



FLOWTECH
陽鼎實業股份有限公司

FIRE DAMPERS for CURTAIN





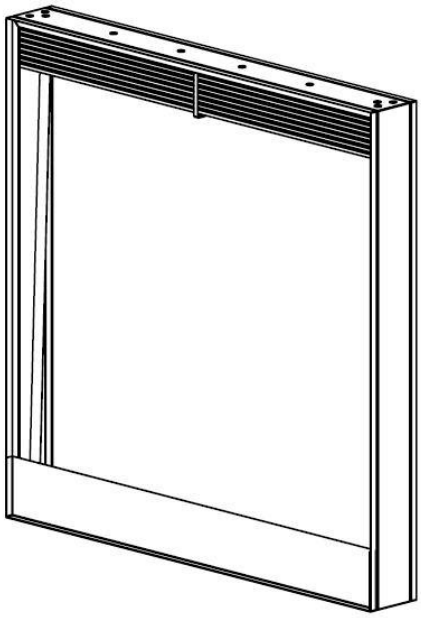
Fire Dampers for Muti-Blade

CLASSIFIED
UL
R26192



APPICATION 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).

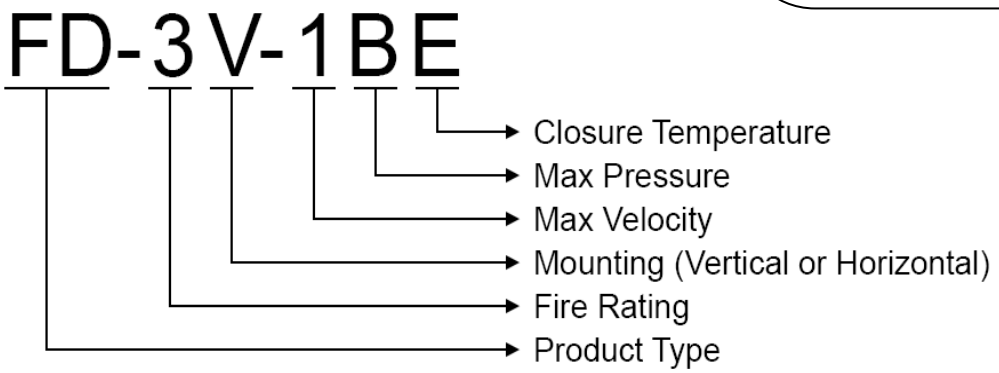


UL Classified
UL 555 Listing R26192
See Complete Marking on Product

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



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 ℃ (165℉)Closure/Operating
B	1.0 kPa (4 in. w.g.)	B	100 ℃ (212℉)Closure/Operating
C	1.5 kPa (6 in. w.g.)	C	121 ℃ (250℉)Operating
D	2.0 kPa (8 in. w.g.)	D	141 ℃ (286℉)Closure/Operating
E	2.5 kPa (10 in.w.g.)	E	177 ℃ (350℉)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˚F (74˚C) 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

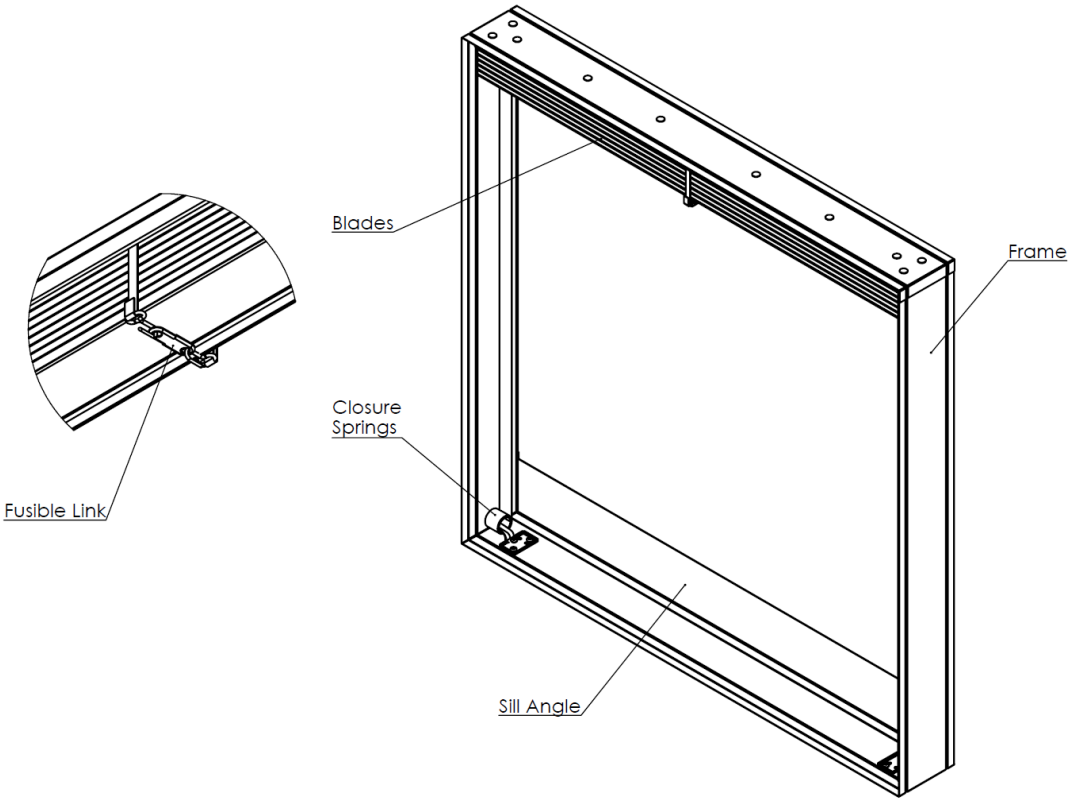
☐ **Factory installed**

☐ Standard ☐ Flange

☐ Double Flange ☐ Sleeve

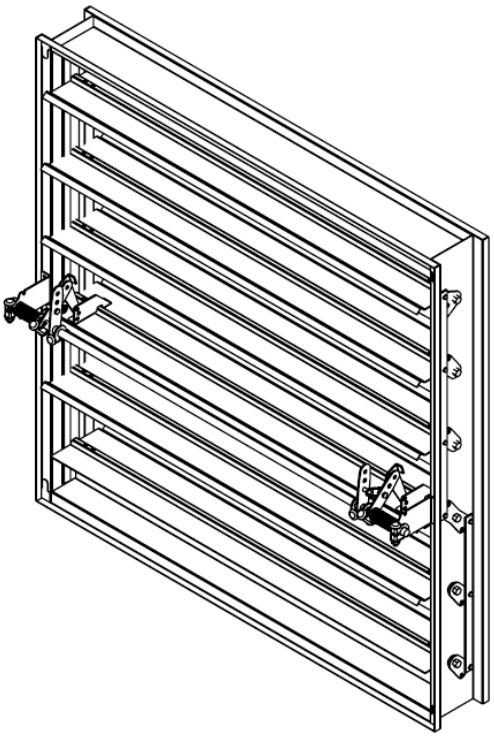
☐ **Alternate fire closure temperature**

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



APPICATION 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).

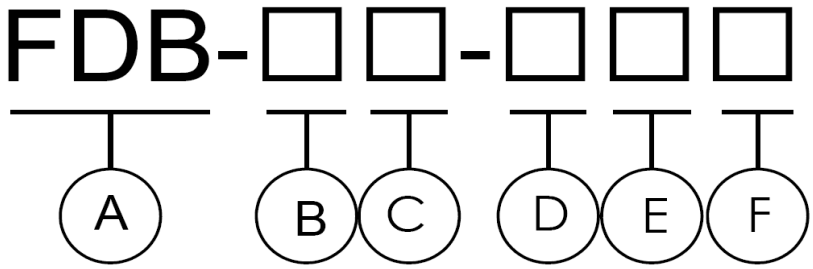


UL Classified
UL 555 Listing R26192
See Complete Marking on Product

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 ℃ (165℉) Operating
V	Vertical	B	100 ℃ (212℉) Operating
H	Horizontal	C	121 ℃ (250℉) Operating
D. Max Velocity		D	141 ℃ (285℉) Operating
1	10.2 m/s (2000 fpm)	E.	177 ℃ (350℉) 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

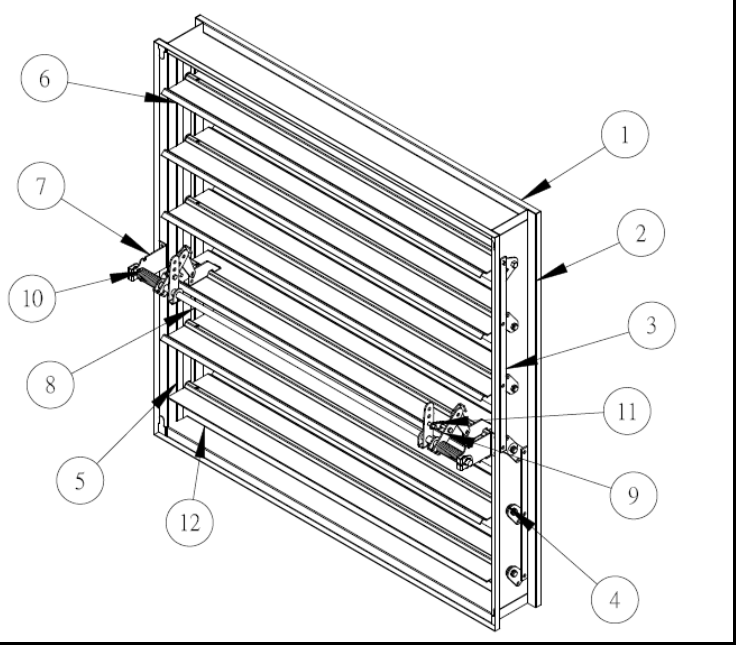
Single Section: 36” x 36” (914mm x 914mm)

Multiple Section: 108” x 72” (2743mm x 1829mm)



Component

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

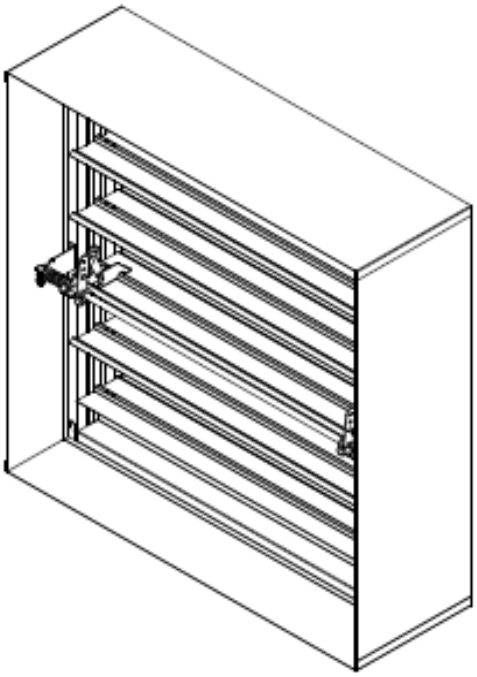
☐ **Factory installed sleeve**

Gauge： ☐ 19＃(1.2mm) ☐ 16＃ (1.6mm)

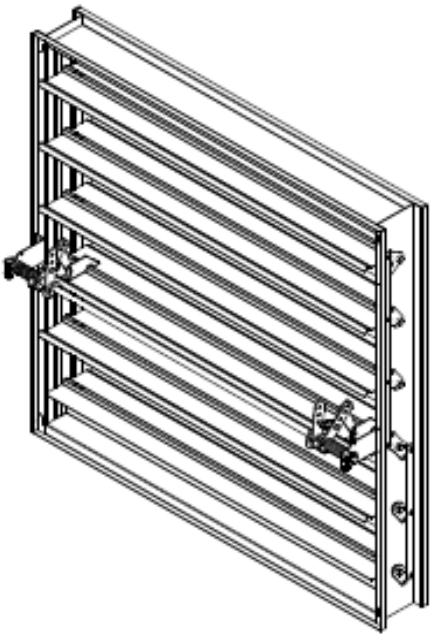
Length： ☐ 12”(305mm) ☐ 16”(406mm) ☐Other

☐ **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

陽鼎實業股份有限公司
FLOWTECH CO., LTD.

CNo.： CAT-FD-FDB December 2014

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