

### Application

The BR-40 series is an eccentrically pivoted backdraft damper for low velocity systems. BR-40 series is a horizontally mounted damper and designed to allow vertical airflow down and prevent reverse airflow. The blade is formed aluminum which increases sensitivity and reduces blade mounted counterbalance weights. 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

2,000 fpm (10.2 m/s)

#### Temperature

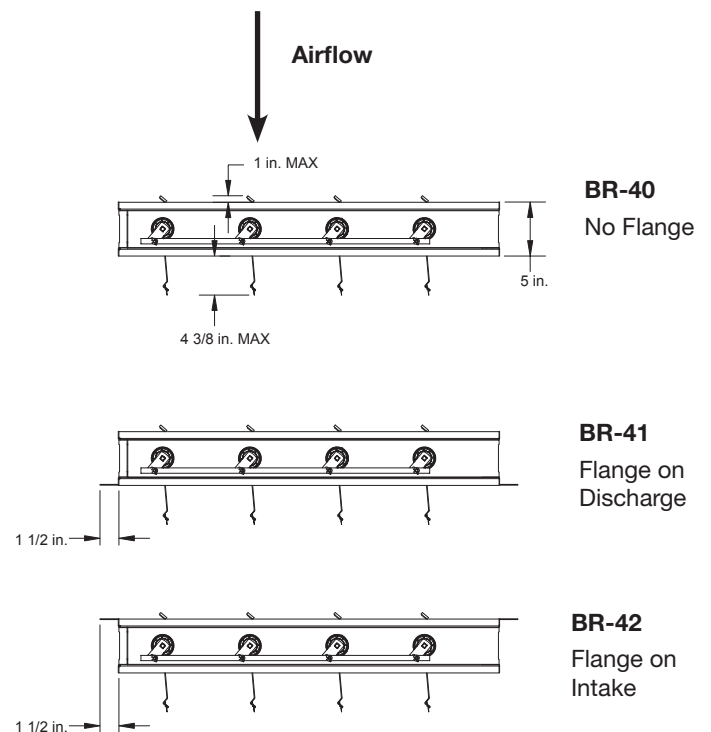
180°F (82°C)

### Construction

	Standard	Optional
<b>Frame Material</b>	Galvanized Steel	304SS, Aluminum
<b>Frame Thickness</b>	16 ga. (1.5mm)	-
<b>Frame Type</b>	No Flange (BR-40)	-
	Flange on Discharge (BR-41)	-
	Flange on Intake (BR-42)	-
<b>Blade Material</b>	Aluminum	-
<b>Blade Seal</b>	TPE	None
<b>Blade Thickness</b>	0.063 in. (1.6mm)	-
<b>Axle</b>	Plated Steel	316SS
<b>Axle Bearings</b>	Galvanized Ball	Acetal w/SS Ball
<b>Linkage Material</b>	Galvanized Steel	-
<b>Jamb Seal</b>	None	EPDM
<b>Counterbalance</b>	Blade mounted with adjustable weights	-
<b>Paint Finishes</b>	None	Baked Enamel, Hi Pro Polyester, Industrial Epoxy



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



### Size Limitations

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

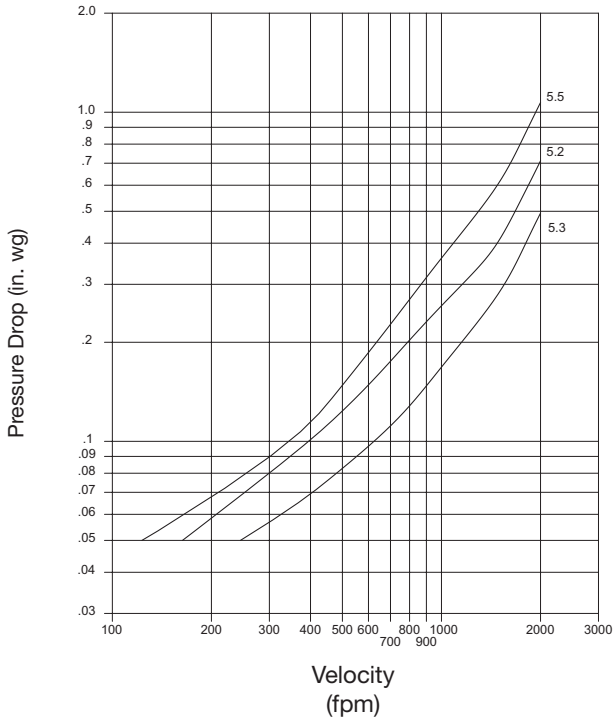
### Feature

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

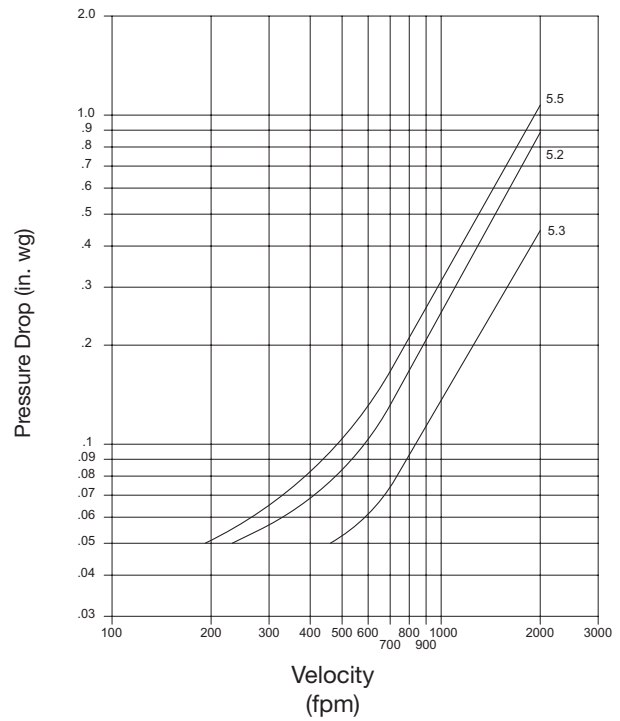
Performance data results from testing a 12 in. x 12 in. and 36 in. x 36 in. (305mm x 305mm and 914mm x 914mm) in accordance with AMCA Standard 500-D using Figure 5.3 (fully ducted), 5.2 (ducted exhausting into an open area), and 5.5 (plenum mounted). All data has been corrected to represent standard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

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



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



Document Links

[Installation Instructions](#)



[Backdraft Catalog](#)



[Damper Product Selection Guide](#)



[Specifications](#)



[Damper Warranty](#)

