

Application

Model ABD-Z1 is designed to provide on demand control to a ventilation system. The ABD-Z1 has a shut off damper with an electric actuator, automatic balancing damper (ABD), and a plenum box as one assembly.

The ABD is designed to maintain a constant airflow volume in HVAC applications. The damper blade is calibrated to automatically adjust to changing pressures.

Optional grilles are available.

Building Types

- Apartments and Condos
- Education Building and Dormitories
- Hospital and Clinics
- Hotels and Motels
- Nursing Homes and Assisted Living

Ratings

Pressure

0.2 in. wg to 2.0 in. wg (0.05 to 0.50 kPa)

Volume

25 cfm to 275 cfm (0.012 to 0.130 m³/s)

Temperature

25° F to 150° F (-4°C to 65°C)

UL Classified

Classified by UL to UL 2043 for heat and visible smoke release (UL File R39668)

Airflow Range by Size

ABD Diameter	Individual Set Points	Airflow Range (CFM)*
4 in (102mm)	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.

Plenum Box by Diameter

Diameter	Grille Box Sleeve Size in Inches (mm)
4 in (102mm)	8 x 8 x 7 (203 x 203 x 178)
6 in (152mm)	10 x 10 x 8½ (254 x 254 x 216)



See complete marking on product.

UL 2043 Classification
R39668

Construction

Construction	Standard
Plenum Box	Steel
Round Control Damper Construction	
Frame Material	Galvanized steel
Frame Thickness	24 ga. (0.7 mm)
Blade Material	Galvanized steel
Blade Seal	Silicone
Axle Bearings	Synthetic
Axle Material	Plated steel
Actuator	120V or 24V with auxiliary switches
ABD Construction	
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

Document Links

[Installation Instructions](#)



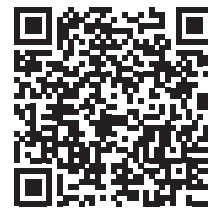
[Damper Interactive Selection Guide](#)



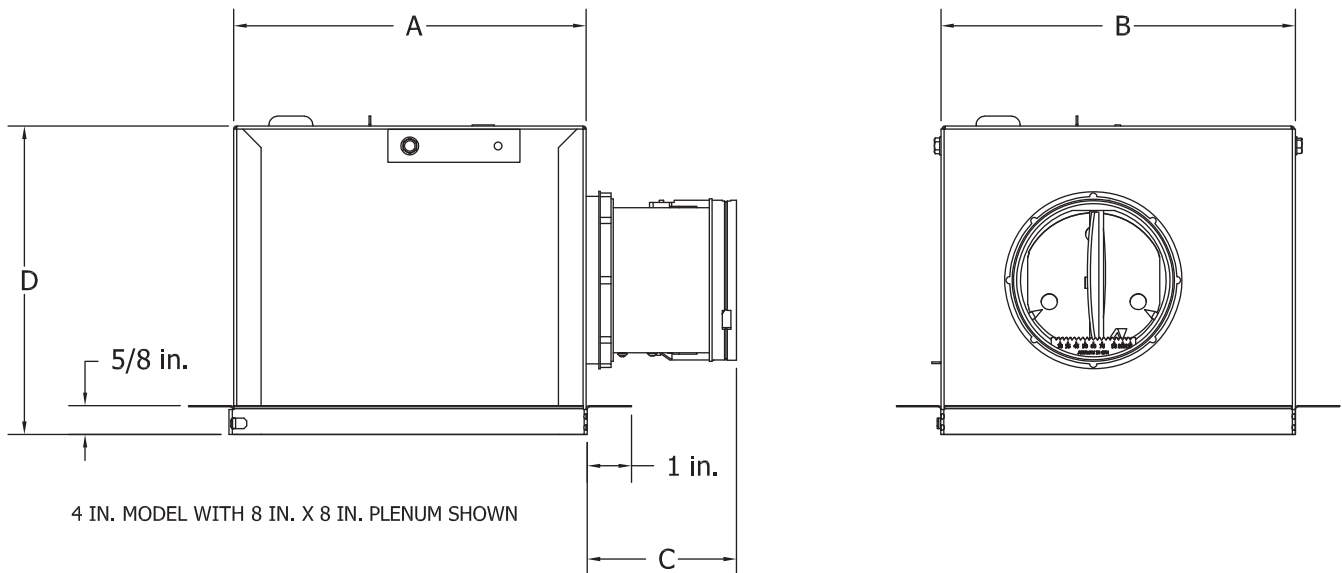
[Damper Warranty](#)



[Specifications](#)



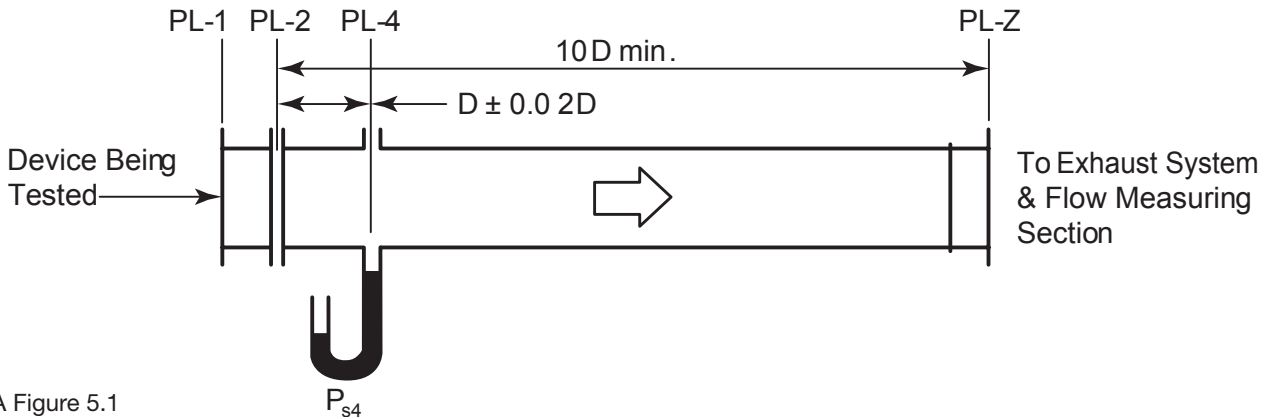
Dimensional Drawings - Intake Mount



Size	A	B	C	D
4 in.	8	8	4½	7
6 in.	10	10	5½	8½

Dimensions in inches.

Performance Data - Tested to AMCA Figure 5.1



AMCA Figure 5.1

