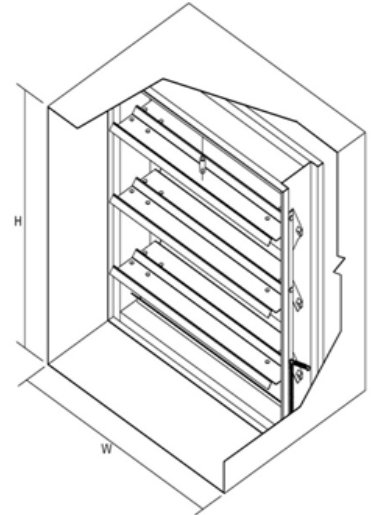


Product Information

Fusible Link Fire Damper with Sleeve - Model FLD-S-A

Application

Model FLD-S-A is a Multi Blade fire damper with 3V style blades. It is designed for closure of the HVAC duct opening in emergency Fire situations. It is certified to withstand fire conditions for 2 hours as well as 4 hours, as per UL555 testing standards, tested by CBRI Roorkee. Model FLD-S-A can be installed vertically, with blades running horizontally with airflow in either direction. Suitable for Velocities up to 2000 fpm



Standard Constructional Details*

Frame Type	Hat Channel – 123mm wide
Frame MOC	Galvanized Steel, 16Ga 120 GSM
Blade Type	Triple V Type Parallel Configuration
Blade MOC	Galvanized Steel, 16Ga 120 GSM
Top & Bottom Blade stopper	1mm thick 120 GSM Galvanized Steel
Axle Bush	Bronze Bush, pressed into Frame
Blade Axle (Shaft) MOC	Zinc Plated Steel 9.5mm Square Bar
Linkage	In Frame
Linkage MOC	3mm Galvanized Steel Bar
Temperature Release Device	UL Stamped Fusible Link 74 Deg C (Std)
Sleeves	Factory Fitted : Minimum 432mm long, Galvanized Steel, 20Ga thick
* Variations available	

Dimensional Limitations

Single Section	Multiple Section
900mm H x 1200mm W (Maximum)	1800mm H x 2400mm W (Maximum)
150mm H x 200mm W (Minimum)	

Features

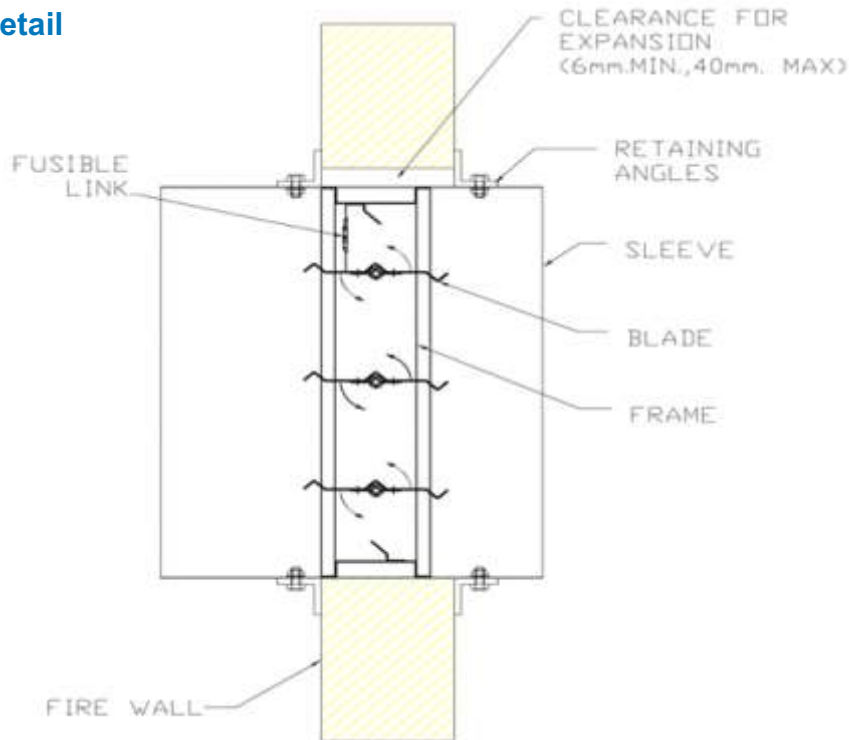
Model FLD-S-A Fire Damper is rated for 2 hours Fire Rating tested at CBRI Roorkee. It features a failsafe design which enables the damper to automatically assume the Closed position when the duct temperature reaches the design temperature of the fusible link. The Frame of the Damper is constructed with reinforced corners. Low profile Slimline frames in head and sill are used in sizes less than 425mm high. Blades are reinforced with 3 longitudinal structurally designed “Vee’s”

Options

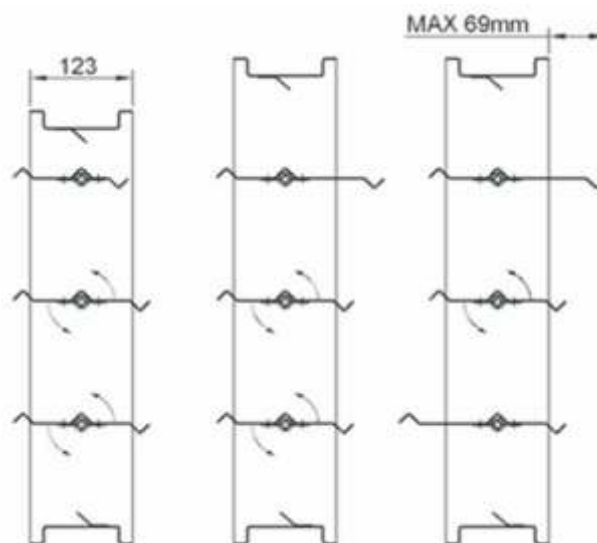
- 100 Deg C, Fusible Link
- Manual Blade Indication Lever
- Electronic Blade position Indication, linked to the Damper blade

Product Information

Installation Detail



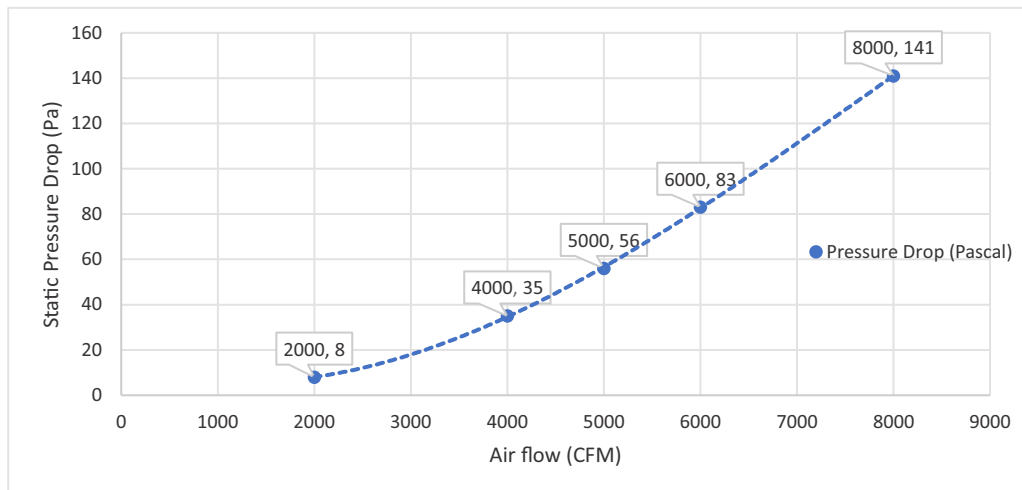
Note : Caryaire dampers are designed for the lowest possible pressure drop. Our engineering team processes each order individually and provides blade width for the desired heights and ensures that the damper has the highest free area, in open condition, and hence the lowest pressure drop. In order to do this, our blade widths may differ and protrude outside the damper frame from one or more sides, upto a maximum of 69mm. (Examples shown below)



Product Information

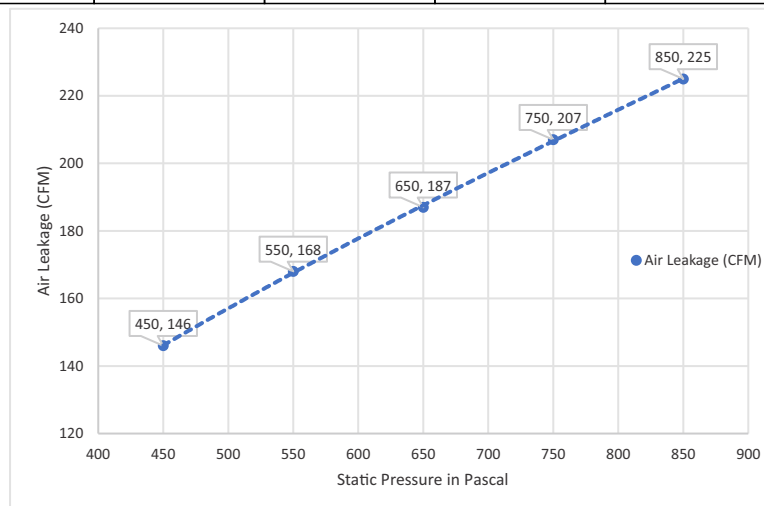
Pressure Drop

Air Flow (CFM)	2000	4000	5000	6000	8000
Air Velocity (FPM)	500	1000	1250	1500	2000
Pressure Drop (Pascal)	8	35	56	83	141



Air Leakage in Closed Condition

AIR Leakage (CFM)	146	168	187	207	225
Static Pressure (Pascal)	450	550	650	700	850



Pressure drop & Air Leakage testing was conducted on a Specimen size 610mm x 610mm.

Actual pressure drop & Air Leakage found in any HVAC system is a combination of many factors. This pressure drop & Air Leakage information along with an analysis of other system influences should be used to estimate actual pressure & Leakage losses for a damper installed in a given HVAC system.

Product Information

Specifications

Fire Damper has fire resistance rating of 2 hours as per UL555 testing standard, tested and approved by CBRI Roorkee. Fire Damper frame is galvanized steel of 16Ga thickness, formed into a structural hat channel in 4-piece construction with integral overlapping gusset reinforcements in each corner to assure square corners. Top and Bottom frame members are of low profile design to maximize the free area on small dampers. Damper Blades are single skin galvanized steel of 16Ga thickness and have 3 accurately rollformed longitudinal grooves for reinforcement and proper closure and operation. The blades are arranged in parallel to provide positive shut off. Each Blade has axles supported on both sides with sintered bronze self lubricating bearings turning in an extruded hole in the frame. All Blades are interconnected using linkage concealed in the frame section.

Each Damper is operated through a UL stamped fusible link rated at 74 or 100 Degree C. Closing of the fire damper is through a suitable rated spring which is capable to close the blades in the event of fusible link disintegrating.

Option of indication of Blade Position is available either through a manual lever or thru an electrically operated open/close switch (if needed by the specifier).

Each Damper is supplied with a factory mounted sleeve made from Minimum 20Ga thick galvanized steel of minimum 432mm length.