



1.0 PRODUCT DESCRIPTION

Available Sizes

- 3 – 36"/DN80 – DN900

Maximum Working Pressure

- Fitting maximum pressure ratings are equivalent to the pressure ratings of the coupling used to install them (See section 7.0 for Reference Materials).

Application

- Supplied with rigid radius grooves in accordance with ANSI/AWWA C-606
- Connects pipe, provides change in direction, and adapts sizes or components.

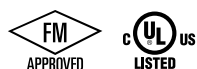
Pipe Material

- Ductile iron

NOTES

- Fittings conform to ANSI A21.10/AWWA C-110 for center-to-end dimensions and AWWA C-153 for wall thickness.
- Fittings are available with flanged ends wherever grooved ends are shown.
- Victaulic can supply tapped fittings on order to ANSI B16.1 dimension locations. Specify fitting size, tap location by letter on order.
- Grooved end base 90° elbows and base tees are available with dimensions to ANSI B16.1.
- Flexible radius groove fitting is available upon request.

2.0 CERTIFICATIONS/LISTINGS



NOTES

- Download [publication 10.01](#) for Fire Protection Certifications/Listings Reference Guide

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

3.0 SPECIFICATIONS – MATERIAL

Fitting:

- Ductile iron conforming to ASTM A536, Grade 65-45-12. Ductile iron conforming to ASTM A395, Grade 65-45-15 is available upon special request.

Fitting Coating: (specify choice)

- **Standard on request**

- ☐ Non-coated
- ☐ Alkyd-phenol primer
- ☐ Bituminous coating

- **Optional**

- ☐ Coal tar epoxy coating
- ☐ Cement/mortar lining – Type II
- ☐ Glass Lining
- ☐ Other linings available. Contact Victaulic.

NOTES

- Coatings are applied per manufacturer's recommended mils.
- The standard black asphalt coating used on Victaulic cement lined AWWA size fittings is NSF 61 Listed.
- Cast surfaces will be provided with surface equivalent to SSPC-SP6 prior to coating unless specified otherwise.

4.0 DIMENSIONS

Elbows

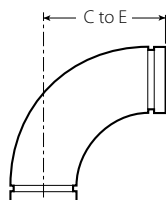
No. 100-C 90° Long Radius Elbow

No. 10-C 90° Elbow

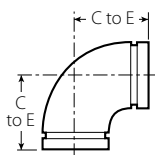
No. 11-C 45° Elbow

No. 12-C 22½° Elbow

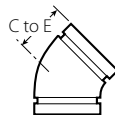
No. 13-C 11¼° Elbow



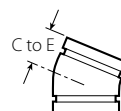
No. 100-C



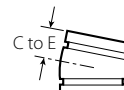
No. 10-C



No. 11-C



No. 12-C



No. 13-C

Size		No. 100-C 90° Long Radius Elbow		No. 10-C 90° Elbow		No. 11-C 45° Elbow		No. 12-C 22½° Elbow		No. 13-C 11¼° Elbow	
Nominal inches DN	Actual Outside Diameter inches mm	C to E inches mm	Approx. Weight (Each) lb kg	C to E inches mm	Approx. Weight (Each) lb kg	C to E inches mm	Approx. Weight (Each) lb kg	C to E inches mm	Approx. Weight (Each) lb kg	C to E inches mm	Approx. Weight (Each) lb kg
3 DN80	3.960 100.6	7.75 197	12.9 5.8	5.50 140	10.6 4.8	3.00 76	6.5 2.9	3.00 76	6.5 2.9	3.00 76	6.8 3.1
4 DN100	4.800 121.9	9.00 229	18.6 8.4	6.50 165	13.7 6.2	4.00 102	9.8 4.4	4.00 102	10.2 4.6	4.00 102	10.2 4.6
6 DN150	6.900 175.3	11.50 292	36.8 16.7	8.00 203	26.3 11.9	5.00 127	19.3 8.8	5.00 127	20.2 9.2	5.00 127	19.6 8.9
8 DN200	9.050 229.9	14.00 356	63.4 28.8	8.00 203	47.0 21.3	5.50 140	30.9 14.0	5.50 140	31.7 14.4	5.50 140	31.9 14.5
10 DN250	11.100 281.9	16.50 419	96.5 43.8	11.00 279	66.0 29.9	6.50 165	46.8 21.2	6.50 165	48.0 21.8	6.50 165	48.5 22.0
12 DN300	13.200 335.3	19.00 483	139.3 63.2	12.00 305	91.0 41.3	7.50 191	75.3 34.2	7.50 191	70.2 31.8	7.50 191	70.6 32.0
14 DN350	15.300 388.6	21.50 546	213.0 96.6	14.00 356	145.3 65.9	7.50 191	90.9 41.2	7.50 191	95.1 43.1	7.50 191	95.7 43.4
16 DN400	17.400 442.0	24.00 610	285.6 129.6	15.00 381	186.9 84.8	8.00 203	122.7 55.7	8.00 203	123.1 55.9	8.00 203	123.6 56.1
18 DN450	19.500 495.3	26.50 673	377.8 171.4	16.50 419	243.2 110.3	8.50 216	155.2 70.4	8.50 216	157.1 71.3	8.50 216	157.8 71.6
20 DN500	21.600 548.6	29.00 737	481.4 218.4	18.00 457	310.3 140.8	9.50 241	200.7 91.1	9.50 241	204.1 92.6	9.50 241	205.4 93.2
24 DN600	25.800 655.3	34.00 864	725.0 328.9	22.00 559	486.2 220.5	11.00 279	298.1 135.2	11.00 279	304.1 137.9	11.00 279	311.9 141.5
30 DN750	32.000 762.0	41.50 1054	866.7 393.1	25.00 635	705.0 319.8	15.00 381	540.9 245.4	15.00 381	565.7 256.6	15.00 381	616.6 279.7
36 DN900	38.300 914.4	49.00 1245	1872.6 849.4	28.00 711	1114.9 505.7	18.00 457	864.5 392.2	18.00 457	901.2 408.8	18.00 457	910.6 413.1

4.1 DIMENSIONS

Tee, True Wye, Cross, Lateral, and Cap

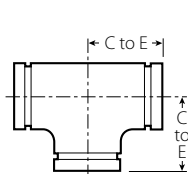
No. 20-C Tee

No. 33-C True Wye

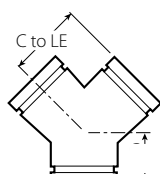
No. 35-C Cross

No. 30-C 45° Lateral

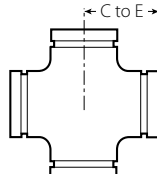
No. 60-C Cap



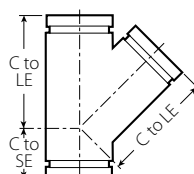
No. 20-C



No. 33-C



No. 35-C



No. 30-C



No. 60-C

Size		No. 20-C Tee		No. 33-C True Wye			No. 35-C Cross		No. 30-C 45° Lateral			No. 60-C Cap ¹	
Nominal	Actual Outside Diameter	C to E	Approx. Weight (Each)	C to LE	C to SE	Approx. Weight (Each)	C to E	Approx. Weight (Each)	C to LE	C to SE	Approx. Weight (Each)	T Thickness	Approx. Weight (Each)
inches DN	inches mm	inches mm	lb kg	inches mm	inches mm	lb kg	inches mm	lb kg	inches mm	inches mm	lb kg	inches mm	lb kg
3 DN80	3.960 100.6	5.50 140	15.3 6.9	5.50 140	3.00 76	12.9 5.8	5.50 140	19.5 8.8	10.00 254	3.00 76	20.5 9.3	1.25 32	3.6 1.7
4 DN100	4.800 121.9	6.50 165	21.6 9.8	6.50 165	3.00 76	16.0 7.3	6.50 165	25.7 11.7	12.00 305	3.00 76	28.7 13.0	1.13 29	5.1 2.3
6 150	6.900 175.3	8.00 203	40.3 18.3	8.00 203	3.50 89	31.8 14.4	8.00 203	47.5 21.5	14.50 368	3.50 89	53.2 24.1	1.13 29	10.4 4.7
8 DN200	9.050 229.9	9.00 229	61.7 28.0	9.00 229	4.50 114	52.0 23.6	9.00 229	71.2 32.3	17.50 445	4.50 114	104.7 47.5	1.38 35	20.9 9.5
10 DN250	11.100 281.9	11.00 279	97.8 44.4	11.00 279	5.00 127	79.3 36.0	11.00 279	112.0 50.8	20.50 521	5.00 127	157.7 71.5	1.50 38	33.3 15.1
12 DN300	13.200 335.3	12.00 305	135.2 61.3	12.00 305	5.50 140	106.9 48.5	12.00 305	148.6 67.4	24.50 622	5.50 140	244.7 111.0	1.50 38	46.9 21.3
14 DN350	15.300 388.6	14.00 356	204.0 92.5	14.00 356	6.00 152	158.9 72.1	14.00 356	234.0 106.2	27.00 686	6.00 152	290.8 131.9	2.75 ² 70	50.1 22.7
16 DN400	17.400 442.0	15.00 381	259.4 117.6	15.00 381	6.50 165	289.7 131.4	15.00 381	294.1 133.4	30.00 762	6.50 165	389.5 176.7	2.75 ² 70	65.0 29.5
18 DN450	19.500 495.3	16.50 419	339.8 154.1	16.50 419	7.00 178	299.4 135.8	16.50 419	383.1 173.8	32.00 813	7.00 178	492.7 223.5	2.75 ² 70	79.7 36.2
20 DN500	21.600 548.6	18.00 457	430.1 195.1	18.00 457	8.00 203	341.0 154.7	18.00 457	483.4 219.2	35.00 889	8.00 203	633.2 287.2	2.75 ² 70	99.0 44.9
24 DN600	25.800 655.3	22.00 559	675.9 306.6	22.00 559	9.00 229	525.8 238.5	22.00 559	765.0 347.0	40.50 1029	9.00 229	928.6 421.2	2.75 ² 70	143.7 65.2
30 DN750	32.000 812.8	25.00 635	1000.8 457.6	25.00 635	10.00 254	782.6 355.0	25.00 635	1116.4 506.4	49.00 1245	10.00 254	1765.0 800.6	4.00 ² 102	235.1 106.6
36 DN900	38.300 972.8	28.00 711	1480.0 671.3	28.00 711	15.00 381	1230.8 558.3	28.00 711	1603.3 728.6	56.00 1422	15.25 387	2743.5 1244.4	4.00 ² 102	473.5 214.8

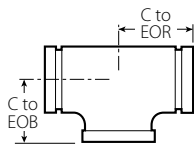
¹ Caps from ½ – 3/15 – 80 mm tap sizes.

² Dish Caps.

4.2 DIMENSIONS

Bullhead Tee

No. 21-C



No. 21-C

Size			Dimensions		Approximate Weight Each lb kg
Nominal inches DN			C to EOR inches mm	C to EOB inches mm	
4 DN100	x	4 DN100	x	6 DN150	34.6 15.7
6 DN150	x	6 DN150	x	8 DN200	48.4 21.9
8 DN200	x	8 DN200	x	10 DN250	89.7 40.7
10 DN250	x	10 DN250	x	12 DN300	122.1 55.4

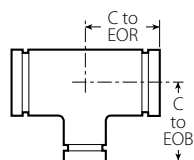
4.3 DIMENSIONS

Reducing Fittings

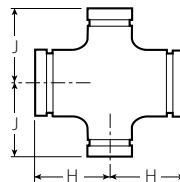
No. 25-C Reducing Tee

No. 35-CR Reducing Cross

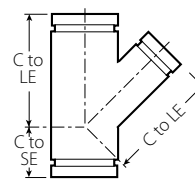
No. 30-CR 45° Reducing Lateral



No. 25-C



No. 35-CR



No. 30-CR

Size	No. 25-C Reducing Tee			No. 35-CR Reducing Cross			No. 30-CR 45° Reducing Lateral		
Nominal inches DN	C to EOR inches mm	C to EOB inches mm	Approx. Weight (Each) lb kg	H inches mm	J inches mm	Approx. Weight (Each) lb kg	C to LE inches mm	C to SE inches mm	Approx. Weight (Each) lb kg
4 DN100	3 DN80	6.50 165	6.50 165	20.5 9.3	6.50 165	24.4 11.1	12.00 305	3.00 76	26.9 12.2
6 DN150	3 DN80	8.00 203	8.00 203	36.2 16.4	8.00 203	40.5 18.4	14.50 368	3.50 89	44.5 20.2
	4 DN100	8.00 203	8.00 203	36.8 16.7	8.00 203	41.9 19.0	14.50 368	3.50 89	46.6 21.1
8 DN200	3 DN80	9.00 229	9.00 229	54.9 24.9	—	—	—	—	—
	4 DN100	9.00 229	9.00 229	55.5 25.2	9.00 229	60.1 27.3	17.50 445	4.50 114	74.0 33.6
	6 DN150	9.00 229	9.00 229	58.1 26.4	9.00 229	65.2 29.6	17.50 445	4.50 114	80.7 36.6
10 DN250	4 DN100	11.00 279	11.00 279	85.7 38.9	11.00 279	93.0 42.2	20.50 521	5.00 127	107.4 48.7
	6 DN150	11.00 279	11.00 279	88.7 40.2	11.00 279	101.0 45.8	20.50 521	5.00 127	114.9 52.1
	8 DN200	11.00 279	11.00 279	92.4 41.9	11.00 279	105.0 47.6	20.50 521	5.00 127	122.1 55.4
12 DN300	4 DN100	12.00 305	12.00 305	115.7 52.5	12.00 305	125.3 56.8	24.50 622	5.50 140	155.2 70.4
	6 DN150	12.00 305	12.00 305	118.5 53.7	12.00 305	130.8 59.3	24.50 622	5.50 140	156.4 70.9
	8 DN200	12.00 305	12.00 305	121.9 55.3	12.00 305	137.4 62.3	24.50 622	5.50 140	174.5 79.1
	10 DN250	12.00 305	12.00 305	125.1 56.7	12.00 305	143.7 65.2	24.50 622	5.50 140	183.6 83.3
14 DN350	6 DN150	14.00 356	14.00 356	183.2 83.1	14.00 356	190.7 86.5	27.00 686	6.00 152	228.1 103.4
	8 DN200	14.00 356	14.00 356	186.7 84.7	14.00 356	199.7 90.6	27.00 686	6.00 152	240.3 109.0
	10 DN250	14.00 356	14.00 356	190.1 86.2	14.00 356	204.3 92.7	27.00 686	6.00 152	249.5 113.2
	12 DN300	14.00 356	14.00 356	194.6 88.3	14.00 356	213.0 96.6	27.00 686	6.00 152	261.9 118.8
16 DN400	6 DN150	15.00 381	15.00 381	232.6 105.5	15.00 381	242.7 110.1	30.00 762	6.50 165	301.9 136.9
	8 DN200	15.00 381	15.00 381	236.0 107.1	15.00 381	248.8 112.8	30.00 762	6.50 165	312.3 141.7
	10 DN250	15.00 381	15.00 381	239.0 108.4	15.00 381	256.0 116.1	30.00 762	6.50 165	322.5 146.3
	12 DN300	15.00 381	15.00 381	242.8 110.1	15.00 381	262.0 118.8	30.00 762	6.50 165	339.1 153.8
	14 DN350	15.00 381	15.00 381	252.8 114.6	15.00 381	277.6 125.9	30.00 762	6.50 165	363.9 165.1

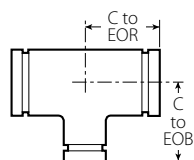
4.3 DIMENSIONS (Continued)

Reducing Fittings

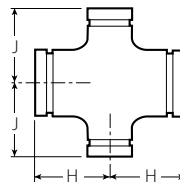
No. 25-C Reducing Tee

No. 35-CR Reducing Cross

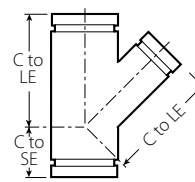
No. 30-CR 45° Reducing Lateral



No. 25-C



No. 35-CR



No. 30-CR

Size		No. 25-C Reducing Tee			No. 35-CR Reducing Cross			No. 30-CR 45° Reducing Lateral		
Nominal inches	DN	C to EOR inches mm	C to EOB inches mm	Approx. Weight (Each) lb kg	H inches mm	J inches mm	Approx. Weight (Each) lb kg	C to LE inches mm	C to SE inches mm	Approx. Weight (Each) lb kg
18 DN450	8 DN200	13.00 330	15.50 394	246.9 112.0	13.00 330	15.50 394	276.5 125.4	27.50 699	7.00 178	340.1 154.3
	10 DN250	13.00 330	15.50 394	248.9 112.9	13.00 330	15.50 394	281.4 127.6	32.00 813	7.00 178	402.5 182.6
	12 DN300	13.00 330	15.50 394	251.7 114.2	13.00 330	15.50 394	265.0 120.2	32.00 813	7.00 178	415.3 188.4
	14 DN350	16.50 419	16.50 419	322.9 146.5	16.50 419	16.50 419	347.6 157.7	32.00 813	7.00 178	439.0 199.1
	16 DN400	16.50 419	16.50 419	331.6 150.4	16.50 419	16.50 419	365.6 165.8	32.00 813	7.00 178	459.6 208.5
	18 DN450	16.50 419	16.50 419	331.6 150.4	16.50 419	16.50 419	365.6 165.8	32.00 813	7.00 178	459.6 208.5
20 DN500	6 DN150	14.00 356	17.00 432	305.2 138.4	—	—	—	—	—	—
	8 DN200	14.00 356	17.00 432	307.9 139.6	14.00 356	17.00 432	319.7 145.0	—	—	—
	10 DN250	14.00 356	17.00 432	310.3 140.7	14.00 356	17.00 432	323.2 146.6	35.00 889	8.00 203	500.3 226.9
	12 DN300	14.00 356	17.00 432	312.9 141.9	14.00 356	17.00 432	328.0 148.8	35.00 889	8.00 203	514.3 233.3
	14 DN350	14.00 356	17.00 432	319.3 144.8	14.00 356	17.00 432	340.3 154.4	35.00 889	8.00 203	536.6 243.3
	16 DN400	18.00 457	18.00 457	319.3 144.8	18.00 457	18.00 457	340.3 154.4	35.00 889	8.00 203	557.3 252.8
	18 DN450	18.00 457	18.00 457	412.0 186.9	18.00 457	18.00 457	446.6 202.6	35.00 889	8.00 203	557.3 252.8
	20 DN500	18.00 457	18.00 457	412.0 186.9	18.00 457	18.00 457	446.6 202.6	35.00 889	8.00 203	557.3 252.8
24 DN600	6 DN150	15.00 381	19.00 483	417.1 189.2	—	—	—	—	—	—
	8 DN200	15.00 381	19.00 483	419.4 190.2	—	—	—	—	—	—
	10 DN250	15.00 381	19.00 483	422.1 191.4	—	—	—	—	—	—
	12 DN300	15.00 381	19.00 483	422.9 191.8	15.00 381	19.00 483	436.1 197.8	40.50 1029	9.00 229	734.3 333.1
	14 DN350	15.00 381	19.00 483	428.4 194.3	15.00 381	19.00 483	446.5 202.5	40.50 1029	9.00 229	758.7 344.2
	16 DN400	15.00 381	19.00 483	434.0 196.8	15.00 381	19.00 483	457.6 207.6	40.50 1029	9.00 229	779.6 353.6
	18 DN450	22.00 559	22.00 559	642.5 291.5	22.00 559	22.00 559	698.2 316.7	40.50 1029	9.00 229	808.4 366.7
	20 DN500	22.00 559	22.00 559	654.3 296.8	22.00 559	22.00 559	720.4 326.7	40.50 1029	9.00 229	837.3 379.8
	24 DN600	22.00 559	22.00 559	654.3 296.8	22.00 559	22.00 559	720.4 326.7	40.50 1029	9.00 229	837.3 379.8
	24 DN600	22.00 559	22.00 559	654.3 296.8	22.00 559	22.00 559	720.4 326.7	40.50 1029	9.00 229	837.3 379.8

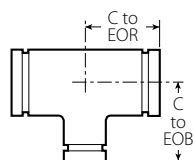
4.3 DIMENSIONS (Continued)

Reducing Fittings

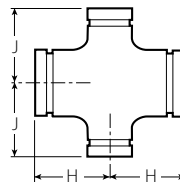
No. 25-C Reducing Tee

No. 35-CR Reducing Cross

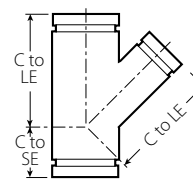
No. 30-CR 45° Reducing Lateral



No. 25-C



No. 35-CR



No. 30-CR

Size		No. 25-C Reducing Tee			No. 35-CR Reducing Cross			No. 30-CR 45° Reducing Lateral		
Nominal inches	DN	C to EOR inches mm	C to EOB inches mm	Approx. Weight (Each) lb kg	H inches mm	J inches mm	Approx. Weight (Each) lb kg	C to LE inches mm	C to SE inches mm	Approx. Weight (Each) lb kg
30 DN750	6 DN150	18.00 457	23.00 584	668.8 303.4	18.00 457	23.00 584	682.4 309.6	—	—	—
	8 DN200	18.00 457	23.00 584	672.1 304.8	18.00 457	23.00 584	687.1 311.7	—	—	—
	10 DN250	18.00 457	23.00 584	675.8 306.5	18.00 457	23.00 584	691.1 313.5	—	—	—
	12 DN300	18.00 457	23.00 584	677.8 307.4	18.00 457	23.00 584	695.2 315.3	49.00 1245	10.00 254	1149.8 521.5
	14 DN350	18.00 457	23.00 584	683.6 310.1	18.00 457	23.00 584	705.9 320.2	49.00 1245	10.00 254	1184.1 537.1
	16 DN400	18.00 457	23.00 584	687.7 311.9	18.00 457	23.00 584	716.4 324.9	49.00 1245	10.00 254	1210.0 548.8
	18 DN450	18.00 457	23.00 584	693.5 314.6	18.00 457	23.00 584	728.0 330.2	49.00 1245	10.00 254	1234.6 560.0
	20 DN500	18.00 457	23.00 584	695.9 315.7	18.00 457	23.00 584	808.7 366.8	49.00 1245	10.00 254	1266.1 574.3
	24 DN600	25.00 635	25.00 635	711.0 322.5	25.00 635	25.00 635	971.4 440.6	49.00 1245	10.00 254	1327.3 602.1
36 DN900	8 DN200	20.00 508	26.00 660	998.4 452.9	20.00 508	26.00 660	1009.9 458.1	—	—	—
	10 DN250	20.00 508	26.00 660	1009.5 457.9	20.00 508	26.00 660	1011.9 459.0	—	—	—
	12 DN300	20.00 508	26.00 660	992.6 450.2	20.00 508	26.00 660	1014.0 459.9	—	—	—
	14 DN350	20.00 508	26.00 660	999.9 453.5	20.00 508	26.00 660	1017.8 461.7	54.00 1372	15.25 387	1804.7 818.6
	16 DN400	20.00 508	26.00 660	1010.7 458.4	20.00 508	26.00 660	1029.2 466.9	54.00 1372	15.25 387	1809.7 820.9
	18 DN450	20.00 508	26.00 660	1015.0 460.4	20.00 508	26.00 660	1037.2 470.5	54.00 1372	15.25 387	1840.5 834.8
	20 DN500	20.00 508	26.00 660	1019.0 462.2	20.00 508	26.00 660	1044.5 473.8	54.00 1372	15.25 387	1869.6 848.0
	24 DN600	20.00 508	26.00 660	1019.9 462.6	20.00 508	26.00 660	1058.7 480.2	54.00 1372	15.25 387	1927.2 874.1
	30 DN750	28.00 711	28.00 711	1436.2 651.4	28.00 711	28.00 711	1509.7 684.8	56.00 1422	15.25 387	2096.3 950.9

4.4 DIMENSIONS

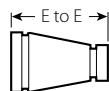
Reducers and Reducing Elbows

No. 50-C Concentric Reducer

No. 51-C Eccentric Reducer

No. 10-CR 90° Reducing Elbow

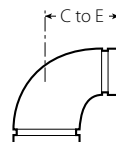
No. 100-CR 90° Long Radius Reducing Elbow



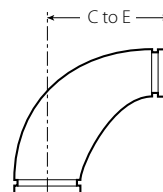
No. 50-C



No. 51-C



No. 10-CR



No. 100-CR

Size	No. 50-C Concentric Reducer		No. 51-C Eccentric Reducer		No. 10-CR 90° Reducing Elbow		No. 10-CR 90° Long Radius Reducing Elbow	
Nominal inches DN	E to E inches mm	Approx. Weight (Each) lb kg	E to E inches mm	Approx. Weight (Each) lb kg	C to E inches mm	Approx. Weight (Each) lb kg	C to E inches mm	Approx. Weight (Each) lb kg
4 DN100 x 3 DN80	7.00 178	8.7 3.9	7.00 178	9.4 4.2	6.50 165	12.8 5.8	9.00 229	17.0 7.7
6 DN150 x 3 DN80	9.00 229	14.3 6.5	9.00 229	14.2 6.5	8.00 203	20.4 9.3	11.50 292	30.1 13.6
	4 DN100	9.00 229	9.00 229	14.2 6.5	8.00 203	22.1 10.0	11.50 292	31.7 14.4
8 DN200 x 3 DN80	11.00 279	24.4 11.1	11.00 279	22.2 10.1	—	—	—	—
	4 DN100	11.00 279	11.00 279	23.6 10.7	9.00 229	31.2 14.2	14.00 356	46.1 20.9
	6 DN150	11.00 279	11.00 279	27.4 12.4	9.00 229	36.5 16.6	14.00 356	54.6 24.8
10 DN250 x 4 DN100	12.00 305	33.8 15.3	12.00 305	32.1 14.5	11.00 279	45.4 20.6	16.50 419	72.9 33.0
	6 DN150	12.00 305	12.00 305	36.3 16.5	11.00 279	52.0 23.6	16.50 419	82.8 37.6
	8 DN200	12.00 305	12.00 305	40.3 18.3	11.00 279	59.2 26.8	16.50 419	94.0 42.6
12 DN300 x 4 DN100	14.00 356	47.4 21.5	14.00 356	44.8 20.3	12.00 305	60.4 27.4	—	—
	6 DN150	14.00 356	14.00 356	49.4 22.4	12.00 305	66.4 30.1	19.00 483	108.6 49.3
	8 DN200	14.00 356	14.00 356	54.7 24.8	12.00 305	74.2 33.7	19.00 483	121.7 55.2
	10 DN250	14.00 356	14.00 356	59.6 27.0	12.00 305	85.4 38.8	19.00 483	128.5 58.3
14 DN350 x 6 DN150	16.00 406	68.4 31.0	16.00 406	75.4 34.2	14.00 356	98.2 44.5	21.50 546	135.0 61.2
	8 DN200	16.00 406	16.00 406	80.3 36.4	14.00 356	105.7 47.9	21.50 546	159.3 72.2
	10 DN250	16.00 406	16.00 406	83.0 37.6	14.00 356	118.5 53.7	21.50 546	174.9 79.3
	12 DN300	16.00 406	16.00 406	93.0 42.2	14.00 356	120.9 54.9	21.50 546	186.3 84.5
16 DN400 x 6 DN150	18.00 457	93.5 42.4	18.00 457	91.4 41.5	—	—	—	—
	8 DN200	18.00 457	18.00 457	104.4 47.4	15.00 381	135.3 61.4	24.00 610	187.7 85.1
	10 DN250	18.00 457	18.00 457	108.0 49.0	15.00 381	168.5 76.5	24.00 610	213.6 96.9
	12 DN300	18.00 457	18.00 457	119.5 54.2	15.00 381	154.7 70.2	24.00 610	240.8 109.2
	14 DN350	18.00 457	18.00 457	129.0 58.5	15.00 381	178.4 80.9	24.00 610	269.4 122.2

4.4 DIMENSIONS (Continued)

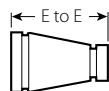
Reducers and Reducing Elbows

No. 50-C Concentric Reducer

No. 51-C Eccentric Reducer

No. 10-CR 90° Reducing Elbow

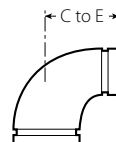
No. 100-CR 90° Long Radius Reducing Elbow



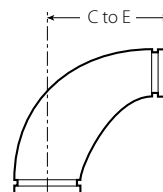
No. 50-C



No. 51-C



No. 10-CR



No. 100-CR

Size		No. 50-C Concentric Reducer		No. 51-C Eccentric Reducer		No. 10-CR 90° Reducing Elbow		No. 100-CR 90° Long Radius Reducing Elbow	
Nominal inches DN		E to E inches mm	Approx. Weight (Each) lb kg	E to E inches mm	Approx. Weight (Each) lb kg	C to E inches mm	Approx. Weight (Each) lb kg	C to E inches mm	Approx. Weight (Each) lb kg
18 DN450	8 DN200	19.00 483	120.1 54.5	19.00 483	121.0 54.9	16.50 419	161.0 73.0	—	—
	10 DN250	19.00 483	127.8 58.0	19.00 483	128.2 58.2	16.50 419	173.5 78.7	26.50 673	274.0 124.3
	12 DN300	19.00 483	137.2 62.2	19.00 483	136.4 61.9	16.50 419	185.5 84.2	26.50 673	296.3 134.4
	14 DN350	19.00 483	149.8 68.0	19.00 483	151.4 68.7	16.50 419	215.8 97.9	26.50 673	328.9 149.2
	16 DN400	19.00 483	162.8 73.8	19.00 483	163.7 74.3	16.50 419	224.2 101.7	26.50 673	358.5 162.6
20 DN500	8 DN200	20.00 508	142.3 64.5	20.00 508	148.6 67.4	—	—	—	—
	10 DN250	20.00 508	150.7 68.3	20.00 508	155.2 70.4	18.00 457	214.6 97.3	29.00 737	331.8 150.5
	12 DN300	20.00 508	159.3 72.3	20.00 508	163.3 74.1	18.00 457	234.2 106.2	29.00 737	356.6 161.8
	14 DN350	20.00 508	174.0 78.9	20.00 508	176.0 79.8	18.00 457	257.2 116.6	29.00 737	393.3 178.4
	16 DN400	20.00 508	186.9 84.8	20.00 508	188.1 85.3	18.00 457	268.3 121.7	29.00 737	426.0 198.2
	18 DN450	20.00 508	202.2 91.7	20.00 508	202.5 91.8	18.00 457	289.4 131.3	29.00 737	464.0 210.4
24 DN600	8 DN200	24.00 610	205.6 93.3	24.00 610	215.2 97.6	—	—	—	—
	10 DN250	24.00 610	215.7 97.9	24.00 610	224.0 101.6	—	—	—	—
	12 DN300	24.00 610	221.7 100.5	24.00 610	248.0 112.5	22.00 559	334.4 151.7	34.00 864	491.5 223.0
	14 DN300	24.00 610	244.5 110.9	24.00 610	250.2 113.5	22.00 559	355.4 161.2	34.00 864	535.5 242.9
	16 DN400	24.00 610	259.9 117.9	24.00 610	263.3 119.4	22.00 559	378.3 171.6	34.00 864	575.4 261.0
	18 DN450	24.00 610	278.1 126.2	24.00 610	281.1 127.5	22.00 559	419.0 190.1	34.00 864	621.4 281.9
	20 DN500	24.00 610	296.2 134.4	24.00 610	297.6 135.0	22.00 559	447.7 203.1	34.00 864	642.8 291.5

4.4 DIMENSIONS (Continued)

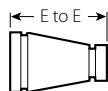
Reducers and Reducing Elbows

No. 50-C Concentric Reducer

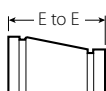
No. 51-C Eccentric Reducer

No. 10-CR 90° Reducing Elbow

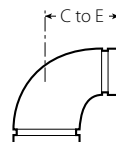
No. 100-CR 90° Long Radius Reducing Elbow



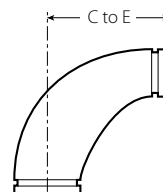
No. 50-C



No. 51-C



No. 10-CR



No. 100-CR

Size		No. 50-C Concentric Reducer		No. 51-C Eccentric Reducer		No. 10-CR 90° Reducing Elbow		No. 10-CR 90° Long Radius Reducing Elbow	
Nominal inches DN		E to E inches mm	Approx. Weight (Each) lb kg	E to E inches mm	Approx. Weight (Each) lb kg	C to E inches mm	Approx. Weight (Each) lb kg	C to E inches mm	Approx. Weight (Each) lb kg
30 DN750	12 DN300	30.00 762	359.8 163.2	30.00 762	373.5 169.4	—	—	—	—
	14 DN350	30.00 762	381.3 172.9	30.00 762	394.2 178.8	25.50 635	513.6 233.0	—	—
	16 DN400	30.00 762	399.3 181.1	30.00 762	410.6 186.2	25.50 635	543.7 246.6	41.50 1054	853.4 387.1
	18 DN450	30.00 762	422.9 191.8	30.00 762	431.6 195.8	25.50 635	563.8 255.7	41.50 1054	912.8 414.0
	20 DN500	30.00 762	445.9 202.2	30.00 762	451.7 204.9	25.50 635	613.0 278.1	41.50 1054	1084.3 491.8
	24 DN600	30.00 762	489.7 222.1	30.00 762	491.3 222.8	25.50 635	586.9 266.2	41.50 1054	1035.4 469.6
	30 DN750	30.00 762	511.3 232.1	30.00 762	511.3 232.1	25.50 635	613.0 278.1	41.50 1054	1084.3 491.8
36 DN900	14 DN350	36.00 914	566.7 257.1	36.00 914	601.9 273.0	—	—	—	—
	16 DN400	36.00 914	584.3 265.0	36.00 914	621.6 282.0	28.00 711	758.9 344.2	—	—
	18 DN450	36.00 914	618.1 280.4	36.00 914	647.9 293.9	28.00 711	800.8 363.2	49.00 1245	1312.6 595.4
	20 DN500	36.00 914	644.6 292.4	36.00 914	672.4 305.0	28.00 711	840.1 381.1	49.00 1245	1381.5 626.7
	24 DN600	36.00 914	693.1 314.4	36.00 914	897.8 407.2	28.00 711	912.9 414.1	49.00 1245	1508.4 684.2
	30 DN750	36.00 914	788.8 357.8	36.00 914	975.2 442.3	28.00 711	1025.9 465.3	49.00 1245	1702.2 772.1
	36 DN900	36.00 914	811.3 368.1	36.00 914	811.3 368.1	28.00 711	840.1 381.1	49.00 1245	1381.5 626.7

NOTE

- Non-standard reducing cross sizes are available. Contact Victaulic for details.

4.5 DIMENSIONS

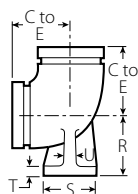
Base Fittings

No. 10-CB Base Elbow

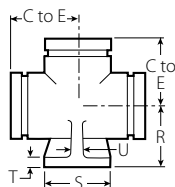
No. 20-CB Base Tee

No. 25-CB Reducing Base Tee

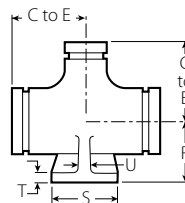
No. 100-CB Long Radius Base Elbow



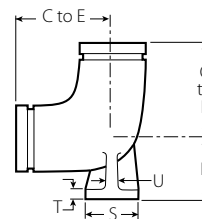
No. 10-CB



No. 20-CB



No. 25-CB



No. 100-CB



Round Base

Size		Dimensions					Approx. Weight (Each)			
Nominal inches DN	Actual Outside Diameter inches mm	R inches mm	U inches mm	T inches mm	S inches mm	W inches mm	No. 10-CB Base Elbow lb kg	No. 20-CB Base Tee lb kg	No. 100-CB LR Base Elbow lb kg	No. 25-CB Reducing Base Tee lb kg
3 DN80	3.960 100.6	4.88 124	0.50 13	0.56 14	5.00 127	3.88 99	18.4 8.3	21.8 9.9	19.7 9.0	+
4 DN100	4.800 121.9	5.50 140	0.50 13	0.62 16	6.00 152	4.75 121	25.9 11.7	30.4 13.8	28.8 13.1	+
6 DN150	6.900 175.3	7.00 178	0.62 16	0.69 18	7.00 178	5.50 140	47.3 21.4	53.2 24.1	69.3 31.5	+
8 DN200	9.050 229.9	8.38 213	0.88 22	0.94 24	9.00 229	7.50 191	85.6 38.8	91.7 41.6	113.9 51.7	+
10 DN250	11.100 281.9	9.75 248	0.88 22	0.94 24	9.00 229	7.50 191	113.6 51.5	126.1 57.2	161.5 73.3	+
12 DN300	13.200 335.3	11.25 286	1.00 25	1.00 25	11.00 279	9.50 241	164.7 74.7	184.7 83.8	238.3 108.1	+
14 DN350	15.300 388.6	12.50 318	1.00 25	1.00 25	11.00 279	9.50 241	221.6 100.5	—	298.8 135.5	+
16 DN400	17.400 442.0	13.75 349	1.00 25	1.00 25	11.00 279	9.50 241	264.9 120.1	—	392.5 178.0	+
18 DN450	19.500 495.3	15.00 381	1.12 29	1.12 29	13.50 343	11.75 299	367.1 166.5	—	544.1 246.8	+
20 DN500	21.600 548.6	16.00 406	1.12 29	1.12 29	13.50 343	11.75 299	435.1 197.4	—	654.7 297.0	+
24 DN600	25.800 655.3	18.50 470	1.12 29	1.12 29	13.50 343	11.75 299	621.1 281.7	—	908.4 412.0	+

+ 90° reducing tee are available with a base. Contact Victaulic for details.

NOTES

- Bolt hole template shown for round base is the same as for the flange of the supporting pipe size, except using only four holes in all cases so placed as to straddle center lines.
- The bases of these fittings are intended for support in compression and are not to be used for anchors or supports in tension or shear.
- Grooved end base 90° elbows (#X-90 CDI) and base tees (#X-CDI) are available with dimensions to ANSI B16.1.
- Side base fittings are available. Contact Victaulic for details.
- For Center to End dimensions, refer to corresponding fitting without the base.

4.6 DIMENSIONS

Tee, True Wye, Cross, Lateral, and Cap

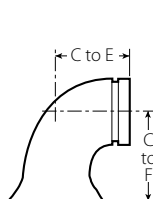
No. 10-CF 90° Flare

No. 100-CF 90° Long Radius Flare

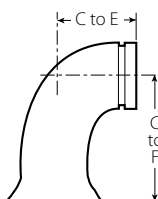
No. 43-CF Straight Flare

No. 10-CS 90° Side Outlet

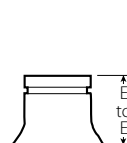
No. 20-CS Tee Side Outlet



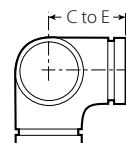
No. 10-CF



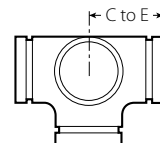
No. 100-CF



No. 43-CF



No. 10-CS



No. 20-CS

Size		No. 10-CF 90° Flare			No. 100-CF 90° Long Radius Flare			No. 43-CF Straight Flare		No. 10-CS 90° Side Outlet ³		No. 20-CS Tee Side Outlet ³	
Nominal	Actual Outside Diameter	C to E	C to F	Approx. Weight (Each)	C to E	C to F	Approx. Weight (Each)	E to E	Approx. Weight (Each)	C to E	Approx. Weight (Each)	C to E	Approx. Weight (Each)
inches	inches	inches	inches	lb	inches	inches	lb	inches	lb	inches	lb	inches	lb
DN	mm	mm	mm	kg	mm	mm	kg	mm	kg	mm	kg	mm	kg
3	3.960	5.50	9.00	17.3	7.75	11.25	20.5	8.00	10.5	5.50	15.3	5.50	18.6
80	100.6	140	229	7.9	197	286	9.3	203	4.8	140	7.0	140	8.4
4	4.800	6.50	9.50	20.3	9.00	12.50	26.4	8.00	13.0	6.50	20.6	6.50	25.1
100	121.9	165	241	9.2	229	318	12.0	203	13.0	165	9.3	165	11.4
6	6.900	8.00	11.50	36.0	11.50	15.00	47.7	8.00	19.7	8.00	38.6	8.00	46.7
150	175.3	203	292	16.3	292	381	21.6	203	8.9	203	17.5	203	21.2
8	9.050	9.00	13.50	58.3	14.00	18.50	81.5	10.00	33.0	9.00	56.5	9.00	67.2
200	229.9	229	343	26.4	356	470	37.0	254	15.0	229	25.6	229	30.5
10	11.100	11.00	16.50	86.6	16.50	22.50	125.6	10.00	43.7	11.00	92.8	11.00	101.0
250	281.9	279	419	39.3	419	572	57.0	254	19.8	279	42.1	279	45.8
12	13.200	12.00	18.50	115.6	19.00	25.50	178.8	12.00	65.3	12.00	124.5	12.00	128.8
300	335.3	305	470	52.4	483	648	81.1	305	29.6	305	56.5	305	58.4
14	15.300	14.00	22.00	229.8	21.50	29.00	256.8	12.00	84.6	14.00	—	—	—
350	388.6	356	559	104.3	546	737	116.5	305	38.4	356	—	—	—
16	17.400	15.00	23.00	288.3	24.00	32.00	318.9	16.00	132.3	15.00	—	—	—
400	442.0	381	584	130.8	610	813	144.7	406	60.0	381	—	—	—
18	19.500	16.50	24.50	335.4	26.50	35.00	423.6	16.00	157.4	16.50	157.4	—	—
450	495.3	419	622	152.1	673	889	192.1	406	71.4	419	71.4	—	—
20	21.600	18.00	26.00	394.9	29.00	38.00	549.5	18.00	205.6	18.00	205.6	—	—
500	548.6	457	660	179.1	737	965	249.2	457	93.2	457	93.2	—	—
24	25.800	22.00	30.00	570.2	34.00	44.50	739.1	18.00	265.7	—	—	—	—
600	655.3	559	762	258.7	864	1130	335.3	457	120.5	—	—	—	—
30	32.000	25.00	—	—	—	—	—	24.00	466.2	—	—	—	—
750	762.0	635	—	—	—	—	—	610	211.5	—	—	—	—
36	38.300	—	—	—	—	—	—	24.00	631.8	—	—	—	—
900	914.4	—	—	—	—	—	—	610	288.6	—	—	—	—

³ Reducing side outlet 90° Elbows, and Tees are available. Contact Victaulic for details.

5.0 PERFORMANCE

Contact Victaulic for details.

6.0 NOTIFICATIONS

⚠ WARNING



- Read and understand all instructions before attempting to install any Victaulic products.
- Always verify that the piping system has been completely depressurized and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.
- Confirm that any equipment, branch lines, or sections of piping that may have been isolated for/during testing or due to valve closures/positioning are identified, depressurized, and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.
- Always reference Victaulic [publication I-ENDCAP](#) for important end cap installation safety instructions.
- Wear safety glasses, hardhat, foot protection, and hearing protection.

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

7.0 REFERENCE MATERIALS

[23.01: AWWA Ductile Iron Pipe - Grooved System](#)

[23.02 Style 31 Grooved Coupling](#)

[23.03 - Style 307 Transition Couplings](#)

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

[I-300: Field Installation Handbook: AWWA Product](#)

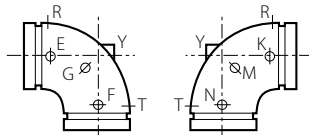
[I-ENDCAP: Victaulic® End Caps INSTALLATION INSTRUCTIONS](#)

7.1 REFERENCE MATERIALS

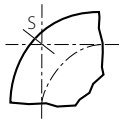
Tapped Fittings

Victaulic can supply tapped fittings on order to ANSI B16.1 dimension locations. Specify fittings size, tap location by letter (as shown below) and tap size (NPT dimensions) on order.

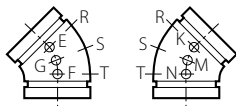
Elbows



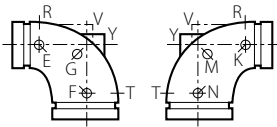
90° ELBOW – STRAIGHT SIZE



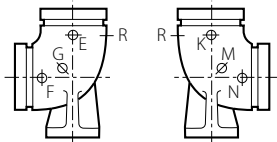
90° ELBOW



45° ELBOW BASE FITTINGS

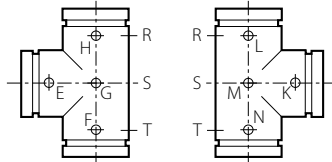


90° ELBOW REDUCING SIZES

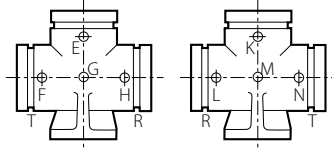


90° BASE ELBOW – STRAIGHT & REDUCING

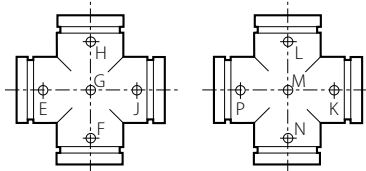
Tees, Crosses, Wyes, and Laterals



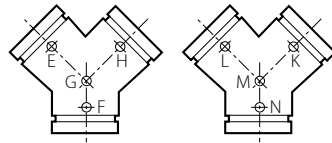
TEE – STRAIGHT SIZES



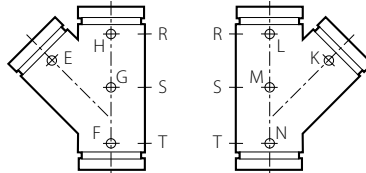
BASE TEE



CROSS – STRAIGHT SIZE

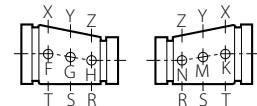


TRUE WYE

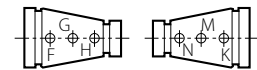


45° LATERAL – STRAIGHT & REDUCING

Reducers



ECCENTRIC REDUCER



CONCENTRIC REDUCER

User Responsibility for Product Selection and Suitability

Each user bears final responsibility for determining the suitability of Victaulic products for their end-use application, in accordance with industry standards, project specifications, and Victaulic's published performance, maintenance, and safety data, as well as all warnings and installation 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, warranty, installation instructions, or this disclaimer.

Installation

Always refer to and follow the [Victaulic Installation Handbook](#) or installation instructions for 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 [victaulic.com](#).

Warranty

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

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Note

All products bearing a Victaulic trademark are manufactured by Victaulic or to Victaulic specifications. All products are to be installed only in accordance with the applicable Victaulic installation instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.