



# Model SEBR-30 Series

**Barometric Relief Dampers  
Vertical Mount - Horizontal Airflow**

## Application

The SEBR-30 series is an eccentrically pivoted backdraft damper for low velocity systems. SEBR-30 series is a vertical mounted damper and designed to allow horizontal airflow 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

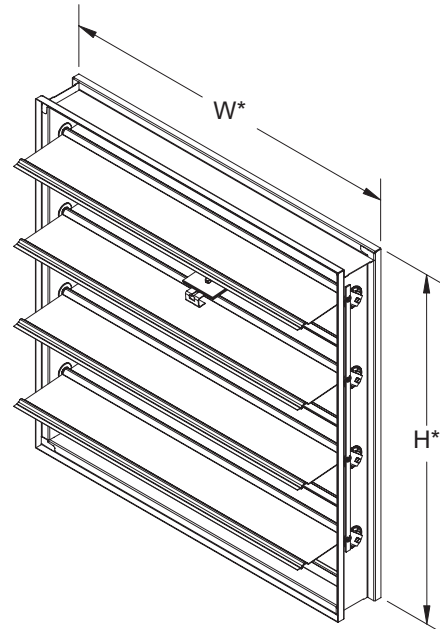
**Back Pressure:** 2.0 in. wg (0.5 kPa)

**Start -to-Open Pressure:** 0.05 in. wg (.01 kPa)

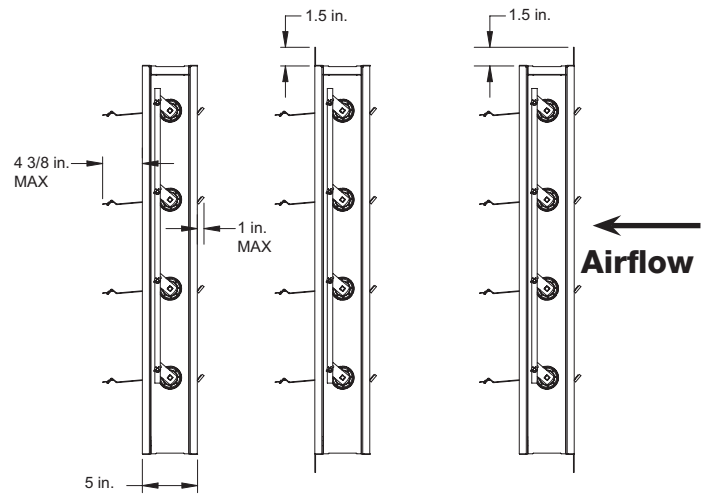
**Velocity:** 2000 fpm (10.2 m/s)

**Temperature:** 180°F (82°C)

Construction	Standard	Optional
Frame Material	316SS	-
Frame Thickness	16 ga. (1.5mm)	-
Frame Type	No Flange (SEBR-30)	-
	Flange on Discharge (SEBR-31)	-
	Flange on Intake (SEBR-32)	-
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 316SS weights	-



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



**SEBR-30**

No Flange

**SEBR-31**

Flange on Discharge

**SEBR-32**

Flange on Intake

## 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

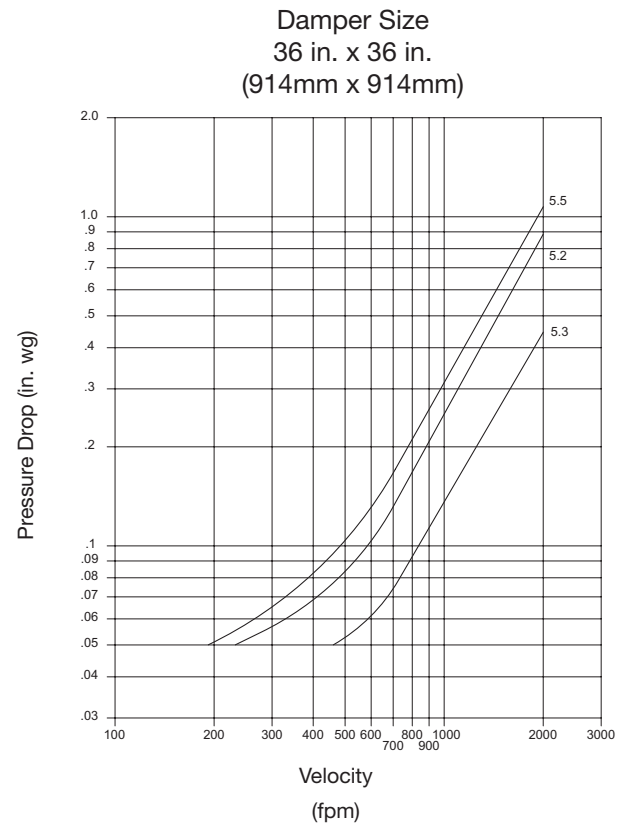
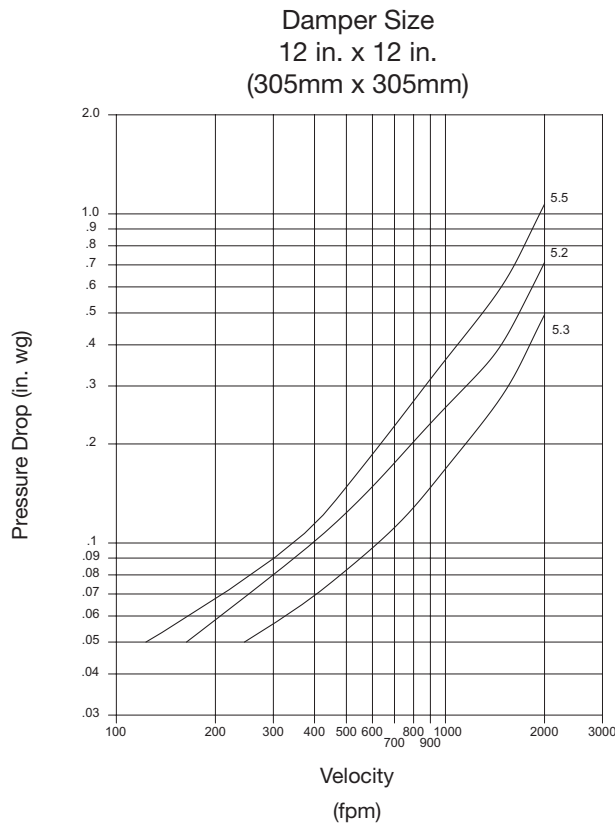
- Selectable start open from .05 to .30 in. wg (0.012 kPa - 0.075 kPa).

# Performance Data

# SEBR-30 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/ft<sup>3</sup> (1.201 kg/m<sup>3</sup>).

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



## 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 bearings with acetal races; 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-30.