

## Application

Model ABD-Z2 has an integral automatic balancing damper (ABD) that can toggle between two pressure independent cfm setpoints by way of an electric actuator (included). The low-point setpoint maintains a constant minimum ventilation rate, while the high-flow setpoint provides boosted on-demand ventilation. The ABD-Z2 is ideal for helping achieve the requirements of ASHRAE 62.2 for acceptable indoor air quality.

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 return/exhaust grille is 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 (.05 kPa) to 2.0 in. wg (.50 kPa)

### Volume

25 cfm (.012 m<sup>3</sup>/s) to 275 cfm (.130 m<sup>3</sup>/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)



Optional grille shown.



See complete marking on product.

UL 2043 Classification  
R39668

## Construction

Construction	Standard
Plenum Box	Steel
Actuator	24V or 120V with auxiliary switches
<b>ABD Construction</b>	
Blade Material	Reinforced UL 94 thermoplastic resins
Frame 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

## Airflow Range by Size

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

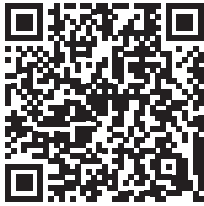
\* Note: Airflow range determined through +/- 10% of average airflow over the pressure range.

## 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)

## Document Links

[Instruction Manual](#)



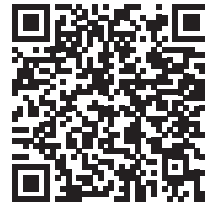
[Damper Interactive Selection Guide](#)



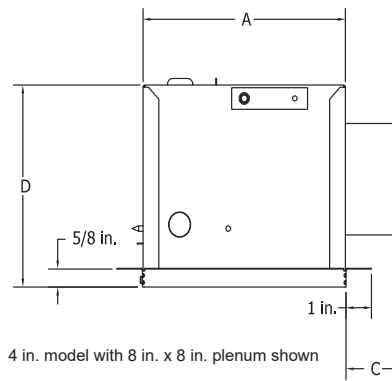
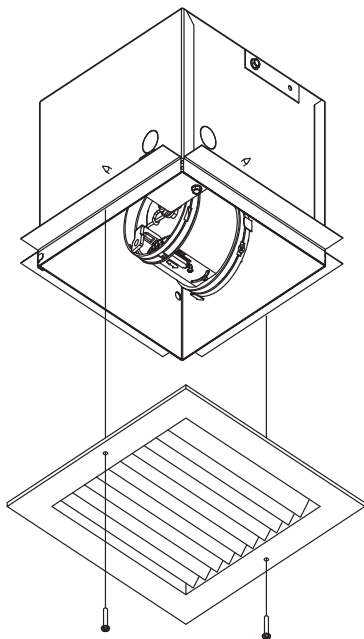
[Specifications](#)



[Warranty](#)



## Dimensional Drawings - Intake Mount



Size (in inches)	A	B	C	D
ABD-Z2 4 in.	8	8	2 <sup>5</sup> / <sub>32</sub>	7
ABD-Z2 6 in.	10	10	2 <sup>5</sup> / <sub>32</sub>	8 <sup>1</sup> / <sub>2</sub>

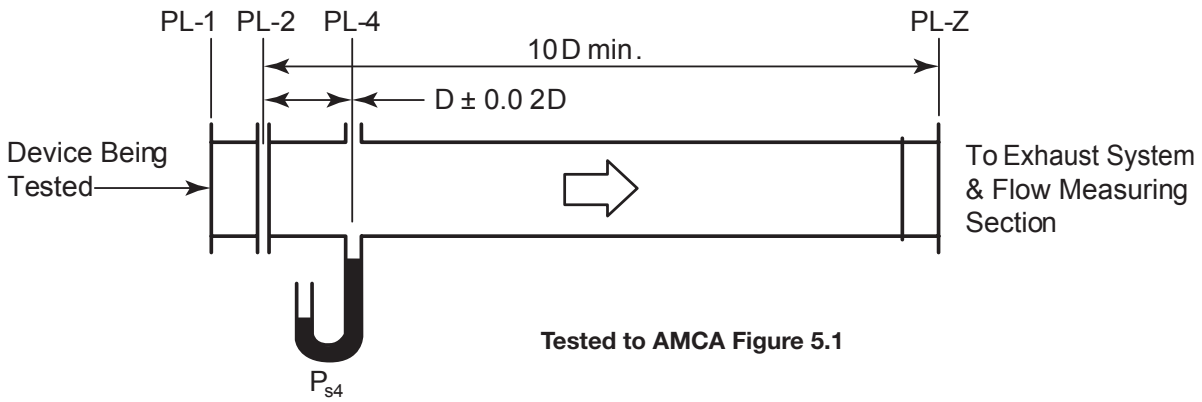
		Minimum CFM Setpoint																	
		25	30	33	35	40	45	48	50	55	60	68	75	80	85	90	95	100	105
Maximum CFM Setpoint	30																		
	33	X																	
	35	X	X																
	40	X	X	X															
	45	X	X	X	X														
	48	X	X	X	X	X													
	50	X	X	X	X	X	X												
	55	X	X	X	X	X	X	X											
	60	X	X	X	X	X	X	X	X										
	68	X	X	X	X	X	X	X	X	X									
	75	X	X	X	X	X	X	X	X	X	X								
	80	X	X	X	X	X	X	X	X	X	X	X							
	85	X	X	X	X	X	X	X	X	X	X	X	X						
	90	X	X	X	X	X	X	X	X	X	X	X	X	X					
	95	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
	100	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
105	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
115	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
125	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
		X = Adjustment with linkage in primary position X = Adjustment with linkage in alternate position																	

See instruction manual for alternate linkage set-up.

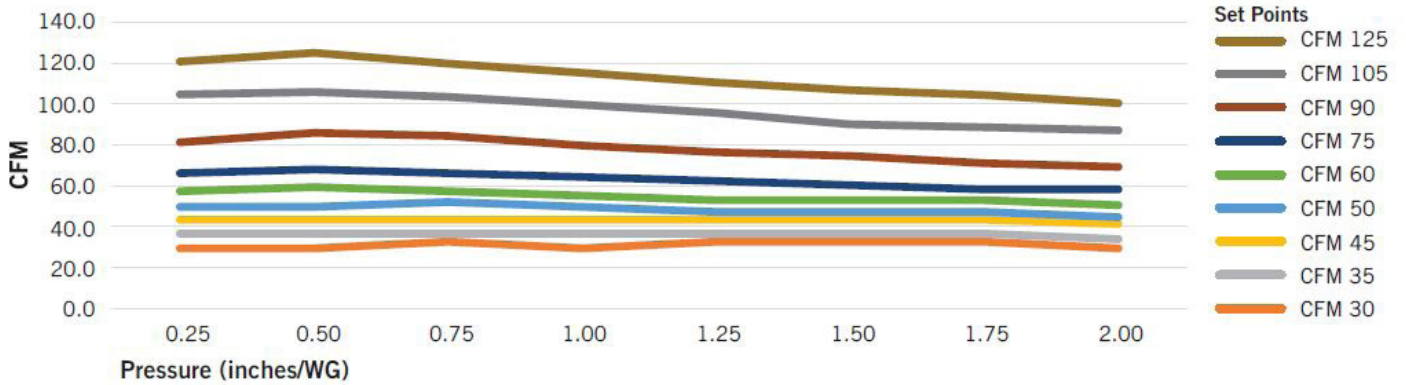
Available Max/Min CFM Set Points for ABD-Z2 6 inch																					
Minimum CFM Setpoint																					
Maximum CFM Setpoint		50	60	65	70	75	80	85	90	98	105	113	120	135	143	150	160	170	180	193	
	65	X																			
	70	X	X																		
	75	X	X	X																	
	80	X	X	X	X																
	85	X	X	X	X	X															
	90	X	X	X	X	X	X														
	98	X	X	X	X	X	X	X													
	105	X	X	X	X	X	X	X	X												
	113	X	X	X	X	X	X	X	X	X											
	120	X	X	X	X	X	X	X	X	X	X										
	135	X	X	X	X	X	X	X	X	X	X	X									
	143	X	X	X	X	X	X	X	X	X	X	X	X								
	150	X	X	X	X	X	X	X	X	X	X	X	X	X							
	160	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
	170	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
	180	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
	193	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
	205	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
	217	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
228	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
240		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
260			X	X							X	X	X	X	X	X					

X = Adjustment with linkage in primary position  
 X = Adjustment with linkage in alternate position

See instruction manual for alternate linkage set-up.



Model ABD-4 inch



Model ABD-6 inch

