

AVS 200 Air Velocity Sensor - Transducer - Transmitter

AVS-200 is a very accurate Air Velocity Sensor used in HVAC systems, laboratories, clean rooms and industrial applications. These kind of sensors are also called transducers or transmitters.

AVS-200 features a choice of 4 selectable velocity ranges and 3 output ranges.

The time constant can be set to 3 or 10 seconds. 3 seconds is used for fast response when the AVS200 is an input to a controller and 10 seconds is for when the unit is used in monitoring applications. The time constant is the time it takes to register 62% of a velocity change.

The sensing probe has an adjustable insertion length, 1- 8". It is connected to the electronic unit by a 4.5 ft cable. The ceramic sensors are protected by a shield.

Typical applications:

- HVAC, main ducts and VAV
- Laboratories, hoods and ducts
- Clean rooms
- Drying processes
- Fan control input



Technical Data

Part number	AVS-200	
Power supply	24 Vac or 24 Vdc +/- 10%, 50/60 Hz	
Power consumption	5 VA	
Velocity ranges	Selectable by DIP switches	
Fixed ranges	0 - 1000 fpm	0 - 5 m/s
	0 - 2000 fpm	0 - 10 m/s
	0 - 3000 fpm	0 - 15 m/s
Adjustable range		
minimum	0 - 1000 fpm	0 - 5 m/s
maximum	0 - 3000 fpm	0 - 15 m/s
Other ranges which replace the adjustable range are available on special order.		
Output	Selectable by DIP switch	
	0 - 10 Vdc	(min. 1000 Ohm)
	0 - 20 mA	(min. 600 Ohm)
	4 - 20 mA	
Time constant	Selectable, 3 or 10 seconds	
Deviation by temperature	Max. 0.1%/°C	
Repeatability	0.5% of measuring range	
Accuracy	+/- 3% of measured value & 0.5% of measuring range	
Ambient temperature limits		
sensor	-4° to 140°F	-20° to 60°C
electronics	30° to 122°F	0° to 50°C
Adjustable probe length	1 - 8"	20 - 200 mm
Cable length	4.5 ft	1.5 m
Enclosure	Dust and splash proof (IP 54)	
Enclosure material	Polycarbonate	



Installation

The sensing probe should be installed with the arrow on the mounting flange pointing in the direction of the air flow. The insertion length is adjustable. Loosen the set screw and move the probe to the selected position. Tighten the set screw. The scale on the probe shows the insertion length.

Preferably install the sensing probe downstream of filters and coils. Avoid placement close to the outside air intake. For best accuracy, locate the sensing probe a minimum of 3 duct diameters, or widths, upstream of any obstruction (elbow, filter, damper, etc.) or a minimum of 5 duct diameters, or widths, downstream of such obstructions.

Be careful not to damage the ceramic sensors at the tip of the probe.

Adjustments

DIP switch adjustments are made on the circuit board inside the electronic enclosure.

