

Application

AM-PD airflow measuring stations employ a galvanized steel sleeve with highly accurate airflow measuring equipment in a single compact assembly. The AM-PD station is factory mounted with multiple point self-averaging pressure sensing probes and Antec Scout DP transmitter with Bluetooth capabilities to provide airflow measuring in one easy to install assembly.

Standard Construction

Sleeve: 12" x 20 gauge (305 x 1.0) galvanized steel.

Air Straightener: Aluminum honeycomb.

Sensor Type: Pressure differential.

Probe Material: Anodized aluminum extrusion.

Probe Mount Location: Right.

Transmitter: Scout/DP (Bluetooth), Scout/DP (Basic)

Transmitter Output: 1 ANALOG OUTPUT
(Configurable 0 to 10 VDC, Max: 10 mA)

Transmitter Power Supply: 24 VAC +/- 10%, 50/60 Hz, 11 VA
or 14 – 32 VDC, 20 mA, Class 2

Accuracy: 3% deviation average across measurement range.

Minimum Size (Horizontal): 8" x 6" (203 x 152)

Minimum Size (Vertical): 6" x 8" (152 x 203)

Maximum Size: Single section: 120" x 96" (3048 x 2438)

Ratings

Maximum Transmitter Pressure Range: -2.0 – 2.0 in. wc
(-500 Pa to 500 Pa)

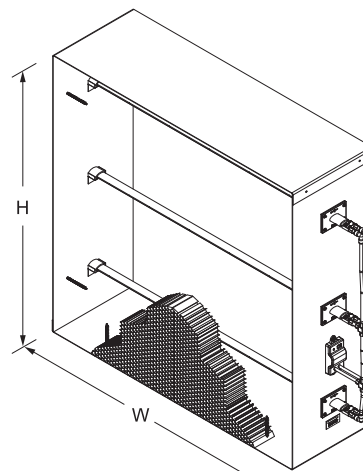
Temperature: -40°F to 185°F (-40°C to 85°C)

Humidity limit: 0-95%, non-condensing

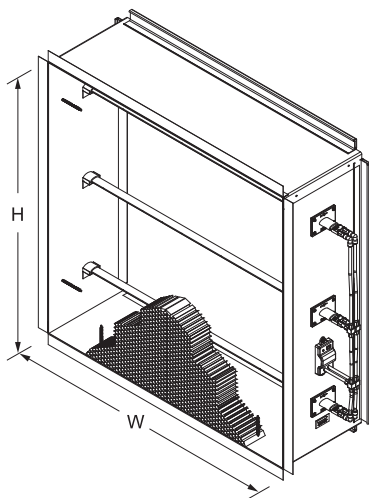
Transmitter Accuracy: 3% of reading

Options

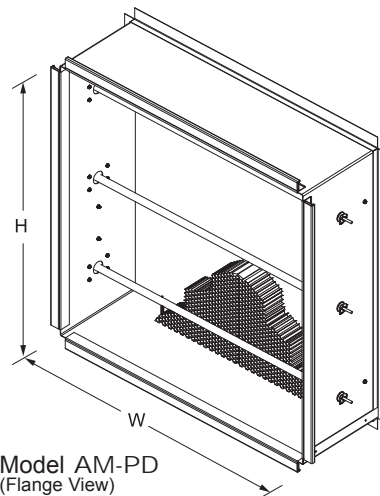
- Factory installed sleeve.
Gauge: 20 (1.0) 16 (1.6) 14 (2.0)
Length: 16" (406) 24" (610) Other _____
- Duct connections: Flanged
 DM-25 DM-35 S & Drive
- Type-304 Stainless steel construction.
- Bottom probe mount location.
 Vertical probe mount location.
- No air straightener (Not AMCA Certified).
- Transmitter:
 Scout/DP (Bluetooth)
 Scout/DP (Basic)



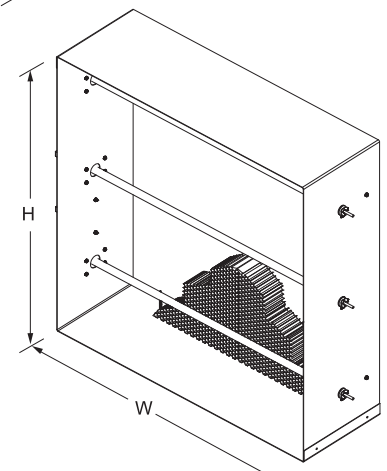
Model AM-PD
(standard)



Model AM-PD
(Flange View)

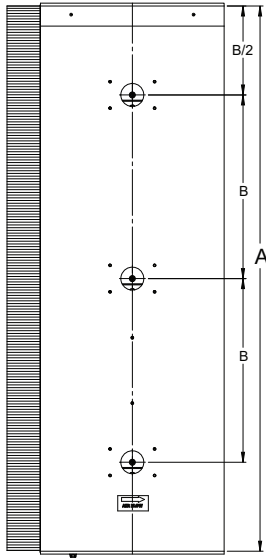


Model AM-PD
(Flange View)

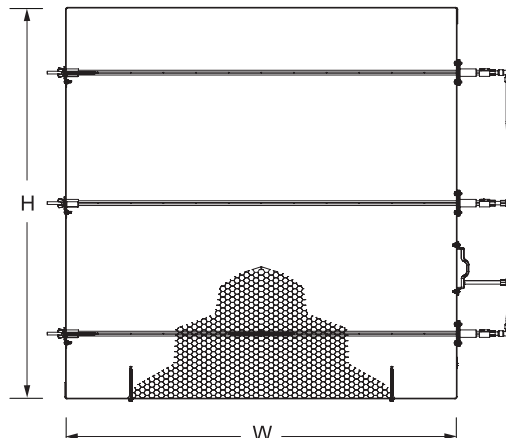


Model AM-45-PD
(standard)

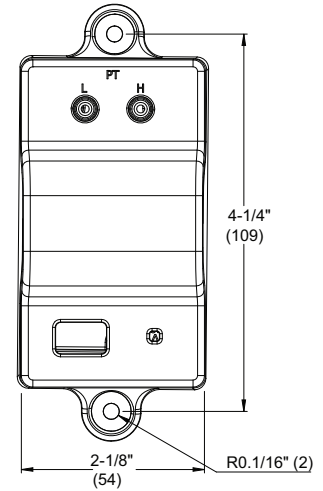
Supplemental Views/ Transmitter



Pilot Tube Placement



Front View



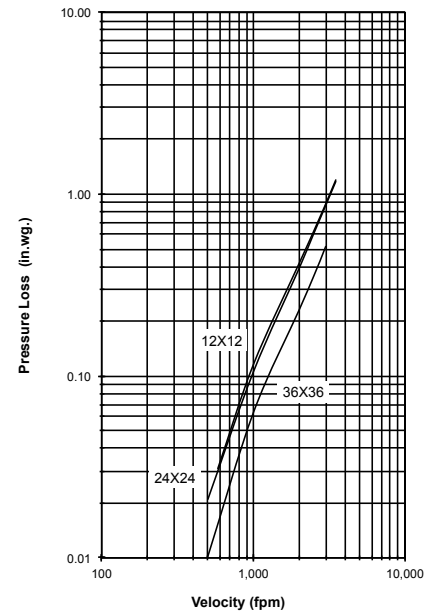
Scout/DP (Bluetooth) Transmitter

Airflow Performance Data

Test Run	Reference Volume CFM	Reference Volume FPM	Indicated Volume CFM	% Accuracy to Reference Airflow
Air Performance Size 12" x 12" (305 x 305)				
1	297	297	309	4.03%
2	622	622	631	1.49%
3	959	959	951	-0.87%
4	1293	1293	1267	-2.03%
5	1629	1629	1608	-1.31%
6	1965	1965	1947	-0.92%
Air Performance Size 24" x 24" (610 x 610)				
1	1497	374	1575	4.95%
2	2546	637	2579	1.28%
3	3854	964	3825	-0.77%
4	5185	1296	5095	-1.76%
5	6523	1631	6381	-2.22%
6	7851	1963	7654	-2.58%
Air Performance Size 36" x 36" (914 x 914)				
1	2774	308	2917	4.89%
2	5669	630	5607	-1.10%
3	8674	964	8574	-1.16%
4	11714	1302	11476	-2.07%
5	14727	1636	14306	-2.94%
6	17755	1973	17413	-1.97%

Test Setup Fig 1

Pressure Loss vs. Velocity



Tested to Figure 1 Per AMCA 611

AMCA ΔPD Test Data		
Test Size	Velocity	ΔPd
12" × 12" (305 × 305)	297	0.008
	622	0.011
	959	0.027
	1293	0.05
	1629	0.063
	1965	0.091
24" × 24" (610 × 610)	374	0.006
	636	0.011
	964	0.019
	1296	0.028
	1631	0.044
	1963	0.050
36" × 36" (914 × 914)	308	0.003
	630	0.012
	964	0.022
	1302	0.031
	1636	0.048
	1973	0.06

Q = k √ ΔPD	
Size	K
12" × 12"	2711
24" × 24"	10931
36" × 36"	24965



Pottorff certifies that the AM-PD Air Monitoring Station shown herein is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 611 and comply with the requirements of the AMCA Certified Ratings Program. Performance ratings include the effect of an integral air equalizer-straightener cell in the airstream.



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