



**AIRFOIL CONTROL DAMPER**  
**EXTRUDED ALUMINUM BLADE**  
**ULTRA-LOW LEAKAGE • HIGH PERFORMANCE**  
**MODELS: 2010 & 2020 WITH CR ROUND**  
**TRANSITIONS OPTION**

**AMCA LICENSED**

The 2010CR/2020CR Series are Nailor's premium extruded aluminum airfoil blade control dampers in a sealed casing with round transition collars. The ultra-low leakage (Class 1A) dampers are suitable for use in high velocity, medium pressure commercial and industrial HVAC systems. Leakage rating is maintained with airflow in either direction, permitting right or left-hand drive installation. The design features zero maintenance concealed linkage (out of the airstream) for reduced pressure drop and air turbulence. Model 2020 is AMCA Licensed and meets the International Energy Conservation Code (802.3.4) maximum leakage for building envelope dampers criteria of 3 cfm/ft<sup>2</sup> @ 1" w.g. (15.2 l/s/m<sup>2</sup> @ 0.25 kPa).

**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 for reinforcement and extra strength.
- BLADES:** Airfoil type 6063-T5 extruded aluminum on 5 1/2" (140) centers.
- LINKAGE:** Concealed side type totally enclosed within the frame and out of the air stream. Plated steel.
- BEARINGS:** 1/2" (13) dia. Oilite® self-lubricating bronze.
- 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:** Silicone. Mechanically locked in place.
- JAMB SEALS:** Cambered stainless steel.
- 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.

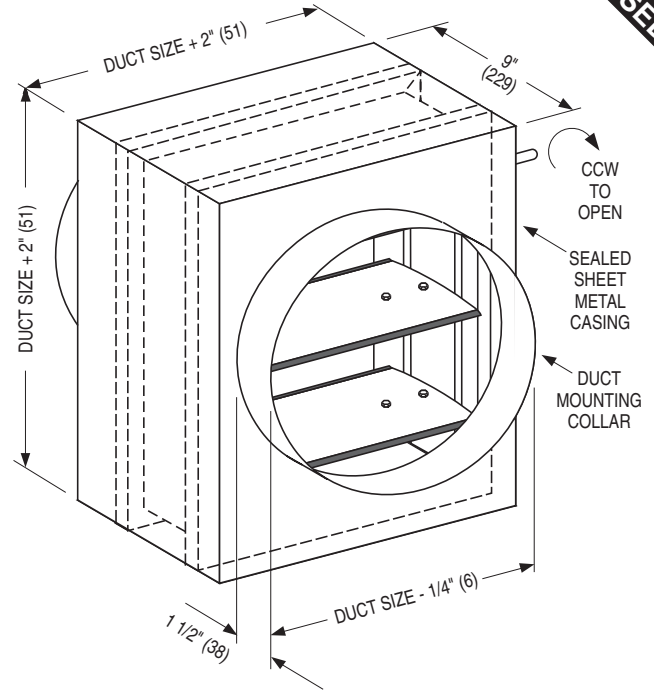
- MINIMUM SIZE:** Single blade: 6" (152) dia.  
 Two blades (parallel or opposed): 8" (203) dia.
- MAXIMUM SIZE:** Single section: 58" (1473) dia.

**TEMPERATURE RANGE:**  
 -50°F to 250°F (-45°C to 157°C).

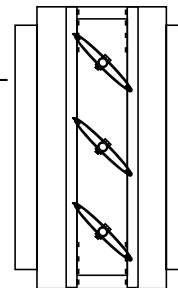
**OPTIONS:**

- BS** Type 304 stainless steel bearings
- SSA** Type 304 stainless steel axles
- SSL** Type 304 stainless steel linkage (includes axles & bearings)
- Other \_\_\_\_\_.

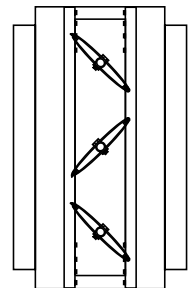
Nailor offers a wide selection of pneumatic and electric actuators for factory or field installation.



**MODEL 2010CR**  
**PARALLEL**  
**BLADE**



**MODEL 2020CR**  
**OPPOSED**  
**BLADE**



**SCHEDULE TYPE:**

**PROJECT:**

**ENGINEER:**

**CONTRACTOR:**

Dimensions are in inches (mm).

| DATE        | B SERIES | SUPERSEDES | DRAWING NO. |
|-------------|----------|------------|-------------|
| 1 - 16 - 07 | 2000     | 3 - 3 - 06 | 2000-5      |