

# MODEL FA1G/F (Leakage Class I)

- FRONT ACCESS DAMPERS FOR GRILLE INSTALLATIONS (VERTICAL & HORIZONTAL)
- AIRFOIL BLADES
- LEAKAGE AND TEMPERATURE RATED COMBINATION FIRE/SMOKE DAMPERS
- TEMPERATURE CLASS 250°F/350°F

## STANDARD MATERIALS AND CONSTRUCTION

**FRAME:** 5 1/2" x 7/8" x 16-GA galvanized steel hat channel.

**BLADES:** 20-GA Double-skinned, equal to 14-GA.

**AXLES:** Square, plated solid steel stub.

**BEARINGS:** Oil Impregnated Bronze.

**LINKAGE:** In-jamb type, located out of the airstream; galvanized steel angle interconnect, with stainless steel pivots.

**STOPS:** 20-GA galvanized steel at head and sill.

**BLADEEDGE**

**SEALS:** Silicone.

**JAMB SEALS:** Stainless steel.

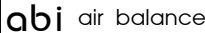

**SLEEVE:** 20-GA galvanized steel by 15" long (1 1/2" grille clearance) or 17" long (3 1/2" grille clearance) with 13/16" front flange.

**FINISH:** Mill on galvanized steel.

**ACTUATOR:** 120 VAC electric with 165°F thermal disc, factory-installed for Power-Open/Spring-Return (fail close) operation. Actuator is internally mounted and accessible from grille side.

**NOTE:** Maximum Velocity of 2000 fpm and 4 in. wg static pressure.

**UNDERWRITERS LABORATORIES INC.®**  
 CLASSIFIED FIRE DAMPER  
 FIRE RESISTANCE RATING 1 1/2 HR  
 ALSO AS TO LEAKAGE RESISTANCE CLASS I

This combination fire/smoke damper meets the construction and performance requirements of:

- Underwriters Laboratories Inc. Standards 555 and 555S
- National Fire Protection Association Standards 90A, 92A and 92B
- ICC's International Building Code
- ICBO's Uniform Building Code
- SBCCI's Standard Building Code
- BOCA's National Building Code
- New York City MEA Listing #111-99-M
- California State Fire Marshall Listing #3225-1328:110

## DIMENSIONAL DATA

**Minimum Size:** 12"W x 14"H

**Maximum Size:** 32"W x 42"H

### ROUND/OVAL DUCT TRANSITION:

**Minimum Size:** 12" Dia. Round  
10" x 12" Oval

**Maximum Size:** 30" Dia. Round  
30" x 40" Oval

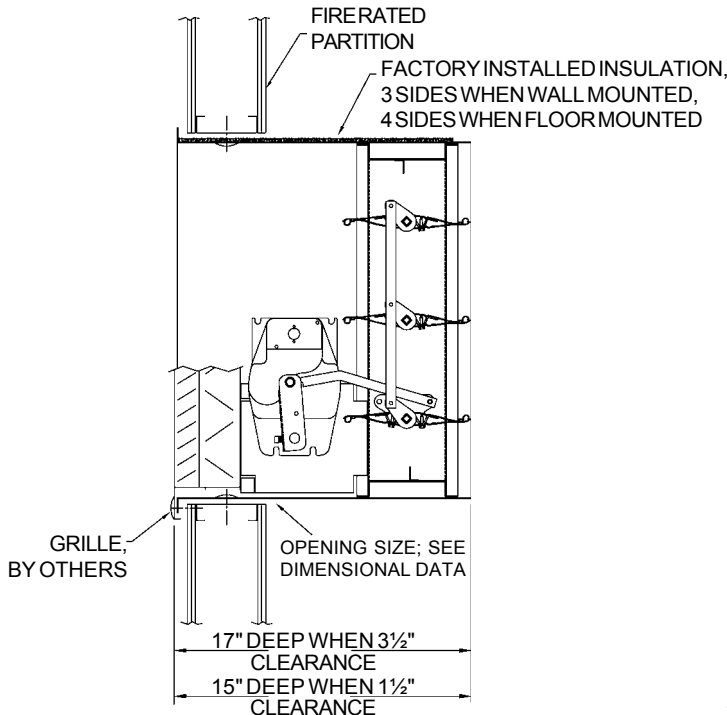
Overall sleeve width and sleeve height will be 2" greater than ordered round duct size.

**Opening Size** - No expansion clearance is required but sufficient clearance between the damper and the opening is required for the insulation and for mounting. The minimum width shall be 3/8" larger than the nominal size. The minimum opening height shall be 1/4" larger than the nominal size when vertically mounted. When horizontally mounted, the opening height shall be 3/8" larger than the nominal size. The maximum sizes shall be no more than 1/4" greater than the minimum sizes.

**Example:** An 18" wide by 24" high nominal size damper when mounted vertically, will require a minimum opening width of 18 3/8" and a minimum opening height of 24 1/4".

## AVAILABLE OPTIONS: (Must Be Specified)

1. 212°F thermal disc.
2. Dual position indication package. These optional auxiliary blade position indication switches are intended to make or break a circuit and will not provide variable or proportional resistance.
3. Tab-Lock Retaining Angles, one set.
4. Round duct transition, one side. A deeper sleeve is required; add 2 inches to standard sleeve depth.
5. "Sens-O-Therm" Thermally Reopenable Temperature Sensing System is available with 165°F (Standard) or 212°F settings. This system includes open and closed position indicator switches. It also includes a second thermal disc to re-close the damper when the rated degradation temperature (250°F or 350°F) is reached.



**PROJECT:**

**LOCATION:**

**ARCHITECT:**

**ENGINEER:**

**CONTRACTOR:**

**PO NUMBER:**

**DATE:**

## AIR BALANCE SUBMITTAL DATA

### PERFORMANCE

**MAXIMUM DIFFERENTIAL  
PRESSURE:** 4 in. wg  
**MAXIMUM VELOCITY:**  
2000 FPM

### LEAKAGE

Definition: UL 555S Class I:  
Leakage Not Greater Than:  
4 CFM per sq. ft. @ 1 in. wg  
8 CFM per sq. ft. @ 4 in. wg

### ELECTRIC

HONEYWELL	Voltage	Maximum Single Panel Size		Minimum Size
		@250°F	@350°F	
ML4115 ML8115	120VAC 24VAC	24" x 16"	N/A	12" x 14"
MS4209/4309 MS8209/8309	120VAC 24VAC	32" x 24"	24" x 24"	12" x 14"
MS4120 MS8120	120VAC 24VAC	32" x 42"	32" x 42"	12" x 20"

### PNEUMATIC

SIEMENS		Maximum Single Panel Size		Minimum Size
		@250°F	@350°F	
331-2997		24" x 24" @ 20 psi	24" x 24" @ 25 psi	12" x 20"
331-2997 (Qty 2)		8 sq. ft. @ 20 psi	8 sq. ft. @ 25 psi	12" x 20"

### GENERAL NOTES

1. Underwriters Laboratories Inc. approved for dual direction flow and dynamic applications.
2. Underwriters Laboratories Inc. Classified for use in fire resistance ratings of less than 3 hours, in accordance with UL Standard 555.
3. Underwriters Laboratories Inc. Classified leakage rated damper for use in smoke control systems designed for Leakage Class I, and Temperature Class 250°F of 350°F in accordance with UL Standard 555S.
4. Installation must comply with the requirements of NFPA-90A & -92A. Actuators must be arranged to operate automatically, must fail close upon loss of power, and must be controlled by a smoke detection system.