



Model FSD-3V-S-211/231 c/w sleeve U.L. 555S Classified Leakage Class 1

Combination Fire/Smoke Damper, U.L. 555 Classified 1 1/2, 3 Hours

Model

Fire/Smoke Damper
FSD-3V-S-211/231 c/w sleeve

Features

- The FSD-3V-S-211/231 c/w sleeve series Combination Fire/Smoke Dampers have been designed and tested to exceed all U.L., U.L.C. and N.F.P.A. requirements for fire dampers as well as smoke dampers. They are intended for use where building codes call for the fire damper to also operate as a smoke damper.
- U.L. 555 and U.L.C. S112 listed and labeled as a 1 1/2 (FSD-3V-S-211) or 3 (FSD-3V-S-231) hour fire damper.
- U.L. and U.L.C. listed for both vertical and horizontal mountings.
- U.L. 555S / U.L.C. S112.1 listed and labeled as a Leakage Class I rated Smoke Damper with airflow in both directions. Class I provides for a maximum leakage of 8 cfm per sq. ft. at 4.0 inches static pressure. As we are constantly expanding our U.L./U.L.C. listings, we suggest you contact the factory for current information.
- Fusible link/actuator (DLT-1) provides an automatic override system to close and latch damper in the fire mode. Also available with automatic resettable/override release options: Model STO/R (single thermostat) to provide the fire fighter with complete discretionary control of smoke functions during a fire/smoke emergency. (See STO/R and DTO/R submittal drawings for complete details). Spring return type damper motor controlled by a smoke detector is recommended to provide proper operation in the smoke mode.
- Also available are options EFL (Electric Fusible Link) and PFV (Pneumatic Fusible Valve). These options provide quick and economical ways to check damper operations and also provide a Systematic Closure Control. Option PFV allows damper operation without the need/cost for an E-P valve and electrical connection at the damper.
- Available optional 3/4" (19mm) flanged sleeve for grille mounting (see fig.9 of installation instructions).

U.L. 555S CLASSIFIED
AT 250°F OR 350°F
DEPENDING UPON
MOTOR/OPERATOR
*SEE MOTOR/OPERATOR SCHEDULE

16" x 20 Ga.
Side Plate Optional

Standard Construction:

Frame: Roll-formed galvanized steel hat-section with staked corners with integral bracing.

Blades: 16 ga. Roll-formed galvanized steel.
Minimum width: 4 1/4" (108mm)
Maximum width: 7 1/4" (184mm)

Bearings: Bronze Oilite, press-fit into frame.

Axles: Square, plated steel.

Seals: Pressure sensitive 450°F silicone blade edge seals and flexible metal jamb seals.

Linkage: Concealed in frame. Linkage bars are 12ga galvanized steel.

Heat Responsive Devices:

Fusible Links, 165° F and 212° F

Snap Disc, 250° F and 350° F

Finish: Mill galvanized.

Spring: Stainless steel.

Sizes:

Minimum Size:
8"w x 6"h (203mm x 152mm)

Maximum UL Listed Size:

Single Section:
36"w x 48"h (914mm x 1219mm)

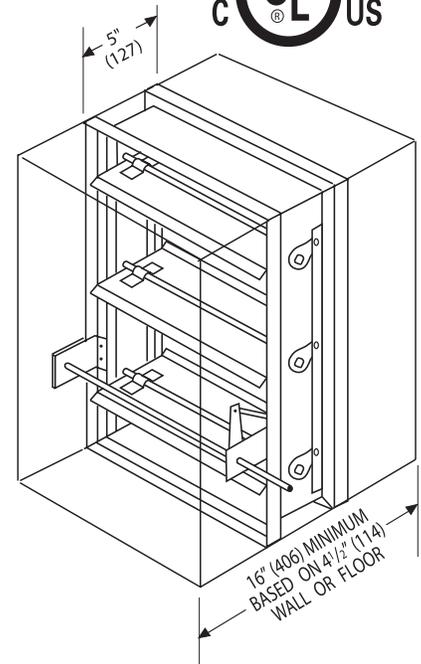
1 1/2 Hr. Vertical: Multiple Assembly
108"w x 96"h (2743mm x 2438mm)

1 1/2 Hr. Horizontal: Multiple Assembly
72"w x 96"h (1829mm x 2438mm)

3 Hr. Vertical: Multiple Assembly
72"w x 96"h (1829mm x 2438mm)

3 Hr. Horizontal:
Maximum UL Listed Size:
72"w X 96"h (1829mm x 2438mm)

LISTED AND LABELLED BY



Notes:

- Dampers are furnished approximately 1/4" (6mm) smaller than given duct dimensions.
- Not recommended with blades running vertically.

Manufacturer's Recommendations

All moving parts of the damper must be inspected and cycled at intervals not greater than every six months and in accordance with the latest edition of NFPA 90A, 92A, local codes and the actuator manufacturer. In addition, fuse links shall be removed and inspected for corrosion. Dry lubricants are recommended.

Specifications are correct at time of printing. However, as part of our 'continuous improvement program,' we reserve the right to make further improvements without notice.

PROJECT:			
ENGINEER:			
CUSTOMER:		Jul / 06	
SUBMITTAL DATE:	SPEC. SYMBOL:	245053	

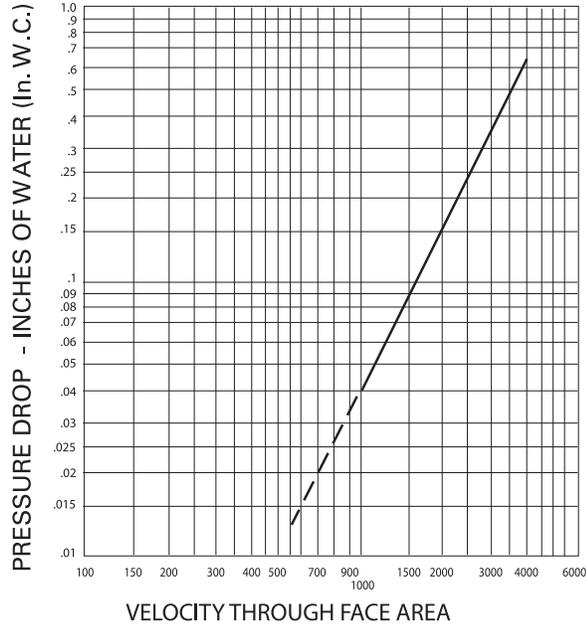
Model FSD-3V-S-211/231 c/w sleeve
U.L. 555S Classified
Leakage Class 1



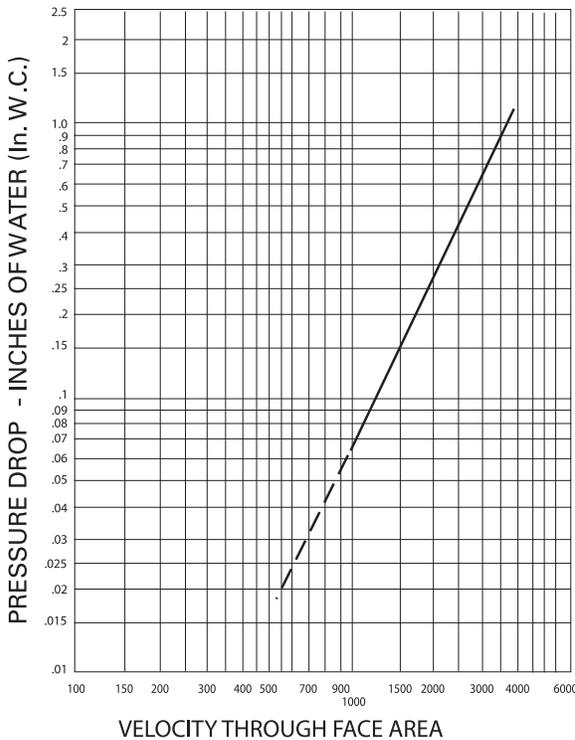
Combination Fire/Smoke Damper,
U.L. 555 Classified 1 1/2, 3 Hours

Pressure drop testing was done by an independent laboratory to the AMCA Standard 500-D, Fig. 5.3 ductwork upstream & downstream.

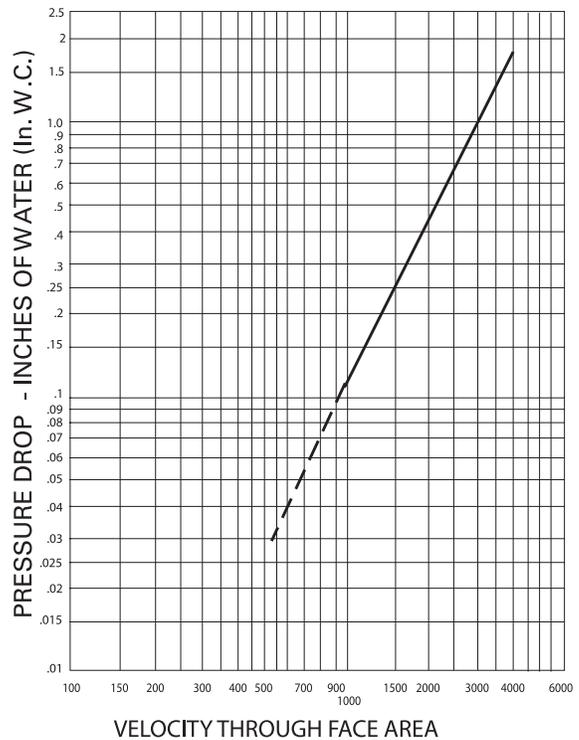
DAMPER SIZE 36 x 36



DAMPER SIZE 24 x 24



DAMPER SIZE 12 X 12





Model FSD-3V-S-212/232 c/w sleeve U.L. 555S Classified Leakage Class 2

Combination Fire/Smoke Damper, U.L. 555 Classified 1 1/2, 3 Hours

Model

Fire/Smoke Damper
FSD-3V-S-212/232 c/w sleeve

Features

- The FSD-3V-S-212/232 c/w sleeve series Combination Fire/Smoke Dampers have been designed and tested to exceed all U.L., U.L.C. and N.F.P.A. requirements for fire dampers as well as smoke dampers. They are intended for use where building codes call for the fire damper to also operate as a smoke damper.
- U.L. 555 and U.L.C. S112 listed and labeled as a 1 1/2 (FSD-3V-S-212) or 3 (FSD-3V-S-232) hour fire damper.
- U.L. and U.L.C. listed for both vertical and horizontal mountings.
- U.L. 555S / U.L.C. S112.1 listed and labelled as a Leakage Class II rated Smoke Damper with airflow in both directions. Class II provides for a maximum leakage of 20 cfm per sq. ft. at 4.0 inches static pressure. As we are constantly expanding our U.L./U.L.C. listings, we suggest you contact the factory for current information.
- Fusible link/actuator (DLT-1) provides an automatic override system to close and latch damper in the fire mode. Also available with automatic resettable/override release options: Model STO/R (single thermostat) to provide the fire fighter with complete discretionary control of smoke functions during a fire/smoke emergency. (See STO/R and DTO/R submittal drawings for complete details). Spring return type damper motor controlled by a smoke detector is recommended to provide proper operation in the smoke mode.
- Also available are options EFL (Electric Fusible Link) and PFV (Pneumatic Fusible Valve). These options provide quick and economical ways to check damper operations and also provide a Systematic Closure Control. Option PFV allows damper operation without the need/cost for an E-P valve and electrical connection at the damper.
- Available optional 3/4" (19mm) flanged sleeve for grille mounting (see Fig.9 of installation instructions). If actuator is to be externally mounted, it is suggested to order flange to be field installed.

LISTED AND LABELLED BY :



**U.L. 555S CLASSIFIED
AT 250°F OR 350°F
DEPENDENT UPON
MOTOR/OPERATOR
*SEE MOTOR/OPERATOR SCHEDULE**

Standard Construction:

Frame: Roll-formed galvanized steel hat-section with staked corners with integral bracing.

Blades:
16 ga. Roll-formed galvanized steel.
Minimum width: 4 1/4" (108mm)
Maximum width: 7 1/4" (184mm)

Bearings: Bronze Oilite, press-fit into frame.

Axles: Square, plated steel.

Seals: Pressure sensitive 450°F silicone blade edge seals & flexible metal jamb seals.

Linkage: Concealed in frame.
Linkage bars are 12ga galvanized steel.

Heat Responsive Devices: 165° F and 212° F

Snap Disc, 250° F and 350° F

Finish: Mill galvanized.

Spring: Stainless steel.

Sizes: Minimum Size: 6" w x 6" h
(152mm x 152mm)

Maximum UL Listed Size:
Single Section: 36" w x 48" h
(914mm x 1219mm)

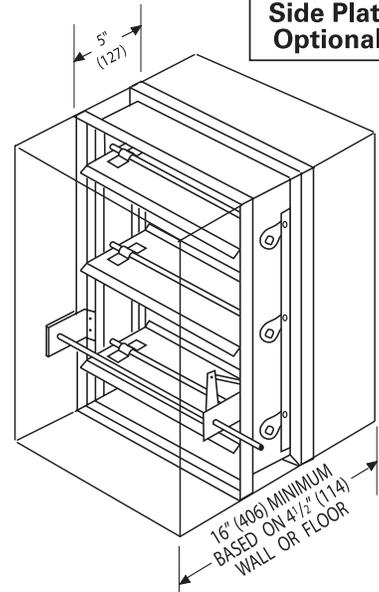
Multiple Assembly:
1 1/2 Hr. Vertical Maximum 108" w X 96" h
(2743mm x 2438mm)

1 1/2 Hr. Horizontal Maximum 72" w X 96" h
(1829mm x 2438mm)

3 Hr. Vertical Maximum 72" w x 96" h
(1829mm x 2438mm)

3 Hr. Horizontal Maximum 72" w X 96" h
(1829mm x 2438mm)

**16" x 20 Ga.
Side Plate
Optional**



Notes:

- Dampers are furnished approximately 1/4" (6mm) smaller than given duct dimensions.
- Not recommended with blades running vertically.

Manufacturer's Recommendations

All moving parts of the damper must be inspected and cycled at intervals not greater than every six months and in accordance with the latest edition of NFPA 90A, 92A, local codes and the actuator manufacturer. In addition, fuse links shall be removed and inspected for corrosion. Dry lubricants are recommended.

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ENGINEER:			
CUSTOMER:		Jul / 06	
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Model FSD-3V-S-212/232

c/w sleeve

U.L. 555S Classified

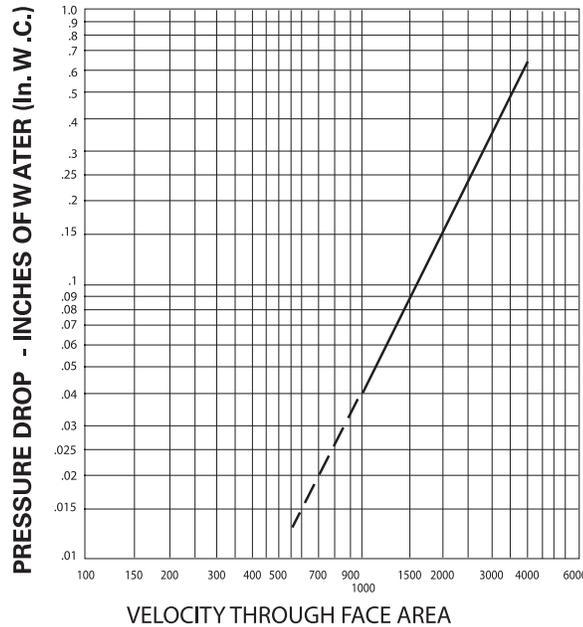
Leakage Class 2



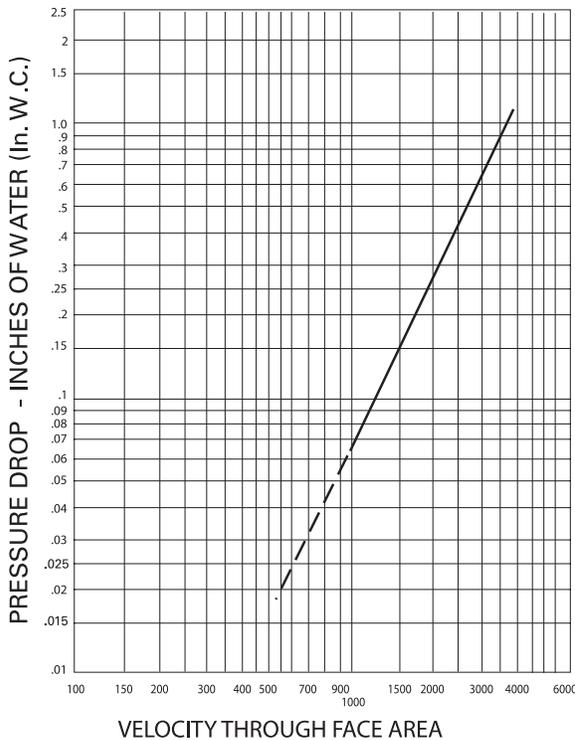
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Pressure drop testing was done by an independent laboratory to AMCA Standard 500-D, Fig. 5.3 ductwork upstream & downstream.

DAMPER SIZE 36 x 36



DAMPER SIZE 24 x 24



DAMPER SIZE 12 X 12

