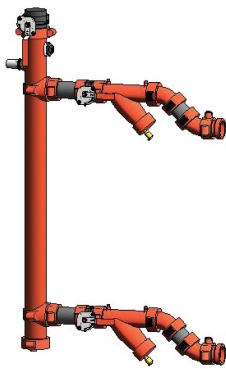


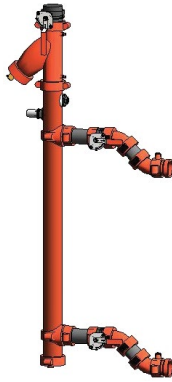
Victaulic® Vibration Isolation Air Handling Unit (AHU) Drop Series 385



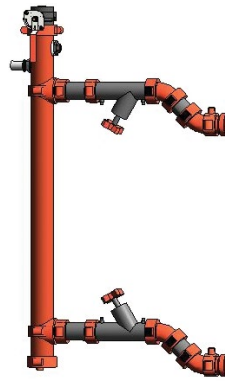
102.15



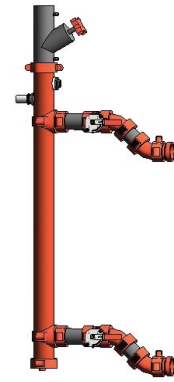
Series 385B Supply
Double Coil/Double Strainer



Series 385C Supply
Double Coil/Single Strainer



Series 385E Return
Double Coil/Double Balancing Valve



Series 385F Return
Double Coil/Single Balancing Valve

1.0 PRODUCT DESCRIPTION

Available Sizes

- 2 x 2"/DN50 x DN50 through 6 x 4"/DN150 x DN100

Pipe Material

- Carbon steel

Maximum Working Pressure

- 300 psi/2068 kPa/21 bar

Temperature Range

- Up to +230°F/+110°C

Function

- Provides hook-ups that address air handling unit piping needs for:
 - Isolation
 - Straining
 - Balancing
 - Draining
 - Air Venting
- Series 385A through Series 385F only: Includes integrated dead leg with blow-down port
- Series 385A through Series 385F only: Swing joint accommodates installation, due to the location variations associated with the customized nature of AHU coil requirements

2.0 CERTIFICATION/LISTINGS

Product designed and manufactured under the Victaulic Quality Management System, as certified by LPCB in accordance with ISO-9001:2008.

ALWAYS REFER TO ANY NOTIFICATIONS AT THE END OF THIS DOCUMENT REGARDING PRODUCT INSTALLATION, MAINTENANCE OR SUPPORT.



3.0 SPECIFICATIONS – MATERIAL

- Standard weight carbon steel conforming to ASTM A53 Grade B.
- Victaulic Original Groove System (OGS).
- Standard orange coating.
- Gaskets: EPDM.
- Bolts/Nuts: Carbon steel oval neck track bolts meeting the mechanical property requirements of ASTM A449. Carbon steel heavy hex nuts meeting the mechanical property requirements of ASTM A563 Grade B. Track bolts and heavy hex nuts are zinc electroplated per ASTM B633 Fe/Zn5, finish Type III (imperial) or Type II (metric).

Ductile iron butterfly valve: Body, end face, and seal retainer conforming to ASTM A536, Grade 65-45-12 with black coating.

Disc: Ductile iron conforming to ASTM A536, Grade 65-45-12, with electroless nickel coating conforming to ASTM B733.

Seat: EPDM.

Stem: 416 stainless steel conforming to ASTM A582.

Stem Seal Cartridge: C36000 brass.

Bearings: Fiberglass or 316 stainless steel with TFE lining.

Stem Seal: Furnished in same materials as seat.

Stem Retaining Ring: Carbon steel.

10-Position Handle: Zinc-plated carbon steel handle with zinc-plated carbon steel latch plate and zinc-plated carbon steel fasteners, infinitely variable, padlockable and includes memory stop.

Ductile iron strainer: Body, coupling, and end cap conforming to ASTM A536, Grade 65-45-12, with orange coating.

Basket: Type 304 stainless steel, perforated metal.

- Sizes 2 – 3"/DN50 – DN80: 0.062"/1.6 mm diameter perforations on 0.09"/2.3 mm centers, 41% open area.
- Sizes 4 – 6"/DN100 – DN150: 0.125"/3.2 mm diameter perforations on 0.19"/4.8 mm centers, 40% open area.

Mesh Underlay: Perforated metal with woven wire underlay.

- Sizes 2 – 6"/DN50 – DN150: 0.156"/3.97 mm diameter perforations on 0.188"/4.6 mm centers, 63% open area. Underlaid with wire mesh with greater than 45% open area.

NOTE

- Mesh underlay available with minimum opening size of 0.025"/0.64 mm. Contact Victaulic for details.

Gaskets: EPDM.

Bolts/Nuts: Heat-treated plated carbon steel zinc-electroplated to ASTM B633, track head conforming to physical properties of ASTM A183, minimum tensile 110,000 psi/758340 kPa.

Blow Down Port: NPT tap provided in the cap for a discharge valve connection, allowing solids to be “blown down” while the system is in service. Strainer supplied with drain valve installed.

Blow Down Drain Valve: DZR brass.

NPT Taps: ¼" NPT tapped strainer with PT plugs

Balancing valve body: 2"/DN50: AMETAL® (Pressure die cast, nonporous copper alloy); 2 ½ - 6"/73.0 mm – DN150: Ductile iron, ASTM A536 Grade 60-40-18 (BS Grade 400/15).

Body Coating: 2 ½ – 4"/73.0 mm – DN100: Epoxy resin coated; 6"/DN150: Painted.

Trim (Bonnet, Stem and Restriction Cone): AMETAL®.

Seat: 2"/DN50: AMETAL®; 2 ½ – 6"/73.0 mm – DN150: Ductile iron.

Seat Seal: EPDM.

Stem Seal: EPDM.

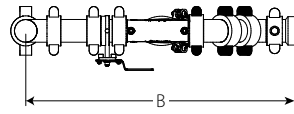
Probe Seal: EPDM.

Handwheel: Red polyamide plastic.

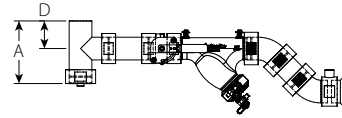
1 ¼" – 18 UNEF Female Thermometer Connection (Fits most commercially available thermometers with the well removed).

4.0 DIMENSIONS

Series 385A Vibration Isolation Air Handling Unit Drop Supply – Single Coil



Top View

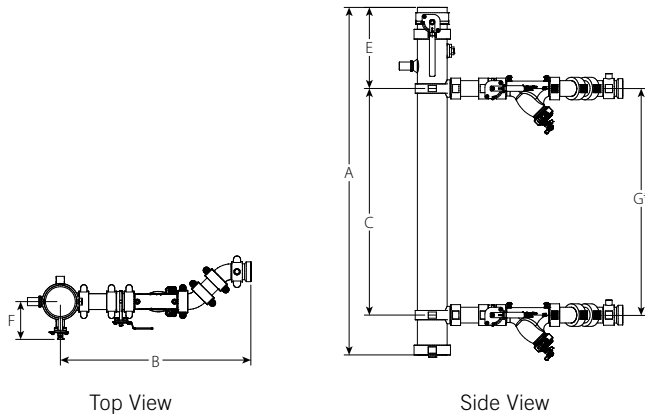


Side View

Size		Dimensions			Weight		
Nominal inches DN		Actual Outside Diameter inches mm	A inches mm	B inches mm	D inches mm	Approximate (Each) lb kg	
2 DN50	x 2 DN50	2.375 60.3	x 2.375 60.3	7.65 194	36.14 918	3.25 83	57.9 26.2
2 ½	x 2 DN50	2.875 73.0	x 2.375 60.3	8.64 219	36.64 931	3.75 95	61.7 28.0
				2.875 73.0	8.64 219	39.31 998	3.75 95
3 DN80	x 2 ½	3.500 88.9	x 2.875 73.0	9.64 245	39.81 1011	4.25 108	71.7 32.5
				3.500 88.9	9.64 245	41.41 1052	4.25 108
4 DN100	x 3 DN80	4.500 114.3	x 3.500 88.9	11.14 283	42.16 1071	5.00 127	68.2 30.9
				4.500 114.3	11.14 283	49.29 1252	5.00 127

4.1 DIMENSIONS

Series 385B Vibration Isolation Air Handling Unit Drop Supply – Double Coil/Double Strainer

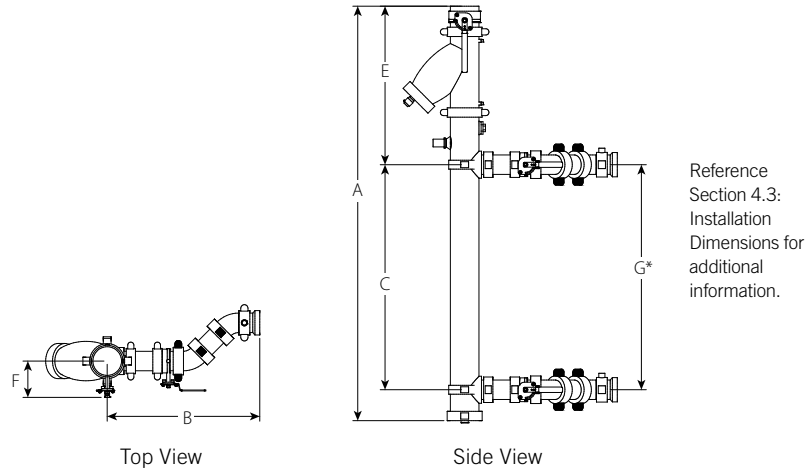


Reference Section 4.3: Installation Dimensions for additional information.

Size			Dimensions					Weight			
Nominal inches DN		Actual Outside Diameter inches mm	A inches mm	B inches mm	C inches mm	E inches mm	F inches mm	Approximate (Each) lb kg			
2½	x	2 DN50	2.875 73.0	x	2.375 60.3	60.71 1542	36.64 931	36.00 914	19.82 503	5.82 148	164.1 74.4
3	x	2 DN50	3.500 88.9	x	2.375 60.3	58.98 1498	36.45 926	36.00 914	15.89 404	6.07 154	171.1 77.6
		2½			2.875 73.0	65.66 1668	39.81 1011	40.00 1016	20.27 515	6.07 154	180.8 82.0
4	x	2½ DN100	4.500 114.3	x	2.875 73.0	64.38 1635	39.56 1005	40.00 1016	16.76 426	6.89 175	191.5 86.9
		3 DN80			3.500 88.9	71.87 1825	41.28 1049	48.00 1219	16.76 426	6.89 175	248.3 112.6
6	x	4 DN150	6.625 168.3	x	4.500 114.3	77.15 1960	49.67 1262	52.00 1321	18.01 457	8.39 213	392.5 178.0

4.2 DIMENSIONS

Series 385C Vibration Isolation Air Handling Unit Drop Supply - Double Coil/Single Strainer



Size			Dimensions					Weight		
Nominal inches DN		Actual Outside Diameter inches mm	A inches mm	B inches mm	C inches mm	E inches mm	F inches mm	Approximate (Each) lb kg		
2½	x	2.875 73.0	x	2.375 60.3	71.61 1819	26.74 679	36.00 914	30.72 780	5.82 148	144.1 65.4
3 DN80	x	2 DN50 3.500 88.9	x	2.375 60.3	70.86 1800	26.55 674	36.00 914	27.77 705	6.07 154	151.1 68.5
				2½ 73.0	77.54 1970	28.91 734	40.00 1016	32.15 817	6.07 154	180.8 82.0
4 DN100	x	2½ 3 DN80 4.500 114.3	x	2.875 73.0	78.24 1987	28.66 728	40.00 1016	31.13 791	6.89 175	203.5 92.3
				3.500 88.9	86.24 2190	29.38 746	48.00 1219	31.13 791	6.89 175	234.3 106.3
6 DN150	x	4 DN100 6.625 168.3	x	4.500 114.3	95.77 2433	35.27 896	52.00 1321	36.63 930	8.39 213	382.5 173.5

4.3 INSTALLATION DIMENSIONS

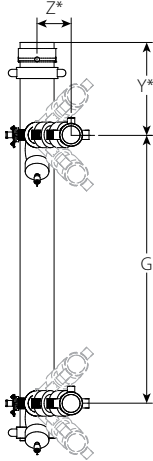
Series 385A/B/C Vibration Isolation Air Handling Unit Drops

2" Branch

36" = Neutral Location
 Coil Spacing Range: 27⁵/₈" – 44³/₈"
 (Accommodates up to 16³/₄"
 of installation variance)

2 1/2" Branch

40" = Neutral Location
 Coil Spacing Range: 31¹/₄" – 48³/₄"
 (Accommodates up to 17³/₄"
 of installation variance)



2" Branch 36" = Neutral Location		
G inches mm	Y inches mm	Z inches mm
44.38 1127	15.63 397	4.19 106
44.00 1118	15.82 402	4.37 111
43.00 1092	16.32 415	4.78 121
42.00 1067	16.82 427	5.11 130
41.00 1041	17.32 440	5.37 136
40.00 1016	17.82 453	5.57 141
39.00 991	18.32 465	5.73 146
38.00 965	18.82 478	5.84 149
37.00 940	19.32 491	5.90 150
36.00 914	19.82 503	5.92 150
35.00 889	20.32 516	5.90 150
34.00 864	20.82 529	5.84 148
33.00 838	21.32 542	5.73 146
32.00 813	21.82 554	5.57 141
31.00 787	22.32 567	5.39 137
30.00 762	22.82 580	5.11 130
29.00 737	23.32 592	4.78 121
28.00 711	23.82 605	4.37 111
27.63 702	24.01 610	4.19 106

NEUTRAL

2 1/2" Branch 40" = Neutral Location		
G inches mm	Y inches mm	Z inches mm
48.88 1242	15.86 403	4.44 113
48.00 1219	16.30 414	4.84 123
47.00 1194	16.80 427	5.21 132
46.00 1168	17.30 439	5.51 140
45.00 1143	17.80 452	5.76 146
44.00 1118	18.30 465	5.95 151
43.00 1092	18.80 478	6.09 155
42.00 1067	19.30 490	6.20 157
41.00 1041	19.80 503	6.26 159
40.00 1016	20.30 516	6.28 160
39.00 991	20.80 528	6.26 159
38.00 965	21.30 541	6.20 157
37.00 940	21.80 554	6.09 155
36.00 914	22.30 566	5.95 151
35.00 889	22.80 579	5.76 146
34.00 864	23.30 592	5.51 140
33.00 838	23.80 605	5.21 132
32.00 813	24.30 617	4.84 123
31.13 791	25.74 654	4.44 113

NEUTRAL

* The tables above are for a maximum 45 degree offset outwards or inwards to allow for offsets from the supply and return. Contact Victaulic for further travel if needed.

4.3 INSTALLATION DIMENSIONS (CONTINUED)

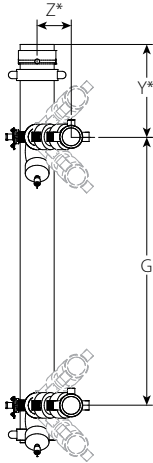
Series 385A/B/C Vibration Isolation Air Handling Unit Drops

3" Branch

48" = Neutral Location
 Coil Spacing Range: 38 5/8" – 57 3/8"
 (Accommodates up to 18 3/4"
 of installation variance)

4" Branch

52" = Neutral Location
 Coil Spacing Range: 39 1/2" – 64 1/2"
 (Accommodates up to 25"
 of installation variance)



3" Branch 48" = Neutral Location		
G	Y	Z
inches	inches	inches
mm	mm	mm
57.38	12.07	4.69
1457	307	119
57.00	12.26	4.87
1448	311	124
56.00	12.76	5.29
1422	324	134
55.00	13.26	5.63
1397	337	143
54.00	13.76	5.91
1372	350	150
53.00	14.26	6.14
1346	362	156
52.00	14.76	6.32
1321	375	161
51.00	15.26	6.46
1295	388	164
50.00	15.76	6.55
1270	400	166
49.00	16.26	6.61
1245	413	168
48.00	16.76	6.63
1219	426	168
47.00	17.26	6.61
1194	438	168
46.00	17.76	6.55
1168	451	166
45.00	18.26	6.46
1143	464	164
44.00	18.76	6.32
1118	477	161
43.00	19.26	6.14
1092	489	156
42.00	19.76	5.91
1067	502	150
41.00	20.26	5.63
1041	515	143
40.00	20.76	5.29
1016	527	134
39.00	21.26	4.87
991	540.0	124
38.63	21.45	4.69
981	545	119

NEUTRAL

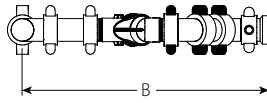
4" Branch 52" = Neutral Location		
G	Y	Z
inches	inches	inches
mm	mm	mm
64.50	11.75	6.25
1638	298	159
64.00	12.00	6.49
1626	305	165
63.00	12.50	6.92
1600	318	176
62.00	13.00	7.29
1575	330	185
61.00	13.50	7.61
1549	343	193
60.00	14.00	7.88
1524	356	200
59.00	14.50	8.12
1499	368	206
58.00	15.00	8.31
1473	381	211
57.00	15.50	8.48
1448	394	215
56.00	16.00	8.61
1422	406	219
55.00	16.50	8.71
1397	419	221
54.00	17.00	8.78
1372	432	223
53.00	17.50	8.83
1346	445	224
52.00	18.00	8.83
1321	457	224
51.00	18.50	8.83
1295	470	224
50.00	19.00	8.78
1270	483	223
49.00	19.50	8.71
1245	495	221
48.00	20.00	8.61
1219	508	219
47.00	20.50	8.48
1194	521	215
46.00	21.00	8.31
1168	533	211
45.00	21.50	8.12
1143	546	206
44.00	22.00	7.88
1118	559	200
43.00	22.50	7.61
1092	572	193
42.00	23.00	7.29
1067	584	185
41.00	23.50	6.92
1041	597	176
40.00	24.00	6.49
1016	610	165
39.50	24.25	6.25
1003	616	159

NEUTRAL

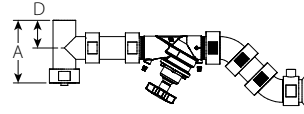
* The tables are for a maximum 45 degree offset outwards or inwards to allow for offsets from the supply and return. Contact Victaulic for further travel if needed.

4.4 DIMENSIONS

Series 385D Vibration Isolation Air Handling Unit Drop Return – Single Coil



Top View

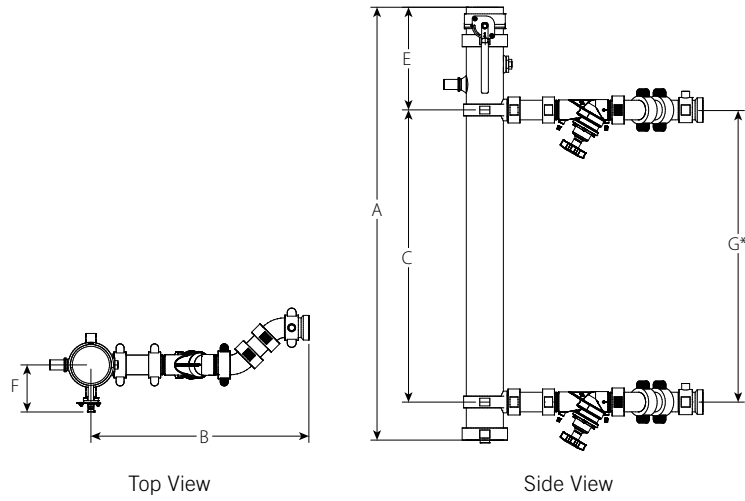


Side View

Size		Dimensions			Weight		
Nominal inches DN		Actual Outside Diameter inches mm	A inches mm	B inches mm	D inches mm	Approximate (Each) lb kg	
2 DN50	x DN50	2.375 60.3	x 2.375 60.3	7.65 194	29.51 750	3.25 83	40.0 18.1
2½	x DN50	2.875 73.0	x 2.375 60.3	7.65 194	30.01 762	3.75 95	43.8 19.9
				8.64 219	36.02 915	3.75 95	49.1 22.3
3 DN80	x DN80	3.500 88.9	x 2.875 73.0	9.64 245	36.52 928	4.25 108	60.6 27.5
				9.64 245	37.99 965	4.25 108	60.2 27.3
4 DN100	x DN100	4.500 114.3	x 3.500 88.9	11.14 283	38.74 984	5.00 127	64.3 29.2
				11.14 283	44.01 1118	5.00 127	105.9 48.0

4.5 DIMENSIONS

Series 385E Vibration Isolation Air Handling Unit Drop Return – Double Coil/Double Balancing Valve

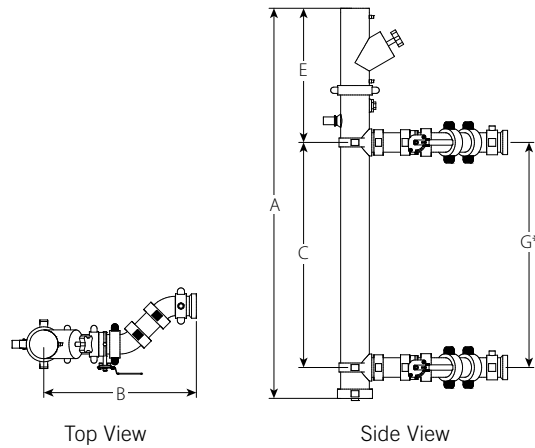


Reference Section 4.7: Installation Dimensions for additional information.

Size		Dimensions					Weight		
Nominal inches DN		Actual Outside Diameter inches mm	A inches mm	B inches mm	C inches mm	E inches mm	F inches mm	Approximate (Each) lb kg	
2½	x 2 DN50	2.875 73.0	x 2.375 60.3	60.71 1542	30.01 762	36.00 914	19.82 503	5.82 148	112.2 50.9
3 DN80	x 2 DN50	3.500 88.9	x 2.375 60.3	58.98 1498	29.82 757	36.00 914	15.89 404	6.07 154	128.5 58.3
	2½		x 2.875 73.0	65.69 1669	36.52 928	40.00 1016	20.27 515	6.07 154	163.8 74.3
4 DN100	x 2½	4.500 114.3	x 2.875 73.0	63.87 1622	36.27 921	40.00 1016	16.76 426	6.89 175	167.8 76.1
	3 DN80		x 3.500 88.9	71.87 1826	37.86 962	48.00 1219	16.76 426	6.89 175	185.7 84.2
6 DN150	x 4 DN100	6.625 168.3	x 4.500 114.3	77.15 1960	44.39 1128	52.00 1321	18.00 457	8.39 213	326.5 148.1

4.6 DIMENSIONS

Series 385F Vibration Isolation Air Handling Unit Drop Return – Double Coil/Single Balancing Valve



Reference Section 4.7: Installation Dimensions for additional information.

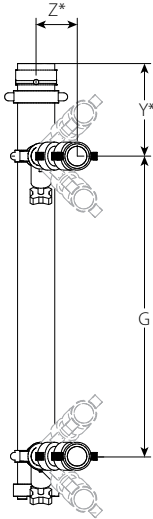
Size		Dimensions				Weight
Nominal inches DN	Actual Outside Diameter inches mm	A inches mm	B inches mm	C inches mm	E inches mm	Approximate (Each) lb kg
2½ x 2 DN50	2.875 x 2.375 inches 73.0 x 60.3 mm	68.32 inches 1735 mm	26.74 inches 679 mm	36.00 inches 914 mm	27.43 inches 697 mm	106.2 lb 48.2 kg
3 DN80 x 2 DN50	3.500 x 2.375 inches 88.9 x 60.3 mm	67.46 inches 1713 mm	26.55 inches 674 mm	36.00 inches 914 mm	24.37 inches 619 mm	123.5 lb 56.0 kg
		74.17 inches 1884 mm	28.91 inches 734 mm	40.00 inches 1016 mm	28.78 inches 731 mm	150.8 lb 68.4 kg
4 DN100 x 2½ DN80	4.500 x 2.875 inches 114.3 x 73.0 mm	72.99 inches 1854 mm	28.66 inches 728 mm	40.00 inches 1016 mm	25.88 inches 657 mm	169.4 lb 76.8 kg
		80.99 inches 2057 mm	29.38 inches 746 mm	48.00 inches 1219 mm	25.88 inches 657 mm	185.7 lb 84.2 kg
6 DN150 x 4 DN100	6.625 x 4.500 inches 168.3 x 114.3 mm	90.15 inches 2290 mm	35.27 inches 896 mm	52.00 inches 1321 mm	31 inches 787 mm	317.5 lb 144.0 kg

4.7 INSTALLATION DIMENSIONS

Series 385D/E/F Vibration Isolation Air Handling Unit Drops

2" Branch

36" = Neutral Location
 Coil Spacing Range: 27 5/8" – 44 3/8"
 (Accommodates up to 16 3/4"
 of installation variance)



2" Branch 36" = Neutral Location

G inches mm	Y inches mm	Z inches mm
44.38 1127	15.63 397	4.19 106
44.00 1118	15.82 402	4.37 111
43.00 1092	16.32 415	4.78 121
42.00 1067	16.82 427	5.11 130
41.00 1041	17.32 440	5.37 136
40.00 1016	17.82 453	5.57 141
39.00 991	18.32 465	5.73 146
38.00 965	18.82 478	5.84 149
37.00 940	19.32 491	5.90 150
36.00 914	19.82 503	5.92 150
35.00 889	20.32 516	5.90 150
34.00 864	20.82 529	5.84 148
33.00 838	21.32 542	5.73 146
32.00 813	21.82 554	5.57 141
31.00 787	22.32 567	5.39 137
30.00 762	22.82 580	5.11 130
29.00 737	23.32 592	4.78 121
28.00 711	23.82 605	4.37 111
27.63 702	24.01 610	4.19 106

NEUTRAL

2 1/2" Branch

40" = Neutral Location
 Coil Spacing Range: 31 1/4" – 48 3/4"
 (Accommodates up to 17 3/4"
 of installation variance)

2 1/2" Branch 40" = Neutral Location

G inches mm	Y inches mm	Z inches mm
48.88 1242	15.86 403	4.44 113
48.00 1219	16.30 414	4.84 123
47.00 1194	16.80 427	5.21 132
46.00 1168	17.30 439	5.51 140
45.00 1143	17.80 452	5.76 146
44.00 1118	18.30 465	5.95 151
43.00 1092	18.80 478	6.09 155
42.00 1067	19.30 490	6.20 157
41.00 1041	19.80 503	6.26 159
40.00 1016	20.30 516	6.28 160
39.00 991	20.80 528	6.26 159
38.00 965	21.30 541	6.20 157
37.00 940	21.80 554	6.09 155
36.00 914	22.30 566	5.95 151
35.00 889	22.80 579	5.76 146
34.00 864	23.30 592	5.51 140
33.00 838	23.80 605	5.21 132
32.00 813	24.30 617	4.84 123
31.13 791	25.74 654	4.44 113

NEUTRAL

* The tables above are for a maximum 45 degree offset outwards or inwards to allow for offsets from the supply and return. Contact Victaulic for further travel if needed.

4.7 INSTALLATION DIMENSIONS (CONTINUED)

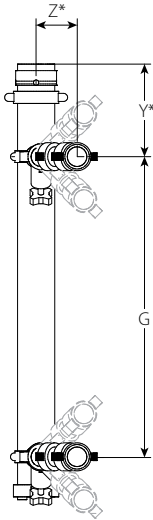
Series 385D/E/F Vibration Isolation Air Handling Unit Drops

3" Branch

48" = Neutral Location
 Coil Spacing Range: 38 5/8" – 57 3/8"
 (Accommodates up to 18 3/4" of installation variance)

4" Branch

52" = Neutral Location
 Coil Spacing Range: 39 1/2" – 64 1/2"
 (Accommodates up to 25" of installation variance)



3" Branch 48" = Neutral Location		
G	Y	Z
inches	inches	inches
mm	mm	mm
57.38	12.07	4.69
1457	307	119
57.00	12.26	4.87
1448	311	124
56.00	12.76	5.29
1422	324	134
55.00	13.26	5.63
1397	337	143
54.00	13.76	5.91
1372	350	150
53.00	14.26	6.14
1346	362	156
52.00	14.76	6.32
1321	375	161
51.00	15.26	6.46
1295	388	164
50.00	15.76	6.55
1270	400	166
49.00	16.26	6.61
1245	413	168
48.00	16.76	6.63
1219	426	168
47.00	17.26	6.61
1194	438	168
46.00	17.76	6.55
1168	451	166
45.00	18.26	6.46
1143	464	164
44.00	18.76	6.32
1118	477	161
43.00	19.26	6.14
1092	489	156
42.00	19.76	5.91
1067	502	150
41.00	20.26	5.63
1041	515	143
40.00	20.76	5.29
1016	527	134
39.00	21.26	4.87
991	540.0	124
38.63	21.45	4.69
981	545	119

NEUTRAL

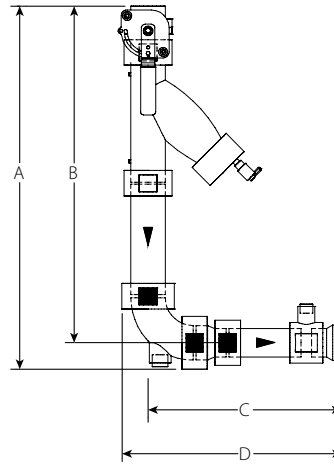
4" Branch 52" = Neutral Location		
G	Y	Z
inches	inches	inches
mm	mm	mm
64.50	11.75	6.25
1638	298	159
64.00	12.00	6.49
1626	305	165
63.00	12.50	6.92
1600	318	176
62.00	13.00	7.29
1575	330	185
61.00	13.50	7.61
1549	343	193
60.00	14.00	7.88
1524	356	200
59.00	14.50	8.12
1499	368	206
58.00	15.00	8.31
1473	381	211
57.00	15.50	8.48
1448	394	215
56.00	16.00	8.61
1422	406	219
55.00	16.50	8.71
1397	419	221
54.00	17.00	8.78
1372	432	223
53.00	17.50	8.83
1346	445	224
52.00	18.00	8.83
1321	457	224
51.00	18.50	8.83
1295	470	224
50.00	19.00	8.78
1270	483	223
49.00	19.50	8.71
1245	495	221
48.00	20.00	8.61
1219	508	219
47.00	20.50	8.48
1194	521	215
46.00	21.00	8.31
1168	533	211
45.00	21.50	8.12
1143	546	206
44.00	22.00	7.88
1118	559	200
43.00	22.50	7.61
1092	572	193
42.00	23.00	7.29
1067	584	185
41.00	23.50	6.92
1041	597	176
40.00	24.00	6.49
1016	610	165
39.50	24.25	6.25
1003	616	159

NEUTRAL

* The tables are for a maximum 45 degree offset outwards or inwards to allow for offsets from the supply and return. Contact Victaulic for further travel if needed.

4.8 DIMENSIONS

Series 385G Vibration Isolation Air Handling Unit Drop Low Profile Supply – Single Coil

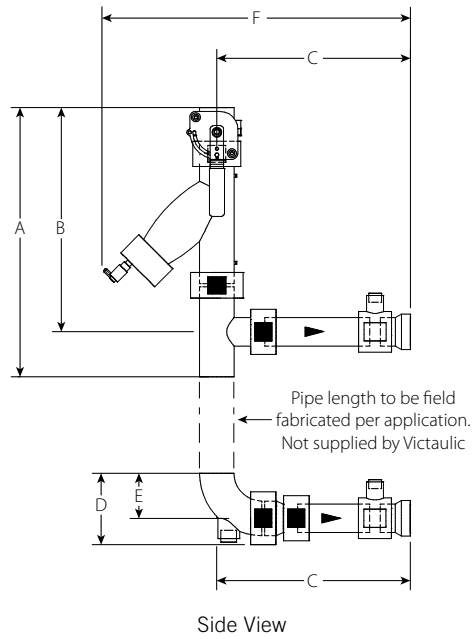


Side View

Size			Dimensions				Weight	
Nominal inches DN		Actual Outside Diameter inches mm	A inches mm	B inches mm	C inches mm	D inches mm	Approx. (Each) lb kg	
2 DN50	x	2.375 60.3	2.375 60.3	28.00 711	26.13 664	12.88 327	14.75 375	51.9 23.5
2½	x	2.875 73.0	2.375 60.3	30.25 768	28.00 711	16.13 410	18.31 465	63.6 28.8
			2.875 73.0	30.31 770	28.13 715	13.63 346	15.81 402	58.4 26.5
3 DN80	x	3.500 88.9	2.875 73.0	35.88 911	33.38 848	18.38 467	20.88 530	84.1 38.1
			3.500 88.9	36.00 914	33.50 851	15.38 391	17.88 454	80.2 36.4
4 DN100	x	4.500 114.3	3.500 88.9	44.75 1137	41.50 1054	20.25 514	23.44 595	126.2 57.2
			4.500 114.3	44.94 1141	41.75 1060	17.50 445	20.69 526	133.8 60.7

4.9 DIMENSIONS

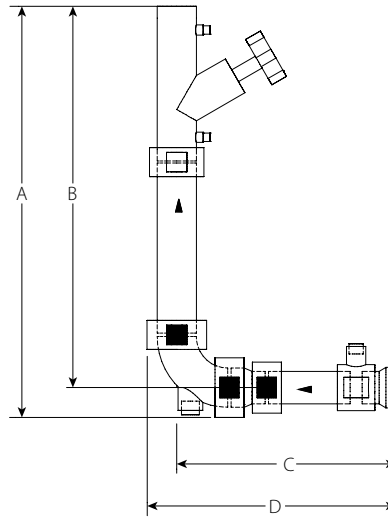
Series 385H Vibration Isolation Air Handling Unit Drop Low Profile Supply – Double Coil/Single Strainer



Size				Dimensions							Weight
Nominal inches DN		Actual Outside Diameter inches mm		A inches mm	B inches mm	C inches mm	D inches mm	E inches mm	F inches mm	Approx. (Each) lb kg	
2½	x	2	x	22.44	18.69	16.13	5.94	3.75	25.56	72.5	
		DN50		570	475	410	151	95	649	32.9	
3	x	2	x	24.44	20.19	18.13	8.25	5.75	28.13	89.0	
DN80		DN50		621	513	461	210	146	715	40.4	
		2½		24.44	20.19	18.38	8.25	5.75	28.38	94.1	
				621	513	467	210	146	721	42.7	
4	x	2½	x	29.44	24.44	20.50	10.44	7.25	32.13	133.6	
DN100		DN80		748	621	521	265	184	816	60.6	
		3		29.44	24.44	20.25	10.44	7.25	31.88	139.2	
		DN80		748	621	514	265	184	810	63.1	
6	x	4	x	37.94	31.44	24.88	14.56	10.25	39.13	251.3	
DN150		DN100		964	799	632	370	260	994	114.0	

4.10 DIMENSIONS

Series 385I Vibration Isolation Air Handling Unit Drop Low Profile Return – Single Coil

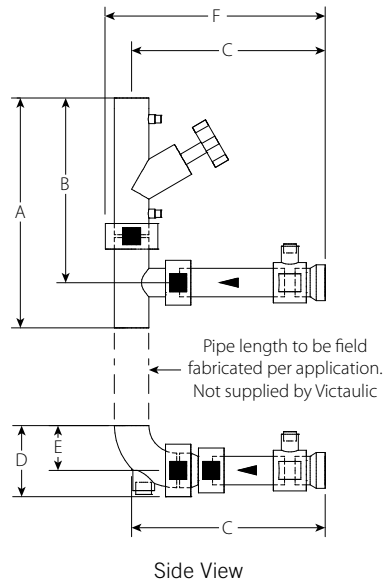


Side View

Size		Dimensions				Weight		
Nominal inches DN		Actual Outside Diameter inches mm		A inches mm	B inches mm	C inches mm	D inches mm	Approx. (Each) lb kg
2 DN50	x 2 DN50	2.375 60.3	x 2.375 60.3	28.00 711	26.13 664	12.88 327	14.75 375	29.2 13.2
2½	x 2 DN50	2.875 73.0	x 2.375 60.3	30.25 768	28.00 711	16.13 410	18.31 465	45.4 20.6
				2.875 73.0	30.31 770	28.13 715	13.63 346	15.81 402
3 DN80	x 2½	3.500 88.9	x 2.875 73.0	35.88 911	33.38 848	18.38 467	20.88 530	64.8 29.4
				3.500 88.9	36.00 914	33.50 851	15.38 391	17.88 454
4 DN100	x 3 DN80	4.500 114.3	x 3.500 88.9	44.75 1137	41.50 1054	20.25 514	23.44 595	96.5 43.8
				4.500 114.3	44.94 1141	41.75 1060	17.50 445	20.69 526

4.11 DIMENSIONS

Series 385J Vibration Isolation Air Handling Unit Drop Low Profile Return – Double Coil/Single Strainer



Size		Dimensions								Weight
Nominal inches DN		Actual Outside Diameter inches mm		A inches mm	B inches mm	C inches mm	D inches mm	E inches mm	F inches mm	Approx. (Each) lb kg
2½	x DN50	2.875 73.0	x 2.375 60.3	19.13 486	15.38 391	16.13 410	5.94 151	3.75 95	18.31 465	52.7 23.9
3 DN80	x DN50	3.500 88.9	2.375 60.3	21.00 533	16.75 425	18.13 461	8.25 210	5.75 146	20.63 524	72.9 33.1
			2.875 73.0	21.00 533	16.75 425	18.38 467	8.25 210	5.75 146	20.88 530	73.4 33.3
			2.875 73.0	24.13 613	19.13 486	20.50 521	10.44 265	7.25 184	23.69 602	98.5 44.7
4 DN100	x DN80	4.500 114.3	3.500 88.9	24.13 613	19.13 486	20.25 514	10.44 265	7.25 184	23.44 595	103.9 47.1
			4.500 114.3	20.25 514	25.75 654	24.88 632	14.56 370	10.25 260	29.19 741	208.3 94.5

5.0 COMPONENT PERFORMANCE

Butterfly Valve Flow Characteristics

C_v/K_v values for flow of water at +60°F/+16°C with various disc positions are shown in the table below.

Formulas for C_v/K_v values:

$$\Delta P = \frac{Q^2}{C_v^2}$$

$$Q = C_v \times \sqrt{\Delta P}$$

Where:

Q = Flow (GPM)

ΔP = Pressure Drop (psi)

C_v = Flow Coefficient

$$\Delta P = \frac{Q^2}{K_v^2}$$

$$Q = K_v \times \sqrt{\Delta P}$$


Where:

Q = Flow (m³/hr)

ΔP = Pressure Drop (Bar)

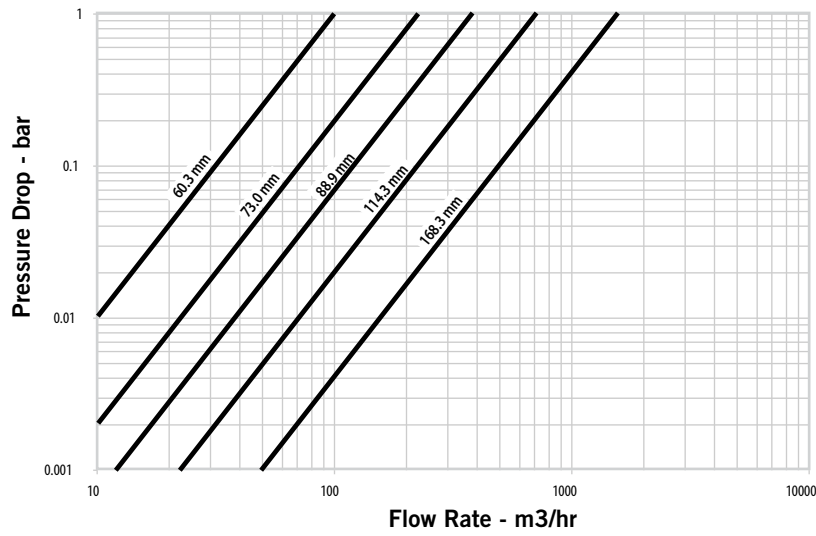
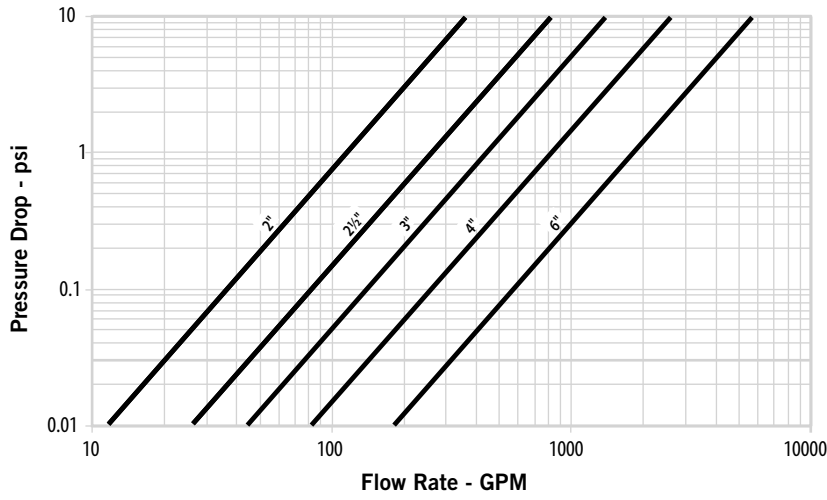
K_v = Flow Coefficient

Size		(Full Open) C _v K _v
Nominal inches DN	Actual Outside Diameter inches mm	
2 DN50	2.375 60.3	115 99
2½	2.875 73.0	260 224
3 DN80	3.500 88.9	440 379
4 DN100	4.500 114.3	820 707
6 DN150	6.625 168.3	1800 1552

Size		Flow Coefficients
Nominal inches DN	Actual Outside Diameter inches mm	Disc Position (Degrees Open)
		90  C _v K _v
2 DN50	2.375 60.3	115 99
2½	2.875 73.0	260 224
3 DN80	3.500 88.9	440 379
4 DN100	4.500 114.3	820 707
6 DN150	6.625 168.3	1800 1552

5.0 COMPONENT PERFORMANCE (Continued)

Butterfly Valve Flow Characteristics



5.1 COMPONENT PERFORMANCE

Strainer Flow Characteristics

C_v/K_v values for flow of water at 60°F/16°C are shown in tables below.

Formulas for C_v/K_v values:

$$\Delta P = \frac{Q^2}{C_v^2}$$

$$Q = C_v \times \sqrt{\Delta P}$$

Where:

Q = Flow (GPM)

ΔP = Pressure Drop (psi)

C_v = Flow Coefficient

$$\Delta P = \frac{Q^2}{K_v^2}$$

$$Q = K_v \times \sqrt{\Delta P}$$

Where:

Q = Flow (m³/hr)

ΔP = Pressure Drop (Bar)

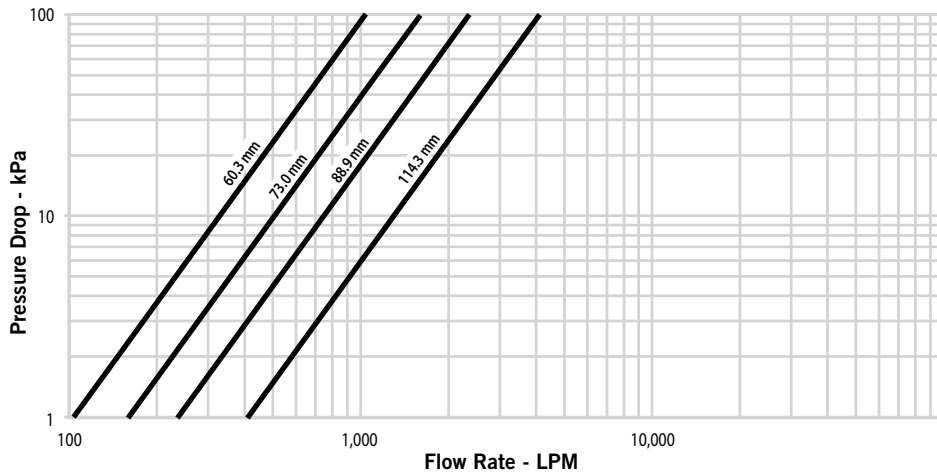
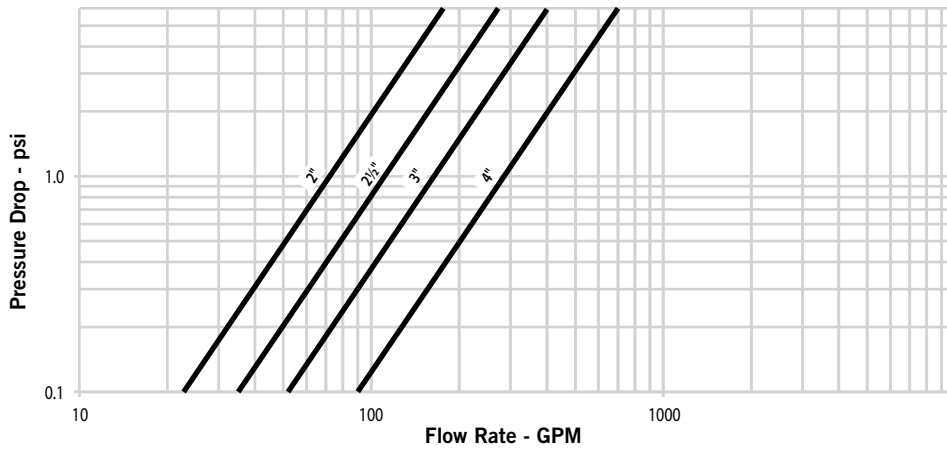
K_v = Flow Coefficient

Size		C _v K _v
Nominal inches DN	Actual Outside Diameter inches mm	
2 DN50	2.375 60.3	72 62
2½	2.875 73.0	111 96
3 DN80	3.500 88.9	164 142
4 DN100	4.500 114.3	285 247

5.1 COMPONENT PERFORMANCE (Continued)

Strainer Flow Characteristics

Flow characteristics are based on standard, clean baskets. Flow may vary from these figures. The charts below express the flow of water at 65°F/18°C through strainer.



5.2 COMPONENT PERFORMANCE

Balancing Valve Flow Characteristics

Size		Min Flow GPM LPM	Nominal Range of Flow GPM LPM	Max Flow GPM LPM
Nominal inches DN	Actual Outside Diameter inches mm			
2 DN50	2.375 60.3	2.0 7.6	12.6 – 36.0 47.7 – 136.0	110.0 416.0
2 ½	2.875 73.0	1.4 5.3	38.0 – 100.0 144.0 – 379.0	290.0 1097.7
3 DN80	3.500 88.9	1.5 5.7	31.0 – 130.0 117.0 – 493.0	410.0 1551.9
4 DN100	4.500 114.3	1.9 7.2	68.0 – 200.0 257.0 – 757.0	650.0 2460.3

6.0 NOTIFICATIONS

WARNING



- Read and understand all instructions before attempting to install, remove, adjust, or maintain any Victaulic piping products.
- Depressurize and drain the piping system before attempting to install, remove, adjust, or maintain any Victaulic piping products.
- Wear safety glasses, hardhat, and foot protection.

Failure to follow these instructions could result in death or serious personal injury and property damage.

7.0 REFERENCE MATERIALS

[05.01: Victaulic Seal Selection Guide](#)

[06.15: Pressure Ratings and End Loads for Victaulic Couplings on Steel Pipe](#)

[08.16: Victaulic Balancing Valves TA Series 786H/787H/788/789 and Series 78KH](#)

[26.01: Victaulic Design Data](#)

[29.01: Victaulic Terms and Conditions/Warranty](#)

[I-100: Victaulic Field Installation Handbook](#)

[I-107N: Victaulic Installation Instructions for QuickVic™ Rigid Coupling - Style 107N](#)

User Responsibility for Product Selection and Suitability

Each user bears final responsibility for making a determination as to the suitability of Victaulic products for a particular end-use application, in accordance with industry standards and project specifications, and the applicable building codes and related regulations as well as Victaulic performance, maintenance, safety, and warning instructions. Nothing in this or any other document, nor any verbal recommendation, advice, or opinion from any Victaulic employee, shall be deemed to alter, vary, supersede, or waive any provision of Victaulic Company's standard conditions of sale, installation guide, or this disclaimer.

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Note

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Installation

Reference should always be made to the Victaulic installation handbook or installation instructions of the product you are installing. Handbooks are included with each shipment of Victaulic products, providing complete installation and assembly data, and are available in PDF format on our website at www.victaulic.com.

Warranty

Refer to the Warranty section of the current Price List or contact Victaulic for details.

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