

## Application

Model GFSD-211 is a combination fire smoke damper with 3V style blades designed for easy access through the grille to the damper, closure device, and the actuator. A separate compartment on the side of the damper houses the actuator. The GFSD-211 has been qualified to 2000 fpm (10.2 m/s) and 4 in. wg (1 kPa) for operation and dynamic closure in emergency fire smoke situations. Model GFSD-211 may be installed vertically (with blades running horizontal) or horizontally and is rated for airflow and leakage in either direction.

## Ratings

### UL 555 Fire Resistance Rating

Fire Rating: 1½ hours

Dynamic Closure Rating: Actual ratings are size dependent

Velocity: Up to 2000 fpm (10.2 m/s)

Pressure: Up to 4 in. wg (1 kPa)

### UL 555S Leakage Rating

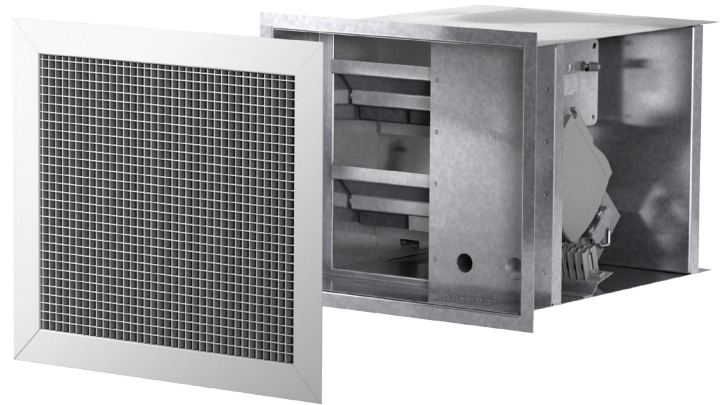
Leakage Class: I

Operational Rating: Actual ratings are actuator dependent

Velocity: Up to 2000 fpm (10.2 m/s)

Pressure: Up to 4 in. wg (1 kPa)

Temperature: Up to 350°F (177°C) - depending upon the actuator



\*Width and Height dimensions furnished approximately ¼ in. (6mm) undersize. Add blanket thickness (⅛ in. [3mm]) and sleeve thickness for overall sleeved damper dimension.

Oversize wall opening as follows:

Nominal damper size plus ⅜ in. (9.5mm).



See complete marking on product.

UL 555 and UL 555S  
Classification R13317

## Construction

	Standard	Optional
<b>Frame Material</b>	Galvanized steel	-
<b>Frame Material Thickness</b>	16 ga. (1.5mm)	-
<b>Frame Type</b>	5 in. x 1 in. (127mm x 25mm) hat channel	-
<b>Blade Material</b>	Galvanized steel	-
<b>Blade Material Thickness</b>	16 ga. (1.5mm) equivalent	-
<b>Blade Type</b>	3V	-
<b>Linkage</b>	Plated steel out of airstream, concealed in jamb	-
<b>Axle Bearings</b>	316SS	-
<b>Axle Material</b>	Plated steel	-
<b>Blade Seals</b>	Silicone	-
<b>Jamb Seals</b>	Stainless Steel	-
<b>Closure Device</b>	RRL	RRL/OCI, TOR, Fusible Link
<b>Closure Temperature</b>	165°F (74°C)	212°F (100°C), 250°F (121°C), 350°F (177°C)

Model GFSD-211 meets the requirements for fire dampers, smoke dampers and combination fire smoke dampers established by:

### National Fire Protection Association

NFPA Standards 80, 90A, 92, 101, & 105

### IBC International Building Codes

### CSFM California State Fire Marshal

Fire Damper Listing (#3225-0981:0103)

Leakage (Smoke) Damper Listing (#3230-0981:0104)

W x H	Minimum Size	Maximum Size	
		Single Section	MultipleSection
Inches	14 x 12	42 x 48	48 x 48
mm	356 x 305	1067 x 1219	1219 x 1219

## Options and Accessories

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- Clean wrap
- [Greenheck test switches \(GTS\)](#)
- [Retaining angles](#)
- [RRL/OCI](#)
- Sealed sleeve
- Smoke detectors
- [TOR](#)

## Document Links

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[Installation Instructions](#)



[Life Safety Damper Catalog](#)



[Damper Product Selection Guide](#)

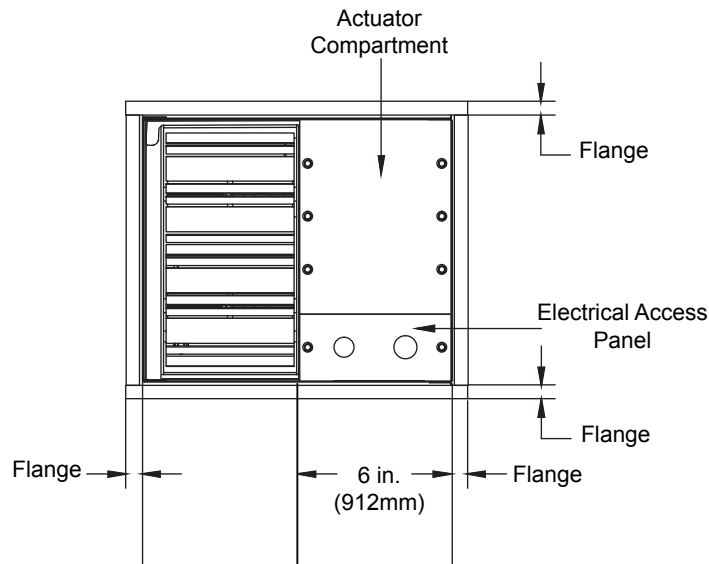


[Specifications](#)

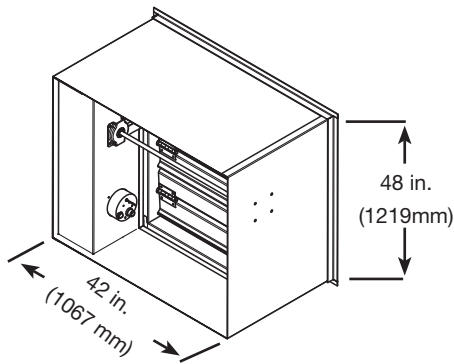


[Damper Warranty](#)

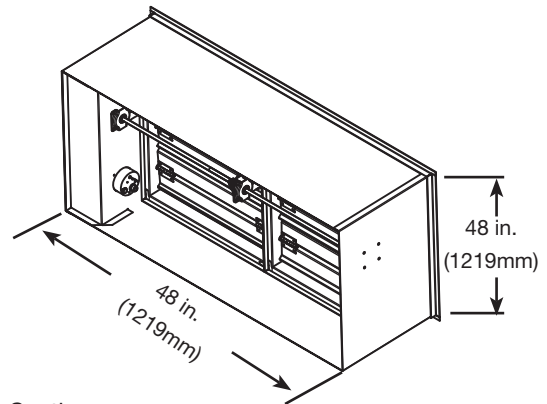




Dampers larger than maximum single section size are supplied as a factory assembly of two or more sections of equal size. The following figures show maximum damper section size and assembly configurations for multi-section dampers.



Single Section



Double Section

## Damper Sizing

The drawing to the right shows the position of the GFSD-211 damper when mounted in a factory sleeve. The standard mounting location provide enough space for the mounting of actuators, controls, and allow space for installation of retaining angles and duct connections.

