

Prefco-JohnsonTech Air Control Inc. certifies that the PREFCO 5000 ASF Series Damper shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance only.



## Application

The 5000 ASF Series is a combination air, fire & smoke damper with a 1 1/2 or 3 Hour UL555 & BS 4 Hour fire rating available with your choice of Class I, II, or III UL555S Leakage rating and 250° F / 350° F Operation temperature. This damper utilizes a thermally responsive electric switch to allow for the return spring of the specified actuator to close the damper upon elevated temperature. The damper may be installed vertically or horizontally for use in barriers requiring both fire and leakage protection. This damper has been evaluated with bi-directional air-flow, and is rated to 2000 FPM (up to 4000FPM optional) and 4" static pressure in compliance with UL555 6th edition and UL555S 4th edition.

## Standard Construction

### Frame

4" Wrap around full channel frame – 16 GA Galvanized Steel (Optional: Stainless Steel material)

### Blades

22 GA Galvanized Steel, Modified Triple-V Design (Optional: Stainless Steel material)

### Bearings

Integral Curl in Frame Design

### Linkage

14 GA Galvanized, on Blade Type (in airstream)

### Seals

Compression type silicone seals (Class I / II only)

### Heat Responsive Device

Electric-Thermal Disc, 165°F standard, 212°, 250°, 286° or 350°F optional

### Sealant

UL Certified silicone caulk (sleeved units only)

### Single Module Size

Width: 12"~36"

Height: 12"~36"

## Options & Accessories

- ✚ Dual Blade Position Indicator Switches (Switch#1)
- ✚ Factory Supplied Sleeves – 18、16 or 14 Gauge, 18" or 24" deep (units with external or internal mount actuators provided with 18 gauge side plate if no sleeve specified)
- ✚ Factory supplied 'EZ Mount' mounting angles
- ✚ Single or Dual Blade stiffeners - for strength & stability of wider units in high pressure systems

## Certification Reference

PREFCO 5000 ASF Series meets or complies with the following as a fire damper:

- ✚ CA State Fire Marshall Leakage listing #3230-1518:106 ; Fire listing #3225-1518:100
- ✚ NFPA 90A & B, 92A & B
- ✚ All major building codes, including BOCA, ICBO/UBC, SBCCI & the ICC International Code
- ✚ UL Listings \_ File #R6189 ; UL555S Class I-III @ 250°F or 350°F optional ;UL555 1 1/2 hour & 3hour fire standard
- ✚ BS476 Part20 , 4Hour fire rating

## Specifications

Actuators will be mounted externally on the right side unless otherwise specified.

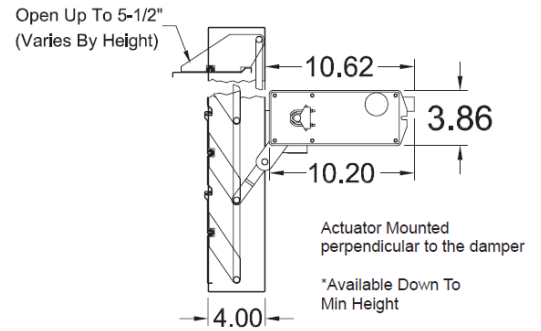
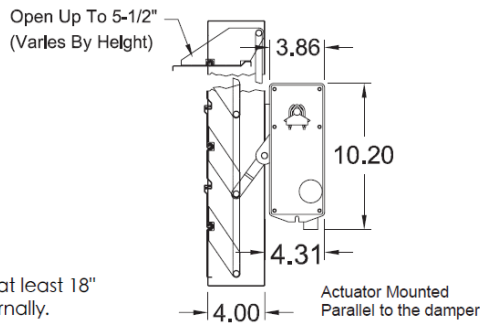
Actuators available for internal or external mount (all must be factory mounted):

- ✚ Damper must be at least 13" in height for actuator to mount internally.
- ✚ Unit must be 10" or greater in width for any internal actuator mounting orientation.
- ✚ The factory will mount the actuator parallel to the damper, whenever height allows , unless otherwise specified
- ✚ 250C-1Hr. High temperature enclosure (optional)
- ✚ 300C-1Hr. High temperature enclosure (optional)

Actuator Model	Voltage (AC)	Power Consumption	
		Running	Holding
Belimo FSNF230	230V	0.13A, 18W	0.04A, 6W
Belimo FSNF24	24V	27VA	27VA
Honeywell MS8109 (9NM)	24V	16VA	8VA
Honeywell MS4604 (3.4NM)	230V	0.13A, 18W	0.1A, 11W
Honeywell MS4109( 9NM)	120V	0.25A, 23W	0.13A, 7W
Honeywell MS4609	230V	0.13A, 23W	0.09A, 7W
Honeywell MS4120 (20NM)	120V	0.35A, 35W	0.15A, 10W
Honeywell MS4620	230V	0.20A, 35W	0.14A, 10W

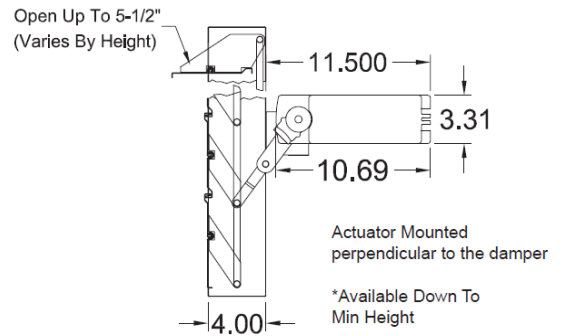
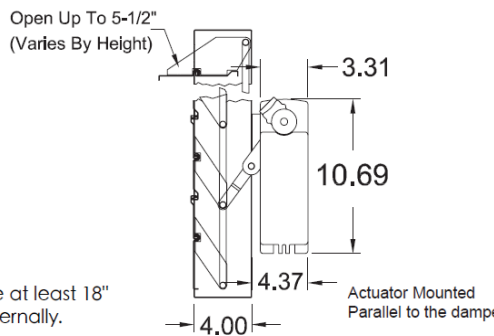
## Mounting Configurations

- BELIMO**  
 FSNF120  
 FSNF24



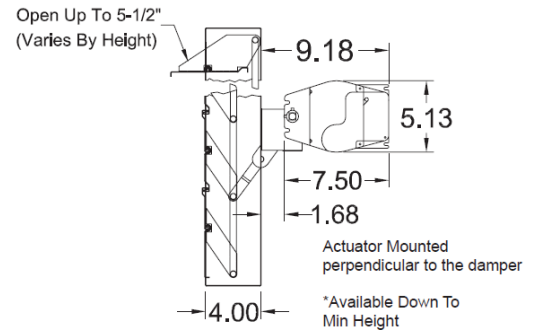
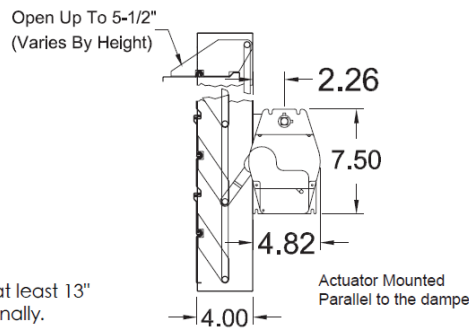
\*Damper height must be at least 18" for actuator to mount internally.

- HONEYWELL**  
 4120F  
 8120F



\*Damper height must be at least 18" for actuator to mount internally.

- HONEYWELL**  
 4115    4209F  
 8115    8209F



\*Damper height must be at least 13" for actuator to mount internally.

**5000 ASF Damper Series Basic Features**

**ENGINEERED AND TEST PROVEN**

- 1 million cycles on dust loaded damper in varying air flow
- Seismic and fragility tested, Q.A. available at extra cost
- 1-1/2 hour U/L classified for both horizontal and vertical mount
- 3 hour UL classification available in vertical mount design
- Designed for U/L Leakage Ratings at 1,000°F for 1 hour

16 GA. steel channel frame—  
Roll and die formed into one  
piece wrap around for reli-  
ability and production meth-  
odization.

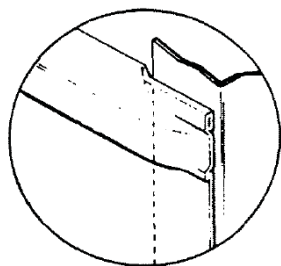
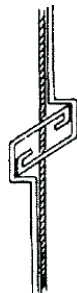
(Optional: Stainless Steel material)

Low profile multi formed  
blade from 22 GA. steel has  
double 90° bends in the tips  
with double wrapped center  
and edges for maximum  
structural strength with stable  
in-heat capability.

(Optional: Stainless Steel material)

Friction free blade end lap  
sealing between special off-  
set blade design allows heat  
expansion without binding or  
bowing the blades.

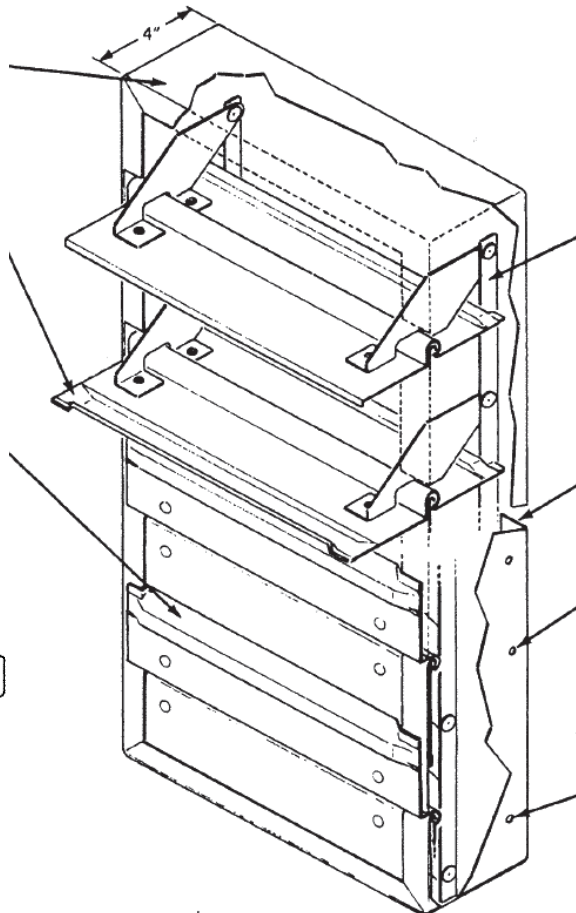
Blade edge to edge  
seal is a dead air  
chamber made be-  
tween two wiping tips.



Die formed blade corners  
complete blade frame lap  
seal.



High surface area, extra deep  
interfitting bearings are  
formed from the frame flange  
and rolled into the blade  
shape for electrolysis cor-  
rosion elimination and built-  
in seal.

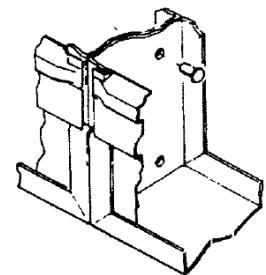


Linkage position and compo-  
nents were conceived for  
minimal air flow resistance  
while providing for the heavy  
duty fire damper need. Stain-  
less steel bearings rotate in  
the 14 GA. steel blade stradle  
bracket.

Flange mounting for added  
application flexibility is pos-  
sible (except for standard  
U/L fire damper use).

Flat web mounting is easier  
and provides for tight seal—  
only one row of fasteners is  
needed. Extra low cost in-  
stallation when retaining an-  
gle fasteners are also  
damper fasteners.

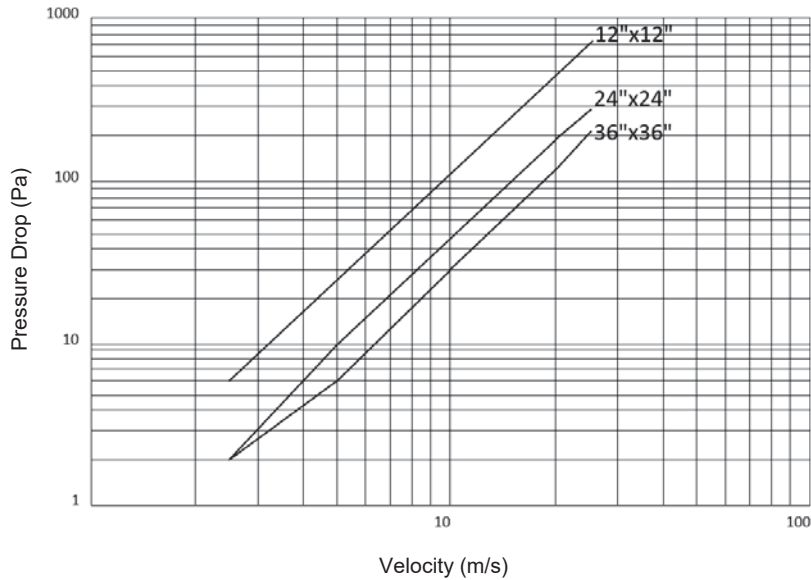
Choice of common fasteners  
—bolts, screws, rivets, or  
weld.



Multiple section mullions are  
handily assembled.

**Test Information**

Tested in accordance with ANSI/AMCA 500D-Figure 5.3

**Air Performance Data**

**12"x12" Air Performance**

Det.No	Velocity (m/s)	$\Delta P_D$ (Pa)
1	25.1	728
2	20.1	466
3	10.1	111
4	5.1	26
5	2.5	6

**24"x24" Air Performance**

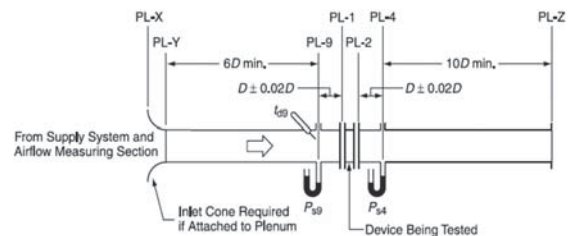
Det.No	Velocity (m/s)	$\Delta P_D$ (Pa)
1	25.1	288
2	20.2	186
3	10.1	43
4	5.1	10
5	2.5	2

**36"x36" Air Performance**

Det.No	Velocity (m/s)	$\Delta P_D$ (Pa)
1	25.1	214
2	20.1	138
3	10.1	30
4	5.0	6
5	2.5	2

**Test Method**

The high stability and reliability performance of 5000 multi-blade fire damper was tested in accordance to AMCA 500-D Fig5.3 method.



## 5000 ASF Damper Series UL Standard Sizes

AMCA Witness single module size is width 12"~36" height 12"~36", and the following table is for your reference of 5000 ASF series UL products size.

### Model 5000 Standard Sizes

Type	Fire Rating	Min. Vertical or Horizontal	Max. Vertical or Horizontal
Static	1 1/2 Hour Fire	6"x6"	120"x84" or 144"x90"
Dynamic	1 1/2 Hour Fire	6"x6"	36"x45"

### Model 5003 Standard Sizes

Type	Fire Rating	Min. Vertical	Max. Vertical
Static	3 Hour Fire	6"x6"	30"x30"
Dynamic	3 Hour Fire	6"x6"	30"x30"

### Model 5050 Standard Sizes

Fire Rating	Leakage Rating	Min. Vertical or Horizontal	Max. Vertical or Horizontal
1 1/2 Hour Fire	Class I-III@250° F	6"x6"	120"x84" or 144"x90"
1 1/2 Hour Fire	Class I-III@250° F	6"x6"	120"x84" or 144"x90"

### Model 5053 Standard Sizes

Fire Rating	Leakage Rating	Min. Vertical	Max. Vertical
3 Hour Fire	Class I-III@250° F	6"x6"	30"x30"
3 Hour Fire	Class I-III@250° F	6"x6"	30"x30"

### Model 5150 Standard Sizes

Leakage Rating	Min. Vertical or Horizontal	Max. Vertical or Horizontal
Class I-III@250° F	6"x6"	144"x96" or 288"x48"
Class I-III@250° F	6"x6"	144"x96" or 288"x48"