

3900 Dr. Greaves Rd.

Kansas City, MO 64030

(816) 761-7476

FAX (816) 765-8955

# ABD AUTOMATIC BALANCING DAMPER

#### **APPLICATION**

Ruskin Model ABD provides pressure independent automatic airflow regulation for supply or exhaust ventilation systems in any residential or commercial building. Use in any HVAC application, with a static pressure between 0.2" and 2.0" w.g. Facilitates controlled volume of make-up or exhaust air in highrise applications.

#### STANDARD CONSTRUCTION

#### **FRAME**

Thermoplastic resins with non-caustic antimicrobial preventing organic growth. Passes UL2043 test for heat and smoke emissions.

#### SFAL

Full circumference outer rubber gasket-type

#### **SPRING**

Stainless leaf type

#### **DIMENSIONS**

Available sizes: 4", 5", or 6" diameters

#### AIRFLOW RANGE

4"	 30	to	125 CFM
5"	 30	to	125 CFM
6"	 60	to	240 CFM





Ruskin utilizes AAB valve in the sproduction of our complete line of pressure independent solutions.



### **FEATURES**

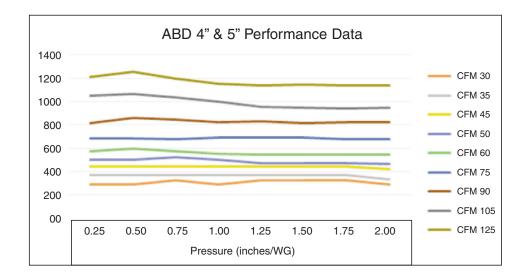
- Field convertible flow direction
- · Anti-microbial agent
- Tool-free set-point adjustment
- Oil-filled, hermetically sealed bearings

#### NOTES:

• Accurate to within 10% of their set airflow value from 0.2" to 2.0" w.g.

## **PERFORMANCE DATA**

Ruskin Model ABD independently tested using AMCA standard 500-D Figure 1. The ABD maintains airflow volume throughout the operating setpoint range within +/- 10% accuracy. Performance based on pressure range of 0.2" - 2.0" w.g.\*

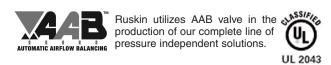


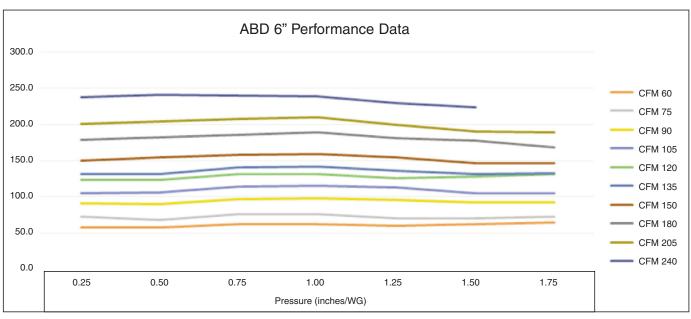


ABD 4" & 5" setpoint range: 30cfm - 125cfm

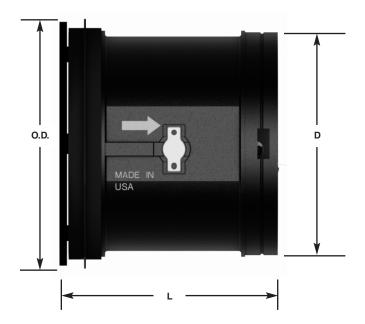


ABD 6" setpoint range: 60cfm - 240cfm









Nominal Diameter	O.D.	D	L	Weight	Duct I.D.	Range
4"	4.1"	3.8"	3.43"	.25 lbs.	4"	30-125 cfm
5"	4.81"	4.68"	3.75"	.43 lbs.	5"	30-125 cfm
6"	5.8"	5.5"	4.97"	.48 lbs.	6"	60-240 cfm

## **OPERATION**

Pressure independent Automatic Balancing Damper (ABD) maintains a constant airflow volume in HVAC applications. The engineered damper blade is calibrated to automatically adjust to varying pressures using physics.

Slide the set-point adjustment arm to the desired airflow.

ABD snaps into enclosure utilizing the adapter ring. To change airflow direction, remove the Quick-Connect Adapter Ring, rotate the ABD, and snap the adapter ring back into place.

Set-point Adjustment Arrow



Set-point Adjustment Indicator



Quick Connect Adapter Ring (Supplied with ABD)

### INSTALLATION AND MAINTENANCE

Ruskin Model ABD can be installed in horizontal or vertical applications. When installing in horizontal applications, the set-point adjustment indicator should be placed at the '6 o'clock position' (see below), with the blade running vertically.



## SUGGESTED SPECIFICATION

Furnish and install at locations shown on plans or as in accordance with schedules, a Ruskin Model ABD Pressure Independent Automatic Balancing damper. Unit shall require no power supply. Unit design shall facilitate field set point adjustment and flow direction change utilizing no tools. Each ABD shall be rated for use in air temperatures ranging from 25° to 150°F (-4° to 65°C). Product shall be accurate to within 10% of set airflow value from 0.2" to 2.0" water column. The unit shall be provided as an assembly, used within a sleeve for mounting in wall or ceiling (Models ABD-SEA, ABD-FD and ABD-CFD). Each ABD will be fitted with a full circumference rubber gasket-type seal. Each unit will be classified per UL 2043 and carry the UL mark indicating compliance. The pressure independent automatic balancing damper assembly shall be in all aspects equivalent to Ruskin Model ABD.

