

## SEBR-30 SERIES

### Vertical Mount Horizontal Airflow

#### Application and Design

The SEBR-30 series is a severe environment 316 stainless steel 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.

#### 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 0.13 in. wg (0.03 kPa)

#### Ratings

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

**Start-to-Open Pressure:** 0.05 in. wg (0.01 kPa)

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

**Temperature:** 180°F (82°C)

#### Standard Construction

**Frame:** Insert mount 16 ga. (1.5mm) 316 stainless steel hat channel

**Blades:** 0.063 in. (1.6mm) thick formed 316 stainless steel, eccentrically pivoted

**Axles:** 3/8 in. (9.5mm) square 316 stainless steel

**Bearings:** 316 stainless steel with acetal races

**Linkage:** 316 stainless steel, side mounted (out of airstream)

**Blade Seals:** Pressure activated vinyl

**Counterbalance:** Blade mounted with 316 stainless steel adjustable weights

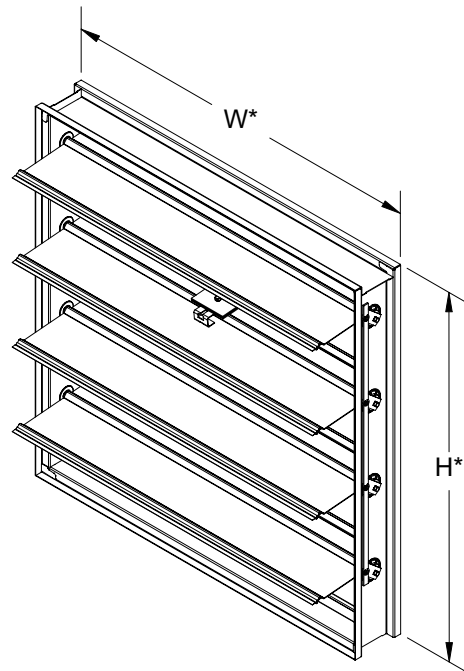
#### Size Limitations

**Minimum Size:** 8 in. W x 6 in. H (203mm x 152mm)

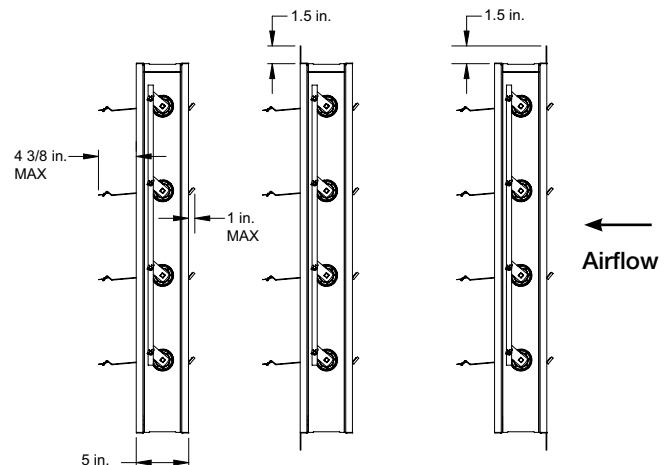
**Maximum Panel Size:** 48 in. W x 74 in. H  
(1220mm x 1880mm)

#### Options

- EPDM segmented jamb seals
- Selectable start open from .05 to .13 in. wg (12 Pa - 32 Pa)



\*W & H dimensions furnished approximately 1/4 in. (6mm) under size.



SEBR-30  
No flange

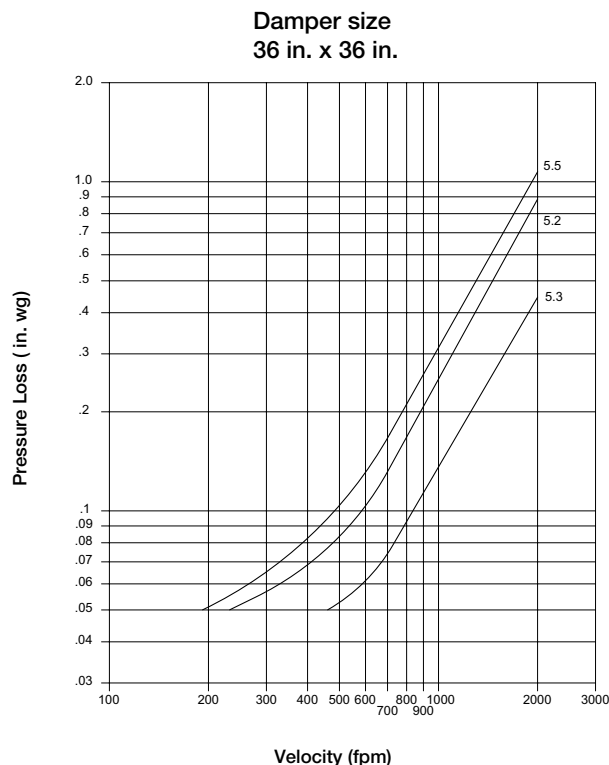
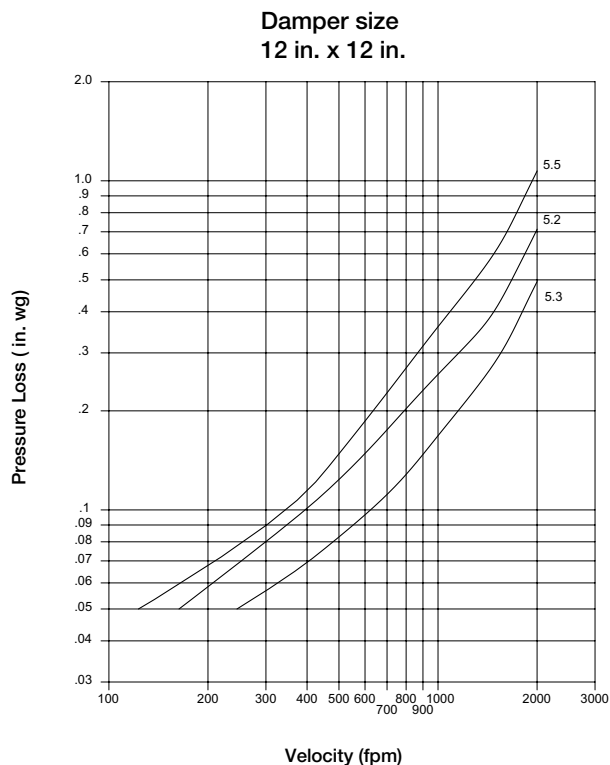
SEBR-31  
Flange on  
Discharge

SEBR-32  
Flange on  
Intake

# PERFORMANCE DATA

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Performance data results from testing a 12 in. x 12 in. (305mm x 305mm) and 36 in. x 36 in. (914mm x 914mm) damper in accordance with AMCA Standard 500D 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>).



## 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 20 ga. (1mm) 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 vinyl 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 (10.2m/s) and temperatures to 180°F (82°C). Testing and ratings to be in accordance with AMCA Standard 500D.

Basis of design is model SEBR-30.

