

Industrial Damper

GI55

10" Deep • Airfoil Blade • 400°F Max. Temperature • Clean Air Application

STANDARD CONSTRUCTION

- FRAME:** 2" x 10" x 2" 12-GA galvanized steel formed channel frame
- BLADE:** .080" extruded aluminum; 8" wide
- JAMBS:** .093" thick; extruded 6063-T5 aluminum
- SHAFT:** 3/4" dia. plated steel stub shaft with a positive interlock into blade section
- LINKAGE:** Formed 12-GA galvanized steel; Trunnion is a machined pivot of plated steel with a 1/2" dia. plated steel interconnecting rod
- OPERATOR:** Manual hand quadrant or lever arm for motor actuator
- FINISH:** Mill
- TEMP. LIMITS:** 400°F

OPTIONS

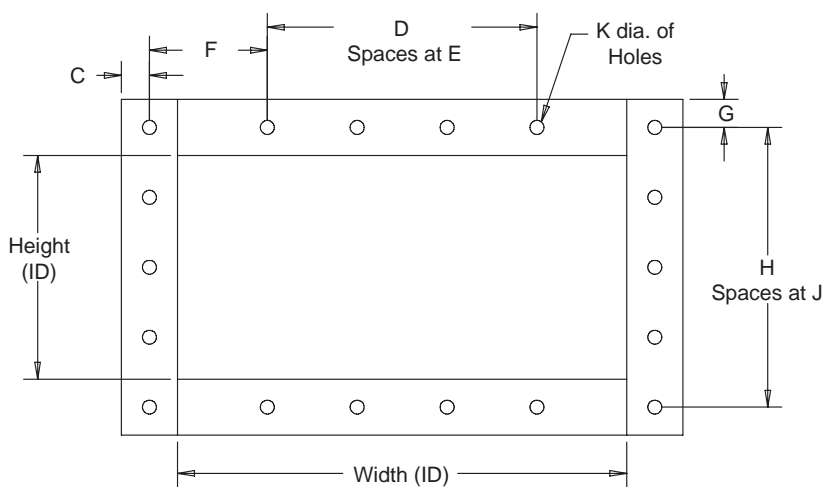
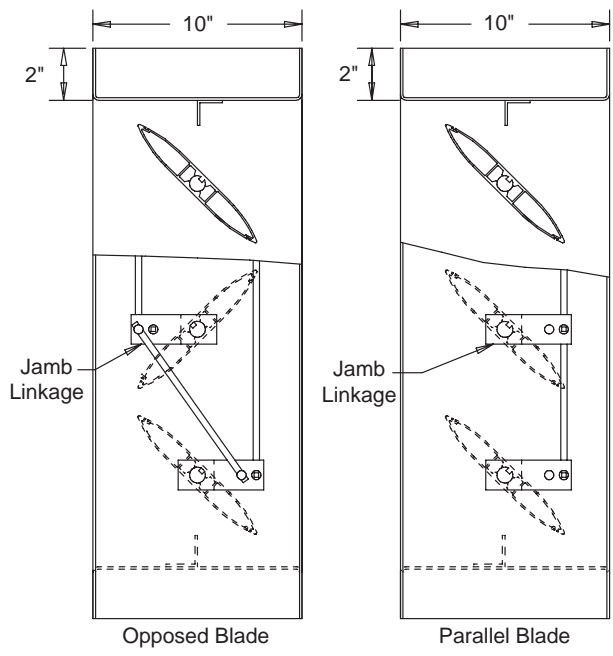
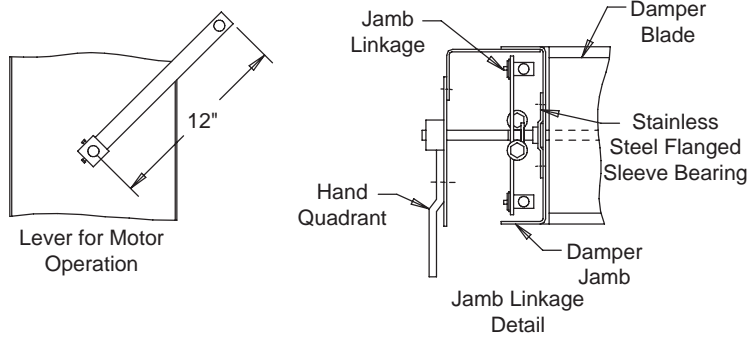
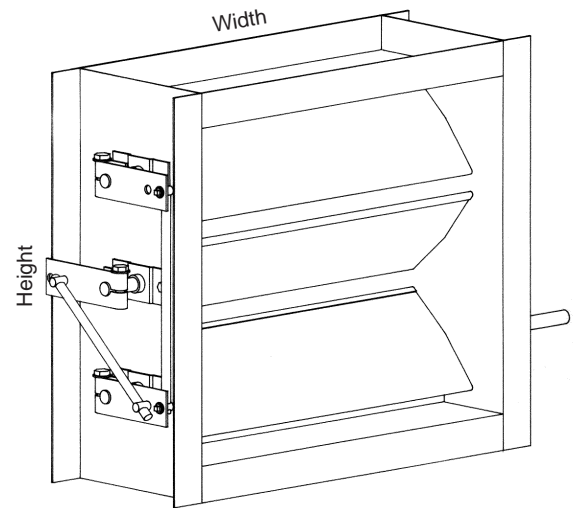
- Stainless Steel Blade or Jamb Seals
- Stuffing Boxes and Replaceable Packing
- Variable Flange Sizes
- Perimeter Holes - One Flange or Both Flanges
- Actuators - Electric or Pneumatic
- Finish - Baked Enamel, Kynar

NOTES

1. "A" width and "B" height are opening dimensions. Dampers are provided by inside dimension.

DAMPER SIZE

Panel	Min Panel (ID)	Max Single Panel (ID)
GI55	12"W x 8"H Single Blade 12"W x 16"H Opposed Blade	60"W x 96"H



Optional Flange with Holes
(Must Specify Dimensions C-K)



SD-GI55-09.01

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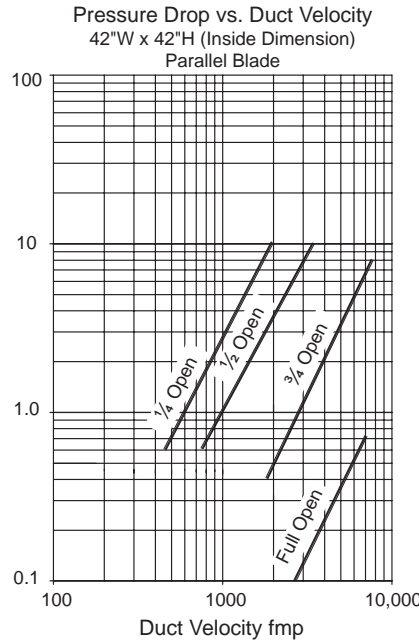
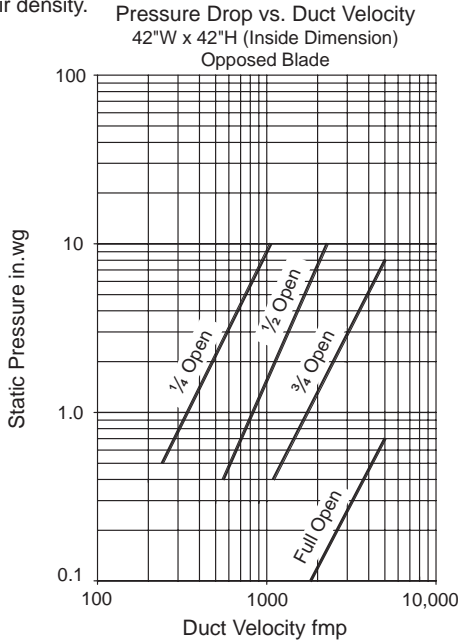
Pressure Drop:

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

Velocity Limitations:

The table below lists the maximum allowable velocity for a given maximum damper size. When application requirements exceed the recommendations listed in the table, select another model or consult the factory.

Maximum Allowable Velocity		
≤ 3000 fmp	4000 fmp	5000 fmp
Damper Sizes		
12"W x 9"H	12"W x 9"H	12"W x 9"H
60"W x 96"H	60"W x 72"H	60"W x 54"H



Leakage:

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

Air Leakage cfm

		Width								
		12	18	24	30	36	42	48	54	60
Height	12	12	16	20	22	24	28	32	34	36
	24	20	24	28	32	36	42	48	49	50
	36	30	35	42	48	54	57	60	68	75
	48	40	44	48	54	60	70	80	90	100
	60	50	55	60	67	75	87	100	112	125
	75	60	65	65	80	90	105	120	135	150
	84	70	77	84	95	105	122	140	158	175
	96	80	88	90	108	120	140	160	180	200

For determining leakage values greater than 1 in.wg to a maximum of 10 in.wg use the multiplier correction chart below.

Static Pressure	2	3	4	5	6	7	8	9	10
Multiplier Correction Factor	1.3	1.5	1.6	1.8	2.0	2.3	2.6	2.8	3.0

Air Leakage ratings are based on AMCA Standard 500 using test set up 5.4 with a damper closing torque applied to the damper of 31 in.lbs/sq.ft. of damper area for a size 60"W x 96"H, with a minimum of 45 in.lbs/sq.ft. of damper area for a size 60"W x 8"H.

Damper air leakage shown is based upon publishing only the most conservative leakage results for the L&D model GI55 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/blade length limits shown provide the user with this information and in addition provides a relationship between damper cost and the application.

The model GI55 damper design at a blade length of 60" has a maximum allowable blade deflection of L/360 for the static pressure indication on the chart. At reduced blade lengths higher static pressure limits can be attained without sacrificing damper operating and performance characteristics.

