

# AVS 200

## AIR VELOCITY SENSOR



AVS 200 is an electronic air flow sensor without moving parts. The unit measures air velocity and is used for the monitoring and/or control of the air flow in ducts and similar spaces. The sensor gives a linear output voltage and current signal proportional to air velocity. The sensor element is protected with polyurethane plastic.



Size: 145x80x55 (LxWxH)

### TECHNICAL DATA

Supply voltage	24 VAC $\pm$ 15%, 50-60 Hz
Power consumption	3 VA
Measuring ranges (programmable)	0-5.....15 m/s (adjustable) 0-5 m/s 0-10 m/s 0-15 m/s
Outputs	0-10 Volts (min. 1000 Ohm) 0(4)-20 mA (max. 500 Ohm)
Output drift vs. temp.	max 0,1% of reading / °C (Cal. at 20 °C)
Repeatability	max. $\pm$ 0,5% of reading
Linearity	$\pm$ (5% of reading + 20 fpm)
Time constant	t 0,67 = 3 alt. 10 sec.
Temp. range (sensor)	-20 °C to +50 °C (0 - 120 F)
(electronic unit)	0-50 °C (30 - 120 F)
Humidity range	max 90% RH
Housing	ABS-plastic, IP 44
Sensor cable	1,5 meter
Sensor insertion length	30-200 mm.

## MOUNTING

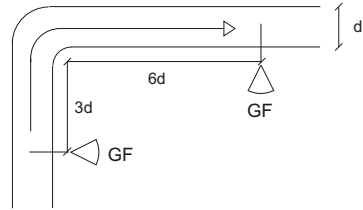
The detecting element should be surrounded by an even air flow and positioned with regard to the direction of flow as shown by the arrows on holder. This means that it may be installed laying or upright, in a vertical or horizontal air stream.

Place the detecting element at least as far from the heater and cooling batteries or the humidifying equipment as normal duct temperature detectors. It should furthermore be placed such that the distance to the nearest air disturbance (for example bend, filter or damper) is at least as shown in withstanding figure.

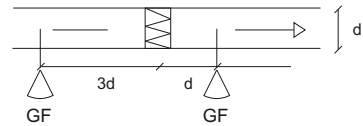
### WARNING

Do not place detecting element before filter and heater in system for inlet air. (Corrosion)

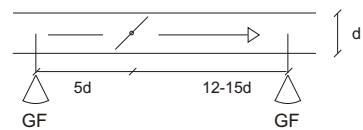
### BEND



### FILTER



### DAMPER



## FUNCTION AND PROGRAMMING

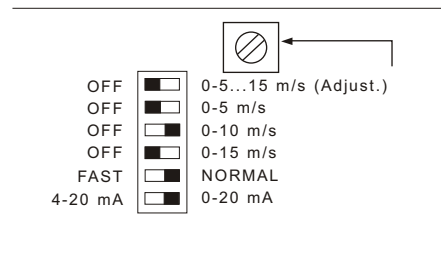
Sensor measures air velocity and gives a linear voltage and current output.

With contacts inside electronic unit, velocity range can be programmed;

0 - 5.....15 (Adjustable)  
 0 - 5 m/s  
 0 - 10 m/s  
 0 - 15 m/s

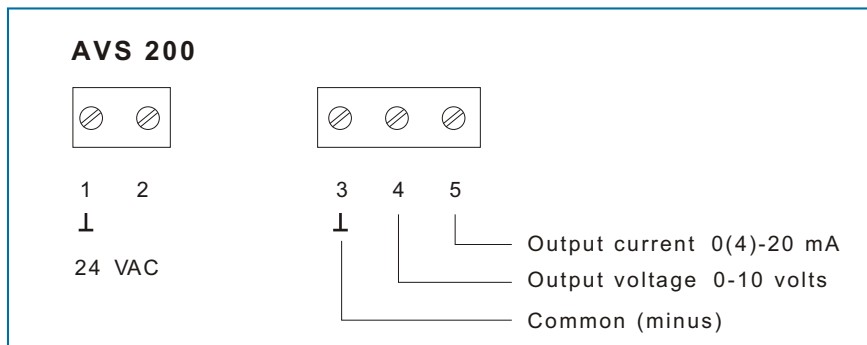
Current output can be programmed;  
 0 - 20 mA or 4 - 20 mA

Time constant can be programmed;  
 3 alt. 10 sec.



Factory settings:  
 Range: 0-10 m/s  
 Output: 0-20 mA  
 Time constant: 10 sec. (Normal)

## CONNECTING DIAGRAM



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