



Model SEBR-40 Series

Barometric Relief Dampers Horizontal Mount - Vertical Airflow Down

Application

The SEBR-40 series is an eccentrically pivoted backdraft damper for low velocity systems. SEBR-40 series is a horizontally mounted damper and designed to allow vertical airflow down and prevent reverse airflow. On-blade counterweights are provided to fine tune start-to-open and full open blade operation. Ball bearings minimize friction.

Recommended Applications

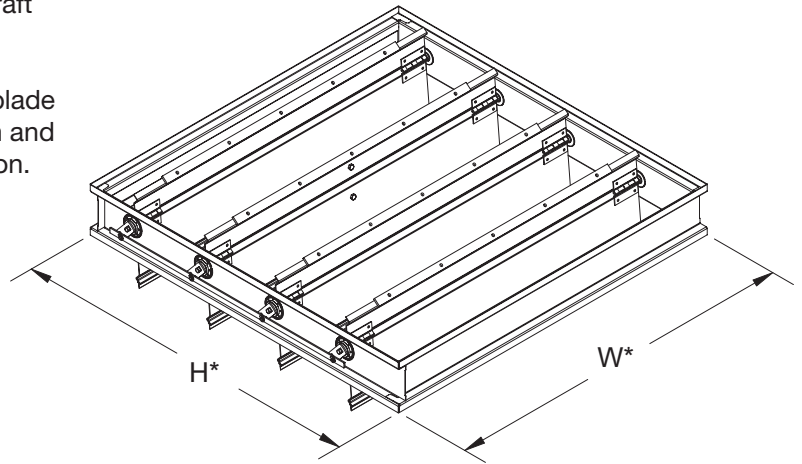
- Gravity hood intake and exhaust
- Stairwell pressurization
- Room pressurization
- Ductwork outlets

Poor Applications

- Propeller fan outlets (high velocity)
- Centrifugal fan outlets (high velocity)
- Building pressurization (sensitive to wind)
- Pressure relief exceeding 0.3 in. wg (0.075 kPa)

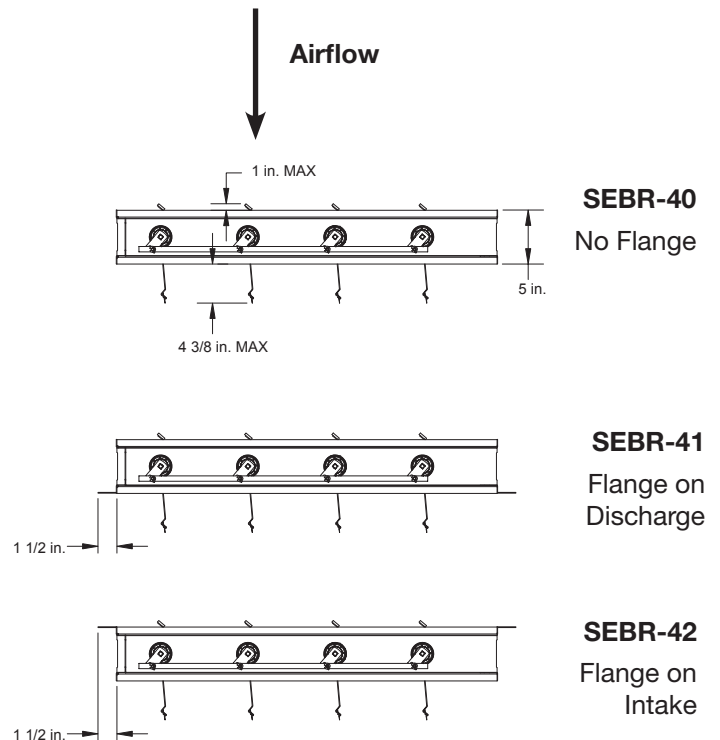
Ratings

Back Pressure: 2.0 in. wg (0.5 kPa)
Start -to-Open Pressure: 0.05 in. wg (.01 kPa)
Velocity: 2000 fpm (10.2 m/s)
Temperature: 180°F (82°C)



•W & H dimensions furnished approximately 1/4 in. (6mm) undersize.

Construction	Standard	Optional
Frame Material	316SS	-
Frame Thickness	16 ga. (1.5mm)	-
Frame Type	No Flange (SEBR-40)	-
	Flange on Discharge (SEBR-41)	-
	Flange on Intake (SEBR-42)	-
Blade Material	316SS	-
Blade Seal	TPE	None
Blade Thickness	20 ga. (1mm)	-
Axle	3/8 in. (9.5mm) sq. 316SS	-
Axle Bearings	316SS with acetal races	-
Linkage Material	316SS	-
Jamb Seal	None	EPDM
Counterbalance	Blade mounted with adjustable weights	-



Size Limitations

W x H	Minimum Size	Maximum Size	
		Single Section	Multiple Sections
Inches	8 x 6	48 x 74	96 x 148
mm	203 x 152	1220 x 1880	2438 x 3759

Feature

- Selectable start open from .05 to .30 in. wg (0.012 kPa - 0.075 kPa).

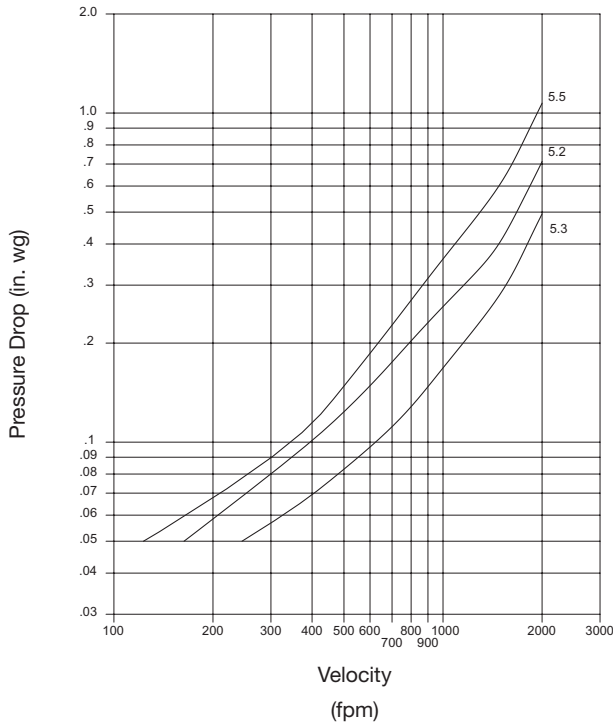
Performance Data

SEBR-40 Series

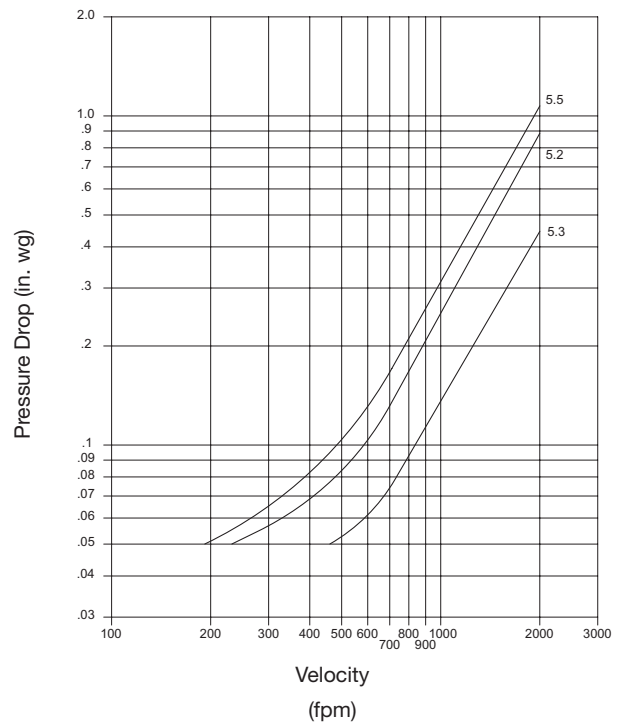
Performance data results from testing a 12 in. x 12 in. and 36 in. x 36 in. (305mm x 305mm and 914mm x 914mm) in accordance with AMCA Standard 500-D using Figure 5.3 (fully ducted), 5.2 (ducted exhausting into an open area), and 5.5 (plenum mounted). All data has been corrected to represent standard air density at 0.075 lb/ft³ (1.201 kg/m³).

Pressure drop data shown is based on minimum start open pressure. Higher start open pressure will result in different pressure drop.

**Damper Size
12 in. x 12 in.
(305mm x 305mm)**



**Damper Size
36 in. x 36 in.
(914mm x 914mm)**



Specifications

Barometric backdraft dampers meeting the following specifications shall be furnished and installed where shown on plans and/or as described in schedules.

Dampers shall consist of: 16 ga. (1.5mm) insert mount 316 stainless steel hat channel frame with 5 in. (127mm) depth; blades from 0.063 in. (1.6mm) thick formed 316 stainless steel, eccentrically pivoted; 3/8 in. (9.5mm) square 316 stainless steel axles with 316 stainless steel press-fit ball bearings; damper shall be equipped with pressure activated TPE blade seals; and internal 316 stainless steel blade-

to-blade linkage with blade mounted 316 stainless steel counterbalance weights.

Damper manufacturer's printed application and performance data including pressure, velocity, and temperature limitations shall be submitted for approval showing damper suitable for pressures to 2 in. wg (0.5 kPa), velocities to 2000 fpm (10.2 m/s, and temperatures to 180°F (82°C). Testing and ratings to be in accordance with AMCA Standard 500-D.

Basis of design is model SEBR-40.