

Technical Data Sheet

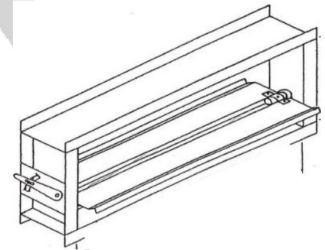
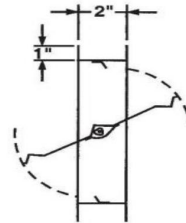
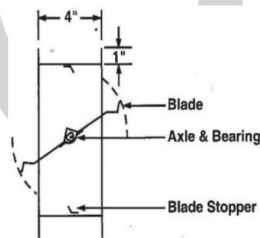
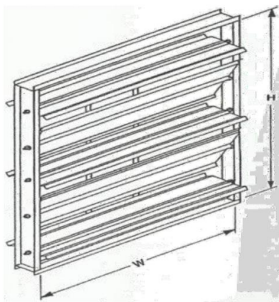


AirQon Synergies

V3 Rectangular Volume control dampers

Construction and material

- Frame: 6" wide galvanized steel channel with welded/locked corners.
- Blades: Galvanized steel reinforced with 3 longitudinal "structurally designed Vees".
- Axles: 1/2"Ø plated steel.
- Bushings: Self oiling bronze bushings.
- Control Shaft: 6" long plated steel 1/2" round to 1/2"x1/2" square.
- Linkage: Exposed in frame (Covered with Plain Sheet)
- Hand Quadrant: For manual operation.
- Finish: Mill galvanized.



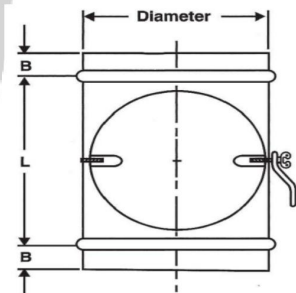
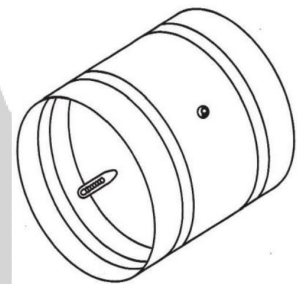
V18 Round Volume control dampers

Construction and material

- Frame: Galvanized steel.
- Blade: Galvanized steel.
- Operation: Hand quadrant for manual operation.
- Regulator: Lower and upper parts of a rapid regulator set.
- Finish: Mill galvanized.

Available size

Diameter Range	L	B
0 - 9-7/8"	dia. + B	1-6/9"
9-7/8" - 23-5/8"	dia. + B	2"
23-5/8" - 35-7/16"	dia. + B	2-7/8"
35-7/16" - Up	dia. + B	4"



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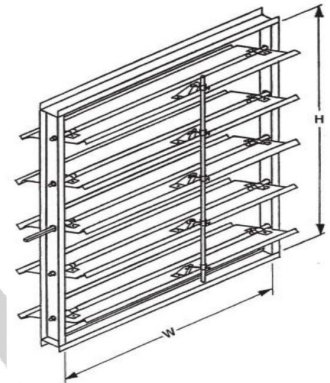


AirQon Synergies

V16 Volume control damper parallel blade

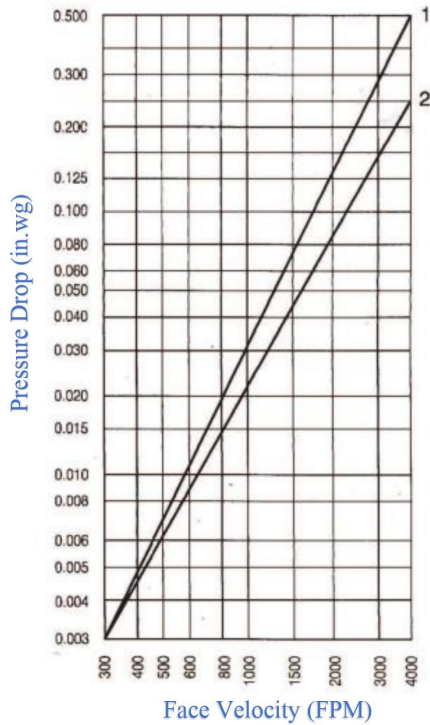
Construction and material

- Frame: 6" wide galvanized steel channel with welded/locked corners.
- Blades: Galvanized steel reinforced with 3 longitudinal "structurally designed Vees".
- Axles: 1/2"Ø plated steel.
- Bushings: Self oiling bronze bushings.
- Linkage: Exposed in frame.
- Control Shaft: 6" long plated steel 1/2" round to 1/2"x1/2" square.
- Hand Quadrant: For manual operation.
- Finish: Mill galvanized.



Performance data (Rectangular)

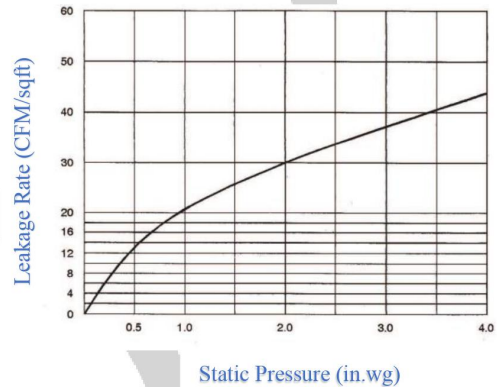
1. Volume control opposed blade damper
2. Volume control parallel blade damper.



Face Velocity (FPM)

Pressure Drop

Pressure Drop Vs. Face Velocity with Damper in Fully Open Position



Static Pressure (in. wg)

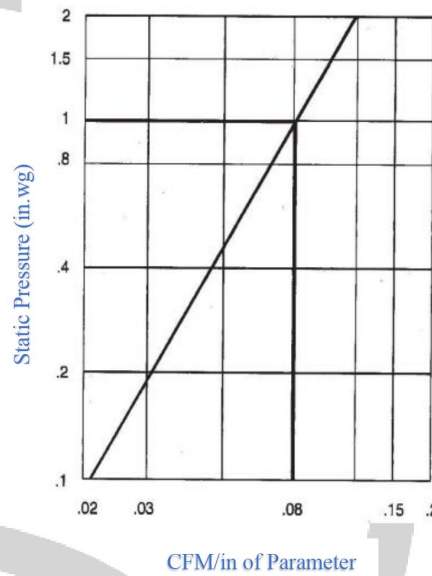
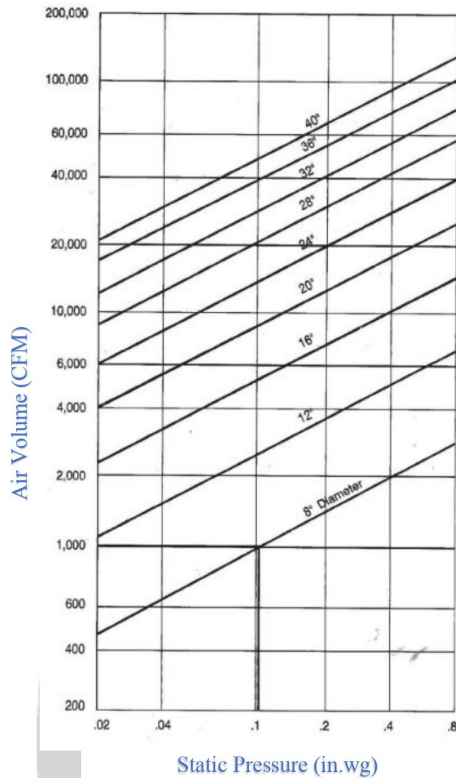
Leakage Chart

Technical Data Sheet



AirQon Synergies

Performance data (Round)



To calculate static pressure drop for an open damper, use these steps:

1. Access the damper pressure drop chart from the left side.
2. Based on the CFM of airflow through the damper, follow the corresponding CFM line.
3. Once you reach the diagonal line with the required damper size, go straight down to determine the static pressure drop of the unit.

Example: The pressure drop of an 8" damper with 1000 CFM flow is 6.11 inches w.g

To calculate damper leakage, follow these steps:

1. Start by accessing the damper Leakage chart from the right side.
2. Based on the static pressure the damper will experience when closed, move horizontally to the diagonal line.
3. Finally, move straight down the chart to find the CFM of leakage per inch of perimeter.

Example: Damper operating 1" W.G. static pressure will leak 0.08 CFM per inch of perimeter. Total leakage on an 8" round will be $8 \times 3.14 \times 0.08$ CFM per inch perimeter = 2 CFM leakage.

Static Pressure and CFM are corrected to 0.075 lb./cu.ft. air density

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Installation details

