

# 流量传感器/风速计

## Flow Sensor/Transmitter



### 产品描述

热式流量传感器可测量空气和气体的流速和温度并且带有线性信号输出，通过 LED 显示传感器的工作状态（正常或有错误）紧凑型插入式传感器，安装在空气通道中，带有极高精度的探头。

### 产品优势

- 快速的单孔安装
- 流量测量不需要压力和温度修正
- 压力损失非常小
- 设计紧凑
- 探针管长度可达 500 mm

### 应用举例

- 空气管道的流量测量
- 体积流量测量
- 燃烧气体控制，如油、碳、木料或燃烧气体
- 干燥系统的气体测量

### Product description

Thermal flow sensor for the measurement of flow velocity and temperature in air and gases with linear output signal. Two diagnostic LED's show operation status and correct function. Compact insertion type sensor for mounting in pipes and air ducts.

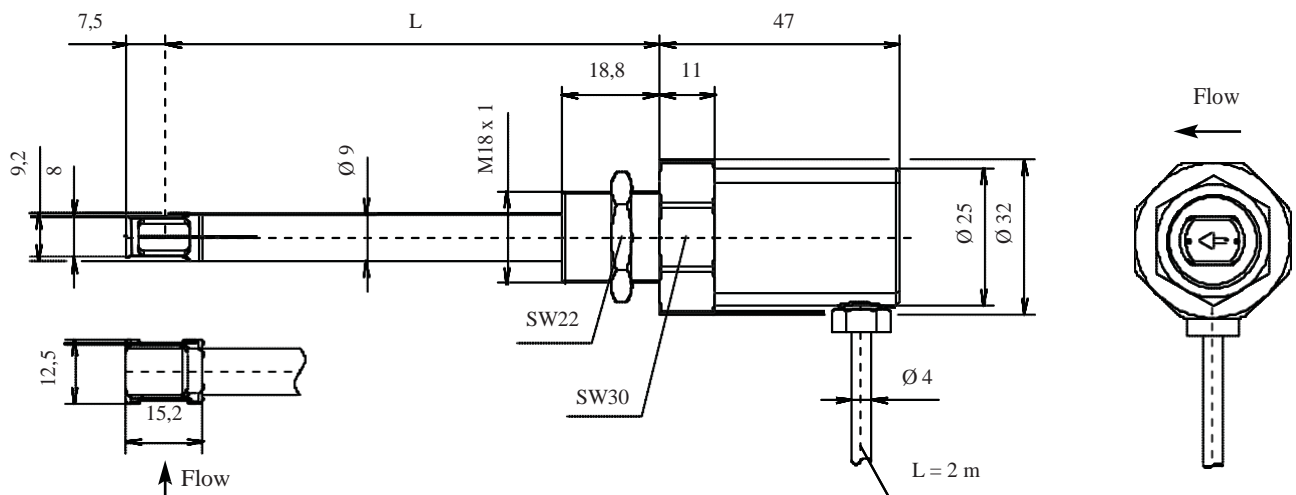
### Product advantages

- Simple single hole mounting
- Mass flow measurement with pressure and temperature compensation
- Very small pressure loss
- Compact design
- Sensor length up to 500 mm

### Applications

- Flow measurements in air ducts
- Volume flow measuring in test benches
- Combustion air control in burners for oil, coal, wood or gas
- Process air in drying systems

### 尺寸 / Physical dimensions



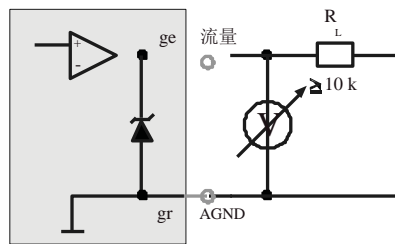
# 流量传感器/风速计

## Flow Sensor/Transmitter

技术参数		Technical Data	
技术/设计	插入式热式传感器	Technology / design	thermal anemometer as insertion design
风速量程	2.5 / 10 / 20 / 40 / 50 m/s 在 20 ° C 和 101.325kPa	Measuring range wN	2.5 / 10 / 20 / 40 / 50 m/s 8.2 / 32.8 / 65.6 / 131.2 / 164 ft/s at 20 ° C and 1013.25 hPa
风速测量下限	0.2 m/s	Lower range limit	0.2 m/s / 0.66 ft/s
风速测量精度	±(测量值的 5 % + 量程的 0.4 %)	Measurement inaccuracy wN	±(5 % of measured value + 0.4 % of measuring range)
温度量程	-20 ... 85 ° C / 120 ° C	Measuring range T	-20 ... 85 ° C / 120 ° C
温度测量精度	±2 ° C	Measurement inaccuracy T	±2 ° C
工作压力	大气压 (700 ... 1.300 kPa)	Pressure range	atmospheric (700 ... 1,300 hPa)
工作温度	介质: -20 ... +85 ° C / +120 ° C 电子元件: -20 ... +70 ° C	Operating temperature	medium: -20 ... +85 ° C / +120 ° C electronics: -20 ... +70 ° C
响应时间	3 s	Response time (t90)	3 s
安装长度	50 / 100 / 200 / 350 / 500 mm	Mounting length	50 / 100 / 200 / 350 / 500 mm 20 / 39 / 79 / 138 / 197 inch
固定	外螺纹 M 18 x 1 可选 螺纹套管接头 1)	Mounting	thread M 18 x 1, opt. tube throughpassage1)
模拟输出	0 ... 10 V / 0 ... 20 mA / 4 ... 20 mA 线性	Analogue output	0 ... 10 V / 0 ... 20 mA / 4 ... 20 mA linear
显示	LED 绿色: 准备就绪 LED 红色: 传感器错误	Display	LED green: operation status LED red: malfunction
电源电压	24 V DC ± 20 %	Supply voltage	24 V DC ± 20 %
电流消耗	30 mA max	Current consumption	30 mA max. (without load at output)
电气连接	电缆 4-针, 固定连接, 长度 2 m	Electrical connection	cable 4-pole, pigtail, length 2 m PBT
外壳材料	PBT, 玻璃钢	Material housing	glass fibre reinforced
传感器材料	白, 玻璃钝化	Material sensorelement	stainless steel 1.4571
探针管材料	1.4571 不锈钢	Material sensor tube	100 g
重量	100 g	Weight by mass	IP 65 (housing)
保护等级	IP 65 (外壳) IP 65 (探针管)	Protection type	IP 65 (sensor tip and tube) IP 65 (sensor tip and tube)

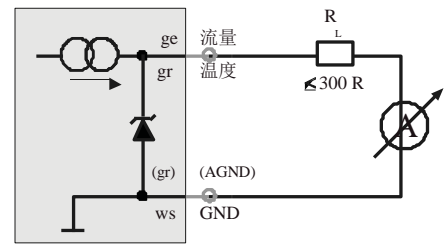
### 接线图 / Connecting diagram

说明 Designation	功能 Function	颜色 Colour
Power	电源电压 Operating voltage	棕色 brown
GND	地线电源 Mass operating voltage	白色 white
AOut. Flow	模拟输出流量 Analogue output flow	黄色 yellow
AOut. Temp	模拟输出 温度 Analogue output temperature	绿色 green
oder / or AGND	模拟输出地线 Mass velocity signal	



模拟输出 / Analogue output:

0 ... 10 V, RL 三 10 k



模拟输出 / Analogue output:

0 ... 20 mA / 4 ... 20 mA, RL 三 300 R

产品编号 Article No.	安装长度 Mounting length	量程 wN Measuring range wN	输出 Output	连接 Connection	工作温度 Operational temp.
12.5	X	Y	Z	A	T
	1 50 mm	1 0 ... 2.5 m/s	1 0 ... 10 V	1 电缆 / cable	1 -20 ... +85 ° C
	2 100 mm	2 0 ... 10 m/s	2 4 ... 20 mA		2 -20 ... +120 ° C
	3 200 mm	3 0 ... 20 m/s	3 0 ... 20 mA		
	4 350 mm	4 0 ... 40 m/s	4 4 ... 20 mA	4 ... 20 mA	
5 500 mm	5 0 ... 50 m/s	5 0 ... 20 mA	0 ... 20 mA		