

## AD-1251 Probe with Differential Pressure Transducer

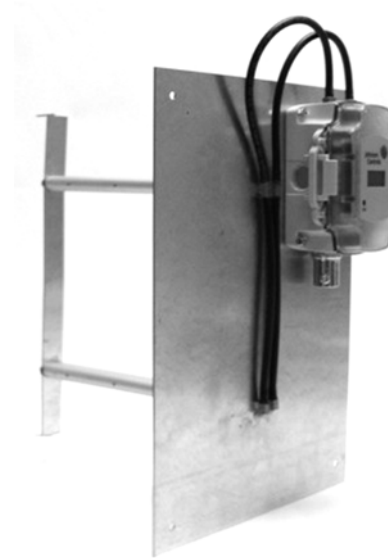
### Description

The AD-1251 Probe with Differential Pressure Transducer (DPT) is designed to provide accurate and economical flow monitoring at all times. The probe is a differential pressure air measuring device that is designed to measure flow in duct applications. The device is intended for retrofit projects. You may install the AD-1251 in a straight duct or one duct diameter upstream from an unvaned elbow, or five duct diameters downstream from an unvaned elbow. The probes are tested per Air Movement and Control Association (AMCA) 610.93 setup.

This probe measures and reports differential pressure, effectively monitoring airflow from 400 to 5,000 Feet Per Minute (fpm) (122 to 1,524 Meters per Minute [mpm]) within  $\pm 5\%$  accuracy. When used with the Pressure Across Measuring System (PAMS) chart accompanying the probe (or in the product literature), precise airflow is easy to determine.

The probe can be used in either a horizontal or vertical application. When ordered with an air straightener, the probe is automatically positioned in a vertical application. The 9 inch (229 mm) deep probe with air straightener allows for installation in tight space requirements where dampers are already installed, or where dampers are also required.

Refer to the *AD-1251 Probe with Differential Pressure Transducer Product Bulletin (LIT-12011473)* for important product information.



AD-1251 Probe with Differential Pressure Transducer

### Features

- Slip Fit Mounting
- Horizontal or Vertical Anodized Aluminum Sensing Probes
- Factory-Piped DPT with Display

### Repair Information

If the AD-1251 Probe with Differential Pressure Transducer fails to operate within its specifications, replace the unit. For a replacement AD-1251 Probe with Differential Pressure Transducer, contact the nearest Johnson Controls® representative.

All Johnson Controls AD-1251 Probes with Differential Pressure Transducers are built to order and cannot be returned due to ordering errors. All AD-1251 Probes with Differential Pressure Transducers are backed by a 3-year warranty, which covers defects in materials or workmanship. Refer to terms and conditions of sale for specifics.

### Selection Charts.

#### Dimensions

Single and Multiple Panel Dimensions <sup>1</sup>	Width x Height, in. (mm)
Minimum Single Probe	6 x 6 (152 x 152)
Maximum Three Probes	60 x 42 (1,524 x 1,069)
Maximum (with Air Straightener)	Unlimited

1. Actual size is 1/4 inch less than nominal

Use the following to select the product:

1. Determine required size from drawings.
2. Select the part number required.
3. Enter width and height of duct.  
www = width of duct (in inches)

hhh = height of duct (in inches)

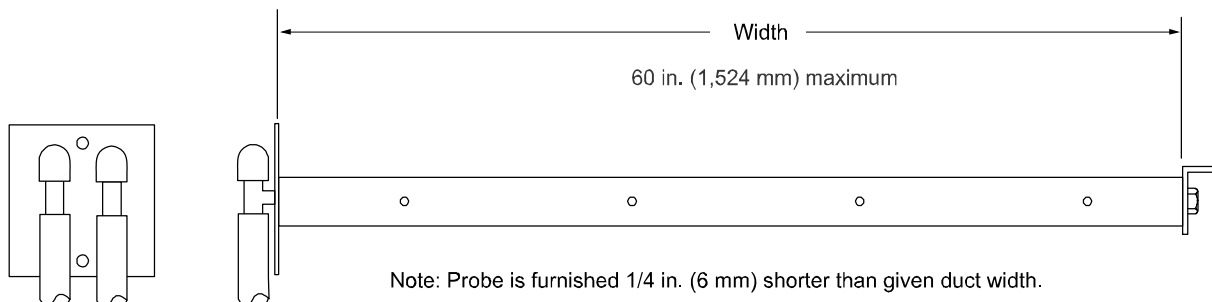
4. Add W to the end of the code number to add the air straightener option.

**Note:** Actual probe size is 1/4 inch (6 mm) less than nominal.

Example: ASEN-020x020W is an airflow measuring probe comprised of an aluminum air straightener, flow pickup station and DPT. Its dimensions are 20 inches (51 mm) wide x 20 inches (51 mm) high, and enclosed in a 9 inch (229 mm) long sleeve without flanges for a slip fit.

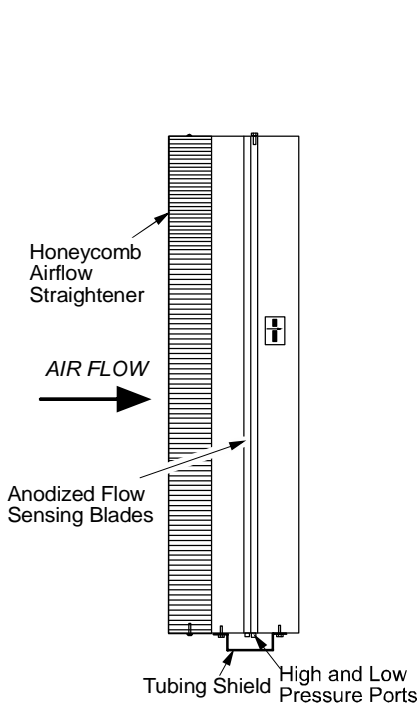
#### Ordering Information

Code Number	Description
ASENN-wwxhhh	Airflow Measuring Probe with DMPR-RA001 Transducer
ASENN-wwxhhhW	Airflow Measuring Probe with DMPR-RA001 Transducer and Air Straightener

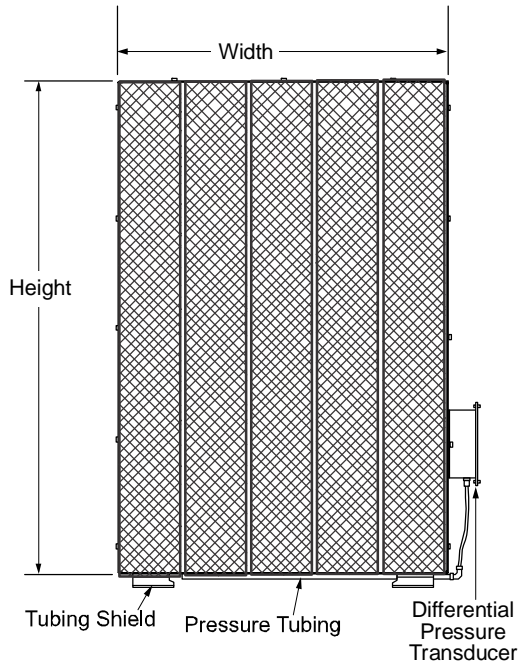


AD-1251 Probe Details

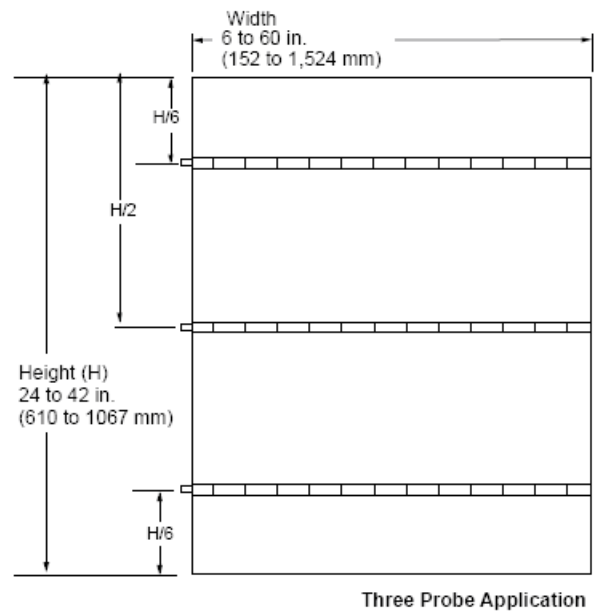
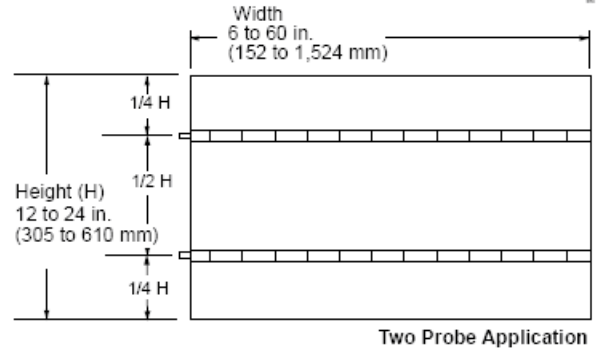
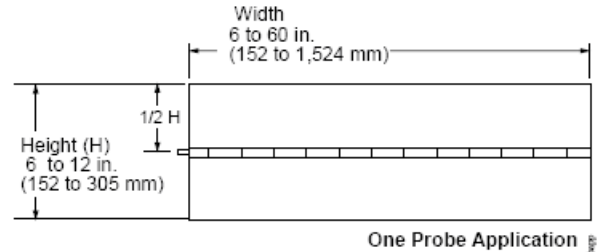
## AD-1251 Probe with Differential Pressure Transducer (Continued)



AD-1251 Probe with Air Straightener, Side View



AD-1251 Probe with Air Straightener, Front View



One, Two, and Three Probe Applications

## AD-1251 Probe with Differential Pressure Transducer (Continued)

### Technical Specifications

AD-1251 Probe with Differential Pressure Transducer <sup>1</sup>		
Velocity Requirements	Airflow Measuring Probe with DMPR-RA001 Transducer	Minimum 400 fpm (122 mpm) Maximum 5,000 fpm (1,524 mpm)
	Airflow Measuring Probe with DMPR-RA001 Transducer and Air Straightener	Minimum 300 fpm (91.44 mpm) Maximum 5,000 fpm (1,524 mpm)
Temperature Rating	Standard Operating Conditions: -22 to 140°F (-30 to 60°C) Actuator: -4 to 122°F (-20 to 50°C)	
Approximate Weight	Sensor with DPT and Side Plate: 8 lb (3.6 kg) for 60 in. (1,524 mm) long probe Sensor only: 1 lb (0.45 kg)	

1. Measuring stations are tested at an AMCA Certified Laboratory using instrumentation and procedures in accordance with AMCA Standard No. 610-93, Airflow Station Performance.