



**PRICE**<sup>®</sup>

**AFSD**  
**DISPLACEMENT VENTILATION**  
**INSTALLATION & SERVICE MANUAL**  
**II-00013**

Date: 04/12  
Reference #: J-30

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# Installation Instructions

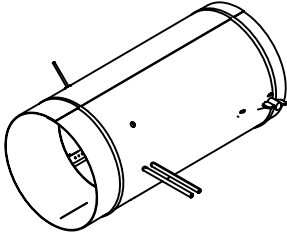
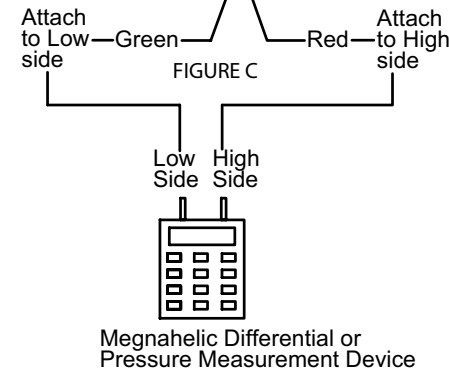
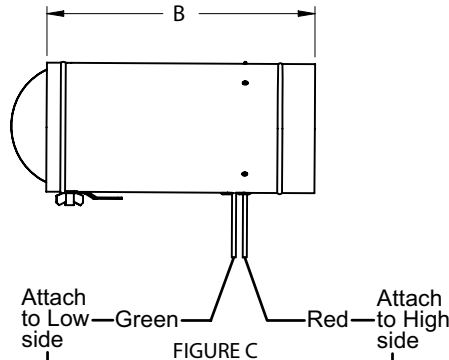
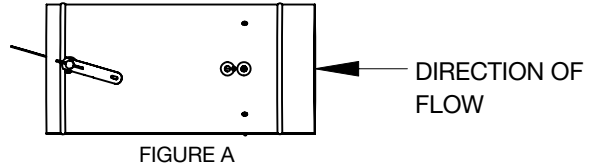
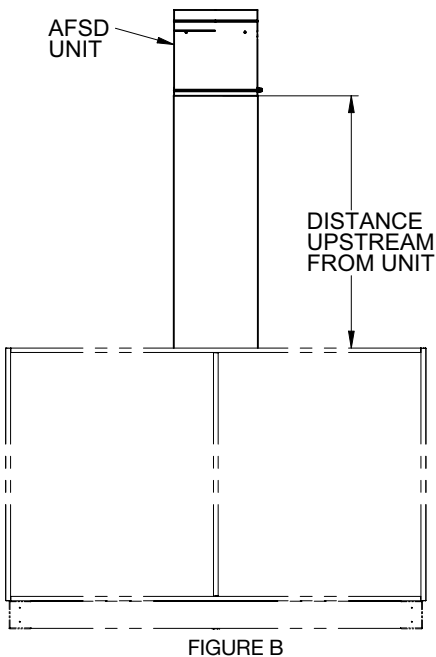
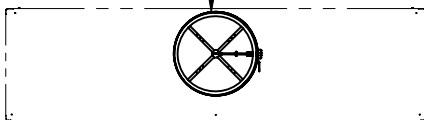


Table 1

| UNIT SIZE | DISTANCE UP STREAM FROM UNIT | MAX CFM | A      | B      |
|-----------|------------------------------|---------|--------|--------|
| 6         | 18                           | 450     | 5.875  | 13.391 |
| 7         | 21                           | 650     | 6.875  | 13.391 |
| 8         | 24                           | 800     | 7.875  | 13.391 |
| 9         | 27                           | 1050    | 8.875  | 13.391 |
| 10        | 30                           | 1350    | 9.875  | 13.391 |
| 12        | 36                           | 2100    | 11.875 | 13.391 |
| 14        | 42                           | 3000    | 13.875 | 15.391 |
| 16        | 48                           | 4000    | 15.875 | 15.391 |



$A = \text{Unit Size} - 0.125$



## RECEIVING INSPECTION

- After unpacking the assembly check for shipping damage. If any damage is found report immediately to the delivering carrier. During unpacking and installation **do not handle by the flow sensor, damper shaft, or handle** because damage may result.

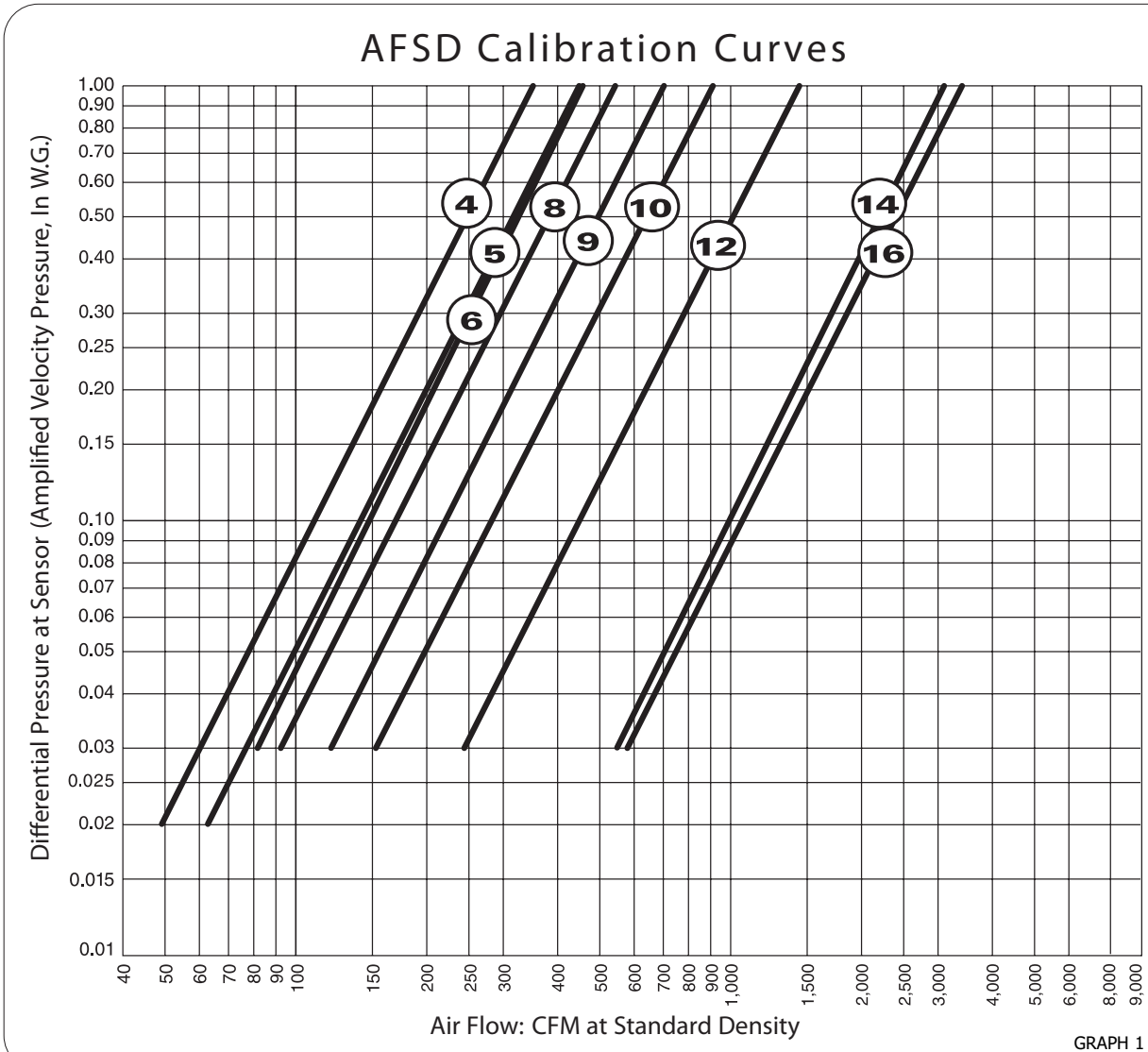
## INSTALLING THE AFSD

- The AFSD is always installed vertically or horizontally with the flow sensor (SP300) facing the flow (See Figure A). (Note: flow must go into the TP ports in the SP300)
- All AFSD units must be installed upstream of diffuser by at least 3 x duct diameter (See Table 1 and Figure B).

## Calibrating the AFSD

- Make sure that the pressure tubes are kink free with no sharp corners. Connect pressure gauge up to AFSD as per Figure C.
- Determine the appropriate K value or slope for the AFSD and then determine your Differential Pressure (VP) (See Table 2, Graph 1 and Equation on Page 2).
- Loosen wing nut on damper handle and adjust damper to vary VP
- Once appropriate VP is obtained, tighten wing nut down on handle to lock in place.

## Installation Instructions



GRAPH 1

Table 2

| Unit Size | K    |
|-----------|------|
| 4         | 350  |
| 5         | 450  |
| 6         | 470  |
| 8         | 540  |
| 9         | 700  |
| 10        | 895  |
| 12        | 1420 |
| 14        | 3150 |
| 16        | 3360 |

$$VP = \left( \frac{Q}{K} \right)^2$$

VP = Differential pressure at sensor, inches w.g.

Q = Air flow rate, CFM at standard density

K = Calibration Constant

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