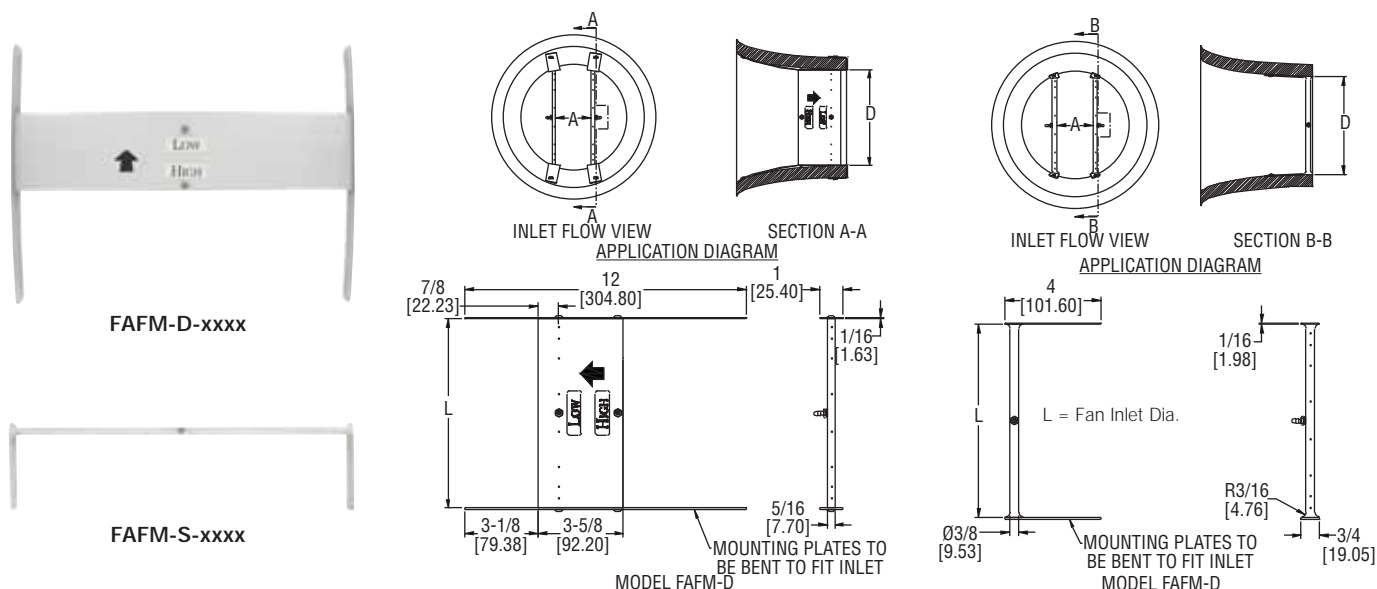




Series FAFM Fan Inlet Air Flow Measuring Probe

Specifications - Installation and Operating Instructions



The Model FAFM Fan Inlet Air Flow Measuring Probes use evenly distributed total and static pressure measuring points to deliver an accurate measurement of flows in a fan inlet. The Air Flow Measuring Probes can be completely installed from outside of the fan making it ideal for when proper duct locations are unavailable. With its lightweight and durable construction in addition to its ease of installation, this product lends itself to being used in the HVAC industry.

There are two versions of the model FAFM fan inlet air flow probes to choose from depending on the depth of the fan inlet.

For fan inlets with depth less than 3-1/2" (8.89 cm): Please order a fan inlet probe with an "S" suffix. This probe has a diameter of .375" (.95 cm). It employs one total flow measuring tube and one static measuring tube. Each probe is covered with an extruded aluminum anodized coat. Each measuring tube has multiple sensing points.

For fan inlets with depth greater than 3-1/2" (8.89 cm): Please order a fan inlet probe with a "D" suffix. This probe has a diameter of 3-1/2" (8.89 cm). It employs extruded aluminum anodized coated probes with both total and static sensors on each tube.

SPECIFICATIONS

Wetted Materials: Aluminum with clear anodized finish.

Accuracy: $\pm 2\%$ (Note: Field Calibration May Be Required).

Max. Temperature: 400°F (204°C).

Minimum Design Flow: 400 fpm (2.03 m/sec).

Maximum Design Flow: 12,000 fpm (60.96 m/sec).

Process Connections: 1/4" NPT female.

INSTALLATION

When you unpack the Model FAFM Fan Inlet Air Flow Measurement Probe ensure that there is no visible damage from shipping. Inspect each sensing point on the probes to ensure that they are not filled with debris from shipping. If there is obvious shipping damage, the probe must be replaced prior to use to avoid inaccurate measurements. Please contact Dwyer Instruments, Inc. if it is necessary to replace your air flow measurement probe.

Please note that Model FAFM Fan Inlet Air Flow Measurement Probes should be installed in portion of the fan inlet with the smallest diameter.

These units are meant to be installed running parallel to each other as shown in figures 1 and 2.

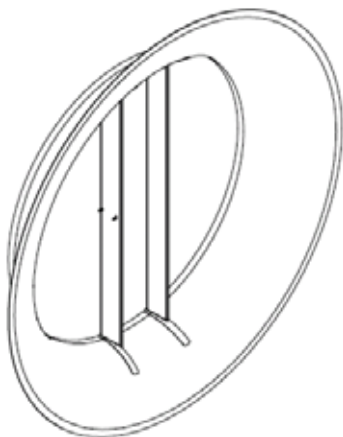


Figure 1

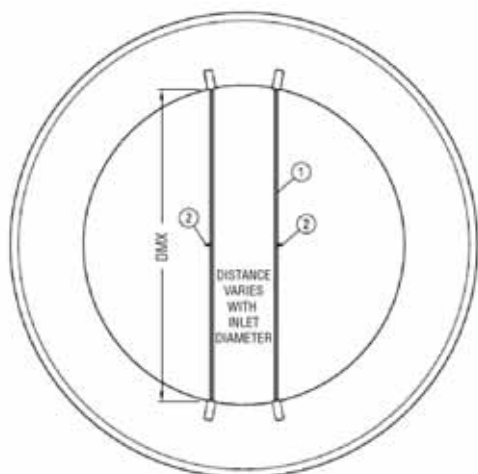


Figure 2

To determine how far apart the two halves of the FAFM should be placed, consult the chart below.

Fan Inlet Diameter	Probe Separation
6"-9" (10.16 cm-22.86 cm)	3" (7.62 cm)
10"-14" (25.4 cm-35.56 cm)	4" (10.16 cm)
15"-20" (38.1 cm-50.8 cm)	5" (12.7 cm)
21"-24" (53.34 cm-60.96 cm)	6" (15.24 cm)
25" (63.5 cm) and up	8" (20.32 cm)

To install the Model FAFM Fan Inlet Air Flow Measuring Probe please refer to the following instructions:

1. Drill a minimum of two (2) holes into mounting plates.
2. Slide Model FAFM Fan Inlet Air Flow Measuring Probe Halves into smallest diameter of the fan inlet.
3. Once in the smallest inlet diameter, push the probe to the outside of the smallest inlet diameter and screw or rivet into place using a minimum of two (2) screws or rivets per FAFM half.

Note: The FAFM Air Flow Measurement Probe should be installed with the holes in all probes visible from the outside of the fan.

4. Tee the two high and low connections to create one high and one low output signal.
5. For double inlet fans tee all of the high and low connections to create one high and one low output signal.
6. Connect the high and low outputs to a differential measurement device such as a differential pressure transmitter.

CALIBRATION

Sometimes field calibration may be required if the probe is installed in a bad location i.e. immediately downstream of an elbow. In order to calibrate, you must either perform a traverse of the duct or a sum of the air registers and compare this with the FAFM output. Then, you must make the correction to the effective area in the computer to make up for the error.

MAINTENANCE

Upon final installation, the device should be checked once a year for a build up of dirt or debris that can be common in an HVAC system. Also check the mounting stability once a year. Other than this no routine maintenance is required. The FAFM model is not field serviceable and should be returned if repair is needed (field repair should not be attempted and may void warranty). Be sure to include a brief description of the problem plus any relevant application notes. Contact customer service to receive a return goods authorization number.