

Application

The VFD-10D-A fire damper employs curtain style blades for point-of-origin control of fire in static and dynamic HVAC systems. The VFD-10D-A is qualified to 4,000 ft/min (20.3 m/s) and 4 in.wg. (1.0 kPa) and may be installed in vertical walls or partitions, or horizontally in floors or assemblies with fire resistance ratings up to 2 hours.

Standard Construction

Frame: 22 gauge (0.85) galvanized steel.

Blades: 24 gauge (0.7) galvanized steel – curtain style.

Fire Closure Device: Fusible link.

Fire Closure Temperature: 165°F (75°C).

Minimum Size: 6" x 6" (152 x 152)

Maximum Size: Single section: Vertical: 36" x 48" (914 x 1219)
 Horizontal: 36" x 36" (914 x 914)
 Multiple Section: Vertical: 72" x 48" (1829 x 1219)
 Horizontal: 36" x 96" (914 x 2438)
 72" x 18" (1829 x 457)

Stainless Steel: Single section: Vertical: 36" x 36" (914 x 914)

Options

Installation: Vertical Mount Horizontal Mount

Velocity Rating: 2000 fpm 4000 fpm

Factory installed sleeve: Integral
 Gauge: 20 (1.0) 18 (1.3) 16 (1.6) 14 (2.0) 10 (3.5)
 Length: 12" (305) 16" (406) 24" (610) Other _____

Low leakage taped joints. (Integral sleeve required)

Transitions: Flanged (sleeve required)

Round Oval
 Duct connections (sleeve required):
 1" (25) S-clip
 DM-25 DM-35 S & Drive WARD

Retaining angle systems:
 Gauge: 20 (1.0) 16 (1.6)
 Picture frame: SSPF (single-side) DSPF (2-side)
 Individual angle sets: SS (single-side) DS (2-side)

Alternate fire closure temperature.
 212°F (100°C)

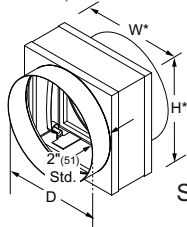
Duct access door factory mounted in common sleeve.

Generic mullion for oversized masonry or concrete openings.

Type-304 stainless steel construction.

Round Transitions

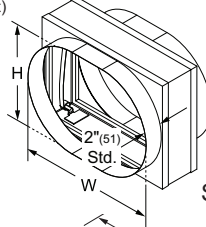
(Standard with D=W=H. Available with D<W and H)



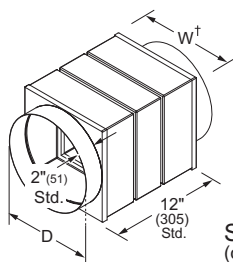
Style AR (optional)

Oval Transitions

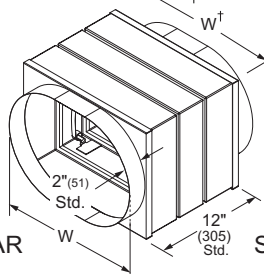
(Standard with W and H equal to damper width and height dimensions. Available with W and H smaller than damper width and height)



Style AO (optional)

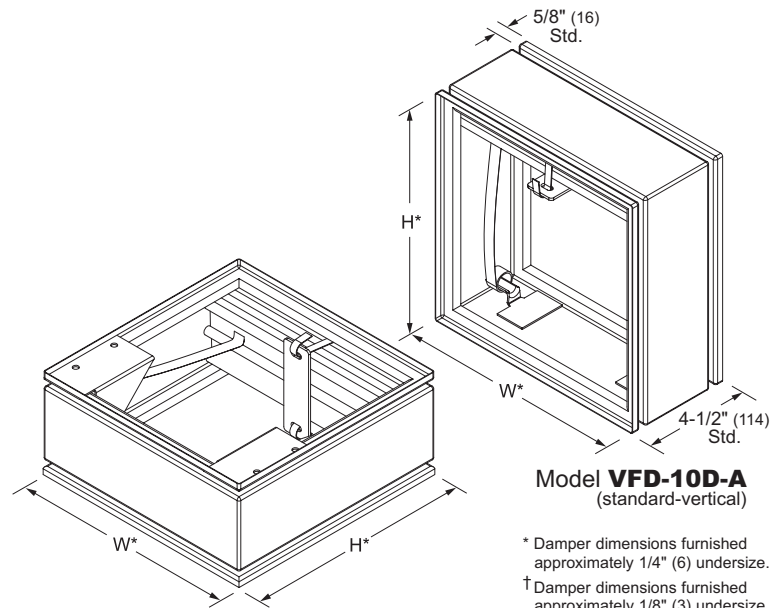


Sleeve Style ISAR (optional)



Sleeve Style ISAO (optional)

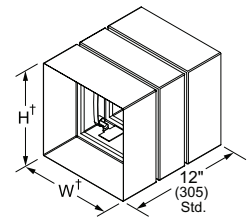
Model **VFD-10D-A**
(standard-horizontal)



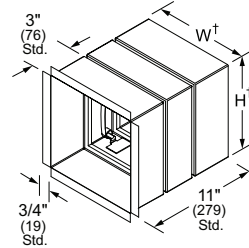
Model **VFD-10D-A**
(standard-vertical)

* Damper dimensions furnished approximately 1/4" (6) undersize.

† Damper dimensions furnished approximately 1/8" (3) undersize.



Sleeve Style ISA (optional)



Sleeve Style ISAF (optional)
with standard flange
(Typical for use with grille.)

*** 4000 fpm (20.3 m/s) limited to:

Single section: Vertical: 36" x 48" (914 x 1219)

Horizontal: 36" x 18" (914 x 457)

Multiple section: Horizontal: 36" x 36" (914 x 914)

72" x 18" (1829 x 457)



Ratings

UL 555 Fire Resistance Rating: 1½ hour (vertical and horizontal)

UL HNLJ.V-5: Ventilation Duct Assemblies

*** **Maximum Dynamic Closure Velocity:** 4,000 fpm (20.3 m/s)
 2,000 fpm (10.2 m/s)

Maximum UL555S Rated Pressure: 4 in.wg. (1.0 kPa)

Listings

UL 555 listing: R11767

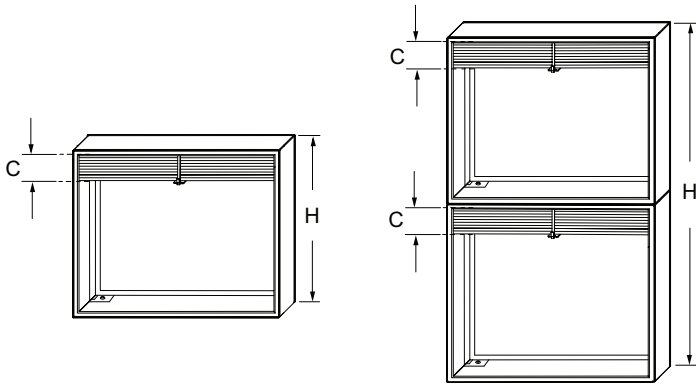
CSFM listing: 3225-0368:101

New York City MEA listing: 295-98-E

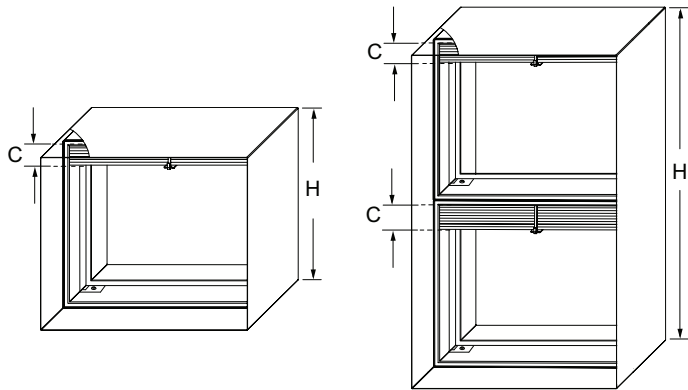
Meets NFPA Standards: 90A, 92A, 92B and 101

Meets Building Code Standards: IBC, NBC, NFPA, SBC and UBC

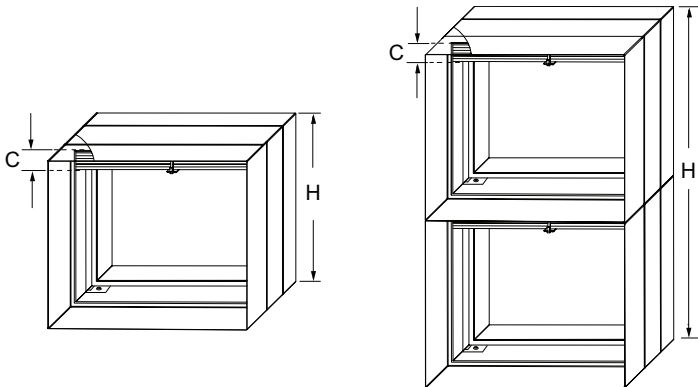
Blade Stack Dimensional Data



Framed Unit — No Sleeve
(Multiple section units supplied as individual dampers for field assembly)



Sleeve Style S — Common Sleeve
(Multiple section units supplied as a single assembly)



Sleeve Style IS — Integral Sleeve
(Multiple section units supplied as individual dampers for field assembly)

Single Section

Nominal Duct Height 'H'	Blade Stack Height 'C'
6" (152)	1-1/16" (27)
7" (178)	1-3/16" (30)
8" (203)	1-3/16" (30)
9" (229)	1-3/16" (30)
10" (254)	1-7/16" (37)
11" (279)	1-7/16" (37)
12" (305)	1-7/16" (37)
13" (330)	1-9/16" (40)
14" (356)	1-9/16" (40)
15" (381)	1-13/16" (46)
16" (406)	1-13/16" (46)
17" (432)	1-13/16" (46)
18" (457)	1-15/16" (49)
19" (483)	1-15/16" (49)
20" (508)	2-3/16" (56)
21" (533)	2-3/16" (56)
22" (559)	2-3/16" (56)
23" (584)	2-5/16" (59)
24" (610)	2-5/16" (59)
25" (635)	2-9/16" (65)
26" (660)	2-9/16" (65)
27" (686)	2-9/16" (65)
28" (711)	2-11/16" (68)
29" (737)	2-11/16" (68)
30" (762)	2-15/16" (75)
31" (787)	2-15/16" (75)
32" (813)	2-15/16" (75)
33" (838)	3-1/16" (78)
34" (864)	3-1/16" (78)
35" (889)	3-5/16" (84)
36" (914)	3-5/16" (84)
37" (940)	3-5/16" (84)
38" (965)	3-7/16" (87)
39" (991)	3-7/16" (87)
40" (1016)	3-11/16" (94)
41" (1041)	3-11/16" (94)
42" (1067)	3-11/16" (94)
43" (1092)	3-13/16" (97)
44" (1118)	3-13/16" (97)
45" (1143)	4-1/16" (103)
46" (1168)	4-1/16" (103)
47" (1194)	4-1/16" (103)
48" (1219)	4-3/16" (106)

Multiple Section

Nominal Duct Height 'H'	Blade Stack Height 'C'
49" (1245)	2-9/16" (65)
50" (1270)	2-9/16" (64)
51" (1295)	2-9/16" (63)
52" (1321)	2-9/16" (62)
53" (1346)	2-9/16" (61)
54" (1372)	2-9/16" (60)
55" (1397)	2-11/16" (68)
56" (1422)	2-11/16" (67)
57" (1448)	2-11/16" (66)
58" (1473)	2-11/16" (65)
59" (1499)	2-15/16" (75)
60" (1524)	2-15/16" (74)
61" (1549)	2-15/16" (73)
62" (1575)	2-15/16" (72)
63" (1600)	2-15/16" (71)
64" (1626)	2-15/16" (70)
65" (1651)	3-1/16" (78)
66" (1676)	3-1/16" (77)
67" (1702)	3-1/16" (76)
68" (1727)	3-1/16" (75)
69" (1753)	3-5/16" (84)
70" (1778)	3-5/16" (83)
71" (1803)	3-5/16" (82)
72" (1829)	3-5/16" (81)
73" (1854)	3-5/16" (80)
74" (1880)	3-5/16" (79)
75" (1905)	3-7/16" (87)
76" (1930)	3-7/16" (86)
77" (1956)	3-7/16" (85)
78" (1981)	3-7/16" (84)
79" (2007)	3-11/16" (94)
80" (2032)	3-11/16" (94)
81" (2057)	3-11/16" (94)
82" (2083)	3-11/16" (94)
83" (2108)	3-11/16" (94)
84" (2134)	3-11/16" (94)
85" (2159)	3-13/16" (97)
86" (2184)	3-13/16" (97)
87" (2210)	3-13/16" (97)
88" (2235)	3-13/16" (97)
89" (2261)	4-1/16" (103)
90" (2286)	4-1/16" (103)
91" (2311)	4-1/16" (103)
92" (2337)	4-1/16" (103)
93" (2362)	4-1/16" (103)
94" (2388)	4-1/16" (103)
95" (2413)	4-3/16" (106)
96" (2438)	4-3/16" (106)

Vertical Dampers Only

Vertical Dampers Only

Note: Dampers shown as vertical mount. Horizontal mount supplied in the same orientation.

Multiple section dampers shown as one wide by two high - two wide by one high similar.