LOW LEAKAGE CONTROL DAMPER
STEEL • STANDARD PERFORMANCE
MODELS: 1010 & 1020 WITH CR ROUND TRANSITIONS OPTION

The 1010CR/20CR Series are Nailor's most widely used low leakage multi-blade dampers in a low leakage casing with round transition collars and are the standard choice for use in the majority of commercial HVAC systems. They meet the frequently specified leakage criteria of less than 10 cfm per sq. ft at 4" w.g. (0.5% at 2000 fpm).

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 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.

Blade Seals: Dual durometer bulb type extruded PVC.

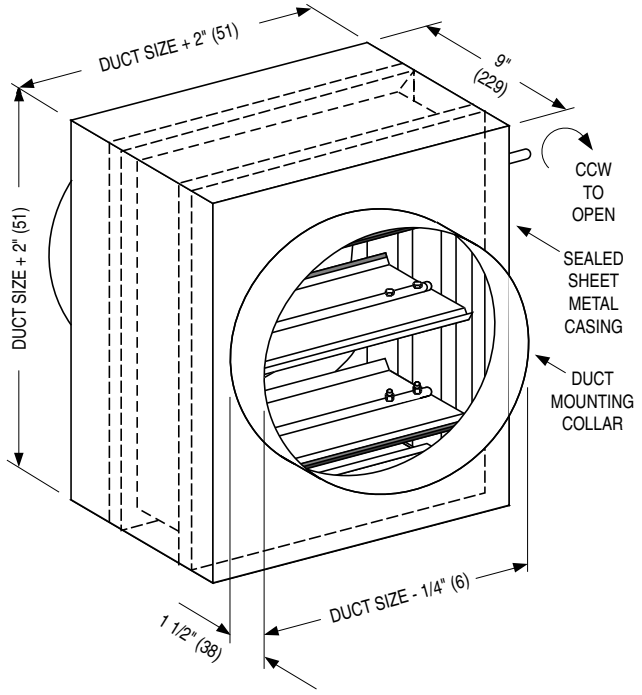
Jamb Seals: Compression type cambered metal.

Casing: Up to 36" x 36" (914 x 914) 20 ga. (1.0) galvanized steel.
36" x 36" (914 x 914) and up 18 ga. (1.31) galvanized steel.
Casing is tack-welded and caulked against leakage.

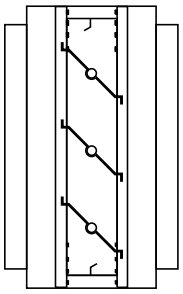
Temperature Range: -50°F to +180°F (-46°C to +82°C).

Sizes (Duct Dia.):

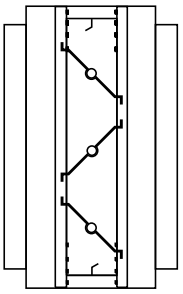
Minimum		Maximum	
Single Section		Single Section	Multiple Section
Single Blade (parallel) 4" (102) dia.	Two Blades (parallel or opposed) 8" (203) dia.	46" (1168) dia.	n/a



❑ **MODEL 1010CR** PARALLEL BLADE



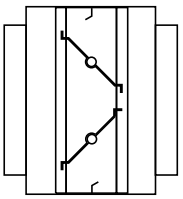
❑ **MODEL 1020CR** OPPOSED BLADE



OPTIONS:

❑ **BO** Oilite bearings
❑ **304** Stainless Steel construction
❑ Other _____.

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



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

Performance Data - Air Leakage (Damper Closed)

Damper Width	Maximum System Pressure	Maximum System Velocity	Leakage*	
			% of Max. Flow	Cfm/ Sq. Ft.
48" (1219)	2.5" w.g.	2000 fpm	.18	3.5
36" (914)	3.0" w.g.	2000 fpm	.20	4.0
24" (610)	4.0" w.g.	2000 fpm	.23	4.5
12" (305)	5.0" w.g.	2000 fpm	.33	6.6

* Leakage information is based upon a pressure differential of 1" w.g. 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.

SCHEDULE TYPE:	Dimensions are in inches (mm).			
PROJECT:				
ENGINEER:	**DATE**	**B SERIES**	**SUPERSEDES**	**DRAWING NO.**
CONTRACTOR:	**12 - 4 - 12**	**1000**	**6 - 30 - 04**	**1000-3**