AVS 200 Air Velocity Sensor

AVS200 is an Air Velocity Sensor used in HVAC systems, laboratories, and industrial applications.

AVS200 features a choice of 4 selectable velocity ranges and 3 output ranges.

The time constant may 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 chosen 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" (25-200 mm). It is connected to the electronic unit by a 4.5 ft (1.5 m) cable for ease of installation.

Technical Data

Part number	AVS200	
Power supply	24 Vac or 24 Vdc +/- 10%, 50/60 Hz	
Power consumption	5 VA	
Velocity range	Selectable by DIP switches	
Adjustable		
minimum	0 - 1000 fpm	0 - 5 m/s
maximum	0 - 3000 fpm	0 - 15 m/s
Fixed		
	0 - 1000 fpm	0 - 5 m/s
	0 - 2000 fpm	0 - 10 m/s
	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	+/- 5% 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
Enclosure	Dust and splash proof (IP 54)	
Enclosure material	Polycarbonate	
Plastic cable length	4.5 ft	1.5 m
Sensing probe length	1 - 8 in	25-200 mm

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

Adjustments

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