

Application

The VFD-10-B fire damper employs out of the airstream curtain style blades for point-of-origin control of fire in static HVAC systems. The VFD-10-B 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: Vertical mount: 4" x 2" (102 x 51)
Horizontal mount: 6" x 4" (152 x 102)

Maximum Size: Single section: Vertical: 48" x 44" (1219 x 1118)
Horizontal: 40" x 36" (1016 x 914)
Multiple Section: Vertical: 120" x 76" (3048 x 1930) or
80" x 116" (2032 x 2946)
Horizontal: 80" x 76" (2032 x 1930)

Stainless Steel: Single section: 40" x 36" (1016 x 914)
Multiple Section: Vertical: 80" x 36" (2032 x 914) or
40" x 76" (1016 x 1930) or
108" x 22" (2743 x 559)
Horizontal: 80" x 36" (2032 x 914) or
40" x 76" (1016 x 1930)

Options

- 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:
 - Round Oval
 - Duct connections (sleeve required):
 - 1" (25) S-clip DM-25 DM-35 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 (not available with integral sleeve option).
- PI-10 (Blade closure indication switch package):
 - External mount (sleeve required) Internal mount Loose

Ratings

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

UL HNLJ.V-5: Ventilation Duct Assemblies

Listings

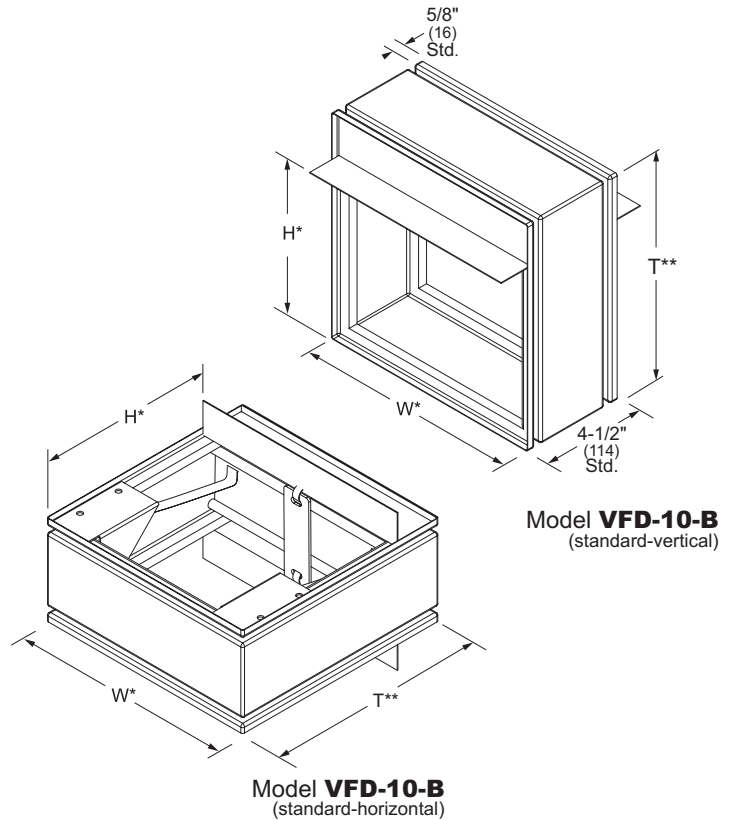
UL 555 listing: R11767

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



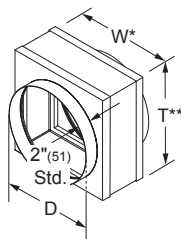
Model **VFD-10-B**
(standard-vertical)

Model **VFD-10-B**
(standard-horizontal)

* Damper dimensions furnished approximately 1/4" (6) undersize.
† Damper dimensions furnished approximately 1/8" (3) undersize.

Round Transitions

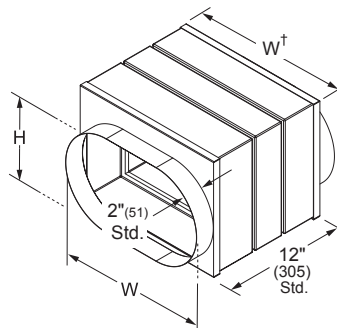
(Standard with D=W=H. Available with D<W and H)



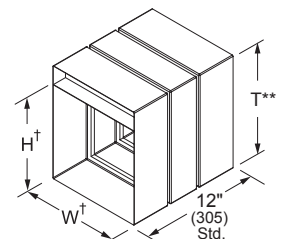
Style BR (optional)

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)

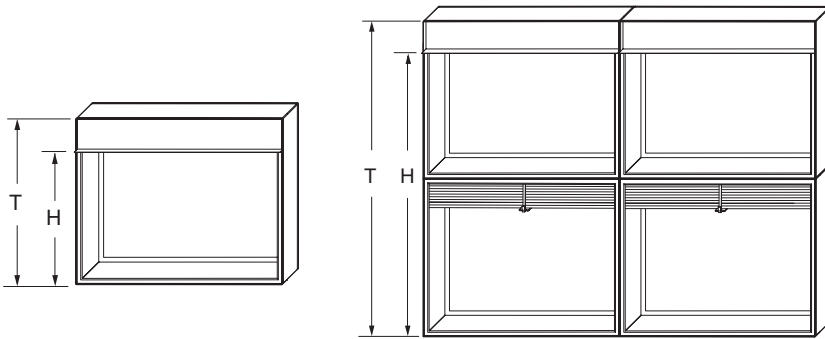


Sleeve Style ISBO
(optional)

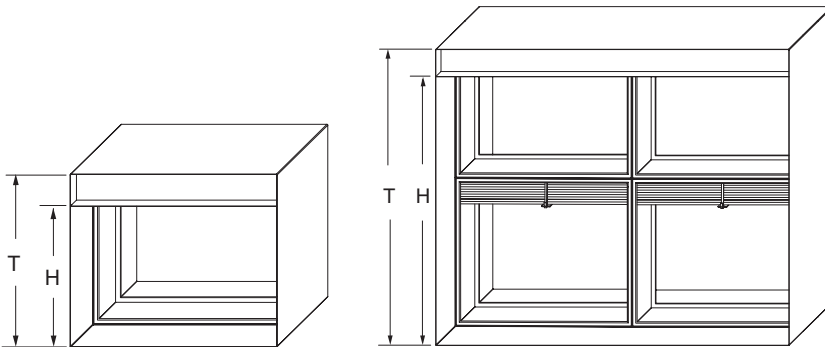


Sleeve Style ISB (optional)

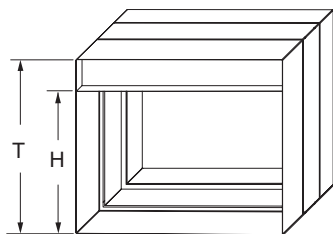
Blade Stack Dimensional Data



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

Single Section

Nominal Duct Height 'H'	Damper Height 'T'
2" (51)	4" (102)
3" (76)	5" (127)
4" (102)	6" (152)
5" (127)	7" (178)
6" (152)	8" (203)
7" (178)	9" (229)
8" (203)	10" (254)
9" (229)	11" (279)
10" (254)	12" (305)
11" (279)	13" (330)
12" (305)	14" (356)
13" (330)	15" (381)
14" (356)	16" (406)
15" (381)	17" (432)
16" (406)	18" (457)
17" (432)	19" (483)
18" (457)	20" (508)
19" (483)	21" (533)
20" (508)	22" (559)
21" (533)	23" (584)
22" (559)	24" (610)
23" (584)	26" (660)
24" (610)	27" (686)
25" (635)	28" (711)
26" (660)	29" (737)
27" (686)	30" (762)
28" (711)	31" (787)
29" (737)	32" (813)
30" (762)	33" (838)
31" (787)	34" (864)
32" (813)	35" (889)
33" (838)	36" (914)
34" (864)	37" (940)
35" (889)	38" (965)
36" (914)	39" (991)
37" (940)	41" (1041)
38" (965)	42" (1067)
39" (991)	43" (1092)
40" (1016)	44" (1118)
41" (1041)	45" (1143)
42" (1067)	46" (1168)
43" (1092)	47" (1194)
44" (1118)	48" (1219)

Multiple Section

Nominal Duct Height 'H'	Damper Height 'T'
37" (940)	39" (991)
38" (965)	40" (1016)
39" (991)	41" (1041)
40" (1016)	42" (1067)
41" (1041)	43" (1092)
42" (1067)	44" (1118)
43" (1092)	45" (1143)
44" (1118)	46" (1168)
45" (1143)	47" (1194)
46" (1168)	48" (1219)
47" (1194)	50" (1270)
48" (1219)	51" (1295)
49" (1245)	52" (1321)
50" (1270)	53" (1346)
51" (1295)	54" (1372)
52" (1321)	55" (1397)
53" (1346)	56" (1422)
54" (1372)	57" (1448)
55" (1397)	58" (1473)
56" (1422)	59" (1499)
57" (1448)	60" (1524)
58" (1473)	61" (1549)
59" (1499)	62" (1575)
60" (1524)	63" (1600)
61" (1549)	64" (1626)
62" (1575)	65" (1651)
63" (1600)	66" (1676)
64" (1626)	67" (1702)
65" (1651)	68" (1727)
66" (1676)	69" (1753)
67" (1702)	70" (1778)
68" (1727)	71" (1803)
69" (1753)	72" (1829)
70" (1778)	73" (1854)
71" (1803)	74" (1880)
72" (1829)	75" (1905)
73" (1854)	76" (1930)
74" (1880)	77" (1956)
75" (1905)	78" (1981)
76" (1930)	80" (2032)
77" (1956)	80" (2032)
78" (1981)	81" (2057)
79" (2007)	82" (2083)
80" (2032)	83" (2108)
81" (2057)	84" (2134)
82" (2083)	85" (2159)
83" (2108)	86" (2184)
84" (2134)	87" (2210)
85" (2159)	88" (2235)
86" (2184)	89" (2261)
87" (2210)	90" (2286)
88" (2235)	91" (2311)
89" (2261)	92" (2337)
90" (2286)	93" (2362)
91" (2311)	94" (2388)
92" (2337)	95" (2413)
93" (2362)	96" (2438)
94" (2388)	97" (2464)
95" (2413)	98" (2489)
96" (2438)	99" (2515)
97" (2464)	100" (2540)
98" (2489)	101" (2565)
99" (2515)	102" (2591)
100" (2540)	103" (2616)
101" (2565)	104" (2642)
102" (2591)	105" (2667)
103" (2616)	106" (2692)
104" (2642)	107" (2718)
105" (2667)	108" (2743)
106" (2692)	109" (2769)
107" (2718)	110" (2794)
108" (2743)	111" (2819)
109" (2769)	112" (2845)
110" (2794)	113" (2870)
111" (2819)	114" (2896)
112" (2845)	115" (2921)
113" (2870)	116" (2946)
114" (2896)	117" (2972)
115" (2921)	119" (3023)
116" (2946)	120" (3048)

Vertical Dampers Only

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Note: Vertical dampers exceeding 48" in width or height will be manufactured in sections not exceeding 40" x 40". Stainless steel vertical dampers exceeding 80" in width will be manufactured in sections not exceeding 36" x 24".

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