

Application

BD-30-SS backdraft dampers employ gravity operated formed style blades to restrict reverse airflow and to permit the forward flow of air in the intended direction. The BD-30-SS damper may be mounted vertically or horizontally in either exhaust or intake installations for low velocity and pressure applications.

Standard Construction

Frame: 2" x 1/2" x 20 ga. (51 x 13 x 0.95) 304 stainless steel channel.

Blades: 22 gauge (0.80) 304 stainless steel formed.

Axles: 3/16" (4.8) diameter synthetic.

Linkage: 22 gauge (0.80) 304 stainless steel.

Bearings: Synthetic.

Seals: Neoprene blade edge seals.

Minimum Size: 6" x 6" (152 x 152)

Maximum Size: Single Section: 36" x 24" (914 x 610)
Multiple Sections: Unlimited

Options

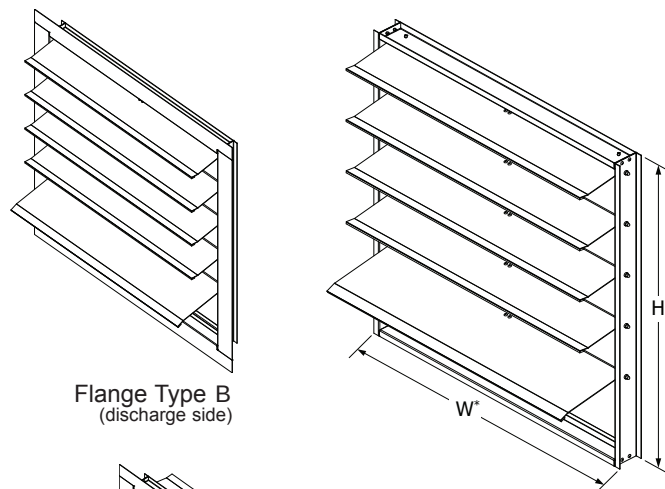
- ☐ Integral 1 1/2" mounting flange:
 - ☐ Type B (discharge side) ☐ Type C (intake side)
- ☐ Factory installed sleeve.
 - Gauge: ☐ 20 (.95) ☐ 16 (1.6)
 - Length: ☐ 10" (254) ☐ 12" (305) ☐ 24" (610) ☐ Other ____
- ☐ Transitions (sleeve required): ☐ Flanged
Round: ☐ AR Oval: ☐ AO
- ☐ Type-316 stainless steel construction.

Ratings

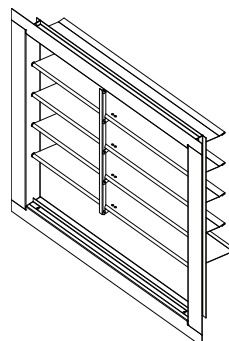
Damper Width	Maximum System Pressure	Maximum System Velocity
12" (305)	3.5 in. wg (0.9 kPa)	1250 fpm (6.4 m/s)
24" (610)	3.0 in. wg (0.8 kPa)	1250 fpm (6.4 m/s)
36" (914)	2.0 in. wg (0.5 kPa)	1250 fpm (6.4 m/s)

Leakage: 9.5 cfm/ft² @ 3.5 in. wg. (0.05 m³/s/ m²@ 0.9 kPa)
8.5 cfm/ft² @ 3.0 in. wg. (0.04 m³/s/ m²@ 0.8 kPa)
7.0 cfm/ft² @ 2.0 in. wg. (0.03 m³/s/ m²@ 0.5 kPa)

Temperature: -25°F to 150°F (-32°C to 66°C)



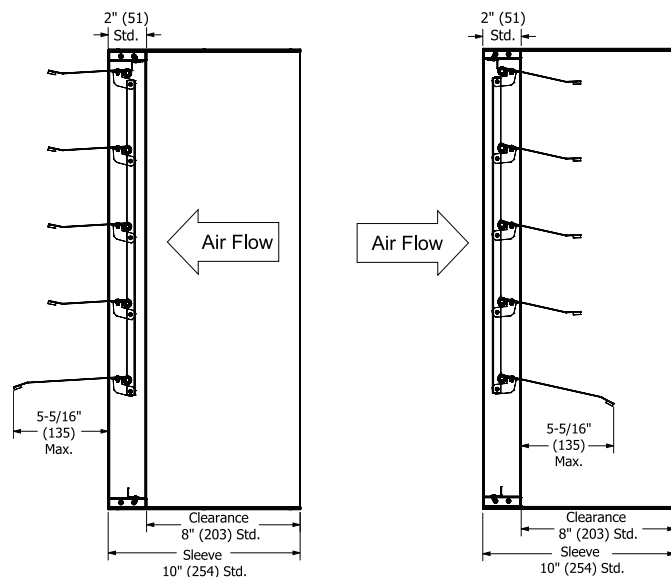
Flange Type B
(discharge side)



Flange Type C
(intake side)

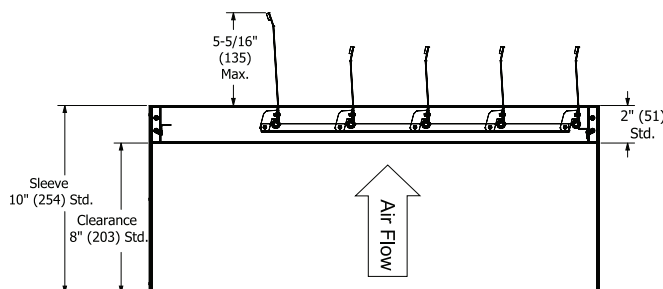
Model BD-30-SS
(standard)

*Damper dimensions furnished approximately 1/4" (6) undersize.



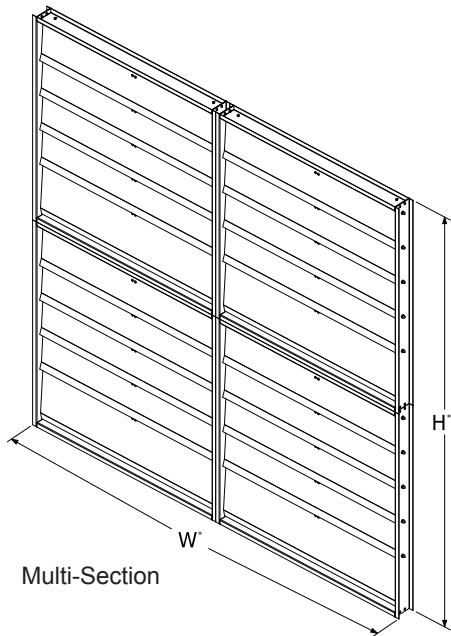
Vertical Mount with Sleeve
Discharge.

Vertical Mount with Sleeve
Intake.



Horizontal Mount
Up-flow only.

Typical Damper Dimensional Details



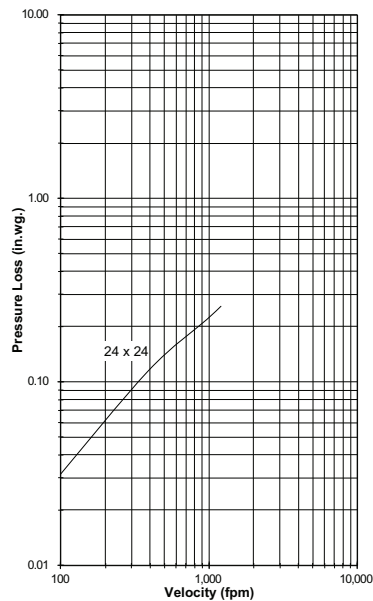
Dampers are designed to be self-supporting in the maximum single section size. When dampers are installed in multiple section assemblies, bracing may be required to support the weight of the dampers and to ensure structural integrity against system pressures.

*Damper dimensions furnished approximately 1/4" (6) undersize.

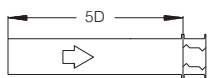
Airflow Performance Data

Pressure Loss vs. Velocity

Figure 5.2 — Ducted Inlet



Pressure drop testing was performed in accordance with AMCA Standard 500-D using Figure 5.2 — Ducted Inlet. All data has been corrected to represent air density of 0.075 lb/ft. Actual pressure drop in any ducted HVAC system is a combination of many elements. This information, along with analysis of other system influences, should be used to estimate actual pressure losses for a damper installed in a given HVAC system.



Ducted Inlet

AMCA Figure 5.2 illustrates a ducted damper exhausting air into an open area.

Pressure Limitations

