# For use up to 12 in. w.g. static pressure

Model GI50

## STANDARD CONSTRUCTION

**FRAME:** 2" x 10" x 2", 12 GA. galvanized steel formed channel frame. **BLADE:** 16 GA. galvanized steel, airfoil design, to a maximum 48" length.

12 GA. galvanized steel, airfoil design, to a maximum 60" length.

SHAFT: 3/4" dia. plated cold-finished steel, corrosion resistant, up to 60"

in length.

BEARINGS: Stainless steel flanged sleeve, bolted to the frame.

LINKAGE: 1/2" dia. inter-connecting rod with trunnion pivot fasteners, located

in jamb.

OPERATOR: Manual hand quadrant or lever arm for motor actuator. Specify

type when ordering.

FINISH: Mill. TEMP. LIMIT: 450°F

Consult the factory for temperature limits over 450°F.

#### **OPTIONS**

Stuffing boxes and replaceable packing

Jamb Seals - Stainless steel

Blade Edge Seals - Stainless steel

Flanges other than the standard 2" wide

Finishes - Acrylic, baked enamel, etc.

Perimeter holes: one flange or two flanges

Other types of bearings

Materials - Full stainless steel construction, extruded aluminum,

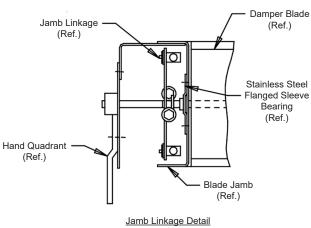
galvanized steel, etc.

#### **NOTES**

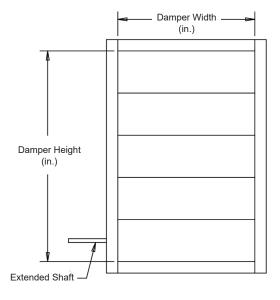
- 1. 1/4" nominal deduction will be made to the opening size given.
- 2. Construction may be with other materials when required to meet special conditions, such as: temperature, pressure, velocity, system environment, or other specifications.
- 3. Approximate shipping weight is 18 lbs./sq.ft.

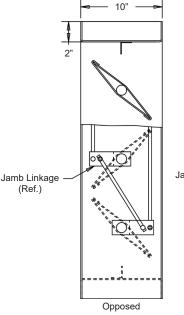
#### **DAMPER SIZES**

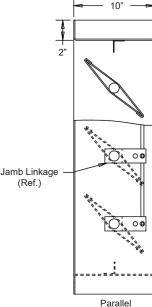
Min. Size	Max. Size					
6"W x 6"H (Single Blade)	60"W x 96"H					
6"W x 12"H (Opposed)	60°W X 96°H					



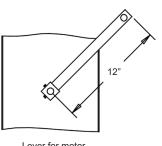
Jamb Linkage Detail
Opposed linkage with
Hand Quadrant.
(Shown)







Not to scale.



Lever for motor operation.

For handwritten orders, use the schedule block on page 4.

In the interest of product development, Louvers & Dampers reserves the right to make changes without notice.



#### **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"	48"	54"	60"								
	12"	6	8	11	14	17	19	22	25	28				
I.D.)	24"	11	17	22	28	33	39	44	50	55				
(in	36"	17	25	33	41	50	58	66	74	83				
Height	48"	22	33	44	55	66	77	88	99	110				
Hei	60"	28	41	55	69	83	96	110	124	138				
per	72"	33	50	66	83	99	116	132	149	165				
Damper	84"	39	58	77	96	116	135	154	173	193				
	96"	44	66	88	110	132	154	176	198	220				

For determining leakage values greater than 1 in. w.g. to a maximum of 12 in. w.g., use the multiplier correction chart below.

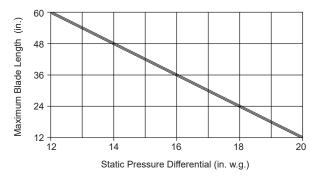
Static Pressure (in.)	2	3	4	5	6	7	8	9	10	11	12
Multiplier Correction Factor	1.5	2.0	2.3	2.7	3.0	3.3	3.6	3.9	4.3	4.6	5.0

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 38 in. lbs./sq.ft. of damper face area for a 60" x 96", with a minimum of 45 in. lbs./sq.ft. of a damper area for a size 60" x 8".

Damper air leakage shown is based upon publishing only the most conservative results for the Model GI50 industrial damper for an entire range of damper sizes.

To ensure proper damper operation and air leakage performance for this damper design, the static pressure and blade length limits shown below provide the necessary information and show the relationship between a damper's costs and its applications.



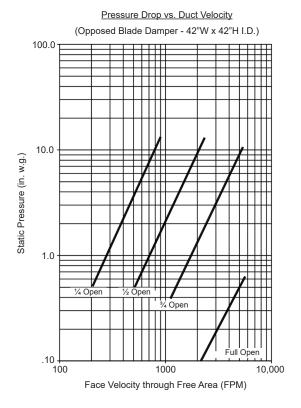


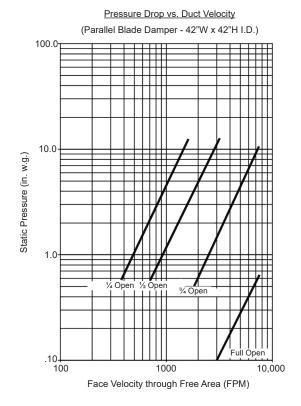
This damper's design at a blade length of 60" has a maximum allowable blade deflection of L / 360 for the static pressure indicated on the chart. At reduced blade lengths, higher static pressure limits can be attained without sacrificing damper operating performance characteristics.

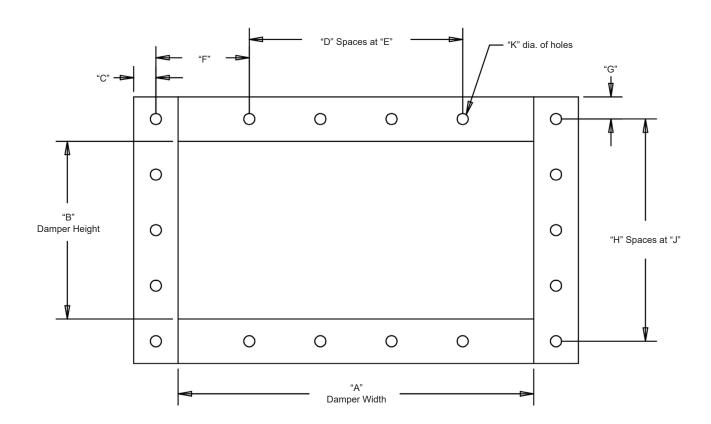


### PRESSURE DROP DATA

Pressure drop ratings are based on AMCA Standard 500, using test set-up figure 5.3 for a damper installed with duct upstream and downstream. Static pressures are corrected to .075 lb./cu.ft. air density.







																	A1
Item #	Qty	"A" Width	"B" Height	"C"	"D"	"E"	"F"	"G"	"H"	"J"	"K"	"M"	Para	Орро	Hand Quad	Motor Lever Arm	
		Damper Size				Damper Specifcs						Blade Position		Actuator		Union Made	
1	1	l	i i	1													
Arch. / E	ing.:						EDR:					ECN:				Job:	
Arch. / E							EDR:					ECN:				Job:	

