



MANUAL BALANCING DAMPER

MODELS: 1810 PARALLEL BLADE 1820 OPPOSED BLADE

The Nailor 1800 Series Dampers are especially designed for manual balancing applications. They are suitable for use in the majority of commercial low to medium pressure and velocity HVAC systems.

They are designed and built to provide a cost effective and reliable damper for reduced volume control and not positive shut-off. They are not recommended for applications as an automatic control damper.

The 1800 Series includes many of the design features incorporated in the Nailor 1000 Series Control Dampers. These include a sturdy hat channel frame with die-formed corner gussets for reinforcement, a roll-formed triple-vee blade design that maximizes strength and zero maintenance concealed linkage (out of the air stream) for reduced air turbulence.

Nailor's 1800 Series exceed the volume damper design recommendations in SMACNA "HVAC Duct Construction Standards - Metal and Flexible" (3rd edition 2005), and offer an economical manufactured product alternative to custom 'shop built' dampers.

STANDARD CONSTRUCTION:

Frame: 5" x 7/8" x 16 ga. (127 x 22 x 1.6) galvanized steel hat channel with die-formed corner gussets. Low profile (flat top and bottom) on dampers 10" (254) high and under.

Blades: 6" (152) wide on 5 1/2" (140) centers. 16 ga. (1.6) galvanized steel triple-vee design. Parallel or opposed action.

Linkage: Concealed type totally enclosed within the frame and out of the airstream. Plated steel.

Bearings: 1/2" (13) dia. celcon[®].

Axes: 1/2" (13) dia. plated steel double bolted to blades.

Drive Shaft: 6" (152) long x 1/2" (13) dia. lock-on drive shaft on each damper section.

Minimum Size: Single blade (parallel): 6" x 4" (152 x 102).
Two blades (parallel or opposed): 6" x 10" (152 x 254).

Maximum Size: Single section size is 48" x 72" (1219 x 1829).
Multiple section assembly: 96" x 144" (2438 x 3658).

Temperature Range: -50°F to 250°F (-45°C to 121°C)

OPTIONS:

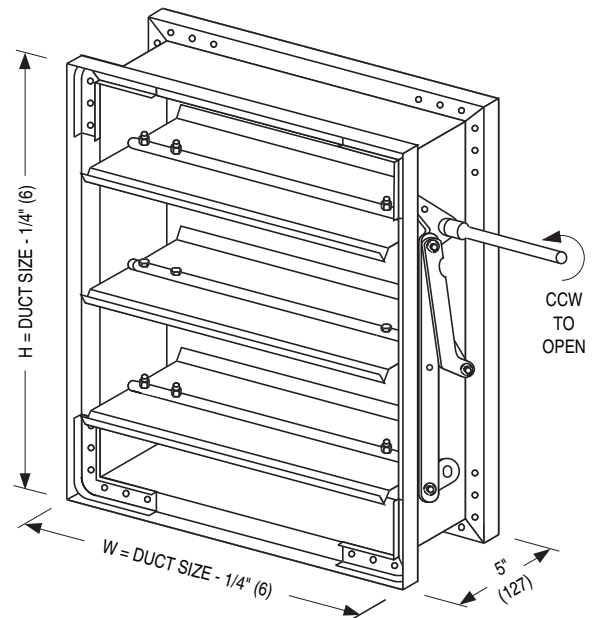
- BO Oilite bearings
- 304 Stainless Steel Construction
- HLQ Hand-locking quadrant (one required per damper section)
- HL2 Hand-locking quadrant with 2" (51) stand-off bracket
- Other _____

PERFORMANCE:

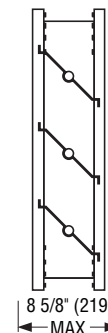
Dampers are designed to operate in a clean, dry environment. For proper operation, dampers must be installed without racking. The hand quadrant must be installed on the indicated drive blade.

Maximum System Pressure: 2.5" w.g. (625 pa).

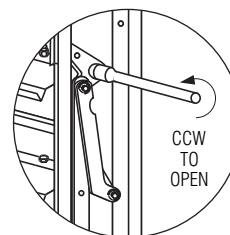
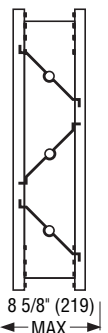
Maximum Face Velocity: 2000 fpm (10 m/s).



MODEL 1810
PARALLEL
BLADE
(optional)

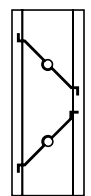


MODEL 1820
OPPOSED
BLADE
(standard)



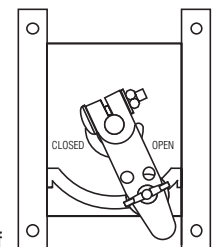
**LOCK-ON
DRIVE SHAFT**

The low profile frame illustration is used to maximize free area on units 10" (254) high and under.



**OPTIONAL
HAND-LOCKING
QUADRANT**

7/8" (22) stand-off



Dimensions are in inches (mm).

SCHEDULE TYPE:				
PROJECT:				
ENGINEER:				
CONTRACTOR:				
DATE	C SERIES	SUPERSEDES	DRAWING NO.	
10 - 1 - 10	1800	1 - 8 - 07	1800-1	