Industrial Damper • 8" Deep • Straight Blades • Formed Channel Frame • Galvanized Steel • 250°F Max Temperature

### Standard Materials and Construction

**FRAME:** 2" x 8" x 2" - 14 GA. galvanized steel, formed channel. **BLADE:** 16 GA. formed galvanized steel, approximately 6" on centers. **SHAFT:** 3/4" dia. plated, cold-finished steel stub. Plug welded to blade.

Drive shaft to be continuous length.

**BEARINGS:** Stainless steel flanged sleeve, press fit into frame.

LINKAGE: Plated steel arm located in jamb. 1/2" dia. inter-connecting rod

with stainless steel trunnion pivot fastener.

OPERATOR: Extended shaft only.

FINISH: Mill.

TEMP. LIMIT: 250°F. Consult the factory for temperatures above 250°F.

#### <u>Options</u>

Blade Edge Seals - Stainless steel.

Stuffing boxes and replaceable packing.

Flanges other than 2" wide.

Perimeter holes - One flange or two flanges.

Finishes - Acrylic, baked enamel, etc.

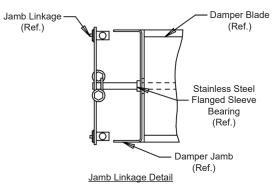
Materials - Stainless steel, extruded aluminum, galvanized steel, etc.

## **Notes**

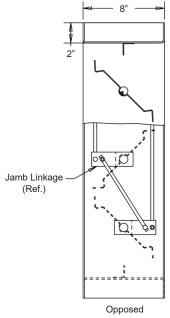
- 1. 1/4" nominal deduction will be made to the opening size given.
- 2. Dampers 36" wide and above, furnished with blade and/or jamb seals, shall be provided with double jamb linkage.
- Construction may be with other materials when required to meet special conditions, such as: temperature, pressure, velocity, system environment, or other specifications.
- 4. Approximate shipping weight is 8.0 lbs./sq.ft.

#### Damper Sizes

Min. Size	Max. Size
6"W x 6¾"H (Single Blade)	40774/ 0071/
6"W x 12" (Opposed)	48"W x 96"H



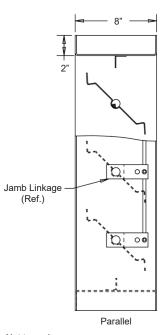
Opposed linkage shown.



Damper Width (in.)

Extended Shaft

Only



Damper Width

(in.)

Not to scale.

	Item #	Oh.	Width	Height	Parallel	Opposed	Seals	Actuator Model	Interior	Exterior	N.C.	N.O.	WIONAL IS
		Qty	Damp	er Size	Blades	Blades			Act. Location		Function		<u>Union Made</u>
	Arch. / Eng.:						EDR:		ECN:		Job:		
	Contractor:												
	Pı	roject:					Date:		DWN:		DWG:		

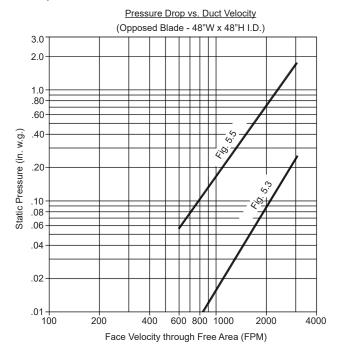


arrowunited.com

Industrial Damper • 8" Deep • Straight Blades • Formed Channel Frame • Galvanized Steel • 250°F Max Temperature

## Pressure Drop Data

Pressure drop ratings are based on AMCA Standard 500, using test set-up figure 5.3 and figure 5.5. Static pressures are corrected to .075 lb./cu.ft. air density.



# Air Leakage Data

Air leakage quantities shown in the chart are results of tests per AMCA Standard 500 and are shown at 1 in. w.g. differential pressure and are corrected to .075 lb./cu.ft. air density.

Air Leakage (Total CFM)

			Damper Width (in. I.D.)													
		12"	18"	24"	30"	36"	42"	48"								
	12"	4	6	8	10	12	14	16								
(.D.)	24"	8	12	16	20	24	28	32								
ji.	36"	12	18	24	30	36	42	48								
Height	48"	16	24	32	40	48	56	64								
	60"	20	30	40	50	60	70	80								
per	72"	24	36	48	60	72	84	96								
Damper	84"	28	42	56	70	84	98	112								
	96"	32	48	64	80	96	112	128								

For determining leakage values greater than 1 in. w.g. to a maximum of 20 in. w.g., use the multiplier correction chart below.

Static Pressure (in.)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Damper Width (in.)
	3.0	4.5	5.5	6.5	7.0	7.8	8.3	9.0	9.7	10.2	10.5	11.3	11.6	12.0	12.5	12.9	13.3	13.6	14.3	14.6	12 - 17
Multiplier Correction Factor	2.0	3.0	3.5	4.2	4.5	5.0	5.5	6.0	6.2	6.8	7.0	7.5	7.7	7.8	8.2	-	-	-	-	-	18 - 24
	1.0	1.5	1.8	2.1	2.3	2.6	2.8	3.0	3.2	3.4	-	-	-	-	-	-	-	-	-	-	24 - 36
	1.0	1.5	1.8	2.1	2.3	2.6	2.8	-	-	-	-	-	-	-	-	-	-	-	-	1	36 - 48

Air leakage ratings are based on AMCA Standard 500, using test set-up Fig. 5.4 with a damper closing torque applied to the damper of 10 in. lbs./sq.ft. of damper face area for a 48" x 96", with a minimum of 40 in. lbs./sq.ft. of a damper area for a size 48" x 63/4".

Damper air leakage shown is based on dampers furnished with blade and jamb seals. Results published are for the model 304 industrial damper for a range of damper sizes.

