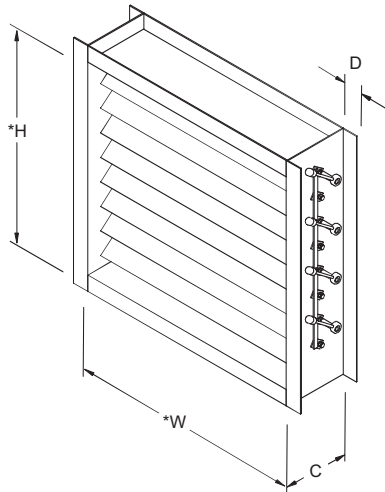
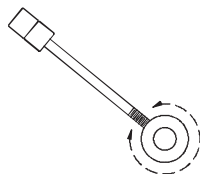
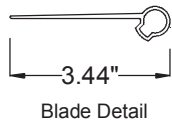


Model BD-200-ID-AL Industrial Backdraft Damper



- * Actual Inside Dimensions (not undersized)
- ** The W dimension is ALWAYS parallel with the damper blade length.



Precision Counter Balanced; both by rotation in hub or slide weight up or down the rod in addition to removal or adding weights.

Application

The BD-200-ID-AL is a heavy duty flanged frame style industrial backdraft damper. It is designed to control backflow and provide shut off in HVAC or industrial process control systems. A variety of optional features (see page 3), makes Model BD-200-ID-AL extremely versatile, allowing its capabilities to be tailored to the application.

Standard Construction

- Frame: 2" x 8" 14 Ga. Galvanized Steel Channel
- Blade: 6060T5 Extruded Aluminum .125 thickness
- Blade Seal: PVC (180°F)
- Linkage: Zinc plated concealed
- Axles: 1/2" diameter cast zinc
- Bearings: Stainless Steel sleeve type

Min. Size Single blade- 6" w x 5" h
Multiple blades- 6" w x 9" h

Max. Single Section 48" w x 48" h

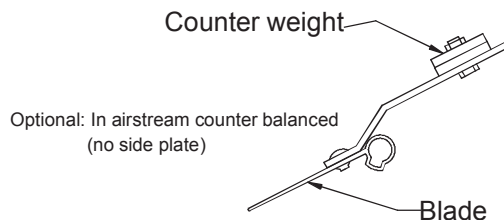
Max. Double Section 96" w x 96" h

Ratings

- Pressure: 5 to 8-1/2 in. w.g. - differential pressure
- Velocity: 4000 FPM
- Temperature: 180° F

Options

- All Aluminum Construction (linkage epoxy coated)
- All #304 Stainless Steel Construction
- All #316 Stainless Steel Construction
- Pressed Ball Bearings
- Heavy Duty Ball Bearings (2 hole flange)
- 12 Ga. Galvanized Frame
- 10 Ga. Galvanized Frame
- Bolt Holes (both sides)
- 450°F Silicone Blade Seals



Optional: In airstream counter balanced (no side plate)

Due to continuing research, MAT reserves the right to change specifications without notice.

Model BD-200-ID-AL (4000 FPM)

Represented by:

6235 South Oak Park Avenue Chicago, IL 60638 USA
Toll free: 800.585.7686 +1.708.552.4040
Fax: +1.708.594.0396 www.metairtech.com

Model BD-200-ID-AL Industrial Backdraft Damper

Performance Data

Pressure Limitations

The chart at the right shows conservative pressure limitations based on a maximum blade deflection of $w/360$.

Temperature Limitations

Blade seals: PVC -40° to +180°F
(for higher temperatures, consult MAT)

Velocity Limitations

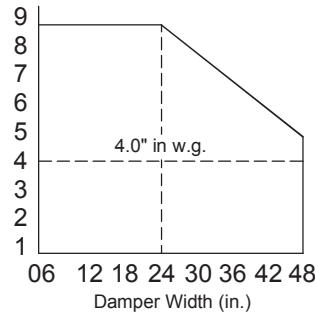
The chart at the far right shows conservative velocity limitations.

Pressure Drop Data

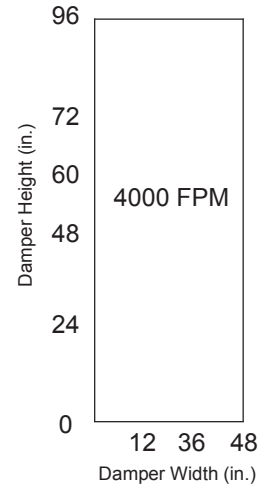
Actual pressure drop found in any HVAC system is a combination of many factors. This pressure drop information along with an analysis of other system influences should be used to estimate actual pressure losses for a damper installed in a given HVAC system.

Leakage Data

Damper leakage (with blades fully closed) varies based on the type of low leakage seals applied.

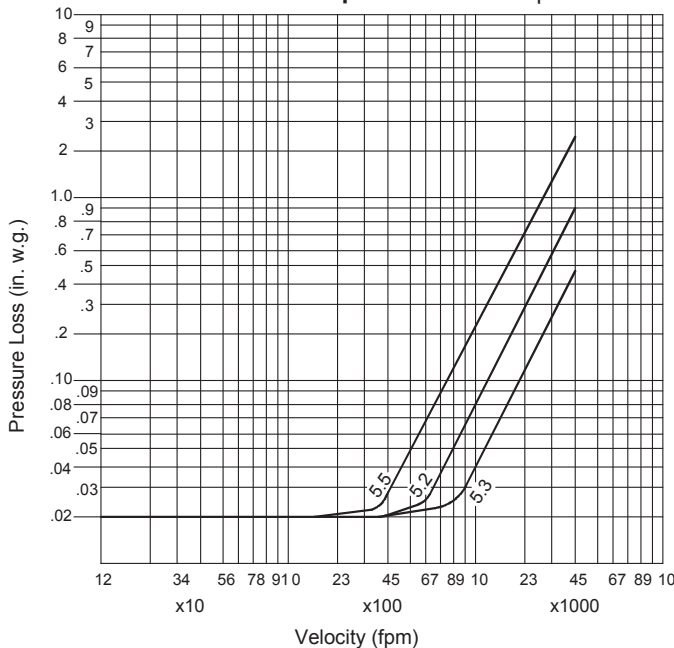


Pressure Limitations



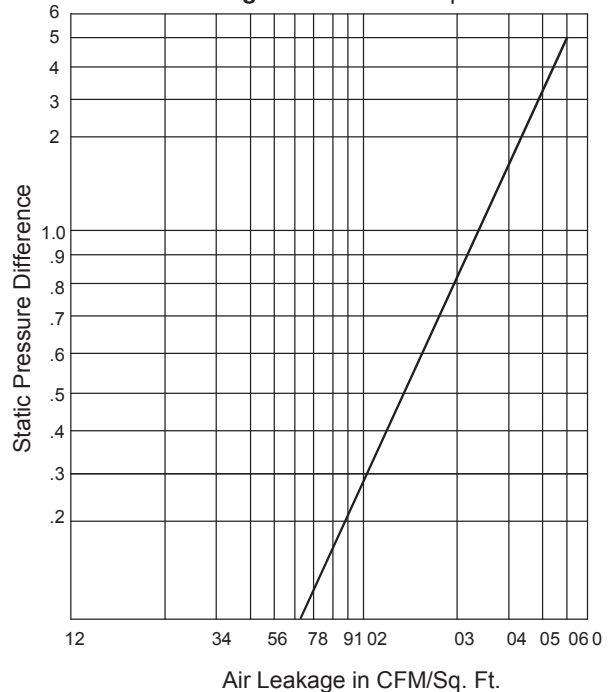
Velocity Limitations

Pressure Drop - 36" x 36" Damper



5.5, 5.2, & 5.3 AMCA Set-ups

Leakage - 36" x 36" Damper



Model BD-200-ID-AL Industrial Backdraft Damper

Frame Construction Options

Flange (D Dim): Standard - 2", optional - 1 1/2" - 4"

Web (C Dim): Standard - 10", optional - 8" - 12"

Bolt holes: (Standard does not include bolt holes)

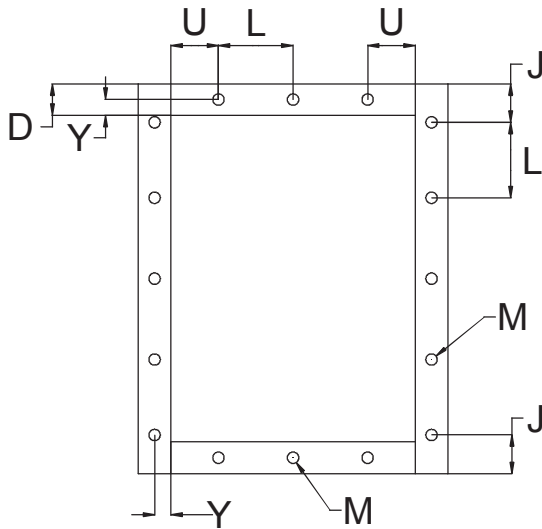
Optional - MAT recommended standard pattern.

7/16" dia. holes (M dimension)

Spaced 6" C-C (L dimension)

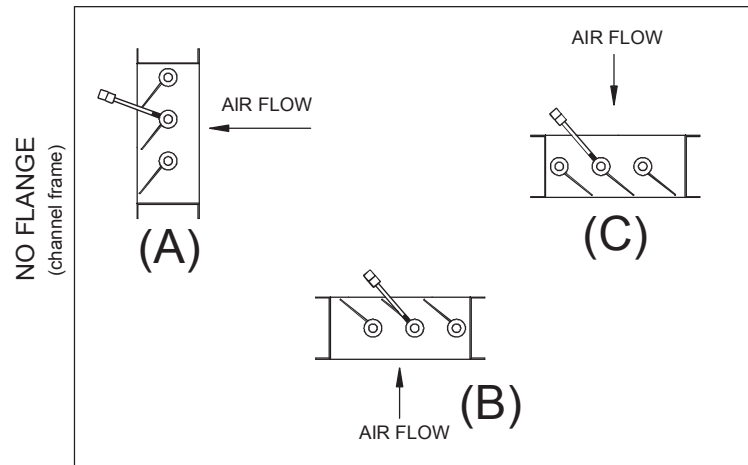
Optional- Customer may specify within limits shown in table.

Dim.	Standard (Min./Max)	Description
J	(D/2 min.)	First/Last Space in Jamb
F	(1 min.)	No. of holes in Jamb
L	6" (2"/12")	Hole Spacing
M	7/16" (1/4"/11/16")M	ounting hole Diameter
U	(3/4" min.)	First/Last Space in Head/Sill
V	(1 min.)	No. of holes in Head/Sill
Y	D/2M (3/4"/D-3/4")	Centerline of bolt hole from inside edge of frame



BD-200-ID-AL AIR FLOW ARRANGEMENTS

Standard counter weights at jamb
(assist to close)



Model BD-200-ID-AL Industrial Backdraft Damper

Frame Construction Options

Specifications

Industrial grade control dampers meeting the following specifications shall be furnished and installed where shown on plans and/or as described in schedules. Dampers shall consist of: a 14 ga. galvanized steel channel frame with 8" minimum depth and 2" flanges; .125" thick extruded aluminum blades, 1/2" cast aluminum axles turning in stainless steel sleeve bearings; and external (out of the airstream). Damper manufacturer's printed application and performance data including pressures to 8-1/2" w.g. velocities to 5000 fpm and temperatures to 180°F. Basis of design is MAT BD-200-ID-AL.

