

ABD-RB

Automatic Balancing Damper for Register Boxes

Application

Model ABD-RB combines a Greenheck Automatic Balancing Damper (model ABD) with the convenience of a factory supplied register box. The ABD-RB can be configured for supply or exhaust applications and can be mounted in both walls and ceilings.

In addition, the ABD can be mounted in either the side or the back of the register box. All ABD models maintain a constant cfm independent of the system pressure to prevent over or under ventilation. The ABD-RB is also available with a factory supplied grille.

Ratings

Pressure

0.2 in wg to 2.0 in. wg (0.05 kPa to 0.5kPa)

Volume

25 cfm to 425 cfm (0.012 m³/s to 0.201 m³/s) size dependent

Temperature

25°F to 150°F (-4°C to 65°C)

UL Classified

UL 2043 for heat and visible smoke release

Construction

	Standard		
Plenum Box	Steel		
Frame Material	Reinforced UL 94 Thermoplastic Resins		
Blade Material	Reinforced UL 94 Thermoplastic Resins		
Bearings	Hydraulic blade dampener		
Outer Seal	Removable rubber gasket		
Spring	Stainless steel leaf type		
Anti-Microbial Agent	Steri-Balance [™] infused into plastic		
Adapter	Quick-connect adapter ring included		
Steel Collar	Optional		





See complete marking on product. UL 2043 Classification R39668

Airflow Range by Size

Diameter (mm)	Individual Set Points	Airflow Range - CFM* (m³/s)
4 in (102)	20	25 to 130 (.012 to .061)
5 in (127)	20	25 to 130 (.012 to .061)
6 in (152)	24	50 to 275 (.024 to .130)
8 in. (203) Exhaust	26	125 to 400 (.059 to .189)
8 in. (203) Supply	26	105 to 425 (.050 to .201)

* Note: Airflow range determined through +/- 10% of average airflow over the pressure range.

Notes:

- When steel collar is selected, ABD valve is shipped loose for field installed.
- Valve diameter drives steel collar diameter.



Back Mounted Box by Valve Diameter

Diameter (mm)	Grille Box Sleeve Size in inches (mm)*
4 in (102)	6 x 6 x 1½ (152 x 152 x 38); 6 x 6 x 5½ (152 x 152 x 143); 8 x 8 x 1½ (203 x 203 x 38):
5 in (127)	6 x 6 x 1½ (152 x 152 x 38); 6 x 6 x 5½ (152 x 152 x 143); 8 x 8 x 1½ (203 x 203 x 38)
6 in (152)	6 x 6 x 1½ (152 x 152 x 38); 8 x 8 x 1½ (203 x 203 x 38); 10 x 10 x 6‰ (254 x 254 x 175)
8 in. (203)	10 x 10 x 1½ (254 x 254 x 38) 10 x 10 x 8 ½ (254 x 254 x 225)

*6 x 6 x 1 $^{1\!\!/_2}$ inch grille box is undersize a $^{1\!\!/_2}$ in. (6mm). Other box sizes are actual size.

Side Mounted Box by Valve Diameter

Diameter (mm)	Grille Box Sleeve Size in inches(mm)		
4 in (102)	6 x 6 x 5% (152 x 152 x 143)		
5 in (127)	6 x 6 x 5½ (152 x 152 x 143)		
6 in (152)	10 x 10 x 67/8 (254 x 254 x 175)		
8 in. (203)	10 x 10 x 8% (254 x 254 x 225)		

Document Links

Instruction Manual



Specifications



ABD Trifold





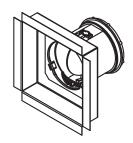


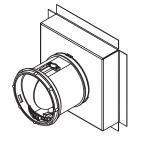
Warranty





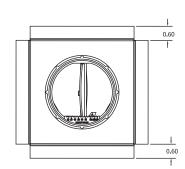
Back Mounted Dimensional Drawings

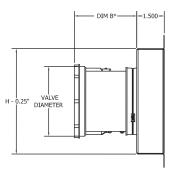




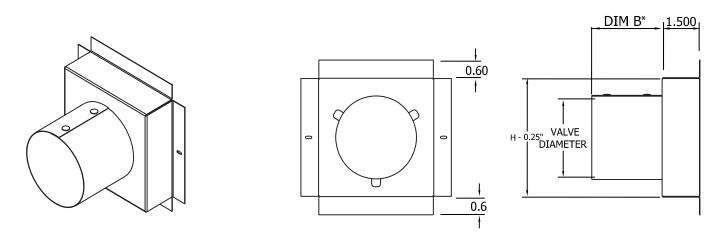
4" INCH MODEL WITH 6" X 6" GRILL MOUNT SHOWN ON INTAKE SIDE OF DAMPER

4" INCH MODEL WITH 6" X 6" GRILL MOUNT SHOWN ON EXHAUST SIDE OF DAMPER SHOWN



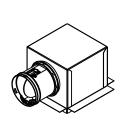


Factory Supplied Steel Collar

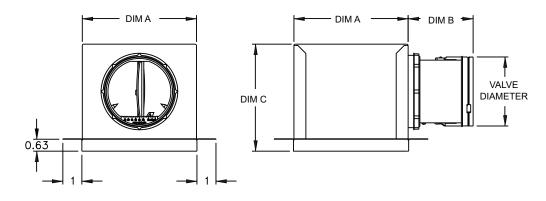


Diameter (mm)	Valve Diameter (mm)	Dim "B" (mm)	
4 in (102)	3.66 in (93)	3.48 in (89)	
5 in (127)	4.81 in (122)	3.72 in (94)	
6 in (152)	5.66 in (144)	5.29 in (134)	
8 in. (203)	7.66 in. (195)	6.96 in. (177)	

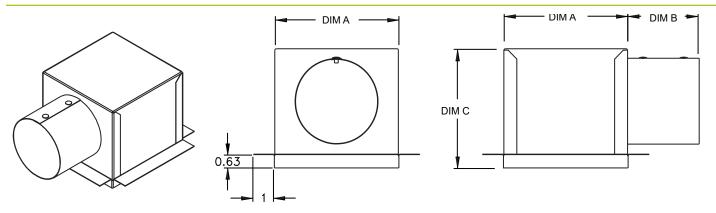
Side Mounted Dimensional Drawings



4 in. model with 6 in. x 6in. grill mount shown on intake side of damper

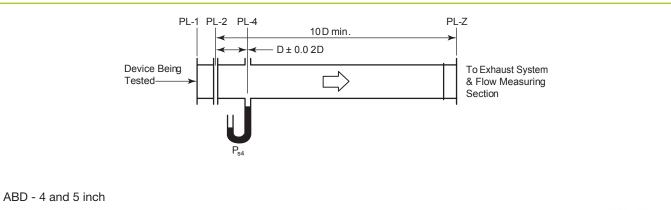


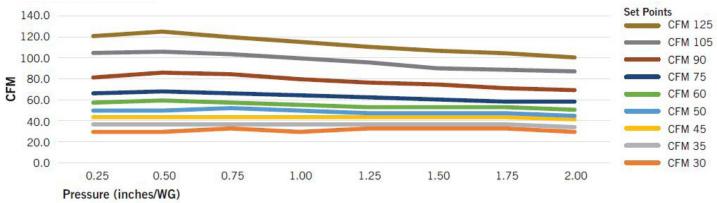
Factory Supplied Steel Collar



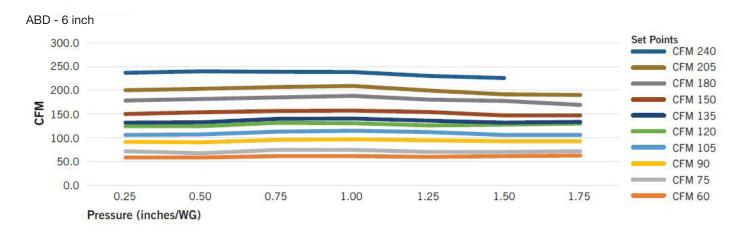
Diameter (mm)	Valve Diameter (mm)	Dim "A" (mm)	Dim "B" (mm)	Dim "C" (mm)
4 in (102)	3.66 in (93)	6 in (152)	3.48 in (89)	5.63 in (143)
5 in (127)	4.81 in (122)	6 in (152)	3.72 in (94)	5.63 in (143)
6 in (152)	5.66 in (144)	10 in (1520)	5.29 in (134)	6.88 in (175)
8 in. (203)	7.66 in. (195)	10 in. (1520)	6.96 in (177)	8.88 in (225)

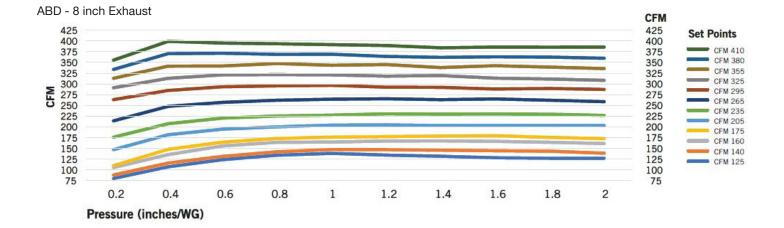
Performance Data - Tested to AMCA Figure 5.1

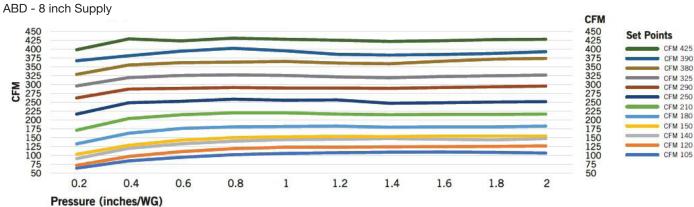




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