

MODEL ID30

4" Deep • Airfoil Blade • 250°F Max. Temperature • Industrial Damper

STANDARD MATERIALS AND CONSTRUCTION

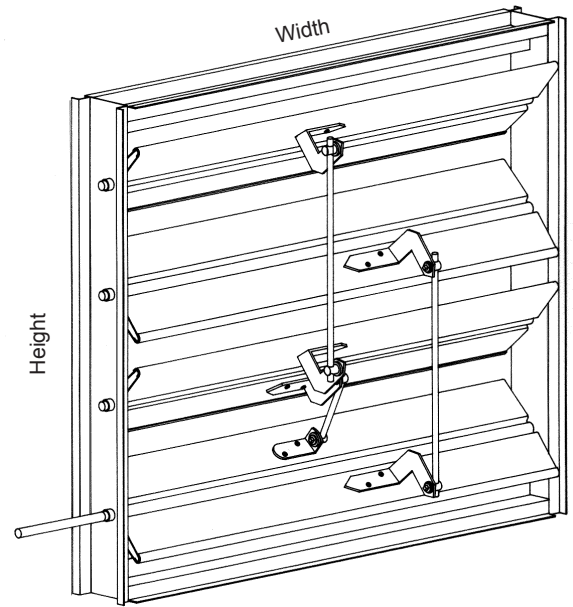
- FRAME:** 16-GA galvanized steel; 4" deep; Hat-Shaped
- BLADE:** 16-GA galvanized steel airfoil; 8" wide max.
- SHAFT:** ½" dia. plated steel shaft full length
- BEARINGS:** Stainless steel flanged sleeve, press fit into frame
- LINKAGE:** Face mounted, located in the airstream; Formed bracket of ⅛" thick steel; Trunion 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

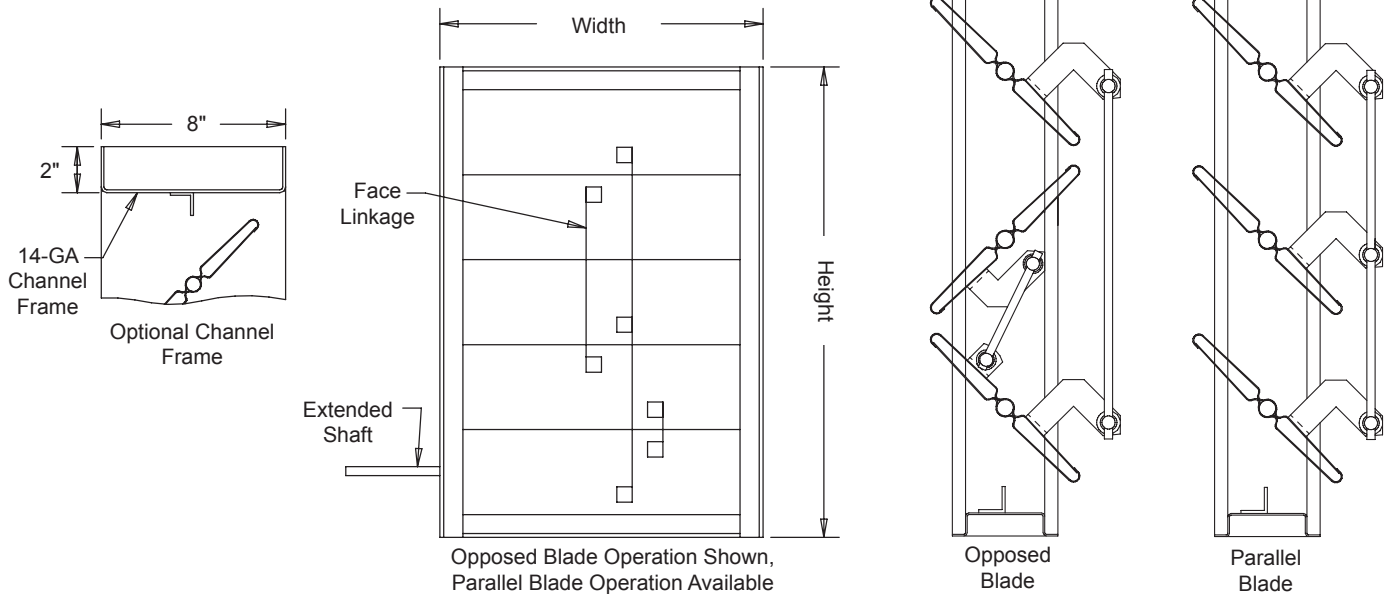
NOTES

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.



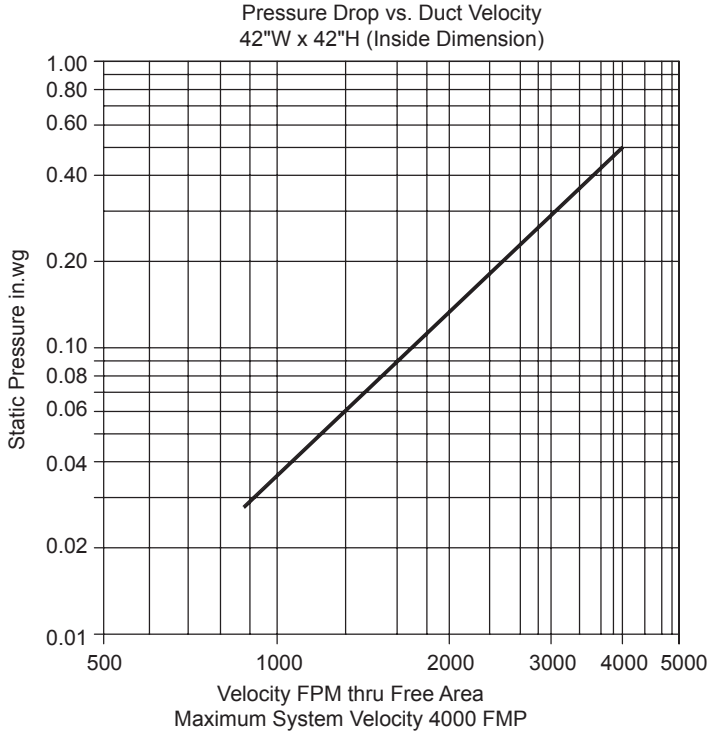
DAMPER SIZES

| Panels | Min Panel | Max Single Panel |
|--------|--|---|
| ID30 | 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 |

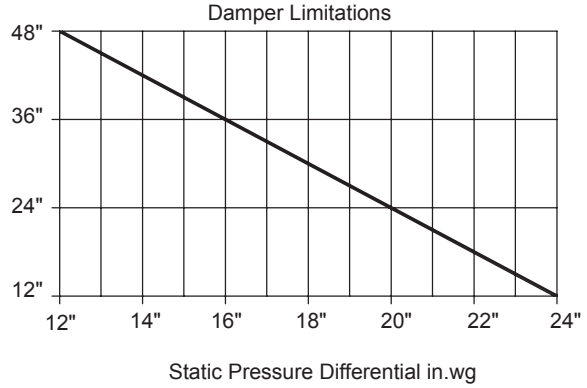


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To ensure proper damper operation and air leakage performance for this damper design. The static pressure/blade length limits shown provide the user with this information and in addition provides a relationship between damper cost and the application.



The ID30 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) | | | | | | | |
| Height (inside dimension) | | 12 | 18 | 24 | 30 | 36 | 42 | 48 | |
| | 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 ABI model ID30 industrial damper for an entire range of damper sizes.

