

RUSKIN®

Control Dampers



Control the Air with Ruskin Dampers

Ruskin Control Dampers and Backdraft Dampers

Get the air where you want it — when you want it!

Controlling the airflow in today's buildings is becoming more demanding and demanding customers choose Ruskin.

For energy conscious building owners, Ruskin gives you more choices than any other manufacturer.

Ruskin ISO 9001 certified factories, AMCA licensed products and **Ruskin Express** shipments ensure the highest quality, best performing damper will be at the job site when you need it.

Model	Application	Maximum Velocity	Maximum Static Pressure	Temperature Range	Minimum Size	Leakage per 24" x 24" unit @1" sp.	Blade Seals
CD60	Galvanized Steel Airfoil blade control damper. High velocity and high pressure conditions. Ultra low leakage.	6000 fpm 12" wide	13" w.g.	-72 ~ 275° F	8" x 6"	2.0 cfm/sq.ft.	Ruskiprene
CD50	Extruded aluminum Airfoil blade control damper. High velocity and high pressure conditions. Ultra low leakage.	6000 fpm 12" wide	13" w.g.	-72 ~ 275° F	6" x 5"	2.0 cfm/sq.ft.	Ruskiprene
CD40	Thinline extruded aluminum Airfoil blade control damper. High velocity and pressure. Low leakage.	6000 fpm 12" wide	13" w.g.	-72 ~ 275° F	6" x 6"	3.5 cfm/sq.ft.	Ruskiprene
CDTI-50	Extruded aluminum Airfoil shape blade control damper designed for low temperature applications where thermal conductivity is a concern. Ultra low leakage.	6000 fpm 12" wide	16" w.g.	-72 ~ 200° F	6" x 5"	2.0 cfm/sq.ft.	Ruskiprene 11
CD51	Aluminum flat blade. Medium velocity and pressure. Standard leakage.	1500 fpm	5" w.g.	-72 ~ 250° F	6" x 5"	3.2 cfm/sq.ft.	Ruskiprene
CD35	Galvanized 3-V groove blade control damper. Medium velocity and pressure. Standard leakage.	1500 fpm *	5" w.g.	-25 ~ 180° F	5" x 5"	12 cfm/sq.ft.	Poly Foam Option
CD36	Galvanized 3-V groove blade control damper. Medium velocity and pressure. Low leakage.	1500 fpm *	5" w.g.	-25 ~ 180° F	5" x 5"	4.8 cfm/sq.ft.	PVC Coated Polyester
CDRS25	True round galvanized control damper. High velocity and high pressure conditions. Low leakage.	4000 fpm	10" w.g.	-20 ~ 200° F	4" dia.	5.65 cfm total (24" dia.)	Neoprene
CDR25	Round induct mounted control damper. High velocity and high pressure conditions. Low leakage optional with seals.	4000 fpm	10" w.g.	-20 ~ 200° F	4" dia.	5.65 cfm total (24" dia.)	Neoprene Option
MD15	Manual balancing damper with hand quad. and 2" standoff.	1500 fpm	3" w.g.	-25 ~ 180° F	5" x 4"	N/A	N/A
MD25	Manual balancing damper with hand quad.	1500 fpm	3" w.g.	-25 ~ 180° F	5" x 4"	N/A	N/A
MD35	Manual balancing damper.	1500 fpm	3" w.g.	-25 ~ 180° F	5" x 4"	N/A	N/A
MDRS25	True round Manual balancing damper with hand quad.	1500 fpm	3" w.g.	-25 ~ 180° F	4" dia.	N/A	N/A
BD2A1	Extruded aluminum backdraft damper. Standard velocity.	1000 fpm	4.5" w.g.	-40 ~ 200° F	6" x 6"	20 cfm/sq.ft.	Vinyl
BD2A2	Extruded aluminum backdraft damper. Medium velocity.	1500 fpm	6" w.g.	-40 ~ 200° F	6" x 6"	17.5/sq.ft.	Vinyl
BD6	Extruded aluminum backdraft damper. High velocity.	2500 fpm	16" w.g.	-40 ~ 200° F	6" x 6"	25/sq.ft.	Vinyl
CBD2	Counterbalanced backdraft damper, extruded aluminum. Standard velocity.	1000 fpm	4.5" w.g.	-40 ~ 200° F	6" x 7"	40 cfm/sq.ft.	Vinyl
CBD4	Counterbalanced backdraft damper, extruded aluminum, with ball bearings. High velocity.	2500 fpm	16" w.g.	-40 ~ 200° F	6" x 11"	40/sq.ft.	Vinyl
CBD6	Counterbalanced backdraft damper, extruded aluminum. High velocity.	2500 fpm	16" w.g.	-40 ~ 200° F	6" x 10"	25/sq.ft.	Vinyl
S3G	Galvanized steel backdraft damper. Can be counterbalanced. High velocity.	3000 fpm	6" w.g.	-40 ~ 200° F	8" x 8"	17.5/sq.ft.	Vinyl
S2SS	Stainless steel backdraft damper. High velocity.	3000 fpm	4" w.g.	-40 ~ 200° F	6" x 6"	32/sq.ft.	SS

* The CD35 and CD36 are structurally designed for velocities to 2000 fpm. Turbulance may produce objectionable noise in some conditions with velocities above 1500 fpm.

CD60 Ultra Low Leakage Damper

The CD60 damper is a “true” airfoil blade damper designed for medium to high velocity and pressure applications. Unlike other two-piece airfoil blade dampers, the CD60 blade is roll formed from a single piece of galvanized steel. The CD60 features Ruskiprene blade and flexible metal jamb seals that provide ultra low leakage of 2 CFM per square foot at 1" sp. which meets the requirements of the International Energy Conservation Code and AMCA Class 1A certification.

FEATURES

- AMCA certified performance
- “True” airfoil blade design
- Stainless steel non-corrosive bearings for long life and ease of operation
- Linkage concealed in frame
- Ruskiprene blade seals mechanically locked to the blades
- Stainless steel jamb seals
- Multiple section assemblies for unlimited sizing

OPTIONS

- Factory mounted actuators
- Enamel and epoxy finishes
- Front, rear and double flanges with bolt holes
- Face and bypass assemblies
- “T” flange frame for TDC, TDF, Ductmate type duct connections

CD60 PERFORMANCE DATA					
DAMPER WIDTH INCHES	MAXIMUM SYSTEM PRESSURE	MAXIMUM SYSTEM VELOCITY	LEAKAGE*		AMCA CLASS
			% OF MAX. FLOW	CFM / SQ. FT.	
60" (1524)	3.5" w.g.	3000 FPM	.07	2.0	1A
48" (1219)	6.2" w.g.	4000 FPM	.05	2.0	1A
36" (914)	8.5" w.g.	4000 FPM	.05	2.0	1A
24" (610)	10.8" w.g.	5000 FPM	.04	2.0	1A
12" (305)	13.0" w.g.	6000 FPM	.05	3.0	1A

* Leakage information based on pressure differential of 1" w.g.
Dimensions in parentheses () indicate millimeters.

The CD60 has superior leakage rated performance. Its sturdy galvanized steel construction features our interlocking frame design with the strength of 13 gage material. The double skin airfoil blade allows for less noise and pressure drop while increasing blade strength and blade-to-blade sealing ability.

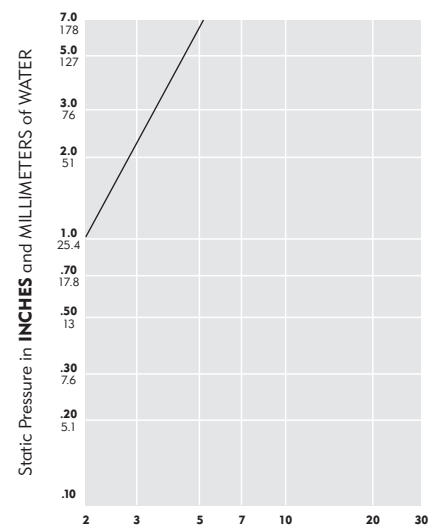
The CD60 may be used in systems with total pressures exceeding 3.5" w.g. by reducing damper section width as indicated. Pressure limitations shown allow maximum blade deflection on 1/180th of span on 60" damper widths.



Ruskin Company certifies that the CD60 shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air leakage performance only.

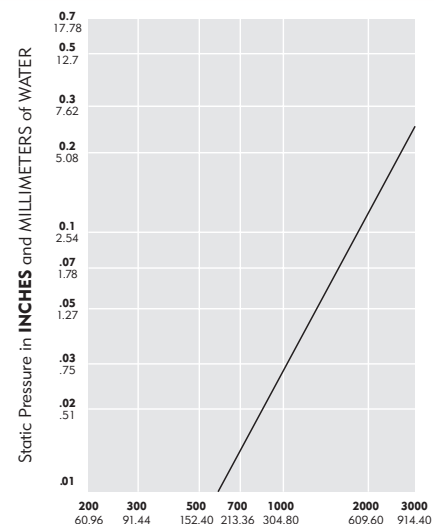


AIR LEAKAGE — DAMPER CLOSED (48" X 48" SIZE)



Air Leakage in **CFM/Sq. Ft.** through FACE AREA.
Tested per AMCA Std. 500, Fig. 5.5, plenum mounted.

PRESSURE DROP — DAMPER OPEN (36" X 36" SIZE)



Air Velocity in **FEET** and **METERS** per minute through FACE AREA. Tested per AMCA Std. 500, Fig. 5.3, ductwork upstream and downstream.

CD50 Ultra Low Leakage Damper

The CD50 damper is an extruded aluminum airfoil blade control damper designed for high velocity and pressure applications. Testing has shown that the CD50 can handle velocities of 5,000 fpm and pressures over 10" w.g. when the blade length is 24 inches (610) or less. The Ruskiprene blade seals and stainless steel jamb seals make the CD50 an extremely low leak damper that meets the leakage requirements of the International Energy Conservation Code (IECC).

FEATURES

- AMCA Certified Performance
- Linkage concealed in frame
- Ruskiprene blade and stainless steel jamb seals
- AMCA Class 1A Leakage
- Molded synthetic bearings
- Multiple section assemblies for unlimited sizing

OPTIONS

- Factory mounted actuators
- Front, rear or double flange frames
- 300 series stainless steel linkage
- Face & Bypass assemblies
- "T" flange frame for TDC, TDF, Ductmate type duct connections

CD50 PERFORMANCE DATA

DAMPER WIDTH INCHES	MAXIMUM SYSTEM PRESSURE	MAXIMUM SYSTEM VELOCITY	LEAKAGE*		AMCA CLASS
			% OF MAX. FLOW	CFM / SQ. FT.	
60" (1524)	3.0" w.g.	3000 FPM	.07	2.0	1A
48" (1219)	6.0" w.g.	4000 FPM	.05	1.9	1A
36" (914)	8.5" w.g.	4000 FPM	.05	1.9	1A
24" (610)	10.8" w.g.	5000 FPM	.04	2.0	1A
12" (305)	13.0" w.g.	6000 FPM	.05	2.7	1A

* Leakage information based on pressure differential of 1" w.g. Dimensions in parentheses () indicate millimeters.

The CD50 may be used in systems with total pressures exceeding 3.5" w.g. by reducing damper section width as indicated. Pressure limitations shown allow maximum blade deflection of 1/180th of span on 60" (1524) damper widths. Leakage information is based on operation between 50°F and 104°F (10°C and 40°C). Leakage ratings are based on AMCA Standard 500 using Test Apparatus Fig. 5.5. Torque applied holding damper closed at 5 in. lbs. per sq. ft. of damper with a minimum of 20 in. lbs.



Ruskin Company certifies that the CD50 shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air leakage performance only.

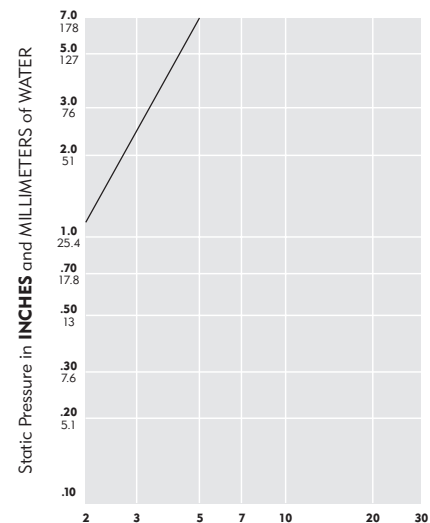
MORE ALUMINUM CONTROL DAMPERS BY RUSKIN*

CD40	Thinline aluminum
CD504	Aluminum airfoil blade does not extend beyond frame
CD51	All aluminum flat blade with extended frame

* Non AMCA Certified

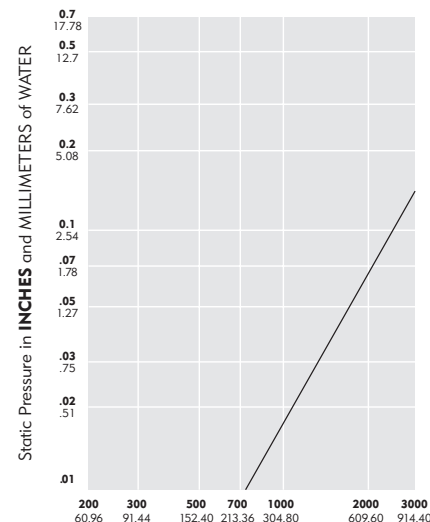


AIR LEAKAGE — DAMPER CLOSED (48" X 48" SIZE)



Air Leakage in **CFM/Sq. Ft.** through FACE AREA. Tested per AMCA Std. 500, Fig. 5.5, plenum mounted.

PRESSURE DROP — DAMPER OPEN (24" X 24" SIZE)



Air Velocity in **FEET** and **METERS** per minute through FACE AREA. Tested per AMCA Std. 500, Fig. 5.3, ductwork upstream and downstream.

Thermal Control Dampers — CDTI-50 and CDTI-50BF

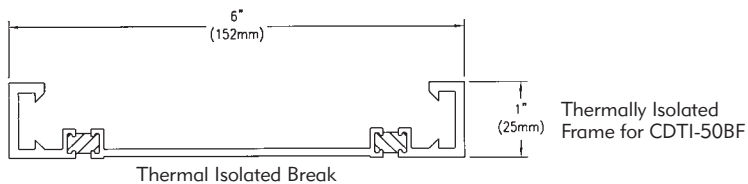
The CDTI50 is an extruded aluminum, airfoil shape, blade damper designed for low temperature applications where thermal conductivity is a concern. The airfoil shape blades are injected with high density polyurethane foam insulation which give the CDTI50 the lowest “R” value rating in the industry for an aluminum control damper when tested to ASTM C976-90 and ASTM C1199-97. In addition, the blade and jamb seal material have been flow tested at -40°F for leakage and durability.

FEATURES

- Blade thermal isolation breaks
- Parallel or opposed blade action
- Linkage concealed in frame
- Extruded aluminum frame and blades
- Multiple section assemblies for unlimited sizing

OPTIONS

- Thermally isolated frame
- Face and bypass assemblies
- “T” flange frame
- 300 series stainless steel linkage



CDTI-50 PERFORMANCE DATA				
DAMPER WIDTH INCHES	MAXIMUM SYSTEM PRESSURE	MAXIMUM SYSTEM VELOCITY	LEAKAGE*	
			% OF MAX. FLOW	CFM / SQ. FT.
60" (1524)	6.0" w.g.	3000 FPM	.06	2.0
48" (1219)	8.5" w.g.	4000 FPM	.05	2.0
36" (914)	11.0" w.g.	4000 FPM	.05	2.0
24" (610)	13.5" w.g.	5000 FPM	.04	2.0
12" (305)	16.0" w.g.	6000 FPM	.03	2.0

* Leakage information based on pressure differential of 1" w.g.
Dimensions in parentheses () indicate millimeters.

MORE INSULATED CONTROL DAMPERS BY RUSKIN	
CD40X2	Double wide insulated control damper with thermal barrier
IL35	Galvanized control damper with sandwich panel foam blade
CD50	Insulated blade with all the benefits of the CD50 with thermal blade



CD35 Standard and CD36 Low Leakage Dampers

The CD35 and CD36 are 3-V groove blade control dampers that are designed for lower velocity (1,500 fpm and under) and lower pressure applications. The CD36 comes standard with PVC coated polyester fabric blade seals and stainless steel jamb seals. With blade and jamb seals the leakage at one inch static pressure is only 3.7 cfm per square foot.

The CD35 comes standard with full length blade stops and optional blade or jamb seals. The CD35 leakage at one inch static pressure is 40 cfm per square foot. Both damper models can be built as multiple section dampers for unlimited size configurations.

FEATURES

- 16 gauge roll formed frame meets 13 gauge specifications
- Molded synthetic bearings for long life and ease of operation
- Linkage concealed in frame
- Blade seals mechanically locked to the blades on the CD36
- Multiple section assemblies for unlimited sizing

OPTIONS

- Factory mounted actuators
- 304/316 stainless steel construction
- Enamel and epoxy finishes
- Front, rear and double flanges with bolt holes
- Face and Bypass assemblies
- "T" flange frame for TDC, TDF, Ductmate type duct connections



CD35 PERFORMANCE DATA						
DAMPER WIDTH INCHES	MAXIMUM SYSTEM PRESSURE	MAXIMUM SYSTEM VELOCITY	LEAKAGE W/O SEALS*		LEAKAGE WITH SEALS*	
			% OF MAX. FLOW	CFM / SQ. FT.	% OF MAX. FLOW	CFM / SQ. FT.
48" (1219)	2.5" w.g.	1500 FPM	2.67	40	0.67	10
36" (914)	3.0" w.g.	1500 FPM	2.67	40	0.67	10
24" (610)	4.0" w.g.	1500 FPM	3.33	50	0.80	12
12" (305)	5.0" w.g.	1500 FPM	4.33	65	1.13	17

CD36 PERFORMANCE DATA				
DAMPER WIDTH INCHES	MAXIMUM SYSTEM PRESSURE	MAXIMUM SYSTEM VELOCITY	LEAKAGE*	
			% OF MAX. FLOW	CFM / SQ. FT.
48" (1219)	2.5" w.g.	1500 FPM	.25	3.7
36" (914)	3.0" w.g.	1500 FPM	.25	3.7
24" (610)	4.0" w.g.	1500 FPM	.32	4.8
12" (305)	5.0" w.g.	1500 FPM	.47	7.0

* Leakage information based on pressure differential of 1" w.g. tested per AMCA Std. 500. Dimensions in parentheses () indicate millimeters.

The CD35 and CD 36 are structurally designed for velocities to 2000 FPM and above. **Turbulence may produce objectionable noise in some conditions with velocities above 1500 FPM.**

CDRS25 True Round Low Leakage Damper

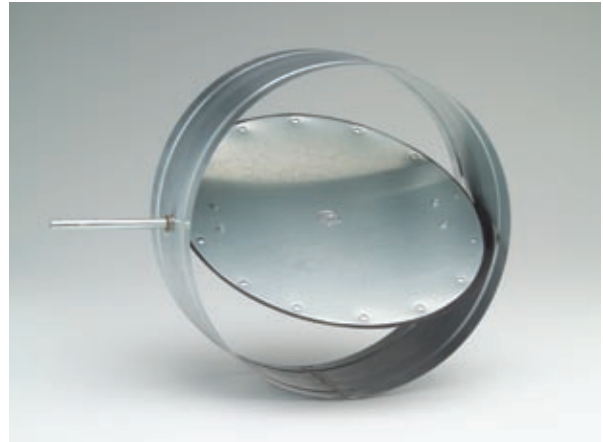
The CDRS25 is a true round commercial control damper with a full circumference blade seal for low leakage. It is designed to replace a section of the duct work where a damper is needed. This construction allows Ruskin to ship actuators installed on the damper. The CDRS25 damper can be constructed of aluminum, or stainless steel if required. The rolled duct stops make for ease of installation and sealing the duct work to the damper. The CDRS25 damper is one of the lowest leak dampers in the industry.

FEATURES

- Full Circumference Neoprene Blade Seal
- 7" long frame with rolled stops for easy installation and sealing.
- Full length axle for maximum strength

OPTIONS

- Factory mounted actuators
- Silicone blade seal
- Viton blade seal
- 304 stainless steel construction
- 316 stainless steel construction
- Aluminum construction



CDRS25 PERFORMANCE DATA				
DAMPER WIDTH INCHES	MAXIMUM SYSTEM PRESSURE	MAXIMUM SYSTEM VELOCITY	LEAKAGE*	
			% OF MAX. FLOW	CFM / SQ. FT.
24" (610)	6.0" w.g.	4000 FPM	.14	5.65
18" (457)	6.0" w.g.	4000 FPM	.11	4.24
12" (305)	8.0" w.g.	4000 FPM	.07	2.83
6" (152)	10.0" w.g.	4000 FPM	.04	1.41

* Leakage information based on pressure differential of 1" w.g. tested per AMCA Std. 500. Dimensions in parentheses () indicate millimeters.

CDR25 True Round Induct Mount Damper

The CDR25 damper is designed to slip fit into the ductwork. It can be built as large as 48" diameter with a narrow frame for ease of installation. With the addition of the optional blade seals the leakage for this damper is under 0.08 cfm per inch of circumference at one inch static pressure. A 48" diameter damper can withstand 4" static pressure.

FEATURES

- Rolled frame for added strength
- 2" deep frame
- Full length axle for added stiffness

OPTIONS

- Neoprene blade seal
- Silicone blade seal
- 304 stainless steel construction
- 316 stainless steel construction
- Aluminum construction
- Shipped loose actuators can be ordered separately



CDR25 AND CDO25 PERFORMANCE DATA						
DAMPER WIDTH INCHES	MAXIMUM SYSTEM PRESSURE	MAXIMUM SYSTEM VELOCITY	LEAKAGE W/O SEALS*		LEAKAGE WITH SEALS*	
			% OF MAX. FLOW	CFM / SQ. FT.	% OF MAX. FLOW	CFM / SQ. FT.
48" (1219)	4.0" w.g.	2500 FPM	21.5	539	.40	10.0
40" (1016)	4.0" w.g.	2500 FPM	14.5	364	.38	9.42
36" (914)	4.0" w.g.	2500 FPM	13.1	328	.34	8.50
24" (610)	6.0" w.g.	4000 FPM	5.5	219	.14	5.65
12" (305)	8.0" w.g.	4000 FPM	2.7	109	.07	2.83
6" (152)	10.0" w.g.	4000 FPM	1.4	55	.04	1.41

* Leakage information based on pressure differential of 1" w.g. tested per AMCA Std. 500. Dimensions in parentheses () indicate millimeters.

MD15 Manual Balancing Damper

The MD15 is an inexpensive manual balancing damper. It comes standard with a hand quadrant and 2" standoff bracket. The MD15 is the damper to order for any manual balancing application 48" x 48" and under.

FEATURES

- Hand quadrant
- 2" standoff bracket

OPTIONS

- 1/2" diameter extended shaft with HQR050 hand quadrant



MD35 Manual Balancing Damper

The MD35 damper is perfect for manual balancing applications that are over 48" x 48" in size. Each damper section will operate independently with its own extended shaft.

FEATURES

- Multi-section construction

OPTIONS

- Hand quadrant
- 2" standoff bracket
- Jackshafting (so all section will operate together)
- Blade stop

MD35 PERFORMANCE DATA				
DAMPER WIDTH INCHES	MAXIMUM SYSTEM PRESSURE	MAXIMUM SYSTEM VELOCITY	LEAKAGE*	
			% OF MAX. FLOW	CFM / SQ. FT.
36" (914)	2.0" w.g.	1500 FPM	5.33	80
24" (610)	2.5" w.g.	1500 FPM	6.67	100
12" (305)	3.0" w.g.	1500 FPM	8.67	130

* Leakage information based on pressure differential of 1" w.g. tested per AMCA Std. 500. Dimensions in parentheses () indicate millimeters.



MDRS25 True Round Manual Balancing Damper

The MDRS25 is a true round manual balancing damper with a factory mounted hand quadrant. The seven inch long damper frame replaces the ductwork for ease of installation. The rolled duct stops provide a close connection with the duct for fast and tight sealing.

FEATURES

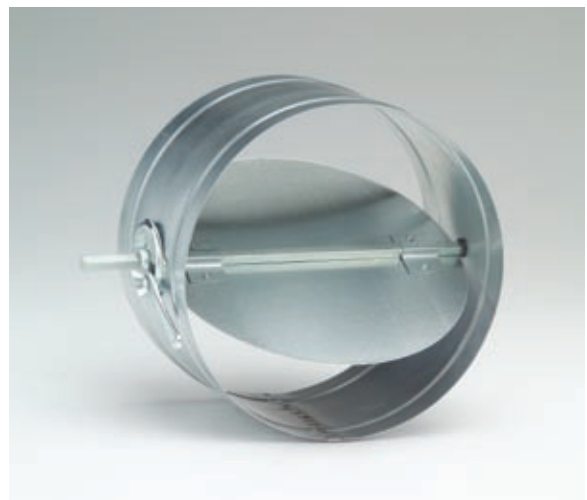
- Factory mounted hand quadrant

OPTIONS

- 2" standoff bracket

MDRS25 PERFORMANCE DATA				
DAMPER WIDTH INCHES	MAXIMUM SYSTEM PRESSURE	MAXIMUM SYSTEM VELOCITY	LEAKAGE*	
			% OF MAX. FLOW	CFM / SQ. FT.
20" (508)	2.0" w.g.	1500 FPM	5.7	85
12" (305)	2.5" w.g.	1500 FPM	3.3	50
6" (152)	3.0" w.g.	1500 FPM	2.0	30

* Leakage information based on pressure differential of 1" w.g. tested per AMCA Std. 500. Dimensions in parentheses () indicate millimeters.



BD2A1, BD2A2 and BD6 Backdraft Dampers

These backdraft dampers are designed for standard building ventilation applications. They will open with a minimal pressure difference to relieve the minor imbalance of pressure that can occur in any building. The BD2A1 will start opening at 0.03" w.g. and be fully open at 0.10" w.g. The BD2A2 is constructed with a thicker blade and starts opening at 0.10" w.g. and is fully open at 0.15" w.g.

The BD6 is a heavy duty commercial backdraft damper for higher velocities and pressures. This damper will start to open at 0.12" w.g. and be fully open at 0.20". The extruded aluminum frame and blades provide a light weight but strong damper for back pressures up to 16" w.g. and velocities of 2,500 fpm. The BD6 can handle spot velocities of up to 3,500 fpm.

FEATURES

- Vinyl blade edge seal mechanically locked to blade
- Exhaust application sheds rain to exterior of building

OPTIONS

- Horizontal mount for upward air flow
- Front or rear mounted screens (may require sleeve)
- Special finish
- BD6 dampers — SPC (Static Pressure Control) from 0.25" to 0.75" w.g.



BD2/A1 PERFORMANCE DATA						
DAMPER WIDTH INCHES	MAXIMUM BACK PRESSURE (External Wind Velocity)	MAXIMUM SYSTEM VELOCITY	LEAKAGE*		BLADES START TO OPEN	BLADES FULLY OPEN
			% OF MAX. FLOW	CFM / SQ. FT.		
40" (1016)	55 mph/1.5" w.g.	1000 FPM	1.5	15	.03" w.g.	.10" w.g.
36" (914)	70 mph/2.5" w.g.	1000 FPM	1.5	15		
24" (610)	85 mph/3.5" w.g.	1000 FPM	2.0	20		
12" (305)	95 mph/4.5" w.g.	1000 FPM	4.0	40		

BD2/A2 PERFORMANCE DATA						
DAMPER WIDTH INCHES	MAXIMUM BACK PRESSURE (External Wind Velocity)	MAXIMUM SYSTEM VELOCITY	LEAKAGE*		BLADES START TO OPEN	BLADES FULLY OPEN
			% OF MAX. FLOW	CFM / SQ. FT.		
40" (1016)	75 mph/3.0" w.g.	1500 FPM	1.0	15	.10" w.g.	.15" w.g.
36" (914)	90 mph/4.0" w.g.	1500 FPM	1.0	15		
24" (610)	100 mph/5.0" w.g.	1500 FPM	1.2	17.5		
12" (305)	110 mph/6.0" w.g.	1500 FPM	2.7	40		

BD6 PERFORMANCE DATA						
DAMPER WIDTH INCHES	MAXIMUM BACK PRESSURE	MAXIMUM SYSTEM VELOCITY	LEAKAGE*		BLADES START TO OPEN	BLADES FULLY OPEN
			% OF MAX. FLOW	CFM / SQ. FT.		
48" (1219)	4.0" w.g.	2500 FPM	.6	15	.12" w.g.	.20" w.g.
36" (914)	8.0" w.g.	2500 FPM	.6	15		
24" (610)	12.0" w.g.	2500 FPM	.7	17.5		
12" (305)	16.0" w.g.	2500 FPM	.1	25		

* Leakage information based on pressure differential of 1" w.g. tested per AMCA Std. 500. Dimensions in parentheses () indicate millimeters.

S3G Backdraft Damper

S3G is a roll formed galvanized backdraft damper. This provides a strong but light weight damper. The S3G can withstand velocities up to 3,000 fpm and back pressures up to 6" sp. This damper is a durable inexpensive pressure relief/backdraft damper for use in many different applications where one way air flow is needed.

FEATURES

- Roll formed frame and blades
- Continuous one piece frame design.
- Stainless steel axles
- Vinyl Blade seal

OPTIONS

- Front or Rear flange frame
- Upward air flow with spring assist
- Downward air flow with counterweights

SG3 PERFORMANCE DATA

DAMPER WIDTH INCHES	MAXIMUM SYSTEM PRESSURE	MAXIMUM SYSTEM VELOCITY	LEAKAGE*	
			% OF MAX. FLOW	CFM / SQ. FT.
42" (1067)	3.0" w.g.	1500 FPM	1.0	15.0
36" (914)	4.0" w.g.	3000 FPM	0.5	15.0
24" (610)	5.0" w.g.	3000 FPM	0.6	17.5
12" (305)	6.0" w.g.	3000 FPM	0.13	40.0

* Leakage information based on pressure differential of 1" w.g. tested per AMCA Std. Dimensions in parentheses () indicate millimeters.



S2SS Backdraft Damper

The S2SS is built completely of stainless steel. The frame blades and axles are 304 stainless steel and other parts are 300 series stainless steel. The S2SS is designed for corrosive environments that require a light duty backdraft damper. The frame is welded in order to provide long lasting operation.

FEATURES

- Stainless Steel construction
- Roll formed blades

OPTIONS

- Front or rear flange frame
- Upward air flow
- 316 stainless steel frame, blades and axles



S2SS PERFORMANCE DATA

DAMPER WIDTH INCHES	MAXIMUM BACK PRESSURE	MAXIMUM SYSTEM VELOCITY Rear Linkage	MAXIMUM SYSTEM VELOCITY Front Linkage	LEAKAGE*	
				% OF MAX. FLOW	CFM / SQ. FT.
36" (914)	3.0" w.g.	1000 FPM	3000 FPM	1.07	32.0
24" (610)	3.5" w.g.	1000 FPM	3000 FPM	1.07	32.0
12" (305)	4.0" w.g.	1000 FPM	3000 FPM	2.00	60.0

* Leakage information based on pressure differential of 1" w.g. tested per AMCA Std. 500. Dimensions in parentheses () indicate millimeters.

CBD6, CBD4 and CBD2 Counterbalanced Backdraft Dampers

The CBD6 and CBD4 dampers are for higher velocities and pressures. Both dampers will handle 2,500 fpm and back pressures up to 16" w.g. The counterweights provided on these dampers allow them to start opening at 0.02" w.g. Frames and blades for both dampers are constructed from light weight extruded aluminum. The CBD2 is constructed like the BD2A1 with adjustable counterbalance weights on the rear of the blades. The CBD2 starts opening at 0.01" w.g.

FEATURES

- Vinyl blade edge seal mechanically locked to blade Exhaust application sheds rain to exterior of building
- CBD4 dampers have ball bearings

OPTIONS

- Horizontal mount for up and down air flows
- Front or rear mounted screens (may require sleeve)
- Special finish



CBD6 PERFORMANCE DATA

DAMPER WIDTH INCHES	MAXIMUM BACK PRESSURE	MAXIMUM SYSTEM VELOCITY	LEAKAGE*		BLADES START TO OPEN	BLADES FULLY OPEN
			% OF MAX. FLOW	CFM / SQ. FT.		
48" (1219)	4.0" w.g.	2500 FPM	.6	15	.02" w.g.	.05" w.g.
36" (914)	8.0" w.g.	2500 FPM	.6	15		
24" (610)	12.0" w.g.	2500 FPM	.7	17.5		
12" (305)	16.0" w.g.	2500 FPM	.1	25		

CBD4 PERFORMANCE DATA

DAMPER WIDTH INCHES	MAXIMUM BACK PRESSURE	MAXIMUM SYSTEM VELOCITY	LEAKAGE*		BLADES START TO OPEN	BLADES FULLY OPEN
			% OF MAX. FLOW	CFM / SQ. FT.		
48" (1219)	4.0" w.g.	2500 FPM	.7	17.5	.02" w.g.	.05" w.g.
36" (914)	8.0" w.g.	2500 FPM	.8	20		
24" (610)	12.0" w.g.	2500 FPM	.9	23		
12" (305)	16.0" w.g.	2500 FPM	1.6	40		

CBD2 PERFORMANCE DATA

DAMPER WIDTH INCHES	MAXIMUM BACK PRESSURE (External Wind Velocity)	MAXIMUM SYSTEM VELOCITY	LEAKAGE*		BLADES START TO OPEN	BLADES FULLY OPEN
			% OF MAX. FLOW	CFM / SQ. FT.		
40" (1016)	55 mph/1.5" w.g.	1000 FPM	1.5	15	.01" w.g.	.06" w.g.
36" (914)	70 mph/2.5" w.g.	1000 FPM	1.5	15		
24" (610)	85 mph/3.5" w.g.	1000 FPM	2.0	20		
12" (305)	95 mph/4.5" w.g.	1000 FPM	4.0	40		

* Leakage information based on pressure differential of 1" w.g. tested per AMCA Std. 500.
Dimensions in parentheses () indicate millimeters.

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