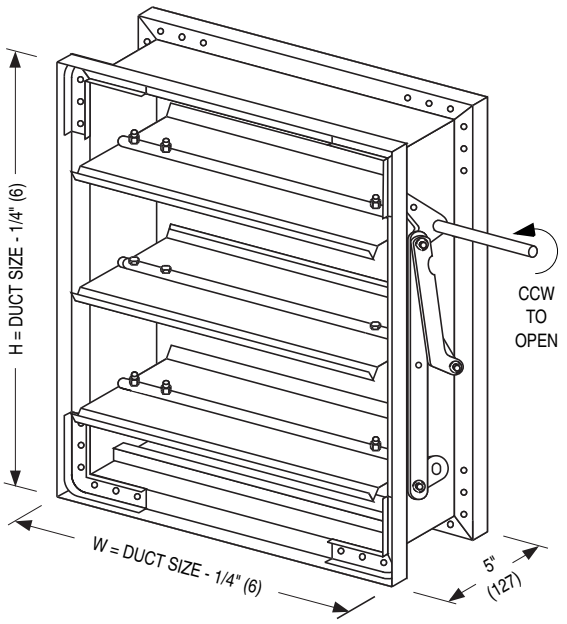
STANDARD CONTROL DAMPER
STEEL • STANDARD PERFORMANCE
MODELS: 1012 & 1022

The 1012/22 Series are Nailor's most widely used unsealed dampers and are the standard choice for use in the majority of low to medium pressure and velocity commercial HVAC systems. They are low cost, high quality dampers that meet or exceed the majority of standard specification requirements. The design features include a sturdy hat channel frame with die-formed corner gussets for reinforcement and structural strength equivalent to 13 gauge channel type frames, a vee groove blade design that maximizes strength and zero maintenance concealed linkage (out of the air stream) for reduced pressure drop and air turbulence.



RATINGS:

Velocity: Up to 3000 fpm (15.2 m/s)
Pressure: Up to 5" wg. (1.2 Kpa)
Leakage: 4 cfm/sq. ft. @ 1" wg. (20 l/s/m2 @ 0.25 kPa)
8 cfm/sq. ft. @ 4" wg. (41 l/s/m2 @ 1.0 kPa)
Temperature Range: -50°F to +180°F (-46°C to +82°C)

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) galv. steel vee groove 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®.

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

Drive Shaft: 6" (152) long x 1/2" (13) dia. rigid drive shaft on all single section dampers. A 1/2" (13) or 1" (25) dia. factory installed jackshaft is standard on all multiple section dampers. See multi-section detail 1000 MSI.

Sizes (Duct W x H):

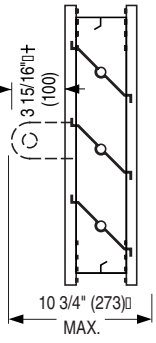
Minimum		Maximum	
Single Section		Single Section	Multiple Section
Single Blade 6" x 4" (152 x 102)	Two Blades (parallel or opposed) 6" x 10" (152 x 254)	48" x 72" (1219 x 1829)	Unlimited

OPTIONS:

- ❑ **BO** Oilite bearings
- ❑ **304** Stainless Steel construction
- ❑ **AMP** Actuator mounting side plate
- ❑ **BSP** Polyurethane foam blade seals
- ❑ **JSM** Metallic jamb seals
- ❑ **DLO** Lock-on drive shaft
- ❑ Other _____.

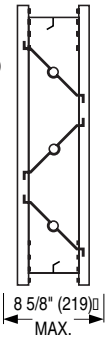
Nailor offers a wide selection of pneumatic and electric actuators for factory or field installation.

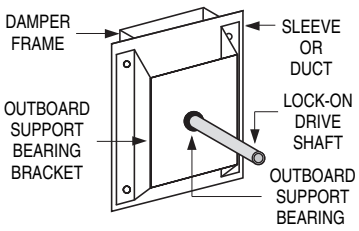
❑ **MODEL 1012** PARALLEL BLADE



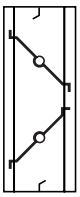
† jackshaft standard on multiple section dampers. Jackshaft securely bolted to frame.

❑ **MODEL 1022** OPPOSED BLADE





Optional lock-on drive shaft support bracket detail.



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

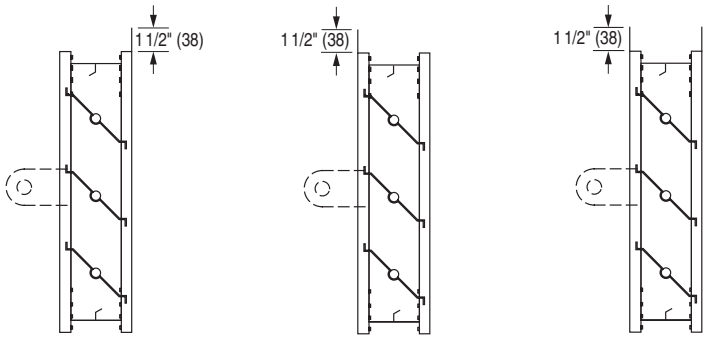
SCHEDULE TYPE:	Page 1 of 2			
PROJECT:	Dimensions are in inches (mm).			
ENGINEER:	DATE	A SERIES	SUPERSEDES	DRAWING NO.
CONTRACTOR:	2 - 25 - 26	1000	12 - 4 - 12	1000-2

STANDARD CONTROL DAMPER
STEEL • STANDARD PERFORMANCE
MODELS: 1012 & 1022 • PERFORMANCE DATA

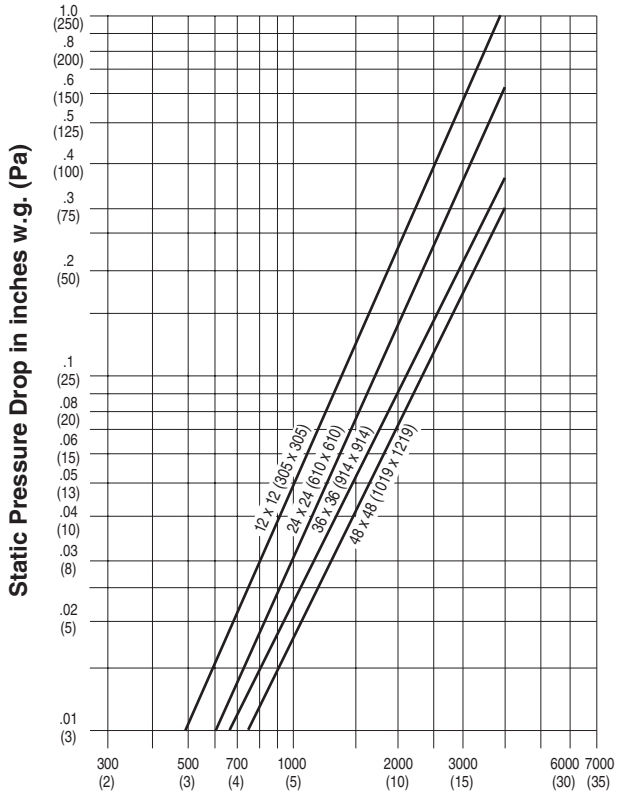
PERFORMANCE DATA:
MODELS: 1012 AND 1022

FRAME OPTIONS:

❑ **FF** Flanged Front ❑ **FR** Flanged Rear ❑ **FD** Double Flange



PRESSURE DROP (damper fully open):



Tested per AMCA standard 500-D, Fig. 5.3.

DYNAMIC LIMITATIONS/LEAKAGE

Damper Width	Maximum System Pressure	Maximum System Velocity	Leakage *			
			W/O Seals		W/Seals	
			% of Max. Flow	Cfm/ Sq. Ft.	% of Max. Flow	Cfm/ Sq. Ft.
48" (1219)	2.5" w.g.	3000 fpm	1.9	38	0.48	9.5
36" (914)	3.0" w.g.	3000 fpm	2.15	43	0.54	10.8
24" (610)	4.0" w.g.	3000 fpm	2.35	47	0.57	11.3
12" (305)	5.0" w.g.	3000 fpm	3.1	62	0.8	16

* Leakage information is based upon a pressure differential of 1" w.g. tested per AMCA standard 500-D, Fig. 5.5.

SCHEDULE TYPE:	Page 2 of 2			
PROJECT:	Dimensions are in inches (mm).			
ENGINEER:	**DATE**	**A SERIES**	**SUPERSEDES**	**DRAWING NO.**
CONTRACTOR:	**2 - 25 - 26**	**1000**	**12 - 4 - 12**	**1000-2**