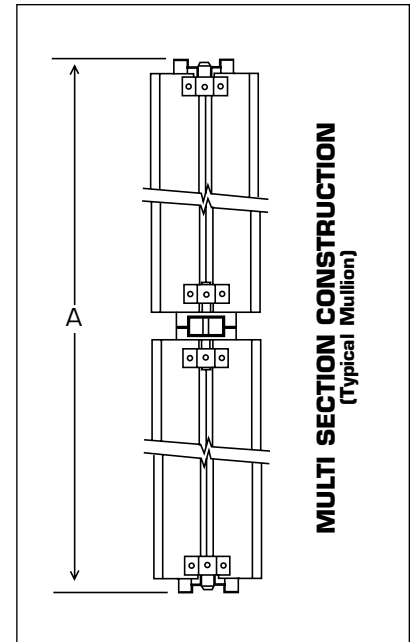
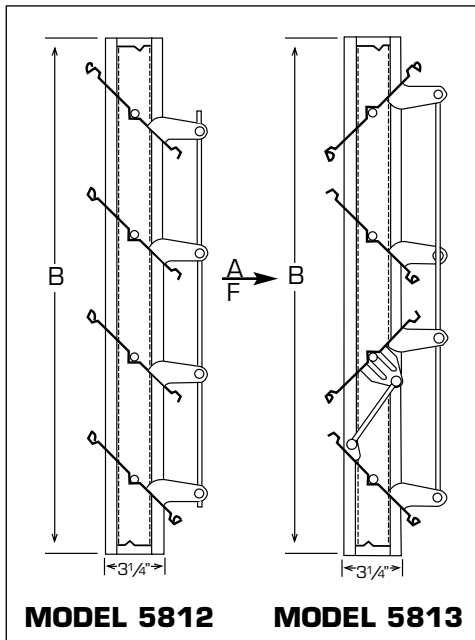




CERTIFICATION & SUBMITTAL

MODEL 5810

**Dyn-O-Seal Low Leakage Dampers
Parallel and Opposed Blade**



STANDARD SPECIFICATIONS

OPTIONS

- **FRAME:** 14 gauge galvanized press formed steel with welded corners.
- **BLADES:** 16 gauge galvanized press formed reinforcements.
- **AXLES:** 1/2" x 2" long plated steel rods.
- **BEARINGS:** 1/2" diameter self-lubricating porous bronze.
- **BLADE EDGE SEAL:** Dyn-O-Grip extruded dual durometer vinyl.
- **SIDE SEALS:** Spring stainless steel.
- **CONTROL ROD:** 1/2" diameter x 9" long plated steel.
- **HARDWARE:** Plated steel center brackets, brass pivots, 1/4" or 5/16" diameter plated steel linkage rod.
- **FINISH:** Standard Mill.
- **MAXIMUM TEMPERATURE:** 160°F.
- **MAXIMUM VELOCITY:** 2000 fpm.
- **MAX. SINGLE SECTION:** 48" X 72".
- **MINIMUM SIZE:** Model 5811: 6" x 8"
Model 5812: 8" x 12"
Model 5813: 12" x 12"

- 09 Tack Weld Hardware.
- 12 Nylon Bearings (Bushings).
- 13 Stainless Steel Bearings (Bushings).
- 14 Stainless Steel Bearing Pins (Axles).
- 20 Vertical Blades.
- 24 Right Angle Mixing Set-up, internal linkage.
- 25 Right Angle Mixing Set-up, external linkage.
- 26 Face & Bypass Set-up, vertical internal linkage.
- 27 Face & Bypass Set-up, vertical external linkage.
- 28 Face & Bypass Set-up, horizontal, internal linkage or jackshaft.
- 31 Flange, 1-1/4" fastened to damper frame [opposite linkage].
- 89 Sleeve.
- 90 Jackshaft.
- 92 Actuators.

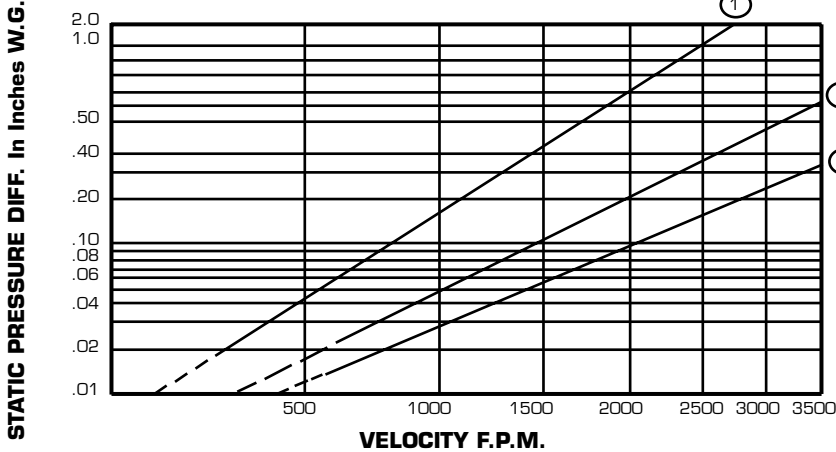
NOTE: A & B are opening dimensions. Unless otherwise specified, dampers are made 1/4" undersize.



**PERFORMANCE DATA
MODEL 5813
Low Leakage Dyn-O-Seal Dampers**

Vent Products certifies that the Model 5813 damper shown herein is licensed to bear the AMCA Seal. The ratings shown in Airflow Chart 1 and Leakage Chart 2 are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and air leakage ratings.

**AIRFLOW
CHART 1**



Test set-up per figure 5.3 (in-duct) and 5.5 (in-wall) and measurement per figure 6.5 of AMCA standard 500-89.

TEST SIZES

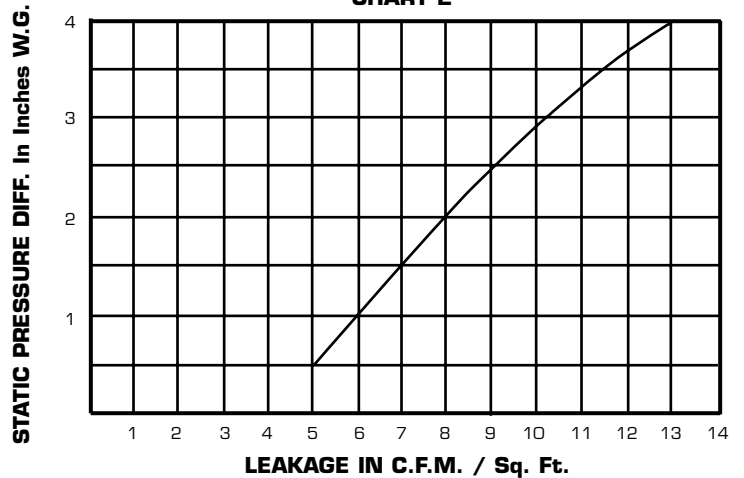
1. 24" X 24" full open Figure 5.5 (in-wall).
2. 12" x 12" full open Figure 5.3 (in-duct).
3. 24" x 24" full open Figure 5.3 (in-duct).

The AMCA Certified Ratings Program (CRP) requires the testing of specific model sizes, tested with airflow in both directions, then certifying only the least favorable performance to assure the most conservative rating ... as shown here in Leakage Chart 2. Holding torque applied was 4-inch pounds per square foot of damper area applied through external control arm to blade linkage. Test set-up per figure 5.5 and measurement apparatus set-up per figure 6.5 of AMCA Standard 500-89.

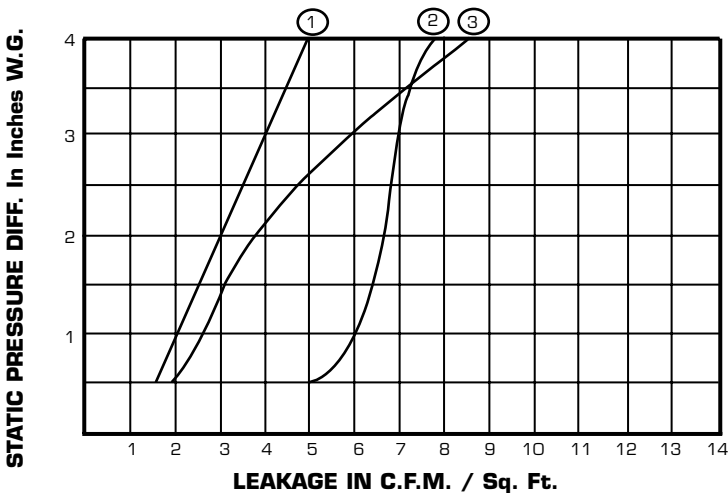
Air leakage is based on operation between 50°F and 104°F.

Standard Air Density 0.075 LB/FT³.

**LEAKAGE
CHART 2**



**LEAKAGE
CHART 3**



The performance information on Leakage Chart 3 is derived from testing in accordance with AMCA Standard 500-89 with test set-up per figure 5.5 and measurement apparatus set-up per figure 6.5 of the AMCA Standard. This data is not certifiable and should be used for reference only.

This information is based on testing the following 3 dampers with linkage downstream as Vent Products recommends, and labels each damper accordingly.

TEST SIZES

- ① 48" X 12" holding torque applied 4 in.lb./S.F. damper area.
- ② 12" X 72" holding torque applied 4 in.lb./S.F. damper area.
- ③ 48" X 72" holding torque applied 4 in.lb./S.F. damper area.