



Product Overview

The AX-AV-SP range of single point air velocity transmitters are designed on the Calorimetric principle of the air flow being passed across a heated thermistor and the results being measured against the control thermistor to determine heat loss and corresponding air flow. The units are mounted across the flow of the duct and give an analogue signal proportionate to the air flow.

Features

- 5% or 8% accuracy versions
- Damped output for a stable control signal
- three speed ranges as standard 4,8,16 m/sec
- Analogue output

Product Specifications

Ranges:	AX-AV-SP-4	0-4m/sec
	AX-AV-SP-8	0-8m/sec
	AX-AV-SP-16	0-16m/sec
Power Supply:	AX-AV-SP	24Vdc \pm 15%
	AX-AV-SPH	21 to 26Vac or 24Vdc \pm 15%
Max Current:		70mA
Max inrush current:		70mA
Max loop resistance:		600 ohms @24Vdc (AX-AV-SP-xxI versions only)
Accuracy:	AX-AV-SP	\pm 5% FSD
	AX-AV-SPH	\pm 8% FSD
Output:	AX-AV-SP-xx-V	0-10Vdc
	AX-AV-SP-xx-I	4-20mA
	AX-AV-SPH	0-10Vdc
Response time:		<10 seconds
Settling time:		<25 seconds after power up
Ambient Temp. Range:		0 to +50°C
Housing:	Material	Flame retardant ABS
	Dimensions	55 x 90 mm dia
Probe:	Material	Aluminium
	Dimensions	240 x 19mm dia
Gasket:		Neoprene
Conformity:		CE marked, EMC, LVD.
Country of Origin:		United Kingdom

Order Codes

AX-AV-SP4-I	AV Transmitter 0-4 m/sec , 4-20mA o/p 5% Accuracy
AX-AV-SP4-V	AV Transmitter 0-4 m/sec , 0-10Vdc o/p 5% Accuracy
AX-AV-SP8-I	AV Transmitter 0-8 m/sec , 4-20mA o/p 5% Accuracy
AX-AV-SP8-V	AV Transmitter 0-8 m/sec , 0-10Vdc o/p 5% Accuracy
AX-AV-SP16-I	AV Transmitter 0-16m/sec , 4-20mA o/p 5% Accuracy
AX-AV-SP16-V	AV Transmitter 0-16m/sec , 0-10Vdc o/p 5% Accuracy
AX-AV-SPxx	AV Transmitter Custom range 5% Accuracy
AX-AV-SPH4	AV Transmitter 0-4 m/sec , 0-10Vdc o/p 8% Accuracy
AX-AV-SPH8	AV Transmitter 0-8 m/sec , 0-10Vdc o/p 8% Accuracy
AX-AV-SPH16	AV Transmitter 0-16m/sec, 0-10Vdc o/p 8% Accuracy

Installation

NOTE:

Do not install the transmitters until the fans have been fully tested and run for several days to remove contaminants

Siting:

Select a location not less than 2m downstream from any heating or cooling device or fan also ensuring that the position chosen is not within 2m of a bend in the ductwork in either direction and in an area where pollutants and dust are at a minimum and not subject to condensation or dampness.

Mounting

Ensure that the supply voltage is within the required tolerances

Drill two holes at 85mm centres and a 20mm diameter centrally between them for the probe.

Fit the sensor to the duct using appropriate screws, making sure to align the holes in the probe so that they point into the airflow.

To get the best accuracy ensure the holes in the probe are positioned 0.24 x the duct radius into the duct Remove the front cover of the housing and feed the screened cable through the gland and terminate at the terminal

block, leave some slack inside the unit and tighten the cable gland.

allow 3 minutes before checking functionality

allow 30 minutes before carrying out pre-commissioning checks

Connections

AX-AV-SP-xx-I

Connector

1	24Vdc
2	0V
3	Output

AX-AV-SP-xx-V and AX-AV-SPH-xx

Connector

1	24Vac/dc
2	0V
3	Output

Note: The current versions are not loop powered and do require the common 0V connection

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