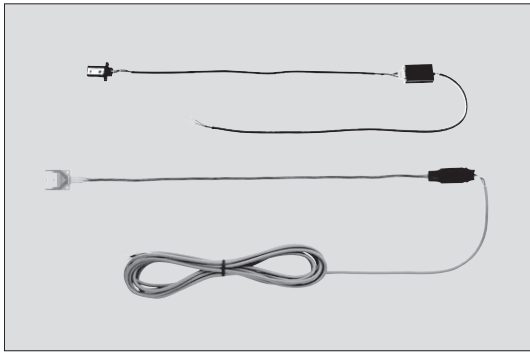


AFS Air Flow Sensor Unit (空气流量传感器)

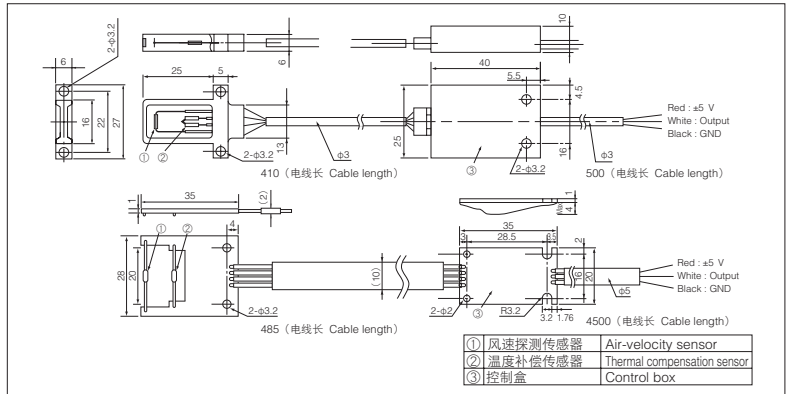
Air Flow Sensor Units

温度传感器
Thermal Sensors



■ 结构图 Construction

单位 Unit: mm



■ 特点 Features

- 由于采用了铂金薄膜温度传感器，实现长期高度稳定性。
- 采用使用小型铂金薄膜温度传感器的定温度差操作电路，实现快速响应。
- 内置温度补偿电路，可以不受风速温度的影响，得到正确的温度值。更加使用了风速检测用传感器和风速温度补偿传感器，使用相同特性的传感器，能够正确的温度补偿。
- 由于没有转动机构，产品振动强烈。
- 产品体积小，重量轻，装配便捷。
- 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.
- Products are compact and light, and are easy to be installed in equipment.

■ 额定值 Ratings

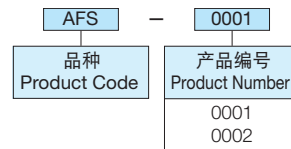
项目 Items	AFS-0001	AFS-0002	备注 Remarks	
检测对象 Detection Object	常压下洁净空气 Clean air, ordinary pressure			
检测范围 (m/s) Detection Range	0~15			
检测精度 Detection Accuracy	(m/s)	±0.3	±0.5	不满0.5~1.0 (less than 1.0) m/s
	(m/s)	±0.5	±0.7	不满1.0~4.0 (less than 4.0) m/s
	(m/s)	±2	±2	不满4.0~12 (less than 12) m/s
	(m/s)	±3	±3	12~15 m/s
	(m/s)	±1.5	±1.5	4.0~15 m/s
电源电压 (V) Power Supply Voltage	5 ± 0.25			
消耗电流 (A) Current Consumption	0.2max.		除去启动时间 Start-up time is excluded.	
输出电压 (V) Output Voltage	1.8~3.2	1.9~3.5	Non-linear analogue (非线性模拟, 参照输出特性图) Non-linear analog (see output characteristics diagram)	
出力输出电阻 (Ω) Output Impedance	100Typ.			
启动时间 (s) Start-Up Time	15Typ.			
使用温度范围 (°C) Operating Temperature Range	0~+60			
使用湿度范围 (%RH) Operating Humidity Range	30~85		禁止露水凝结 Dew condensation not allowed	
保存温度范围 (°C) Storage Temperature Range	-10~+70			
保存湿度范围 (%RH) Storage Humidity Range	30~85		禁止露水凝结 Dew condensation not allowed	
温度补偿范围 (°C) Temperature Compensation Range	0~+60			

■ 使用注意事项 Precautions for Use

- 由于风速检测传感器和温度补偿传感器与放大器部分一起被校正，因此请勿取出或交换传感器。更换传感器的场合，必须进行重新校正。
- 风速传感器请面对风向垂直安装。
- 请勿对风速传感器施以撞击、安装外壳或者加以涂层。
- 当风速传感器在加热过程中，请勿用手触碰。在安装可燃性气体时请加以注意。
- 垃圾、灰尘、水滴等附着物会导致风速传感器产生误差，请加以注意！
- 如需变更传感器探针到放大器部分连接用线缆的长度，请和我们联系。

■ 品名构成 Type Designation

实例 Example

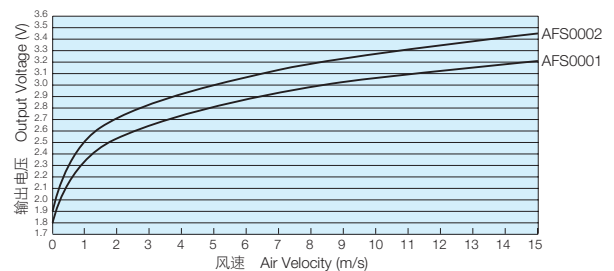


■ 用途 Applications

- 热水器的风量控制。
- 大楼空调系统的风量控制。
- 对Fan Motor (风扇电机) 停止进行检测、控制风量。
- Clean Room (无尘室) 和Clean Bench (无尘工作台) 的风量控制。
- 环境设备机器风速、风量的控制。
- 检测Filter (过滤器) 是否阻塞。
- 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.

■ 输出特性 Output Characteristics Diagram

AFS输出电压 AFS Output Voltage (代表值 Typical Value)



- 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.