

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

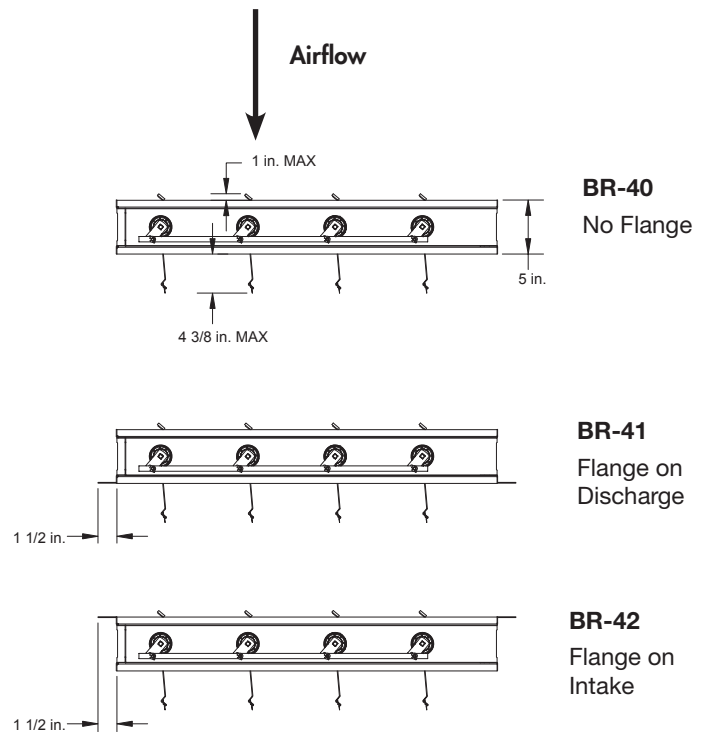
180°F (82°C)

Construction

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



*W & H dimensions furnished approximately ¼ in. (6mm) undersize.



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

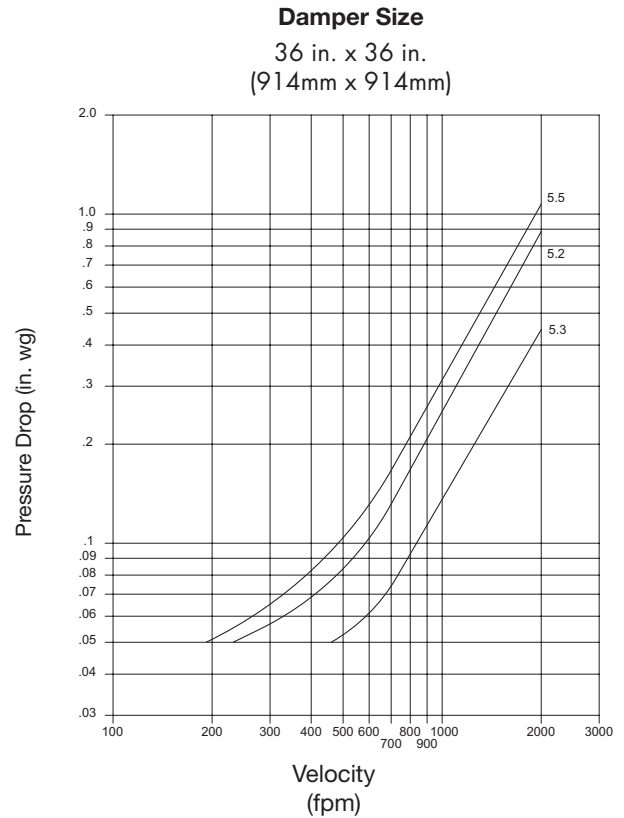
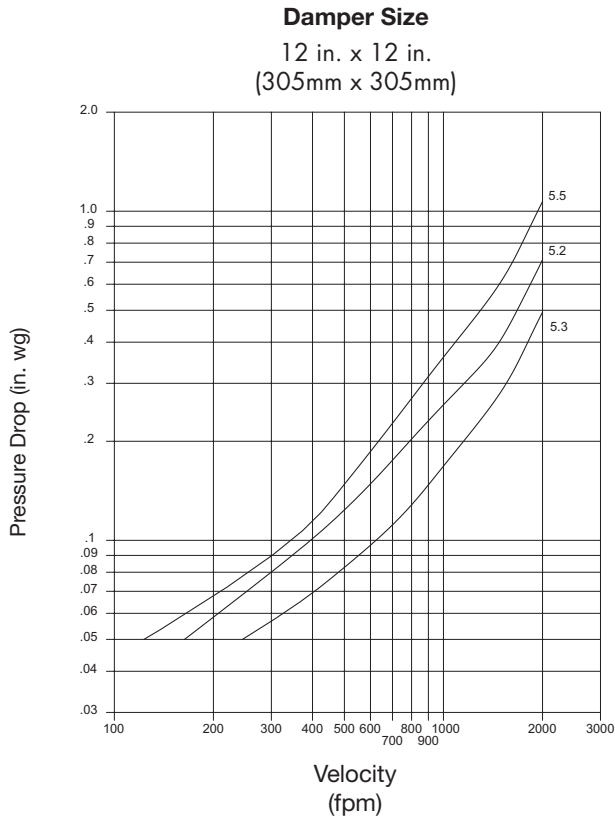
Features

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

Performance Data

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.



Document Links

[Installation Instructions](#)



[Product Catalog](#)



[Damper Warranty](#)

