

3900 Dr. Greaves Rd.

Kansas City, MO 64030

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# CD504 LOW LEAKAGE CONTROL DAMPER EXTRUDED ALUMINUM

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## STANDARD CONSTRUCTION

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#### FRAME

5" x 1" (127 x 25) x 6063T5 extruded aluminum hat channel with .125" (3.2) minimum wall thickness. Low profile, 5" x 1/2" (127 x 13) top and bottom frames on dampers 12" (305) high and less. Mounting flanges on both sides of frame.

#### BLADES

4" (102) wide, 6063T5 heavy gage extruded aluminum, airfoil shaped blades.

# LINKAGE

Concealed.

#### AXLES

1/2 " (13) plated steel hex.

#### BEARINGS

Molded synthetic.

#### SEALS

Extruded TPR blade edge seal for -72°F to +275°F (-58°C to +135°C) and flexible metal compression type jamb seals.

#### CONTROL SHAFT

6" x  $^{1/2}$ " (152 x 13) diameter. Outboard support bearing supplied with all single section dampers for field mounted actuators. Factory-installed jackshaft supplied with all multiple section dampers.

FINISH

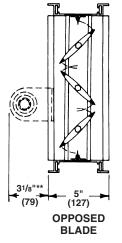
#### Mill.

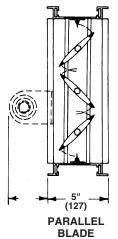
## MINIMUM SIZE

Single blade, parallel action -6"w x 6"h (152 x 152). Two blade, parallel or opposed action -6"w x 9"h (152 x 229).

# MAXIMUM SIZE

Single section – 60"w x 72"h (1524 x 1829). Multiple section assembly – Unlimited size.





### FEATURES

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The CD504 offers leakage of 6 cfm/sq. ft. at 4" w.g. – the lowest leakage attainable with a commercially built thin line 4"(102) blade damper. Linkage is concealed in frame and out of air stream for low maintenance and reduced air turbulence. Hexagonal axles positively lock axles to blades. Blade edge seals feature unique double edge, inflatable pocket design that enables higher pressure on either side of damper to assist in tight blade-to-blade seal off. Seals are mechanically locked in extruded blade slots, yet are easily replaced in the field.

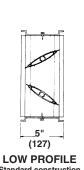
# VARIATIONS

Variations to the CD504 standard design are available at additional cost and include:

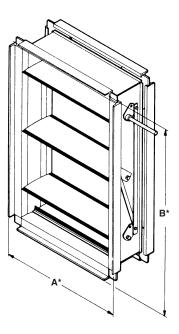
- · Anodize finishes.
- Factory-installed, pneumatic and electric actuators (specific information required with order).
- Frame-mounting bracket for simple field installation of most actuators.
- SP100 Switch Package to remotely indicate damper blade position.
- Front or rear flange frame.
- · Face and bypass mixing damper assemblies.

**NOTE:** Dimensions shown in inches, parenthesis ( ) indicate millimeters.

- $^{\ast}$  Units furnished approximately  $^{1/4^{\rm m}}$  (6) smaller than given open ing dimensions.
- \* Jackshaft used only on multiple section dampers.



Standard construction for higher free area on dampers 12" (305) high and less.



# SUGGESTED SPECIFICATION

Furnish and install, at locations shown on plans, or in accordance with schedules, low leakage dampers that meet the following minimum construction standards: Frames shall be 5" x 1" x .081" (127 x 25 x 2) (minimum thickness) 6063T5 extruded aluminum hat channel with hat mounting flanges on both sides of the frame. Each corner shall be reinforced with two die formed internal braces and machine staked for maximum rigidity. Blades shall be airfoil type extruded aluminum (maximum 4" [102] depth) with integral structural reinforcing tube running full length of each blade.

Blade edge seals shall be extruded TPR double edge design with inflatable pocket which enables air pressure from either direction to assist in blade to blade seal off. Blades seals shall be mechanically locked in extruded blade slots, yet shall be easily replaceable in field. Adhesive or clip-on type blade seals are not acceptable. Bearings shall be non-corrosive molded synthetic. Axles shall be hexagonal (round not acceptable) to provide positive locking connection to blades and linkage. Linkage shall be concealed in frame. Dampers shall be in all respects equivalent to Ruskin Model SCD514.



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