

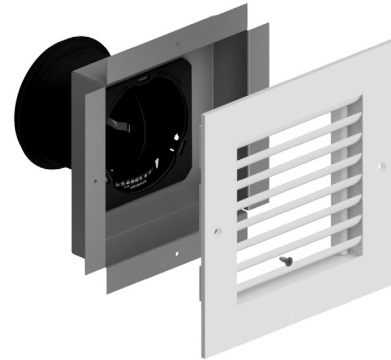
Automatic Balancing Damper with Grille Mount Box

Application and Design

Model ABD-GM is an automatic balancing damper with a flanged grille mount box. The damper is designed to maintain a constant airflow volume in HVAC applications. The damper blade is calibrated to automatically adjust to changing pressures. The grille mount box will allow for the insertion of a standard depth grille. The ABD-GM can be used in both supply and exhaust applications.

Ratings

Pressure: 0.2 in. wg (.05 kPa) to 2.0 in. wg (.50 kPa)
 Velocity: 25 cfm (.012 m³/s) to 275 cfm (.130 m³/s)
 Temperature: 25° F (-4°C) to 150° F (65°C)
 UL Classified: Classified by UL to UL 2043 for heat and visible smoke release (UL File R39668)



Construction	Standard
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



See complete marking on product.
 UL 2043 Classification
 R39668

Airflow Range by size

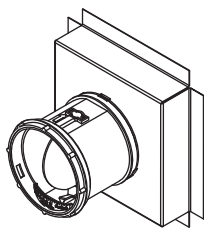
Diameter	Individual Set Points	Airflow Range (CFM)*
4 in (102mm)	20	25 to 130 (.012 to .061m ³ /s)
5 in (127mm)	20	25 to 130 (.012 to .061m ³ /s)
6 in (152mm)	24	50 to 275 (.024 to .130 m ³ /s)

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

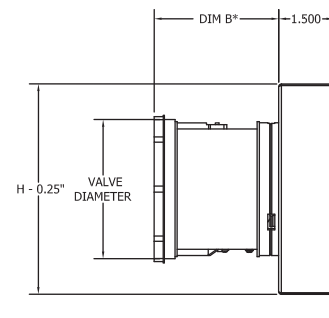
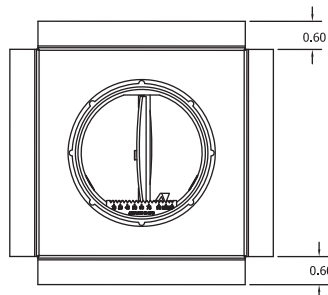
Grille Mount Box by Diameter

Diameter	Grille Box Sleeve Size in inches (mm)
4 in (102mm)	6 x 6 (152 x 152) and 8 x 8 (203 x 203)
5 in (127mm)	6 x 6 (152 x 152) and 8 x 8 (203 x 203)
6 in (152mm)	6 x 6 (152 x 152) and 8 x 8 (203 x 203)

Dimensional Drawings - Exhaust Mount

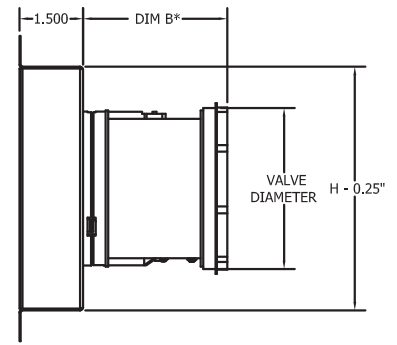
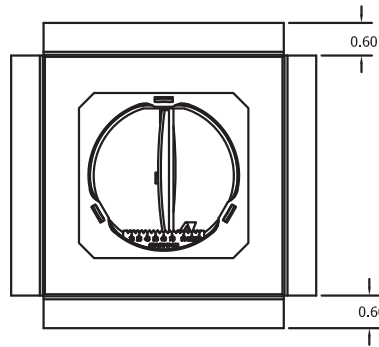
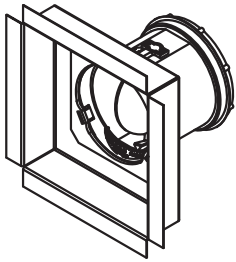


4" INCH MODEL WITH 6" X 6" GRILLE MOUNT SHOWN ON EXHAUST SIDE OF DAMPER SHOWN



Diameter	Valve Diameter	Dim "B"
4 in (102mm)	3.66 in (93mm)	3.44 in (87mm)
5 in (127mm)	4.81 in (122mm)	3.72 in (94mm)
6 in (152mm)	5.66 in (144mm)	5.22 in (133mm)

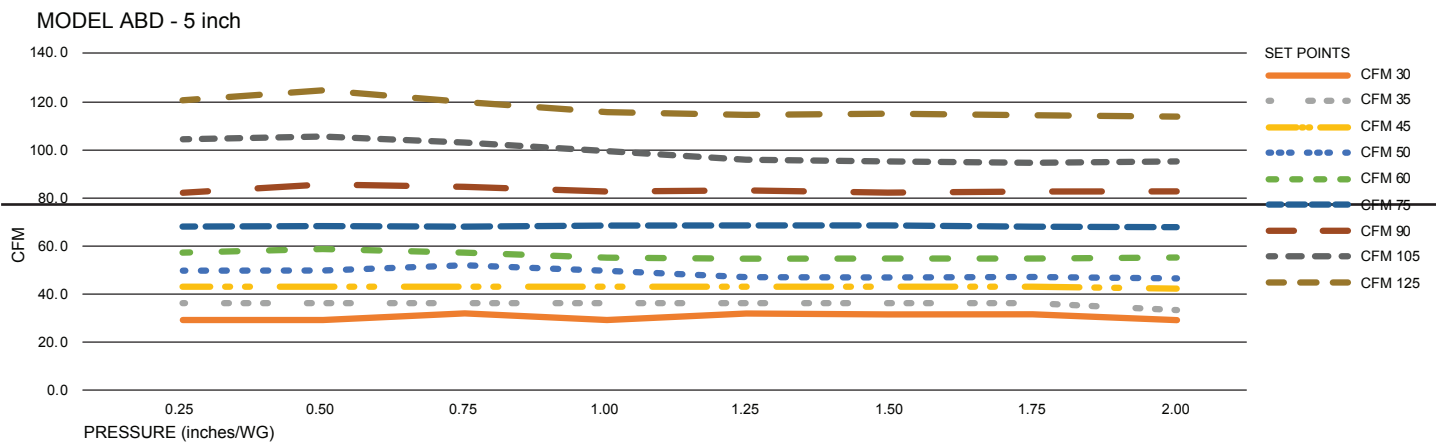
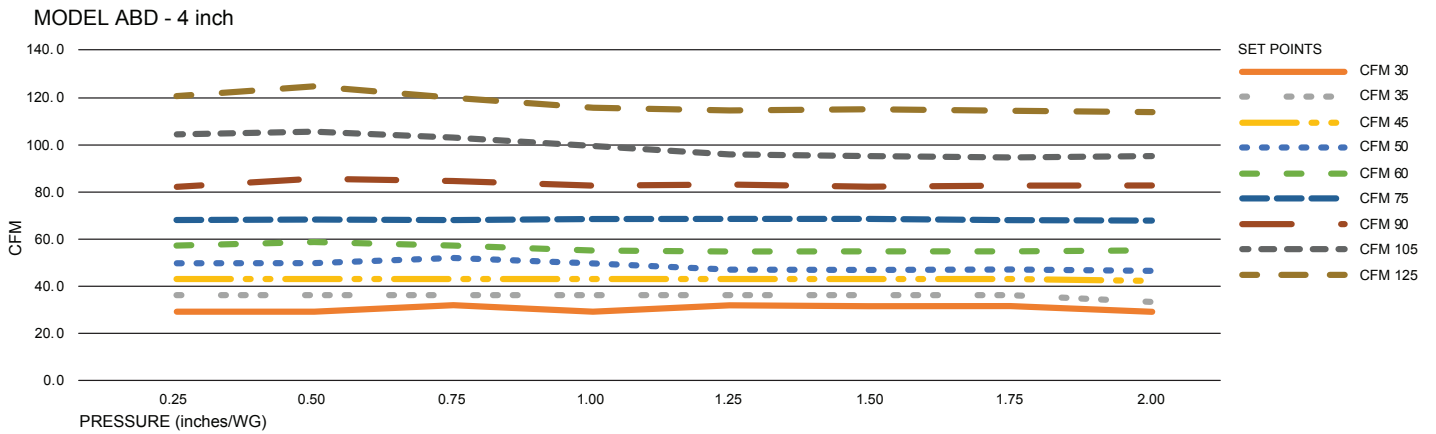
Dimensional Drawings - Intake Mount

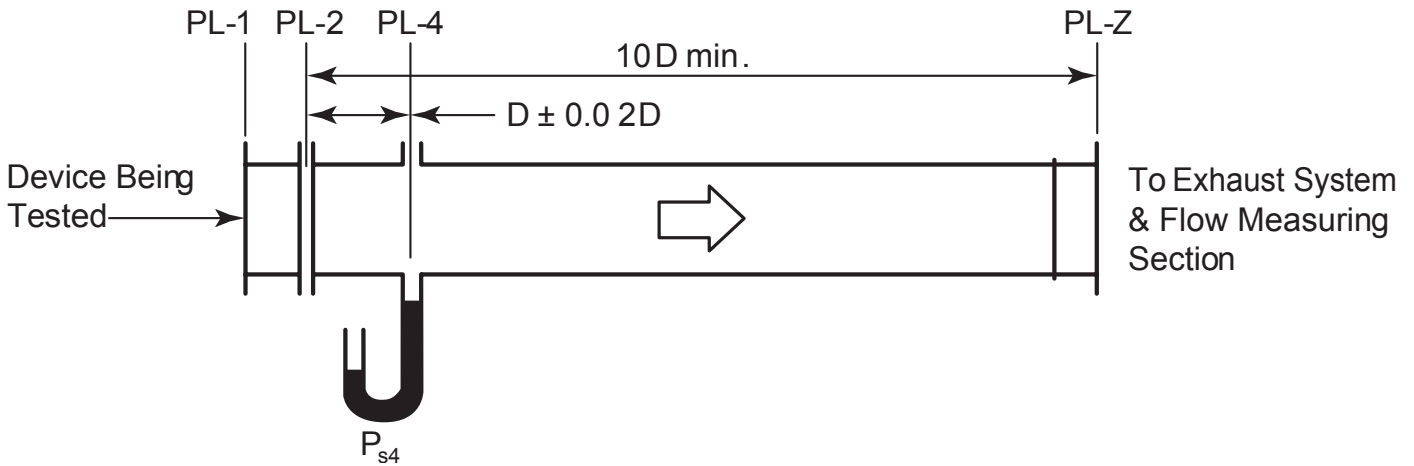
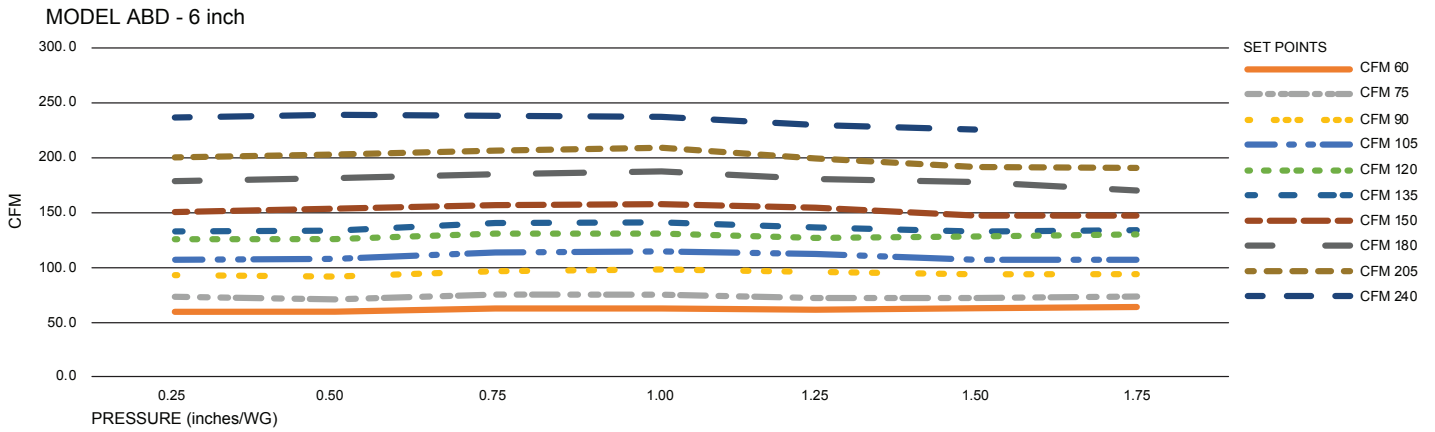


4" INCH MODEL WITH 6" X 6" GRILL MOUNT
SHOWN ON INTAKE SIDE OF DAMPER

VALVE DIAMETER	DIM B*
4"	3.44
5"	3.72
6"	5.22

Performance Data - Tested to AMCA Figure 5.1





Specifications

Automatic balancing dampers meeting the following specifications shall be furnished and installed where shown on plans and/or as described in schedules. Dampers shall respond automatically to changes in duct pressure without the need for a power supply. Dampers shall meet be tested, rated, and labeled in accordance with the latest edition of UL Standard 2043 for heat and visible smoke release.

Dampers shall incorporate a hand-operated manual set-point adjustment feature that allows for field adjustment without the use of tools. All set points shall operate within +/- 10% of the airflow set point. Individual set points shall be laboratory calibrated and tested in accordance with AMCA 500-D-12.

Damper frame and blades shall consist of reinforced UL 94 thermoplastic resins, infused with Steri-Balance™ anti-microbial agent. Bearings shall be hydraulic blade dampener. Outer damper seal shall be removable rubber gasket-type around circumference of damper. Damper spring shall be stainless steel leaf type.

Dampers shall be suitable for pressures up to 2 in. wg (.50 kPa), velocities up to 275 CFM (.130 m³/s), and temperatures ranging from 25° (-4°C) to 150°F (65°C).

Basis of design is Greenheck's ABD-GM.

