

Application

Model DFD-150 is approved for use in walls, floors, and partitions with fire resistance ratings less than 3 hours. This model carries a 1 1/2 hour UL fire damper label. UL555 classifies dynamic rated fire damper for use in HVAC systems that are operational in the event of fire.

Ratings

UL 555 Fire Resistance

Fire Rating: 1 1/2 hours

Velocity

4000 fpm (20.3 m/s) vertical mount only, up to 24 in. x 24 in. (610mm x 610mm);
2000 fpm (10.2 m/s) vertical or horizontal mount all sizes

Pressure

Maximum: 4 in. wg (1 kPa)



* W & H dimensions furnished approximately 1/4 in. (6mm) undersize.

Construction

Construction	Standard	Optional
Frame Material	Galvanized steel*	-
Frame Depth	3 11/16 in. (94mm)	-
Blade Material	Galvanized steel*	-
Closure Spring	Stainless steel	-
Fusible Link	165°F (74°C)	212°F or 286°F (100°C or 141°C)
Mounting	Vertical	Horizontal

* in gauges required by UL listing R13317

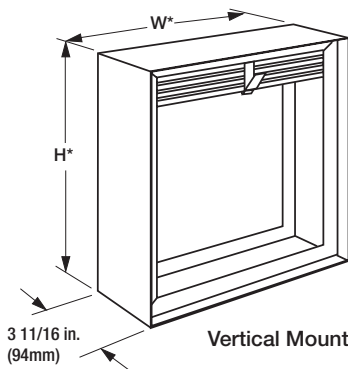


See complete marking on product.

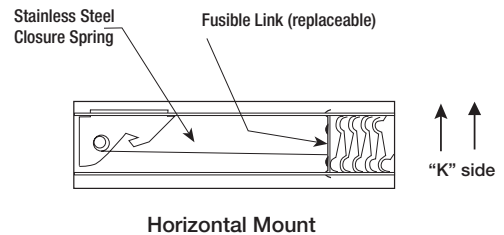
UL 555 Classification R16690

Model DFD-150 meets the requirements for fire dampers established by:

- National Fire Protection Association NFPA Standards, 80, 90A, and 101
- International Building Codes (IBC)



Vertical Mount



Options and Accessories

- [Breakaway connections](#)
- Clean wrap
- Closed indicator switch
- Flanges
- [Grille tabs](#)
- [Retaining angles](#)
- [Security bars](#)
- Sealed transitions and sleeve
- Transitions: B, B2, C, CO, CR, R

Document Links

[Installation Instructions](#)



[Life Safety Products](#)



[Damper Warranty](#)



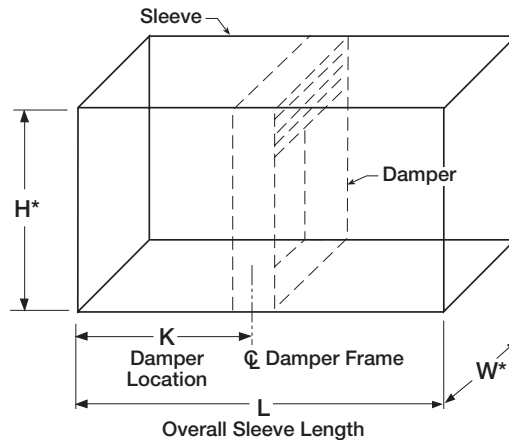
Factory Sleeve Option

All fire damper installations require the use of sleeves, angles and methods described in the installation instructions. Sleeves can be field fabricated or factory furnished as a completed damper/sleeve assembly.

Sleeves are galvanized steel and are available in 20 through 10 ga. (1mm - 3.5mm) thicknesses and lengths up to 36 in. (914mm).

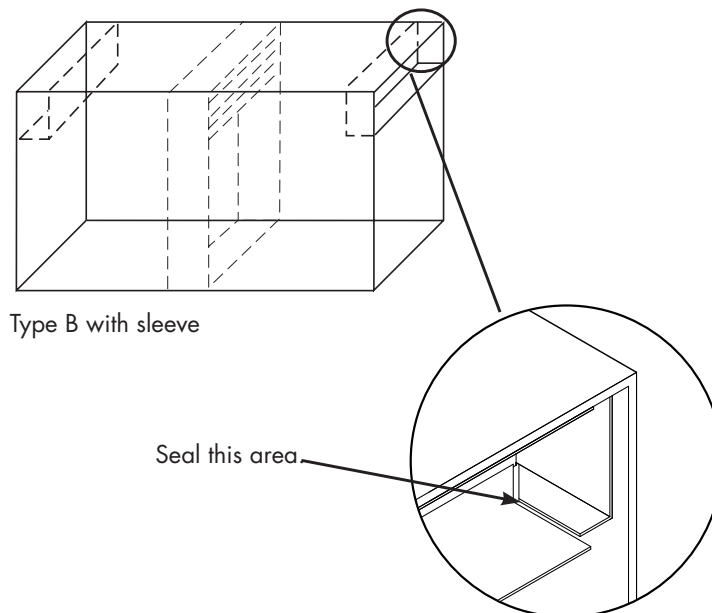
"K" dimension specifies location of damper within the sleeve. Minimum is 4 in. (102mm), maximum is "L" less 4 in. (102mm), which allows for mounting angle installation, and duct connection at each end of the sleeve. If "K" dimension is not specified, it will be provided as one half of "L" dimension (damper centered in sleeve).

Note: If using access doors, the door should be installed on the "K" side of the damper.



Sealed Option

When sealed option is selected, B transition will need to be field sealed in the area where duct to sleeve connection is made.



Type A, B, & B2

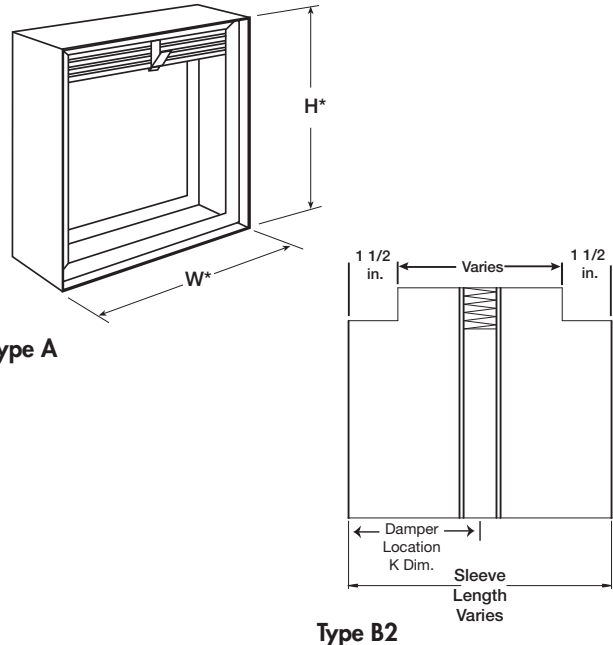
Dampers larger than maximum single section sizes are supplied in 2 or more sections of equal size. Multi-section dampers are factory assembled ready for installation.

Size Limitations

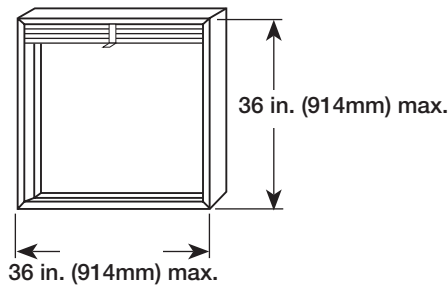
Inches (mm)	Type A		Type B & B2	
	Minimum	Maximum*	Minimum	Maximum*
Single Section Vertical	4 x 4 (102 x 102)	36 x 36 (914 x 914)	4 x 3 (102 x 76)	36 x 31 (914 x 787)
Multi Section** Vertical	NA	72 x 48 (1829 x 1219), 60 x 60 (1524 x 1524) or 120 x 30 (3048 x 762)	NA	72 x 45 (1829 x 1143), 60 x 56 (1524 x 1422) or 120 x 26 (3048 x 660)
Single Section Horizontal	4 x 4 (102 x 102)	30 x 30 (762 x 762)	4 x 3 (102 x 76)	30 x 26 (762 x 660)
Multi Section** Horizontal	NA	48 x 36 (1219 x 914)	NA	48 x 33 (1219 x 838)

* Sizes are based on 165°F closure temperature and 2000 fpm. Consult factory for maximum size for different temperatures and velocities.

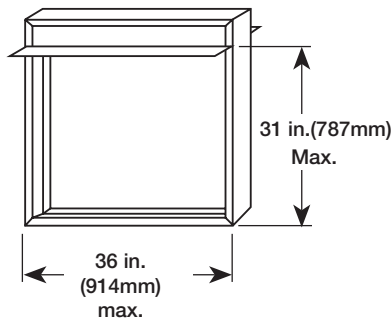
** Consult factory for number of sections.



Maximum Single Section Dimensions



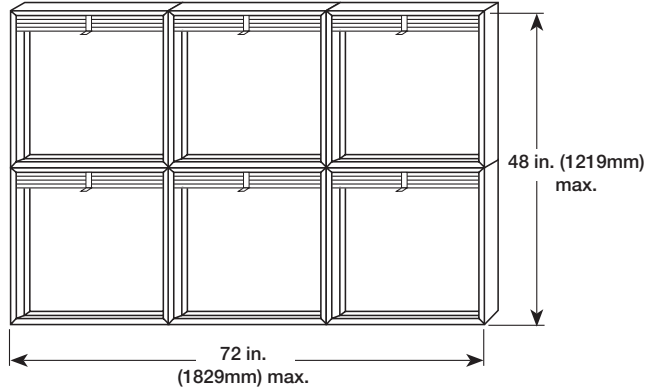
Type A Single Section



Type B Single Section

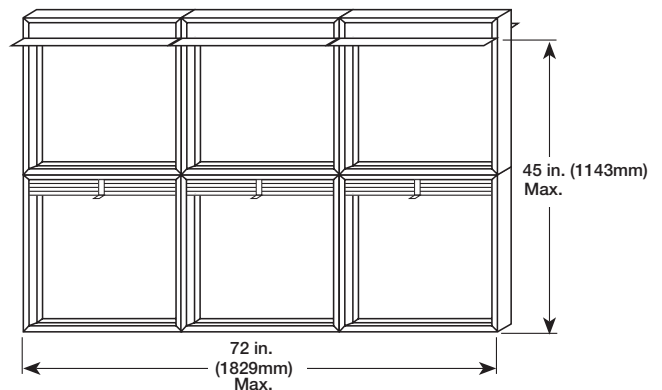
Multi-Section Limitations - Type A

Maximum damper height is 48 in. (1219mm) when combination width is 72 in. (1829mm) or less.



Multi Section Limitations - Type B/B2

Maximum damper height is 45 in. (1143mm) when combination width is 72 in. (1829mm) or less.

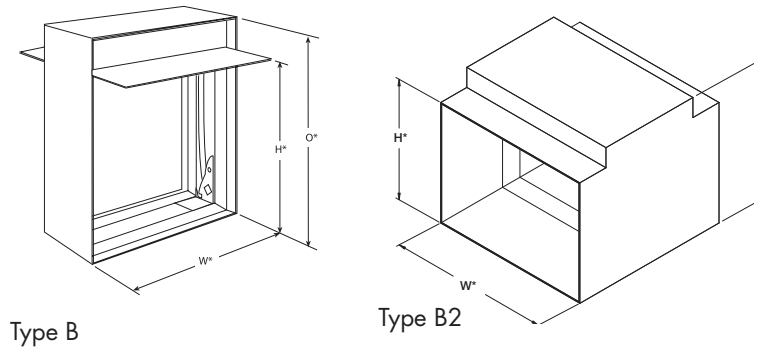


Type A, B, & B2

Vertical Mount

H*	O*	H*	O*
3 (76)	5 (127)	30 (762)	34 (864)
4 (102)	6 (152)	31 (787)	36 (914)
5 (127)	7 (178)	32 (813)	37 (940)
6 (152)	8 (203)	33 (838)	37 (940)
7 (178)	9 (229)	34 (864)	37 (940)
8 (203)	10 (254)	35 (889)	38 (965)
9 (229)	11 (279)	36 (914)	39 (991)
10 (254)	12 (305)	37 (940)	40 (1016)
11 (279)	13 (330)	38 (965)	41 (1041)
12 (305)	14 (356)	39 (991)	42 (1067)
13 (330)	15 (381)	40 (1016)	43 (1092)
14 (356)	16 (406)	41 (1041)	44 (1118)
15 (381)	18 (457)	42 (1067)	45 (1143)
16 (406)	19 (483)	43 (1092)	46 (1168)
17 (432)	20 (508)	44 (1118)	47 (1194)
18 (457)	21 (533)	45 (1143)	48 (1219)
19 (483)	22 (559)	46 (1168)	50 (1270)
20 (508)	23 (584)	47 (1194)	51 (1295)
21 (533)	24 (610)	48 (1219)	52 (1321)
22 (559)	26 (660)	49 (1245)	53 (1346)
23 (584)	27 (686)	50 (1270)	54 (1372)
24 (610)	28 (711)	51 (1295)	55 (1397)
25 (635)	29 (737)	52 (1321)	56 (1422)
26 (660)	30 (762)	53 (1346)	57 (1448)
27 (686)	31 (787)	54 (1372)	58 (1473)
28 (711)	32 (813)	55 (1397)	59 (1499)
29 (737)	33 (838)	56 (1422)	60 (1524)

Type B & B2 Overall Damper Dimensions



Horizontal Mount

H*	O*	H*	O*
3 (76)	5 (127)	19 (483)	22 (559)
4 (102)	6 (152)	20 (508)	23 (584)
5 (127)	7 (178)	21 (533)	24 (610)
6 (152)	8 (203)	22 (559)	26 (660)
7 (178)	9 (229)	23 (584)	27 (686)
8 (203)	10 (254)	24 (610)	28 (711)
9 (229)	11 (279)	25 (635)	29 (737)
10 (254)	12 (305)	26 (660)	30 (762)
11 (279)	13 (330)	27 (686)	31 (787)
12 (305)	14 (356)	28 (711)	31 (787)
13 (330)	15 (381)	29 (737)	32 (813)
14 (356)	16 (406)	30 (762)	33 (838)
15 (381)	18 (457)	31 (787)	34 (864)
16 (406)	19 (483)	32 (813)	35 (889)
17 (432)	20 (508)	33 (838)	36 (914)
18 (457)	21 (533)	-	-

* Dimension is inches (mm). These dimensions are furnished approximately 1/4 in. (6mm) undersize. All 'H' dimensions larger than single section height are two sections high. Refer to size limitations chart. The top section is a Type B/B2 and the bottom section are Type A.

Type C, CO, CR, & R

Dampers larger than maximum single section sizes are supplied in 2 or more sections of equal size. Note: All multiple section dampers with transitions, will include a factory installed sleeve.

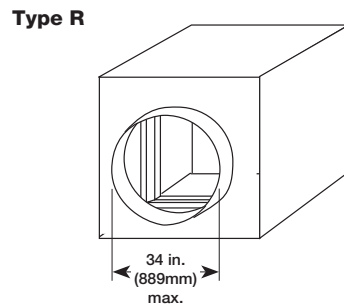
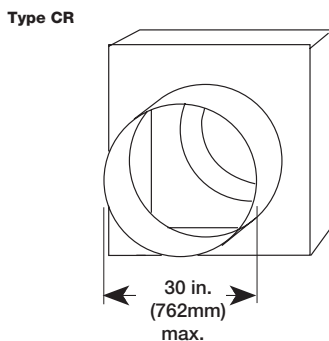
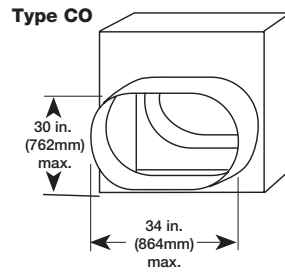
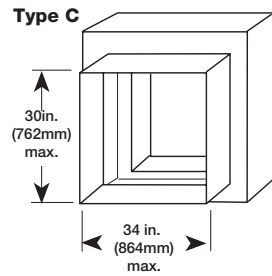
Inches (mm)	Type CR		Type CO & C		Type R+	
	Minimum	Maximum*	Minimum	Maximum*	Minimum	Maximum*
Single Section Vertical	3 (76)	30 (762)	3 x 3 (76 x 76)	34 x 30 (864 x 762)	3 (76)	34 (864)
Multi Section Vertical**	NA	55 (1397)	NA	70 x 44 (1778 x 1118), 58 x 55 (1473 x 1397) or 118 x 25 (2997 x 635)	NA	58 (1473)
Single Section Horizontal	3 (76)	25 (635)	3 x 3 (76 x 76)	28 x 25 (711 x 635)	3 (76)	28 (711)
Multi Section Horizontal**	NA	32 (813)	NA	46 x 32 (1163 x 787)	NA	34 (864)

* With 2 in. (51mm) offset. Sizes adjust with an 1 in. (25mm) offset.

* Sizes are based on 165°F closure temperature and 2000 fpm. Consult factory for maximum size for different temperatures and velocities.

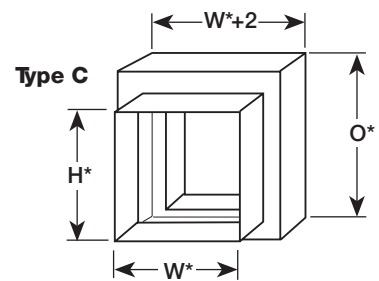
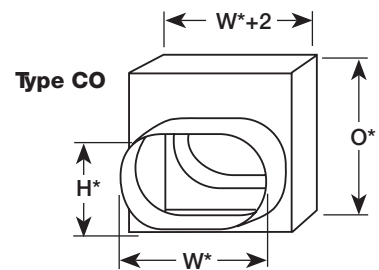
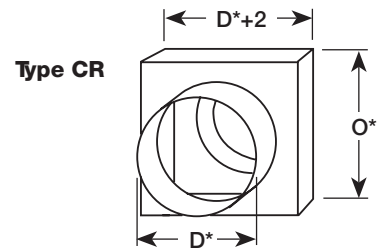
** Consult factory for number of sections.

Maximum Single Section Dimensions



Type R transition is centered on damper frame. (Dimension are with 2 in. (51mm) offset.)

Overall Damper Dimensions



C, CO, CR transitions are positioned 1 in. (25mm) from bottom of sleeve.

Type C, CO, CR & R

Vertical Mount

H* or D*	O*	H* or D*	O*	H* or D*	O*
3 (76)	6 (152)	21 (533)	26 (660)	39 (991)	45 (1143)
4 (102)	7 (178)	22 (559)	27 (686)	40 (1016)	46 (1168)
5 (127)	8 (203)	23 (584)	28 (711)	41 (1041)	47 (1194)
6 (152)	9 (229)	24 (610)	29 (737)	42 (1067)	48 (1219)
7 (178)	10 (254)	25 (635)	30 (762)	43 (1092)	49 (1245)
8 (203)	11 (279)	26 (660)	31 (787)	44 (1118)	50 (1270)
9 (229)	12 (305)	27 (686)	32 (813)	45 (1143)	50 (1270)
10 (254)	13 (330)	28 (711)	33 (838)	46 (1168)	51 (1295)
11 (279)	14 (356)	29 (737)	34 (864)	47 (1194)	52 (1321)
12 (305)	15 (381)	30 (762)	36 (914)	48 (1219)	53 (1346)
13 (330)	16 (406)	31 (787)	37 (940)	49 (1245)	54 (1372)
14 (356)	18 (457)	32 (813)	37 (940)	50 (1270)	55 (1397)
15 (381)	19 (483)	33 (838)	39 (991)	51 (1295)	56 (1422)
16 (406)	20 (508)	34 (864)	40 (1016)	52 (1321)	57 (1448)
17 (432)	21 (533)	35 (889)	41 (1041)	53 (1346)	58 (1473)
18 (457)	22 (559)	36 (914)	42 (1067)	54 (1372)	59 (1499)
19 (483)	23 (584)	37 (940)	43 (1092)	55 (1397)	60 (1524)
20 (508)	24 (610)	38 (965)	44 (1118)		-

Horizontal Mount

H* or D*	O*	H* or D*	O*
3 (76)	6 (152)	18 (457)	22 (559)
4 (102)	7 (178)	19 (483)	23 (584)
5 (127)	8 (203)	20 (508)	24 (610)
6 (152)	9 (229)	21 (533)	26 (660)
7 (178)	10 (254)	22 (559)	27 (686)
8 (203)	11 (279)	23 (584)	28 (711)
9 (229)	12 (305)	24 (610)	29 (737)
10 (254)	13 (330)	25 (635)	30 (762)
11 (279)	14 (356)	26 (660)	31 (787)
12 (305)	15 (381)	27 (686)	31 (787)
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14 (356)	18 (457)	29 (737)	33 (838)
15 (381)	19 (483)	30 (762)	34 (864)
16 (406)	20 (508)	31 (787)	35 (889)
17 (432)	21 (533)	32 (813)	36 (914)

* Dimension is inches (mm). These dimensions are furnished approximately ¼ in. (6mm) undersize. All 'H' dimensions larger than single section height are two sections high. Refer to size limitations chart.