Model FSD-AF-211/231 c/w Sleeve

U.L. 555S Classified Leakage Class 1 Airfoil Blade

Combination Fire/Smoke Damper, U.L. 555 Classified 1½, 3 Hours

Model

Fire/Smoke Damper

FSD-AF-211/231 c/w Sleeve

Standard Construction:
Frame: Roll-formed galvanized steel hatsection with staked corners with integral bracing.

Blades: Airfoil-shaped, double skin galvanized steel of roll-formed construction. Mechanically joined to form construction equivalent to 14 ga. steel.

Minimum width 5" (127mm)

Maximum width 7" (178mm)

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 8"h (203mm x 203mm)

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

1½ Hr. Vertical: Multiple Assembly-108"w x 96"h (2743mm x 2438mm)

1½ Hr. Horizontal: Multiple Assembly-36"w x 48"h (914mm x 1219mm)

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

3 Hr. Horizontal: Maximum UL/ULC Listed Size: 36"w X 48"h (914mm x 1219mm)

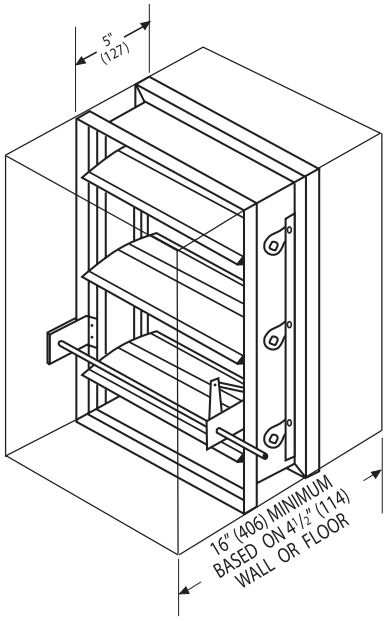
Notes:
- Dampers are furnished approximately 1/4" smaller than given duct dimensions.
- Not recommended with blades running vertically.

LISTED AND LABELLED BY :

CLASSIFIED C UL US

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



Features

- The FSD-AF-211/231 c/w sleeve series Combination Fire/Smoke Dampers have been designed and tested to provide a complete range of performance features when used in engineered smoke control systems.
- U.L. 555 and U.L.C. S112 listed and labeled as a 1½ (FSD-AF-211) or 3 (FSD-AF-231) hour fire damper.
- U.L. 555S and U.L.C. S112.1 listed and labelled 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.
- Streamlined "airfoil" blades to provide low pressure drop and reduced air turbulence for quiet operation.
- Fusible link/actuator 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) or DTO/R (double 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" (19) 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.

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:		price®	
ENGINEER:			
CUSTOMER:		Jul / 06	
SUBMITTAL DATE:	**SPEC. SYMBOL:**	245063	

All Metric dimensions ( ) are soft conversion.
Imperial dimensions are converted to metric and rounded to the nearest millimetre.

© Copyright E.H. Price Limited 2006.

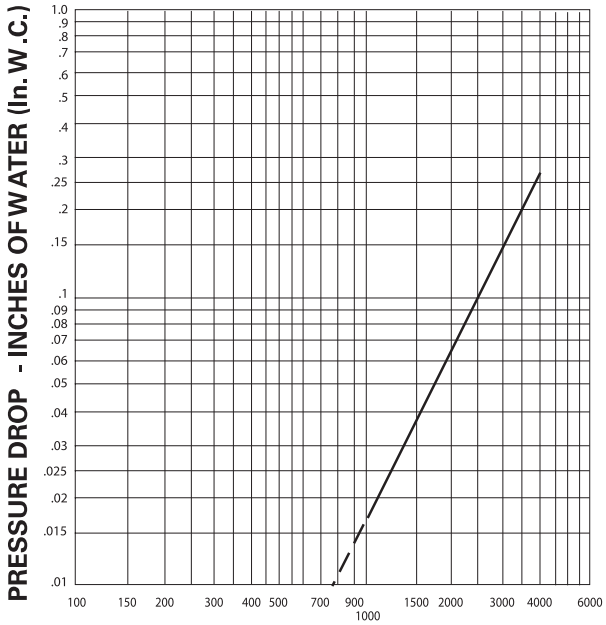
Model FSD-AF-211/231 c/w Sleeve

U.L. 555S Classified
Leakage Class 1
Airfoil Blade

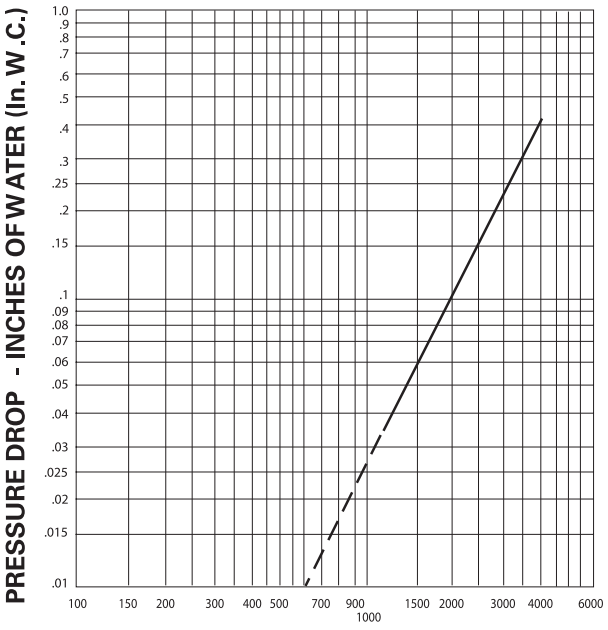
Combination Fire/Smoke Damper, U.L. 555 Classified 1½, 3 Hours

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

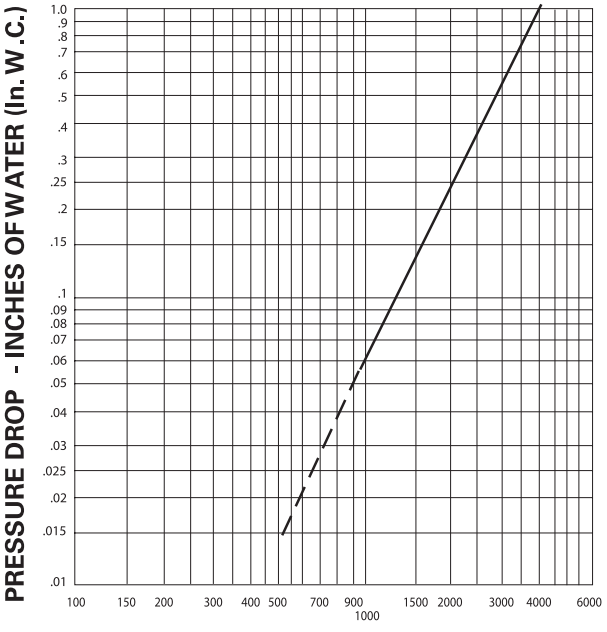
DAMPER SIZE 36 x 36



DAMPER SIZE 24 x 24



DAMPER SIZE 12 x 12



All Metric dimensions ( ) are soft conversion.
Imperial dimensions are converted to metric and rounded to the nearest millimetre.

© Copyright E.H. Price Limited 2006.

Model FSD-AF-212/232 c/w Sleeve

U.L. 555S Classified Leakage Class 2 Airfoil Blade

Combination Fire/Smoke Damper, U.L. 555 Classified 1½, 3 Hours

Model

Fire/Smoke Damper

FSD-AF-212/232 c/w Sleeve

Standard Construction:
Frame: Roll-formed galvanized steel hatsection with staked corners with integral bracing.

Blades: Airfoil-shaped, double skin galvanized steel of roll-formed construction. Mechanically joined to form construction equivalent to 14 ga. steel.

Minimum width 5" (127mm)

Maximum width 7" (178mm)

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 8"h (203mm x 203mm)

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

1½ Hr. Vertical: Multiple Assembly-108"w x 96"h (2743mm x 2438mm)

1½ Hr. Horizontal: Multiple Assembly-36"w x 48"h (914mm x 1219mm)

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

3 Hr. Horizontal: Maximum UL/ULC Listed Size: 36"w x 48"h (914mm x 1219mm)

Notes:
- Dampers are furnished approximately ¼" (6mm) smaller than given duct dimensions.
- Not recommended with blades running vertically.

LISTED AND LABELLED BY :

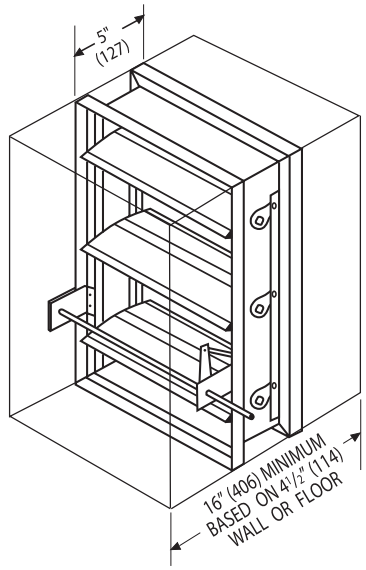
CLASSIFIED C UL US

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

Features

- The FSD-AF-212/232 series Combination Fire/Smoke Dampers have been designed and tested to provide a complete range of performance features when used in engineered smoke control systems.
- U.L. 555 and U.L.C. S112 listed and labeled as a 1½ (FSD-AF-212) or 3 (FSD-AF-232) hour fire damper.
- U.L. 555S and 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.
- Streamlined "airfoil" blades to provide low pressure drop and reduced air turbulence for quiet operation.
- Fusible link/actuator 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) or DTO/R (double 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 ¾" (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.

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:		price®
ENGINEER:		
CUSTOMER:		Jul / 06
SUBMITTAL DATE:	**SPEC. SYMBOL:**	245064

All Metric dimensions ( ) are soft conversion.
Imperial dimensions are converted to metric and rounded to the nearest millimetre.

© Copyright E.H. Price Limited 2006.

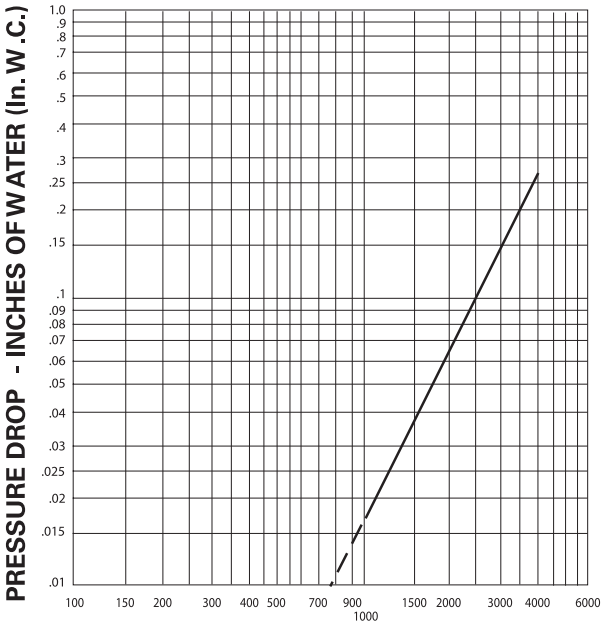
Model FSD-AF-212/232 c/w Sleeve

U.L. 555S Classified
Leakage Class 2
Airfoil Blade

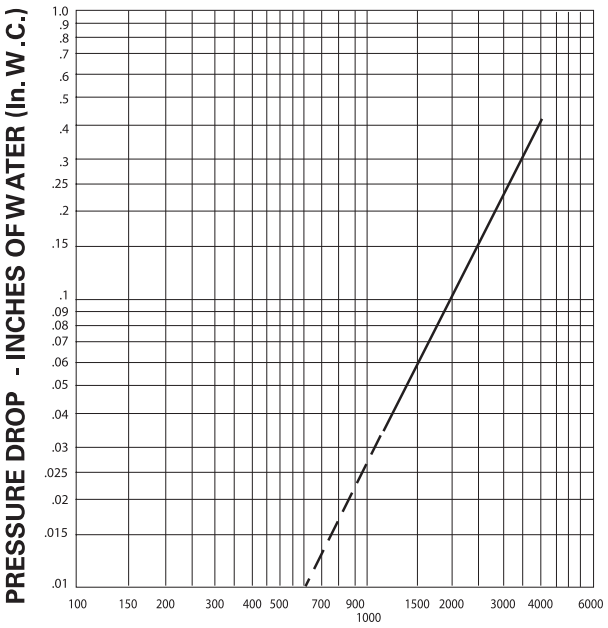
Combination Fire/Smoke Damper, U.L. 555 Classified 1½, 3 Hours

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

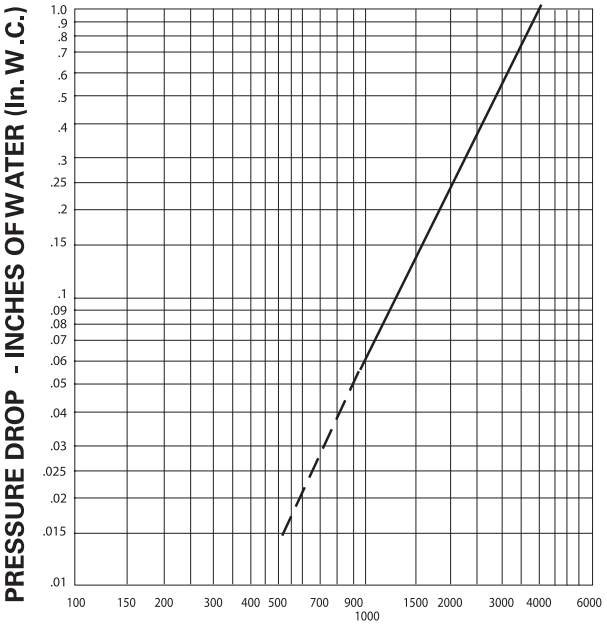
DAMPER SIZE 36 x 36



DAMPER SIZE 24 x 24



DAMPER SIZE 12 x 12



All Metric dimensions ( ) are soft conversion.
Imperial dimensions are converted to metric and rounded to the nearest millimetre.

© Copyright E.H. Price Limited 2006.