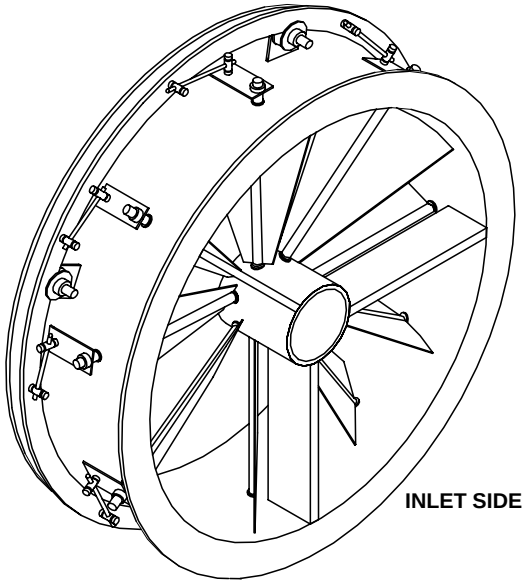
DEPENDABLE PRODUCTS SINCE 1955

VANE INLET DAMPER Model - VID

Primary Function – Designed for flow and modulation of CLASS I and CLASS II fans in clean or moderately dirty flow streams.

STANDARD CONSTRUCTION

FRAME
12 Ga. Galvanized Steel (see table below)
BLADES
16 Ga. Galvanized Steel
BLADE AXLES & BEARINGS
AXLE – 1/2" diameter plated steel
BEARING – stainless steel with trust washers
HUB
Open – 12 Ga. Galvanized Steel
LINKAGE
Plated Steel
MIN. & MAX. TEMPERATURE
-40^0 F to 250^0 F
MAXIMUM SIZE
72" Diameter
MINIMUM SIZE
12" Diameter
FINISH
Shop Primer
ACTUATOR
None



INLET SIDE

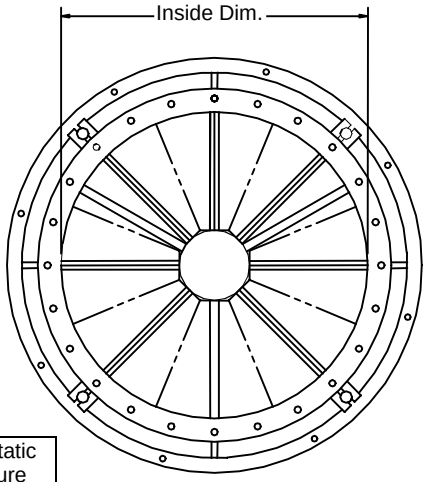
Specify Rotation of Inlet Air as Viewed From Inlet Side

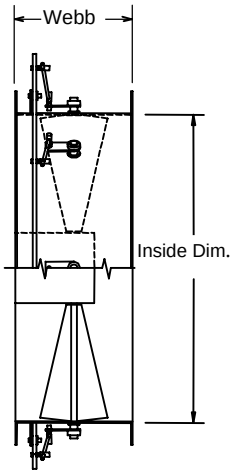
OPTIONAL CONSTRUCTION

SPECIFIED MATERIAL – Available in stainless steel
BLADE AXLES & BEARINGS – 3/4" to 2" dia
FINISH – Air-dry primer, polyurethane, epoxy, or enamel. Baked epoxy or enamel. For industrial special purpose coating, please consult Dowco.
BOLT HOLES – Based on standard bolt circles available
ACTUATORS – Manual, Electric, or Pneumatic.

SPECIAL PURPOSE CONSTRUCTION

For higher temperatures and velocities, please consult Dowco.





Bolt holes are optional

FRAME DIMENSIONS				
Inside Dim. (dia.) from	to	Flange	Webb	Max. Static Pressure
12"	25"	1-1/2 x 12 ga.	9" x 10 ga.	8" wg.
26"	42"	2 x 3/16 thk.	9" x 3/16"	8" wg.
43"	60"	2 x 3/16 thk	10" x 3/16"	6" wg.
61"	72"	2-1/2 x 3/16 thk	12" x 1/4"	4" wg.

DATE	ARCHITECT / ENGINEER	CUSTOMER		
PROJECT				
ITEM	QTY	W	H	DESCRIPTION

DEPENDABLE PRODUCTS SINCE 1955

SAFE-AIR/DOWCO

Engineering and General Offices

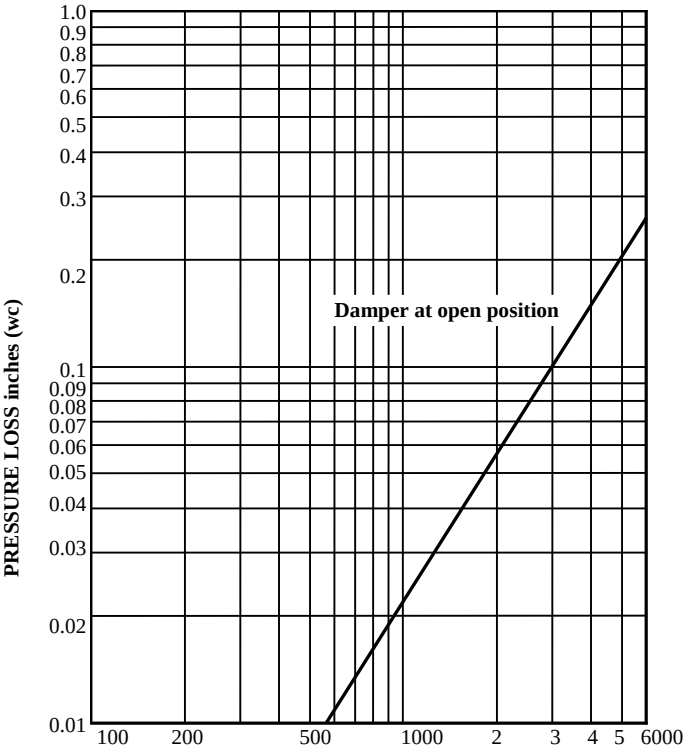
1855 South 54th Avenue, Cicero, Illinois 60804

Phone 708-652-9100 FAX 708-652-9158

VID – PERFORMANCE

All tests performed at an independent laboratory and based on AMCA standards for air performance.

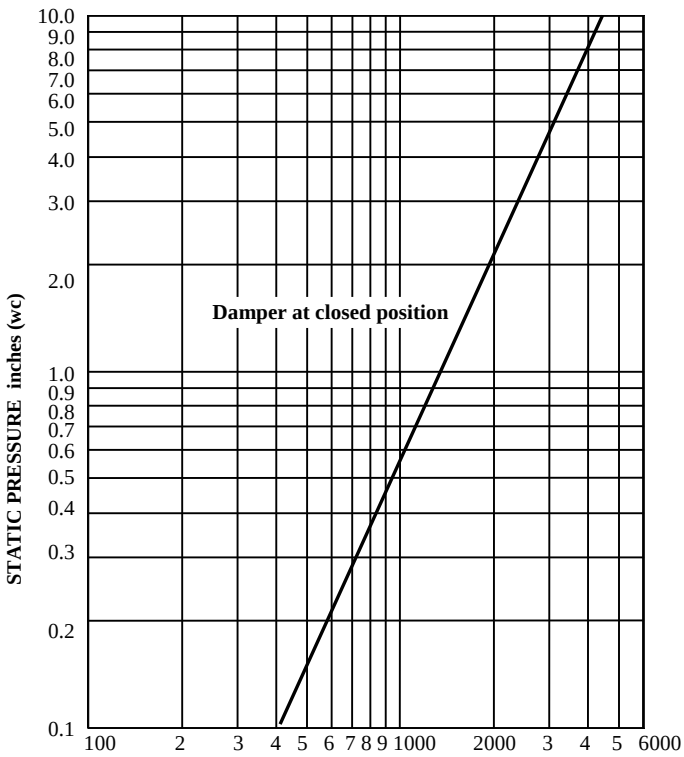
AIR PERFORMANCE



FACE AREA VELOCITY (fpm)

24" diameter sample tested per AMCA Std. 500, Figure 5.3

AIR LEAKAGE



LEAKAGE PER SQ. FT. OF FACE AREA (cfm)

48" diameter sample tested per AMCA Std. 500, Figure 5.5

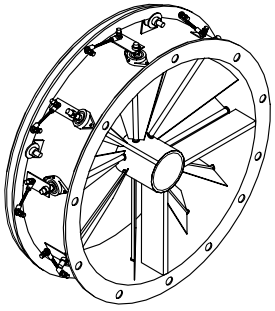
CALCULATING PRESSURE LOSS

Based upon a given flow rate (in CFM), the flowing pressure loss may be determined from the "air performance graph", knowing the sq. ft. of face area of the damper. Alternately, the face area may be determined based upon a volumetric flow rate and a maximum pressure loss. Utilizing the "air performance" graph.

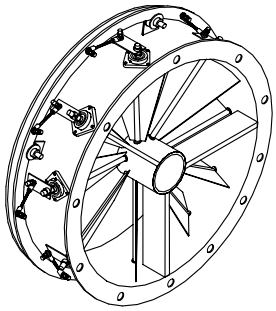
_____in. W.C. Max. Pressure Loss Intake or Exhaust

_____FPM (Face Area Velocity From "Air Performance" Graph)

_____CFM / ____ FPM Free Area Velocity = _____Sq. Ft. Face Area



With 2-bolt flange bearing



With 4-bolt flange bearing

STANDARD BOLT HOLE PATTERN FOR VANE INLET DAMPERS				
Order Size (Inches)	Flange (F)	Holes Size (Diameter)	Number of Holes	Bolt Cirle Factor
12 to 18	1-1/2"	7/16"	8	2"
19 to 22	1-1/2"	7/16"	12	1-3/4"
23 to 24	1-1/2"	7/16"	12	1-7/8"
25	1-1/2"	7/16"	16	1-7/8"
26 to 36	2"	7/16"	16	2-3/8"
37 to 50	2"	7/16"	24	2-3/8"

- Actual I. D. Size = Order Size + 1/8"
- Actual O. D. Size = Actual I. D. Size + (F x 2)
- Bolt Circles = Order Size + Bolt Circle Factor

Bolt holes start perpendicular to blade axles (12 o'clock)