

- STAINLESS STEEL CONSTRUCTION
- VEE BLADE
- LOW LEAKAGE
- STANDARD PERFORMANCE

MODELS:

- 1010-304 STAINLESS STEEL CONSTRUCTION (PARALLEL BLADE)**
- 1020-304 STAINLESS STEEL CONSTRUCTION (OPPOSED BLADE)**



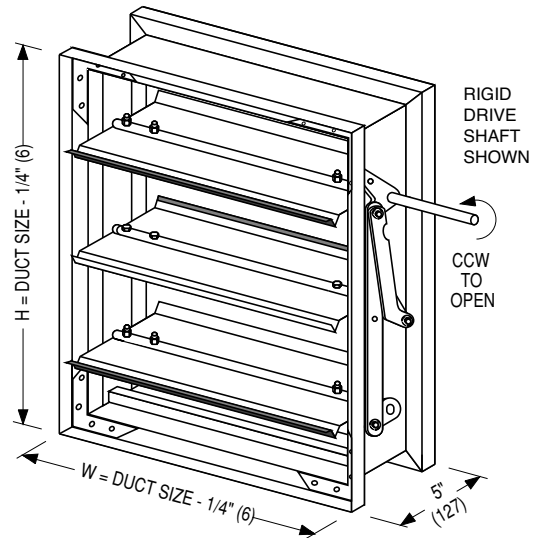
Model 1020 with 304 Stainless Steel construction

Nailor Models 1010/1020 with optional 304 Stainless Steel construction provide an enduring solution for corrosive environment commercial and industrial HVAC and process applications. The proven triple-vee blade design and sturdy hat channel mitered frame with die-formed corner gussets afford solid performance that will withstand many normally harsh atmospheric and process elements. The design also features stainless steel zero-maintenance concealed blade linkage for reduced pressure drop and turbulence, and stainless steel axles, bushings and hardware for long lasting operation suitable for use in applications with temperatures ranging from -50°F (-45°C) to 250°F (121°C) depending on blade configuration and leakage (seals) requirements.

B CONTROL DAMPERS

STANDARD CONSTRUCTION:

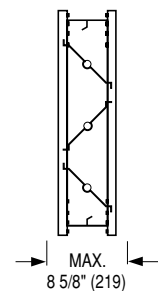
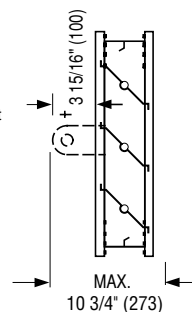
- FRAME:** 5" x 7/8" x 16 ga. (127 x 22 x 1.6) Type 304 stainless steel hat channel with stainless steel corner gussets. Frame and corner gussets are welded for rigidity. Low profile (flat top and bottom) on dampers 10" (254) high and under.
- BLADES:** 6" (152) wide on 5 1/2" (140) centers. 16 ga. (1.6) Type 304 stainless steel triple-vee design. Parallel or opposed action.
- LINKAGE:** Concealed type totally enclosed within the frame and out of the airstream. Type 304 stainless steel.
- BEARINGS:** 1/2" (13) dia. Type 304 stainless steel.
- AXLES:** 1/2" (13) dia. stainless steel double bolted to blades.
- DRIVE SHAFT:** 6" (152) long x 1/2" (13) dia. stainless steel rigid shaft; or optional lock-on shaft with outboard support bracket (standard in Canada), on all single section dampers.
- BLADE SEALS:** Dual durometer bulb type extruded PVC.
- JAMB SEALS:** Compression type cambered stainless steel.
- 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: 48" x 72" (1220 x 1829). Multiple section assembly - unlimited.



MODEL 1010-304 STAINLESS STEEL PARALLEL BLADE

MODEL 1020-304 STAINLESS STEEL OPPOSED BLADE

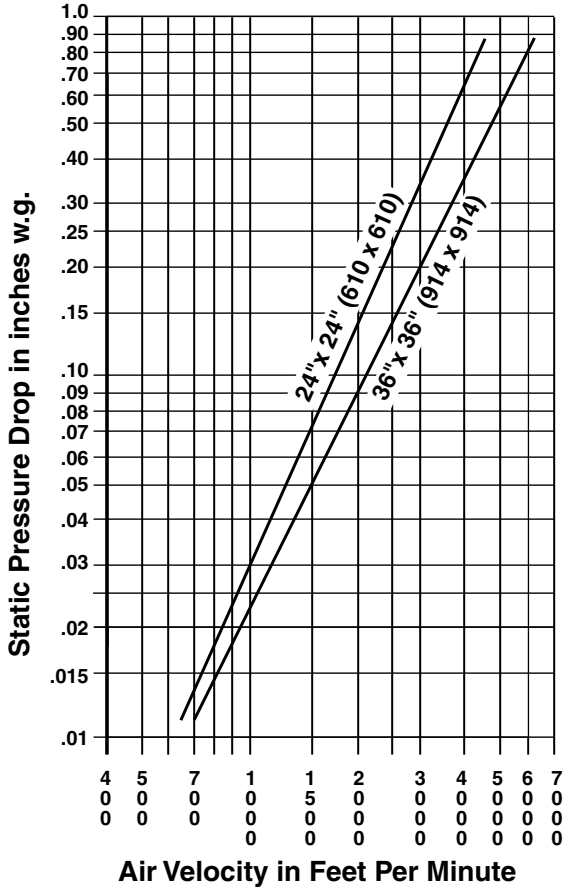
+ jackshaft standard on multiple section dampers.



MODELS: 1010/1020 WITH OPTIONAL 304 STAINLESS STEEL CONSTRUCTION

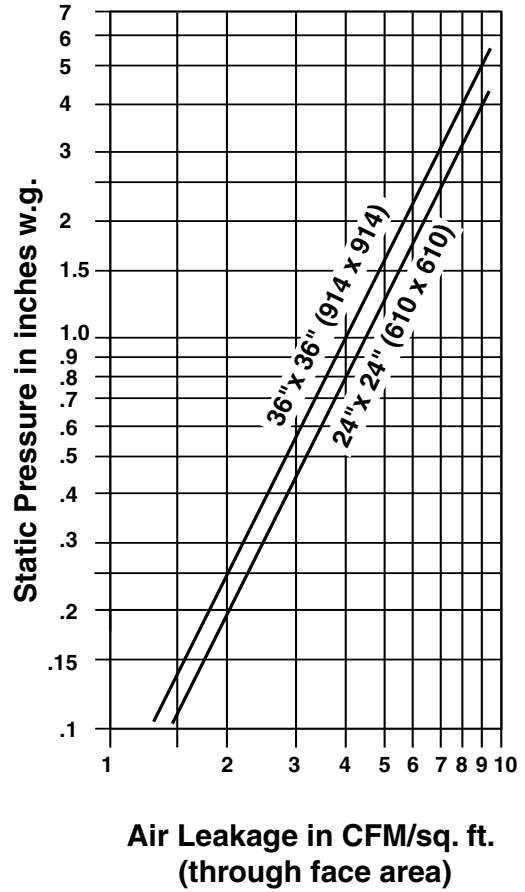
PERFORMANCE DATA:

PRESSURE DROP (damper fully open)



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

LEAKAGE (damper fully closed)



Tested per AMCA standard 500-D, Fig. 5.5.

PRESSURE DROP (in. w.g.)

DAMPER SIZE	APPROACH VELOCITY (FPM)			
	750	1000	1500	2000
24" x 24" (610 x 610)	.016	.030	.07	.14
36" x 36" (914 x 914)	.013	.023	.05	.09
48" x 48" (1219 x 1219)	.010	.020	.03	.07

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

DYNAMIC LIMITATIONS/LEAKAGE

DAMPER WIDTH	MAXIMUM SYSTEM PRESSURE	MAXIMUM SYSTEM VELOCITY	LEAKAGE *	
			% OF MAX. FLOW	CFM/SQ. FT.
48" (1219)	2.5" w.g.	2000 FPM	0.18	3.5
36" (914)	3.0" w.g.	2000 FPM	0.20	4.0
24" (610)	4.0" w.g.	2000 FPM	0.23	4.5
12" (305)	5.0" w.g.	2000 FPM	0.33	6.6

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

Standard Construction Temperature Range: -50°F to 180°F (-45°C to 82°C)

MODELS: 1010/1020 WITH OPTIONAL 304 STAINLESS STEEL CONSTRUCTION

AVAILABLE OPTIONS/ACCESSORIES:

The following construction options and accessories are implemented or available on Models 1010/1020 WITH OPTIONAL 304 STAINLESS STEEL CONSTRUCTION. See page B55 for further description of options/accessories.

	CODE	DESCRIPTION
MATERIAL:	304	Type 304 Stainless Steel Construction.
FRAME:	HC	Hat channel frame is standard. Flange frames are not available with 304 option.
FRAME GAUGE:	16G	16 Gauge frame is standard. Other gauges are not available with 304 option.
BLADE LINKAGE STYLE:	LC	Concealed linkage is standard. Face linkage is not available with 304 option.
BEARINGS:	BS	Stainless Steel Bearings are standard when option 304 is selected.
JAMB SEAL:	JSS	Stainless Steel Jamb Seal is standard when option 304 is selected.
ROUND/OVAL TRANSITION:	CR CO	Transition Casing for Round Duct Transition Casing for Oval Duct
OPERATOR ACCESSORIES:	HLQ PCE PCI FMO FMI JK5 JK1 VCK	Hand Locking Quadrant External Chain Operator Internal Chain Operator Factory Mounted Actuator-Outside w/side plate Factory Mounted Actuator-Internal w/jackshaft 1/2" (13) Dia. Jackshafting for Single Section 1" (25) Dia. Jackshafting for Single Section Vertical Interconnection Kit

B

CONTROL DAMPERS

At Nailor Industries, we take pride in our flexibility to meet the needs of your specific applications. The options listed above provide a variety of commonly used modifications to satisfy the majority of today's diverse requirements. Should your application require a more unique configuration, please consult your authorized Nailor Representative or the Nailor Industries office nearest you for assistance.

HOW TO SPECIFY OR TO ORDER

MODELS: 1010/1020 WITH OPTIONAL 304 STAINLESS STEEL CONSTRUCTION

HOW TO ORDER:

Standard construction for Models 1010/1020 WITH OPTIONAL 304 STAINLESS STEEL CONSTRUCTION is shown in highlighted box. Other option codes are listed below. See previous page for description of options.

MODEL	SIZE (W X H)	MATERIAL	FRAME TYPE	FRAME GAUGE	BLADE LINKAGE STYLE	DRIVE LOCATION	BEARINGS	BLADE SEAL	JAMB SEAL	ROUND/OVAL TRANSITION	OPERATOR ACCESSORIES
1010	ie: 48 x 24	304	HC	16G	LC	DR/DL	BS	BPV	JSS	-	-
1020		↑					*		*	CR CO	HLQ FMO FMI PCE PCI JK5 JK1 VCK

- Notes:
- ↑ Arrow indicates 'must select' option.
 - * When material option 304 is selected, stainless steel bearings (BS) and stainless steel jamb seals (JSS) will be selected automatically.
 - Right hand driveshaft is standard. For left hand driveshaft simply rotate the damper so that the driveshaft is on left hand side, as blade and jamb seals are designed to work with airflow in either direction. 1/2" (13) or 1" (25) dia. jackshafting is standard on all multiple section wide units.
 - If Pull Chain Operator option is selected, please specify length of chain required.
 - If Option CR Round Transition casing (or CO) is selected please order by duct size diameter ie: 36"ø.

SUGGESTED SPECIFICATION:

Provide and install, as shown on plans and/or schedules, low-leakage stainless steel dampers meeting or exceeding the following criteria: Frame shall be constructed of 16 ga. (1.6) Type 304 stainless steel hat channel with mitered corners and stainless steel corner gussets, welded for rigidity. Blades shall be of triple-vee design, 16 ga. (1.6) Type 304 stainless steel construction, on maximum 6" (152) centers, in parallel or opposed (please select) configuration. Blade axles shall be 1/2" (13) dia. stainless steel, double thru-bolted to blades with stainless steel fasteners at each end. Hex or square friction-fit, or press-fit axles are not acceptable. Bearings shall be of Type 304 stainless steel. Blade linkage shall be of Type 304 stainless steel, and be zero-maintenance design, out of airstream and totally concealed within the frame. Blade seals shall be dual durometer bulb type extruded PVC, and jamb seals shall be compression type cambered stainless steel, providing positive shut-off. All submitted performance data to be based on tests in accordance with AMCA Standard 500-D. Standard of acceptance: Nailor Industries Model 1010-304 Stainless Steel (parallel blade) or Model 1020-304 Stainless Steel (opposed blade).