

Industrial Damper

GI30

4" Deep • Airfoil Blade • 250°F Max. Temperature • Galvanized Steel

STANDARD MATERIALS AND CONSTRUCTION

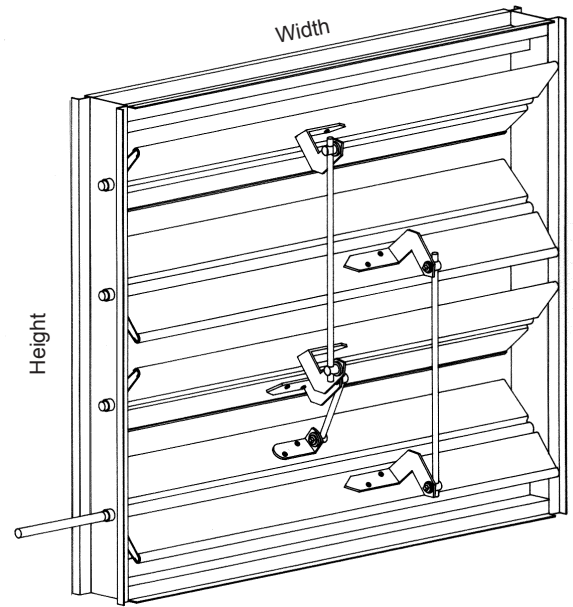
- FRAME:** 16-GA galvanized steel; 4" deep; Hat-Shaped
- BLADE:** 16-GA galvanized steel airfoil; 8" wide max.
- SHAFT:** ½" dia. plated steel shaft full length
- BEARINGS:** Stainless steel flanged sleeve, press fit into frame
- LINKAGE:** Face mounted, located in the airstream; Formed bracket of ⅛" thick steel; Trunnion is a machined pivot of plated steel with a 5/16" dia. rod
- OPERATOR:** 6" extended shaft
- FINISH:** Mill
- TEMP. LIMITS:** 250°F; Consult factory for temperatures > 250°F

OPTIONS

- Channel Frame
- Frame Holes for Channel Frame
- Flexible Stainless Steel Jamb or Blade Edge Seals
- Neoprene Jamb or Blade Edge Seals
- Stainless Steel Construction
- Actuators - Electric or Pneumatic
- Finish - Baked Enamel, Kynar

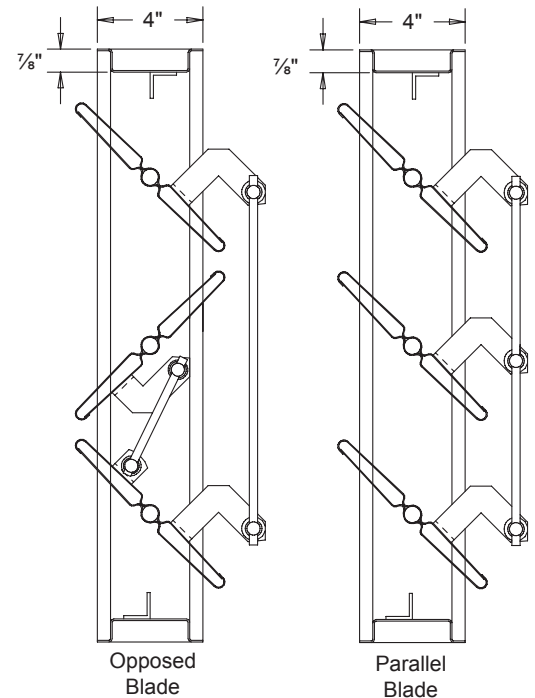
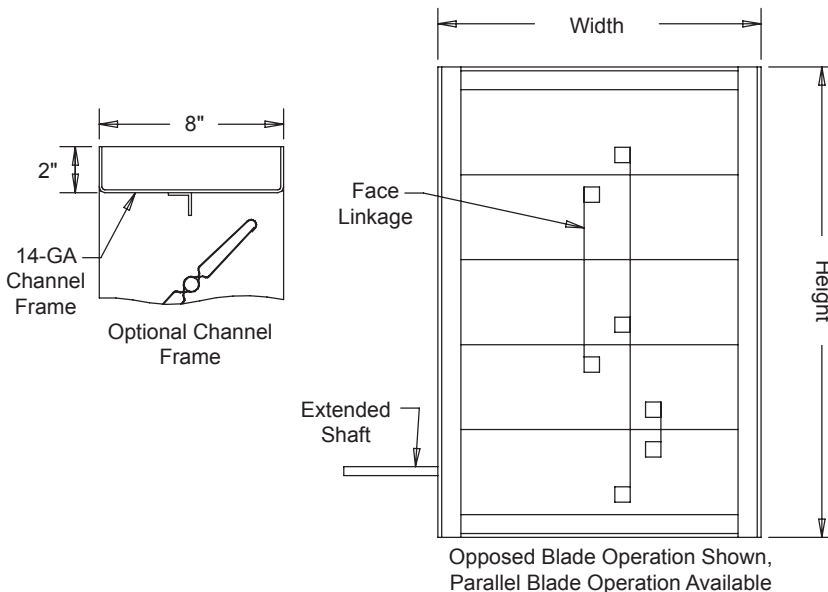
NOTES

1. "A" width and "B" height are opening dimensions.
2. Hat-Shaped framed dampers are provided approximately ¼" undersize than the outside dimension.
3. Dampers with channel frames will be fabricated to exact inside dimension unless otherwise specified.



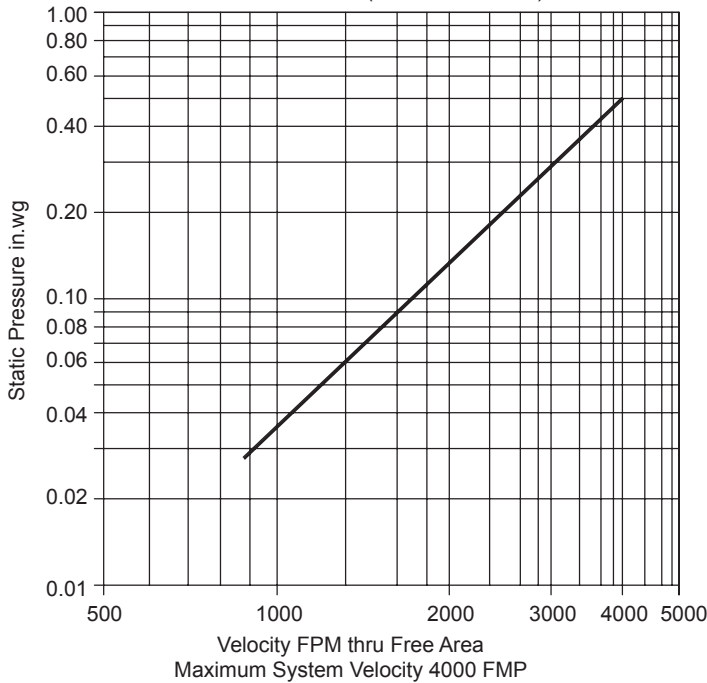
DAMPER SIZES

Panels	Min Panel	Max Single Panel
GI30	12"W x 8"H - Single Blade 12"W x 12"H - Opposed	48"W x 72"H - Hat-Shaped Frame 48"W x 96"H Channel Frame

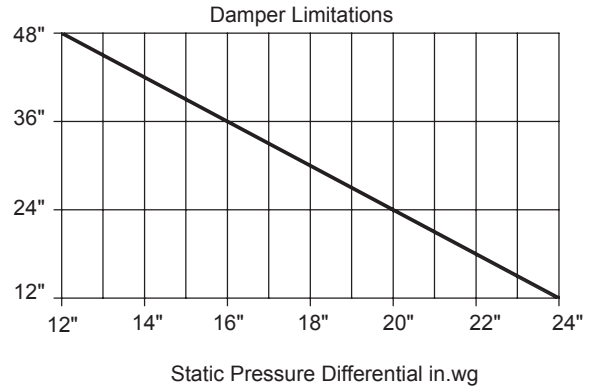


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Pressure Drop vs. Duct Velocity
42"W x 42"H (Inside Dimension)



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 GI30 design at a length of 48" 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 and performance characteristics.

Pressure drop curves listed are based on AMCA Standard 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.

Air Leakage cfm

		Width (inside dimension)							
		12	18	24	30	36	42	48	
Height (inside dimension)	12	5	4	8	10	12	14	16	
	24	8	12	16	20	24	28	32	
	36	12	18	24	30	36	42	48	
	48	16	24	32	40	48	56	64	
	60	20	30	40	50	60	70	80	
	72	24	36	48	60	72	84	96	
	84	28	42	56	70	84	98	112	
	96	32	48	64	80	96	112	128	

Shaded Area - Damper height can increase to 96" when furnished with channel frame.

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.

For determining leakage values greater than 1 in.wg 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	2.5	2.8	3.1	3.4	3.8	4.4	5.0	5.6	6.3

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 on 15 in.lbs/sq.ft of damper face area for a 48"W x 72"H, with a minimum of 25 in.lb/sq.ft of damper area for a size 48"W x 9½".

Damper air leakage show is based upon dampers furnished with blade and jamb seals. Results published are for the L&D model GI30 industrial damper for an entire range of damper sizes.