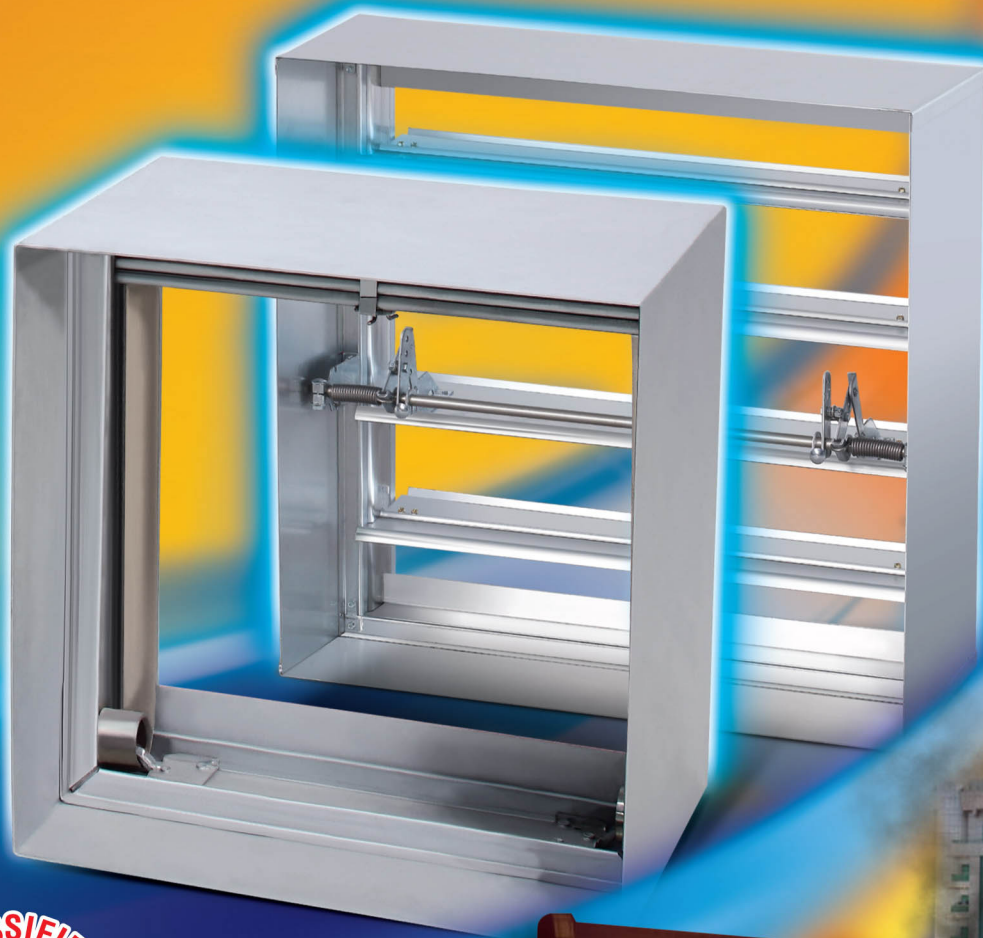


# FD & FDB series

Fire Dampers for Curtain  
Fire Dampers for Multi-blade



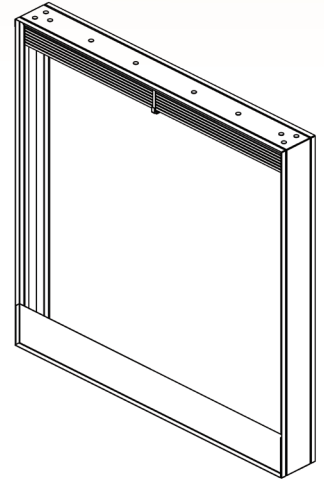
## Application and design

Model FD-3V is a fire damper with curtain type blades for use in HVAC systems that shut down during a fire event. The FD-3V has been qualified with the Fire Resistance Rating up to 3 hr. It may be used for the fire wall, dividing wall (the brick wall or the gypsum board).

UL Classified UL 555 Listing R26192 See Complete Marking on Product

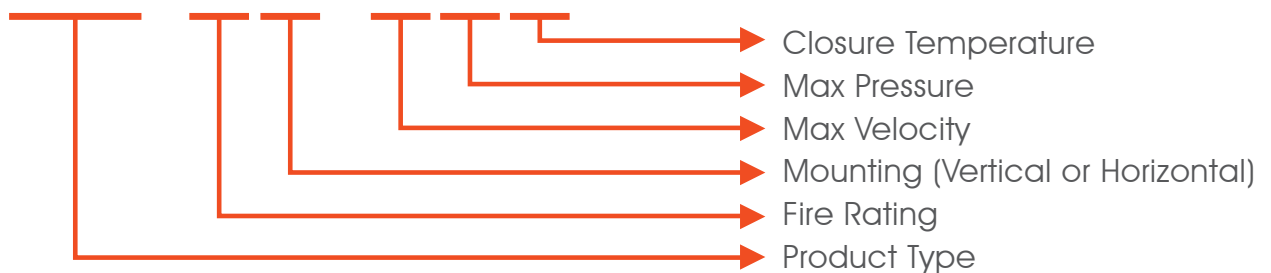
The FD-3V damper meets the following requirement for fire dampers established by:

- National Fire Protection Association NFPA Standards 80, 90A, 92A, 92B & 101
- ICC International Code Council IBC International Building Code NBC National Building Code
- SFPE Society of Fire Protection Engineers Handbook of Fire Protection Engineering



## Model Nomenclature

# FD-3V-1BE



Fire Resistance Rating		Max Velocity	
0	No Fire Rating	1	10.2 m/s (2000 fpm)
1	1 hr.	2	15.2 m/s (3000 fpm)
2	1.5 hr.	3	20.3 m/s (4000 fpm)
3	3 hr.	Closure Temperature of Fusible Link (Operating Temperature)	
Max Pressure			
A	0.5 kPa (2 in. w.g.)	A	74 °C (165 °F) Closure / Operating
B	1.0 kPa (4 in. w.g.)	B	100 °C (212 °F) Closure/Operating
C	1.5 kPa (6 in. w.g.)	C	121 °C (250 °F) Operating
D	2.0 kPa (8 in. w.g.)	D	141 °C (286 °F) Closure/Operating
E	2.5 kPa (10 in.w.g.)	E	177 °C (350 °F) Closure/Operating



## STANDARD CONSTRUCTION

### Frame

22 gauge (0.8mm) galvanized steel

### Blades

22 gauge (0.8mm) galvanized steel

### Fire Closure Device

Fusible Link

### Closure Springs

301 Stainless Steel

### Fusible Link Temperature:

165°C (74°F) is Standard

### Minimum Size

4" x 4" (102mm x 102mm)

### Maximum Size

**Single Section:** 36" x 36" (914mm x 914mm)

**Multiple Section:** 108" x 72" (2743mm x 1829mm)



## OPTIONS

### ☐ Factory installed sleeve

Gauge: ☐ 19# (1.2mm) ☐ 16# (1.6mm)

Length: ☐ 12" (305mm) ☐ 16" (406mm) ☐ Other

### ☐ Factory installed

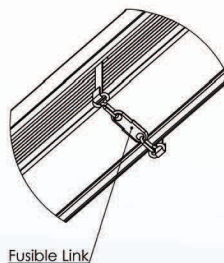
☐ Standard ☐ Flange

☐ Double Flange ☐ Sleeve

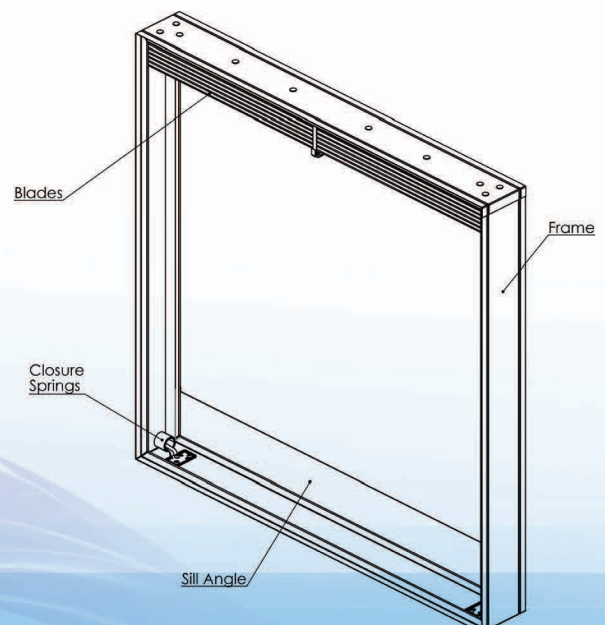
### ☐ Alternate fire closure temperature

☐ 212°F (100°C) ☐ 286°F (141°C)

☐ 350°F (177°C)



Fusible Link



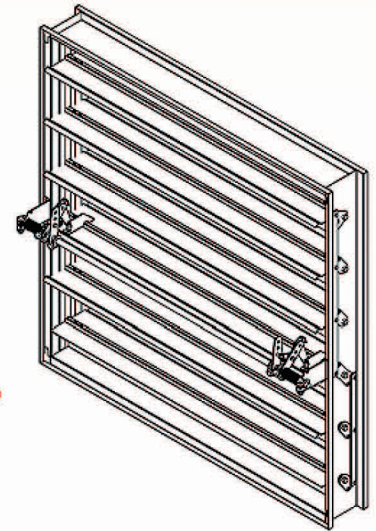
## APPLICATION and Design

Model FDB-3V is a multi-blade fire damper with triple-Vee blades. The FDB-3V has been qualified to 2000 fpm (10.2 m/s) the dynamic closure Pressure Rating is 6 in-Wg (1.5 kPa) in the duct, the Fire Resistance Rating is 3 hr, It may be used for the fire wall, dividing wall (the brick wall or the gypsum board ).

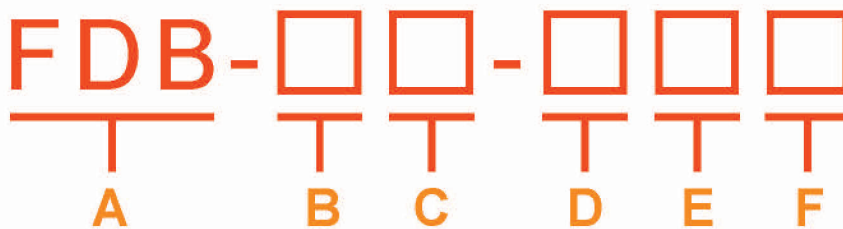
UL Classified UL 555 Listing R26192 See Complete Marking on Product

The FDB-3V damper meets the following requirement for fire dampers established by:

- National Fire Protection Association  
NFPA Standards 80, 90A, 92A, 92B & 101
- ICC International Code Council  
IBC International Building Code  
NBC National Building Code
- SFPE Society of Fire Protection Engineers  
Handbook of Fire Protection Engineering



## Model Nomenclature



A. Product Type		E. Max Pressure	
FDB	Fire Damper of Blade	A	0.5 kPa (2 in. w.g.)
B. Fire Rating		B	1.0 kPa (4 in. w.g.)
2	1.5hr	C	1.5 kPa (6 in. w.g.)
3	3.0hr	F. Temperature	
C. Mounting		A	74 °C ( 165 °F ) Operating
V	Vertical	B	100 °C ( 212 °F ) Operating
H	Horizontal	C	121 °C ( 250 °F ) Operating
D. Max Velocity		D	141 °C ( 285 °F ) Operating
1	10.2 m/s (2000 fpm)	E	177 °C ( 350 °F ) Operating



## STANDARD CONSTRUCTION

### Frame

20 gauge (123mmx23mm) galvanized steel hat channel with interlocking corner gusset

### Blades

16 gauge (153mmx1.6mm) galvanized steel-Triple Vee

### Jackshaft

(12.7mm) diameter plated steel hex.

### Linkage

Concealed in frame

### Springs

Stainless Steel

### Bearings

Stainless steel oilite, sleeve-type

### Fusible Link Temperature

165 °F (74°C ) is Standard

### Minimum Size

12" x 8" (305mm x 203mm)

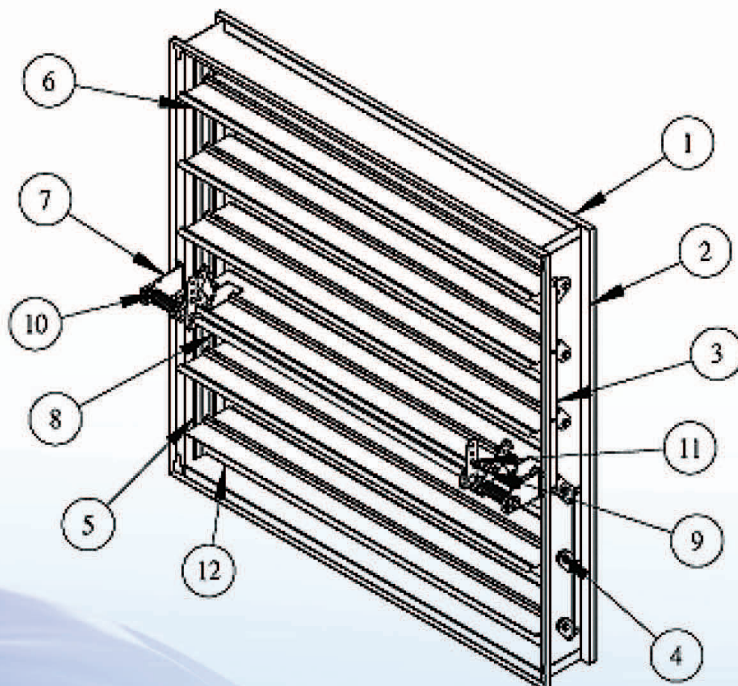
### Maximum Size

**Single Section:** 36" x 36" (914mm x 914mm)

**Multiple Section:** 108" x 72" (2743mm x 1829mm)



ITEM	NAME
1	Top & Down Frame
2	Side Frame
3	Concealed Linkage
4	Bearing
5	Jamb Seal
6	Blade
7	Clip Shaft Base
8	Jackshaft
9	Joint
10	Spring
11	Fusible Link
12	Block Frame



## OPTIONS

☐ **Factory installed**

☐ No Sleeve (Standard) ☐ Sleeve

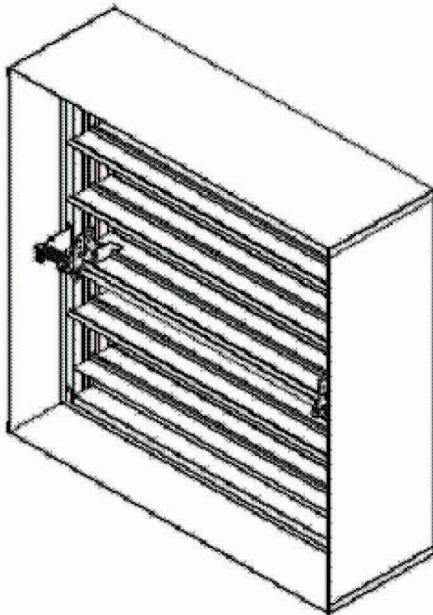
☐ **Factory installed sleeve**

Gauge: ☐ 19# (1.2mm) ☐ 16# (1.6mm)

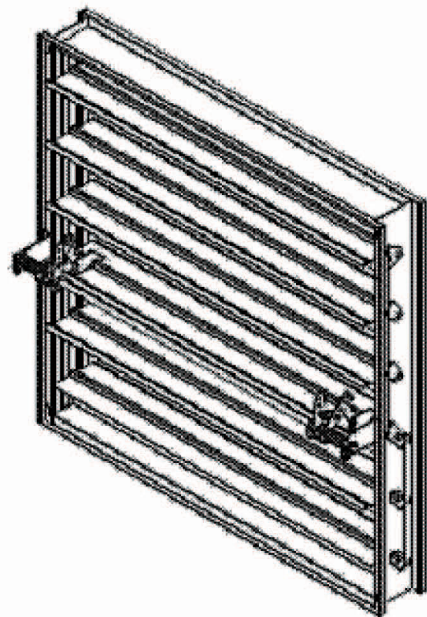
Length: ☐ 12" (305mm) ☐ 16" (406mm) ☐ Other

☐ **Alternate fire closure temperature**

☐ 212°F (100°C) ☐ 286°F (141°C) ☐ 350°F (177°C)



☐ Sleeve (optional)



☐ No Sleeve (Standard)

## **DAMPERS INSTALLATION AND OPERATING INSTRUCTIONS**

### **RECEIVING AND HANDLING**

After receiving the damper, please check on the appearance and internal deformation or damage. If there is found to deformation or damage, please notice to the Company by letter or email imminently, the Company will identify the handling or assembly issues, and at the same time Repair or replace faulty parts will be organize. Be sure to check all the accessories and the component items are not losing. The Damper must be storage indoors and kept dry and clean place to prevent dust and fouling in all time.

### **SAFETY WARNING**

Incorrect installation, adjustment, modification, use and maintenance may cause product damage, personal injury and other circumstances. Before the installation, use and maintenance, please read the installation manual and maintenance manual first. The installation manual is for the user only, after the damper installation is complete, please give the final user of this manual.

### **WARRANTY**

The Flowtech provide the products for one year warranty. Under the warranty period the dampers found in non artificial factors, Flowtech will repair or replace without any charges to customers. If the damage caused by the improper artificial use factors, then it will not be under warranty by Flowtech, the Company will not responsibility for the replacement of the product cost.

### **CUSTOMER SERVICE CENTRE**

If there is any question, please contact with the customer service centre of our company.

TEL : +886-2-2232-8066 (Represent number)

FAX : +886-2-2231-0285



# SALES CONTACT



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