

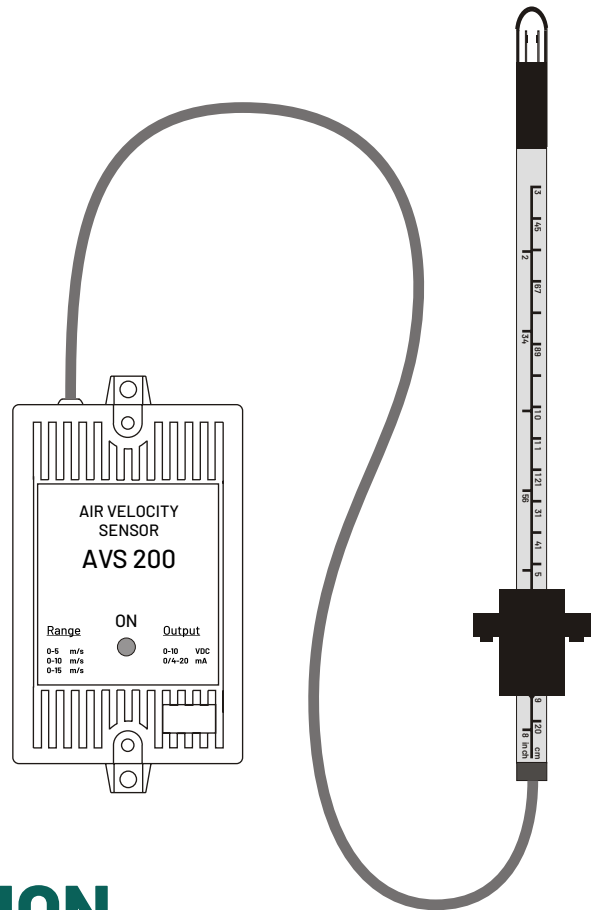
# AVS 200

## SPEED SENSOR

FOR THE NEEDS OF AIR FLOW MEASUREMENT AND CONTROL

AVM 160-400 is an air flow measurement unit for ventilation ductwork. The measuring device consists of a round casing, a speed sensor and a transmitter. The casing of the measuring unit is made of Aluzink material or acid-resistant steel.

The measuring unit AVM sends a calibrated current or voltage signal that corresponds to the air volume or air speed.



## TECHNICAL INFORMATION

Operating voltage	24 VAC $\pm$ 15%, 50-60 Hz
Connection power	3 VA
Measuring range (settable)	0/5 ... 15 m/s (adjustable) 0-5 m/s 0-10 m/s 0-15 m/s
Analog output message	0-10 V (min. 1000 $\Omega$ ) 0 (4) - 20 mA (max. 500 $\Omega$ )
Temperature dependence	max. 0.1% of reading/ $^{\circ}$ C (Cal. at 20 $^{\circ}$ C)
Reliability	max. $\pm$ 0.5% of reading
Linearity	$\pm$ (5% of reading + 0.1 m/s)
Time constant	t 0.67 = 3 or 10 seconds
Operating temperature (transmitter unit)	-20 $^{\circ}$ C ... +50 $^{\circ}$ C 0-50 $^{\circ}$ C
Humidity area	max 90% RH
Sensor cable	1.5 meters
Installation length of the sensor	30-200 mm

## INSTALLATION

The sensor must be installed in the duct in a place where the air flow is uniform and the arrow on the sensor bracket points in the direction of the air flow. The sensor can be installed either in a vertical or horizontal channel.

The sensor must be placed at least as far as the protective distance indicated in the picture from various air handling devices (e.g. curves). If there is a heating/cooling radiator or a humidifier in the duct, the speed sensor must be installed in the supply air duct before them.

### ATTENTION

The sensor must not be installed directly in the outdoor air. The end of the measuring element is centered in the channel by loosening the screws of the measuring tube, setting the length to the right and locking the screws.

## OPERATION AND PROGRAMMING

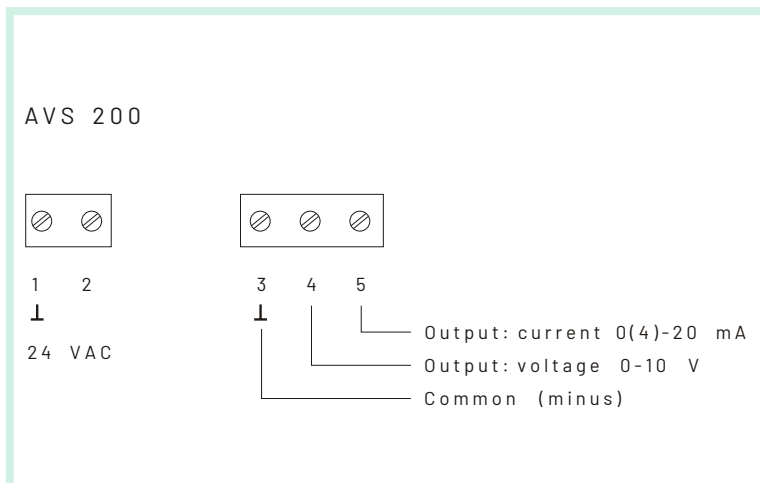
The sensor measures air speed and gives a linear voltage or current signal. The operating range of the sensor can be programmed by setting the switches according to the instructions inside the housing.

- 0 - 5...15 m/s (Can be set)
- 0 - 5 m/s
- 0 - 10 m/s
- 0 - 15 m/s

The range of the current message is programmable; 0 to 20 mA or 4 to 20 mA

The time response can be programmed to 3 or 10 seconds.

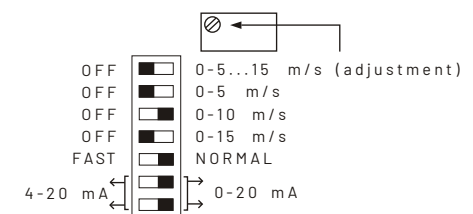
## CIRCUIT DIAGRAM



### CURVE

### FILTER

### ADJUSTMENT DAMPER



Factory settings:  
 Area: 0-10m/s  
 Power message: 0-20 mA  
 Time response: 10 sec.