



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, gray iron

NOTES

- Fittings conform to ANSI A21.10/AWWA
- C-110 for center-to-end dimensions and AWWA C-153 or ANSI A21.10/AWWA C-110 for wall thickness.
- Fittings are available with flanged ends wherever grooved ends are shown.
- Linings include cement/mortar Type 2 (standard) and others. Fittings can readily be prepared for glass lining by others.
- Victaulic fittings shown have an end-to-end dimension tolerance of $\pm 1/8"$ in all sizes and styles.
- 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.

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.

System No.		Location	
Submitted By		Date	

Spec Section		Paragraph	
Approved		Date	

3.0 SPECIFICATIONS – MATERIAL

Fitting:

Ductile iron conforming to ASTM A-536, Grade 65-45-12. Ductile iron conforming to ASTM A-395, 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

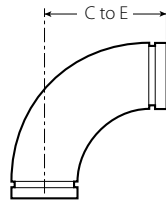
No. 100-C 90° Long Radius Elbow

No. 10-C 90° Elbow

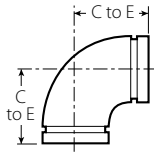
No. 11-C 45° Elbow

No. 12-C 22½° Elbow

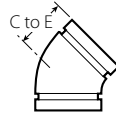
No. 13-C 11¼° Elbow



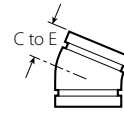
No. 100-C



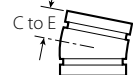
No. 10-C



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 80	3.960 100.6	7.75 197	19.3 8.8	5.50 140	8.6 3.9	3.00 76	5.8 2.6	3.00 76	12.5 5.7	3.00 76	9.0 4.1
4 100	4.800 121.9	9.00 229	28.0 12.7	6.50 165	12.0 5.4	4.00 102	8.4 3.8	4.00 102	11.5 5.2	4.00 102	11.5 5.2
6 150	6.900 175.3	11.50 292	55.0 25.0	8.00 203	22.0 10.0	5.00 127	15.0 6.8	5.00 127	25.0 11.3	5.00 127	21.5 9.8
8 200	9.050 229.9	14.00 356	83.0 37.7	9.00 229	38.0 17.2	5.50 140	28.8 13.1	5.50 140	39.5 17.9	5.50 140	39.0 17.7
10 250	11.100 281.9	16.50 419	160.0 72.6	11.00 279	76.0 34.5	6.50 165	43.3 19.6	6.50 165	67.0 30.4	6.50 165	77.0 34.9
12 300	13.200 335.3	19.00 483	210.0 95.3	12.00 305	92.0 41.7	7.50 191	72.0 32.7	7.50 191	108.0 49.0	7.50 191	120.0 54.4
14 350	15.300 388.6	21.50 546	261.0 118.4	14.00 356	174.0 78.9	7.50 191	104.0 47.2	7.50 191	92.0 41.7	7.50 191	101.0 45.8
16 400	17.400 442.0	24.00 610	337.0 152.9	15.00 381	239.0 108.4	8.00 203	142.0 64.4	8.00 203	112.0 50.8	8.00 203	121.0 54.9
18 450	19.500 495.3	26.50 673	451.0 204.6	16.50 419	328.0 148.8	8.50 216	186.0 84.4	8.50 216	145.0 65.8	8.50 216	146.0 66.2
20 500	21.600 548.6	29.00 737	588.0 266.7	18.00 457	413.0 187.3	9.50 241	246.0 111.6	9.50 241	200.0 90.7	9.50 241	202.0 91.6
24 600	25.800 655.3	34.00 864	909.0 412.3	22.00 559	668.0 303.0	11.00 279	414.0 187.8	11.00 279	282.0 127.9	11.00 279	284.0 128.8
30 750	32.000 762.0	41.50 1054	2136.0 968.9	25.00 635	1002.0 454.4	15.00 381	720.0 326.6	15.00 381	681.0 308.9	15.00 381	699.0 317.1
36 900	38.300 914.4	49.00 1245	3120.0 1415.2	28.00 711	1608.0 729.4	18.00 457	1152.0 522.6	18.00 457	975.0 442.3	18.00 457	1124.0 509.8

4.1 DIMENSIONS

Tee, True Wye, Cross, Lateral, and Cap

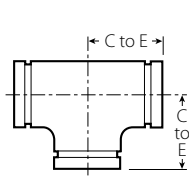
No. 20-C Tee

No. 33-C True Wye

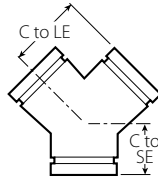
No. 35-C Cross

No. 30-C 45° Lateral

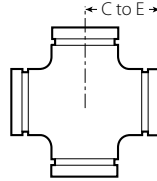
No. 60-C Cap



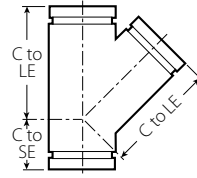
No. 20-C



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	3.960	5.50	14.2	5.50	3.00	25.00	5.50	24.0	10.00	3.00	28.0	1.22	3.0
80	100.6	140	6.4	140	76	635	140	10.9	254	76	12.7	31	1.4
4	4.800	6.50	19.0	6.50	3.00	55.0	6.50	40.0	12.00	3.00	38.4	1.16	5.0
100	121.9	165	8.6	165	76	25.0	165	18.1	305	76	12.7	29	2.3
6	6.900	8.00	34.0	8.00	3.50	90.0	8.00	71.0	14.50	3.50	67.0	1.16	9.0
150	175.3	203	15.4	203	89	40.8	203	32.2	368	89	30.4	29	4.1
8	9.050	9.00	59.0	9.00	4.50	140.0	9.00	106.0	17.50	4.50	120.0	1.34	16.0
200	229.9	229	26.8	229	114	63.5	229	48.1	445	114	54.4	34	7.3
10	11.100	11.00	111.0	11.00	5.00	220.0	11.00	225.0	20.50	5.00	215.0	1.53	37.2
250	281.9	279	50.4	279	127	99.8	279	102.1	521	127	97.5	39	16.9
12	13.200	12.00	136.0	12.00	5.50	315.0	12.00	310.0	24.50	5.50	346.0	1.53	52.0
300	335.3	305	61.7	305	140	142.9	305	140.6	622	140	157.0	39	23.6
14	15.300	14.00	262.0	14.00	6.00	*	14.00	307.0	27.00	6.00	492.0	2.75 ²	55.0
350	388.6	356	118.8	356	152	*	356	139.3	686	152	223.2	70	25.0
16	17.400	15.00	304.0	15.00	6.50	*	15.00	426.0	30.00	6.50	696.0	2.75 ²	68.0
400	442.0	381	137.9	381	165	*	381	193.2	762	165	315.7	70	30.9
18	19.500	16.50	408.0	16.50	7.00	*	16.50	567.0	32.00	7.00	870.0	2.75 ²	90.0
450	495.3	419	185.1	419	178	*	419	254.9	813	178	394.6	70	40.8
20	21.600	18.00	552.0	18.00	8.00	*	18.00	717.0	35.00	8.00	1103.0	2.75 ²	110.0
500	548.6	457	250.4	457	203	*	457	325.2	889	203	500.3	70	50.0
24	25.800	22.00	980.0	22.00	9.00	*	22.00	1177.0	40.50	9.00	1746.0	2.75 ²	165.0
600	655.3	559	444.5	559	229	*	559	533.9	1029	229	792.0	70	74.8
30	32.000	25.00	1552.0	25.00	10.00	*	25.00	1366.0	49.00	10.00	3280.0	4.00 ²	300.0
750	762.0	635	704.0	635	254	*	635	619.6	1245	254	1487.8	102	136.1
36	38.300	28.00	2050.0	28.00	15.00	*	28.00	1885.0	56.00	15.25	5020.0	4.00 ²	536.0
900	914.4	711	929.9	711	381	*	711	855.0	1422	387	2277.1	102	243.1

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

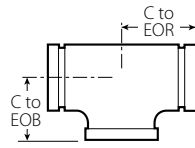
² Dish Caps.

* Contact Victaulic for details.

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	
4 100	x	4 100	x	6 150	*	*	47.0 21.3
6 150	x	6 150	x	8 200	8.00 203	8.00 203	79.0 35.8
8 200	x	8 200	x	10 250	11.00 279	11.00 279	164.0 74.4
10 250	x	10 250	x	12 300	*	*	226.0 102.5

* Contact Victaulic for details.

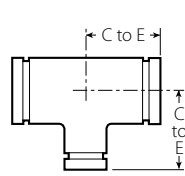
4.3 DIMENSIONS

Reducing Fittings

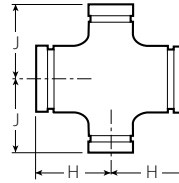
No. 25-C Reducing Tee

No. 35-CR Reducing Cross

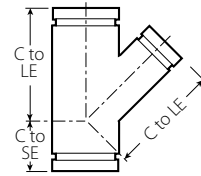
No. 30-CR 45° Reducing Lateral



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	100	3 x 80	6.50	6.50	26.4	6.50	6.50	22.0	12.00	3.00	45.0
			165	165	12.0	165	165	10.0	305	76	20.4
6	150	3 x 80	8.00	8.00	30.0	8.00	8.00	46.0	14.50	3.50	74.0
			203	203	13.6	203	203	20.9	368	89	33.6
		4 x 100	8.00	8.00	34.0	8.00	8.00	38.0	14.50	3.50	80.0
			203	203	15.4	203	203	17.2	368	89	36.3
8	200	3 x 80	9.00	9.00	*	—	—	—	—	—	—
			229	229	78.0	9.00	9.00	76.0	17.50	4.50	125.0
			229	229	35.4	229	229	34.5	445	114	56.7
			229	229	80.0	9.00	9.00	59.0	17.50	4.50	140.0
		6 x 150	9.00	9.00	36.3	229	229	26.8	445	114	63.5
			229	229	120.0	11.00	11.00	120.0	20.50	5.00	204.0
			279	279	54.4	279	279	54.4	521	127	92.5
			279	279	128.0	11.00	11.00	114.0	20.50	5.00	212.0
		8 x 200	11.00	11.00	58.1	279	279	51.7	521	127	96.2
			279	279	130.0	11.00	11.00	123.0	20.50	5.00	236.0
			279	279	59.0	279	279	56.8	521	127	107.1
			279	279	186.0	12.00	12.00	139.0	24.50	5.50	324.0
		10 x 250	12.00	12.00	84.4	305	305	63.1	622	140	147.0
			305	305	112.0	12.00	12.00	174.0	24.50	5.50	290.0
			305	305	50.8	305	305	78.9	622	140	131.5
			305	305	180.0	12.00	12.00	130.0	24.50	5.50	302.0
		6 x 150	12.00	12.00	81.7	305	305	59.0	622	140	137.0
			305	305	112.0	12.00	12.00	139.0	24.50	5.50	324.0
			305	305	84.4	305	305	63.1	622	140	147.0
			305	305	192.0	12.00	12.00	154.0	24.50	5.50	356.0
		8 x 200	12.00	12.00	87.1	305	305	69.9	622	140	161.5
			305	305	112.0	12.00	12.00	139.0	24.50	5.50	324.0
			305	305	50.8	305	305	78.9	622	140	131.5
			305	305	180.0	12.00	12.00	130.0	24.50	5.50	302.0
		10 x 250	14.00	14.00	108.0	356	356	97.5	686	152	149.7
			356	356	112.0	12.00	12.00	139.0	24.50	5.50	324.0
			356	356	50.8	305	305	78.9	622	140	131.5
			356	305	180.0	12.00	12.00	130.0	24.50	5.50	302.0
		8 x 200	14.00	14.00	109.3	356	356	100.3	686	152	156.9
			356	356	112.0	12.00	12.00	139.0	24.50	5.50	324.0
			356	356	50.8	305	305	78.9	622	140	131.5
			356	305	180.0	12.00	12.00	130.0	24.50	5.50	302.0
		10 x 250	14.00	14.00	114.8	356	356	106.6	686	152	244.9
			356	356	112.0	12.00	12.00	139.0	24.50	5.50	324.0
			356	356	50.8	305	305	78.9	622	140	131.5
			356	305	180.0	12.00	12.00	130.0	24.50	5.50	302.0
		12 x 300	14.00	14.00	121.1	356	356	110.7	686	152	283.5
			356	356	112.0	12.00	12.00	139.0	24.50	5.50	324.0
			356	356	50.8	305	305	78.9	622	140	131.5
			356	305	180.0	12.00	12.00	130.0	24.50	5.50	302.0
		14 x 350	15.00	15.00	130.6	381	381	120.7	762	165	258.6
			381	381	112.0	12.00	12.00	139.0	24.50	5.50	324.0
			381	381	50.8	305	305	78.9	622	140	131.5
			381	305	180.0	12.00	12.00	130.0	24.50	5.50	302.0
		8 x 200	15.00	15.00	142.9	381	381	125.2	762	165	265.4
			381	381	112.0	12.00	12.00	139.0	24.50	5.50	324.0
			381	381	50.8	305	305	78.9	622	140	131.5
			381	305	180.0	12.00	12.00	130.0	24.50	5.50	302.0
		10 x 250	15.00	15.00	144.7	381	381	132.0	762	165	285.8
			381	381	112.0	12.00	12.00	139.0	24.50	5.50	324.0
			381	381	50.8	305	305	78.9	622	140	131.5
			381	305	180.0	12.00	12.00	130.0	24.50	5.50	302.0
		12 x 300	15.00	15.00	149.7	381	381	138.4	762	165	294.8
			381	381	112.0	12.00	12.00	139.0	24.50	5.50	324.0
			381	381	50.8	305	305	78.9	622	140	131.5
			381	305	180.0	12.00	12.00	130.0	24.50	5.50	302.0
		14 x 350	15.00	15.00	341.0	381	381	280.0	30.00	6.50	692.0
			381	381	154.7	381	381	127.0	762	165	313.9

* Contact Victaulic for details.

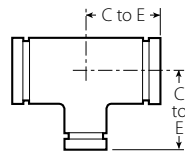
4.3 DIMENSIONS (Continued)

Reducing Fittings

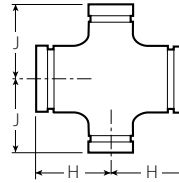
No. 25-C Reducing Tee

No. 35-CR Reducing Cross

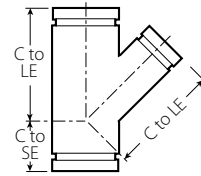
No. 30-CR 45° Reducing Lateral



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		C to EOR	C to EOB	Approx. Weight (Each)	H	J	Approx. Weight (Each)	C to LE	C to SE	Approx. Weight (Each)
DN		inches	inches	lb	inches	inches	lb	inches	inches	lb
		mm	mm	kg	mm	mm	kg	mm	mm	kg
18 450	x 8 200	13.00	15.50	326.0	13.00	15.50	272.0	*	*	*
		330	394	147.9	330	394	123.4			
	10 250	13.00	15.50	332.0	13.00	15.50	277.0	32.00	7.00	765.0
		330	394	150.6	330	394	125.6	813	178	347.0
	12 300	13.00	15.50	339.0	13.00	15.50	291.0	32.00	7.00	800.0
		330	394	153.8	330	394	132.0	813	178	362.9
14 350	16.50	16.50	441.0	16.50	16.50	361.0	32.00	7.00	865.0	
	419	419	200.0	419	419	163.7	813	178	392.4	
16 400	16.50	16.50	453.0	16.50	16.50	367.0	32.00	7.00	895.0	
	419	419	205.5	419	419	166.5	813	178	406.0	
20 500	x 6 150	14.00	17.00	*	—	—	—	—	—	—
		356	432	*	—	—	—	—	—	—
	8 200	14.00	17.00	412.0	14.00	17.00	343.0	—	—	—
		356	432	186.9	356	432	155.6	—	—	—
	10 250	14.00	17.00	419.0	14.00	17.00	343.0	*	*	*
		356	432	190.1	356	432	155.6			
	12 300	14.00	17.00	426.0	14.00	17.00	357.0	35.00	8.00	1000.0
		356	432	193.2	356	432	161.9	889	203	453.6
14 350	14.00	17.00	443.0	14.00	17.00	327.0	35.00	8.00	1062.0	
	356	432	201.0	356	432	148.3	889	203	481.7	
16 400	18.00	18.00	571.0	18.00	18.00	458.0	35.00	8.00	1105.0	
	457	457	259.1	457	457	207.7	889	203	501.2	
18 450	18.00	18.00	584.0	18.00	18.00	469.0	35.00	8.00	1150.0	
	457	457	264.9	457	457	212.7	889	203	521.6	
24 600	x 6 150	15.00	19.00	*	—	—	—	—	—	—
		381	483	*	—	—	—	—	—	—
	8 200	15.00	19.00	*	*	*	*	*	*	*
		381	483	*	*	*	*	*	*	*
	10 250	15.00	19.00	*	*	*	*	*	*	*
		381	483	*	*	*	*	*	*	*
	12 300	15.00	19.00	593.0	15.00	19.00	475.0	*	*	*
		381	483	269.0	381	483	215.5			
	14 350	15.00	19.00	610.0	15.00	19.00	450.0	40.50	9.00	1510.0
		381	483	276.7	381	483	204.1	1029	229	684.9
16 400	15.00	19.00	620.0	15.00	19.00	446.0	40.50	9.00	1580.0	
	381	483	281.2	381	483	202.3	1029	229	716.7	
18 450	22.00	22.00	918.0	22.00	22.00	782.0	40.50	9.00	871.0	
	559	559	416.4	559	559	354.7	1029	229	395.1	
20 500	22.00	22.00	937.0	22.00	22.00	788.0	40.50	9.00	1705.0	
	559	559	425.0	559	559	357.4	1029	229	773.4	

* Contact Victaulic for details.

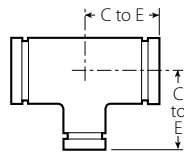
4.3 DIMENSIONS (Continued)

Reducing Fittings

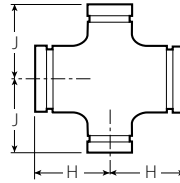
No. 25-C Reducing Tee

No. 35-CR Reducing Cross

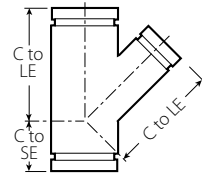
No. 30-CR 45° Reducing Lateral



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
30 750	6 150	18.00	23.00	*	18.00	23.00	—	—	—	—
		457	584	*	457	584	*	*	*	*
	8 200	18.00	23.00	*	18.00	23.00	*	*	*	*
		457	584	*	457	584	*	*	*	*
	10 250	18.00	23.00	*	18.00	23.00	*	*	*	*
		457	584	*	457	584	*	*	*	*
	12 300	18.00	23.00	1175.0	18.00	23.00	888.0	49.00	10.00	2178.0
		457	584	533.0	457	584	402.8	1245	254	987.9
	14 350	18.00	23.00	1250.0	18.00	23.00	853.0	49.00	10.00	2208.0
		457	584	567.0	457	584	386.9	1245	254	1001.5
	16 400	18.00	23.00	1437.0	18.00	23.00	843.0	49.00	10.00	2248.0
457		584	651.0	457	584	382.4	1245	254	1019.7	
18 450	18.00	23.00	1450.0	18.00	23.00	839.0	49.00	10.00	2294.0	
	457	584	657.7	457	584	380.6	1245	254	1040.6	
20 500	18.00	23.00	1462.0	18.00	23.00	835.0	49.00	10.00	2339.0	
	457	584	663.2	457	584	378.8	1245	254	1061.0	
24 600	25.00	25.00	1475.0	25.00	25.00	1304.0	49.00	10.00	2451.0	
	635	635	669.1	635	635	591.5	1245	254	1111.8	
36 900	8 200	20.00	26.00	*	20.00	26.00	*	*	*	*
		508	660	*	508	660	*	*	*	*
	10 250	20.00	26.00	*	20.00	26.00	*	*	*	*
		508	660	*	508	660	*	*	*	*
	12 300	20.00	26.00	*	20.00	26.00	1262.0	*	*	*
		508	660	572.4	508	660	572.4	*	*	*
	14 350	20.00	26.00	*	20.00	26.00	1222.0	54.00	15.25	*
		508	660	554.3	508	660	554.3	1372	387	*
	16 400	20.00	26.00	*	20.00	26.00	1213.0	54.00	15.25	3493.0
		508	660	550.2	508	660	550.2	1372	387	1584.4
	18 450	20.00	26.00	*	20.00	26.00	1204.0	54.00	15.25	3533.0
508		660	546.1	508	660	546.1	1372	387	1602.6	
20 500	20.00	26.00	*	20.00	26.00	1190.0	54.00	15.25	3574.0	
	508	660	539.8	508	660	539.8	1372	387	1621.2	
24 600	20.00	26.00	*	20.00	26.00	1163.0	54.00	15.25	3675.0	
	508	660	527.5	508	660	527.5	1372	387	1667.0	
30 750	28.00	28.00	*	28.00	28.00	1865.0	56.00	15.25	3879.0	
	711	711	846.0	711	711	846.0	1422	387	1759.5	

* Contact Victaulic for details.

4.4 DIMENSIONS

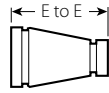
Reducers and Reducing Elbows

No. 50-C Concentric Reducer

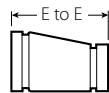
No. 51-C Eccentric Reducer

No. 10-CR 90° Reducing Elbow

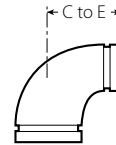
No. 100-CR 90° Long Radius Reducing Elbow



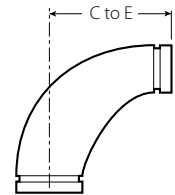
No. 50-C



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. 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	
4 100	x 80	7.00	10.0	7.00	12.0	6.50	17.0	9.00	20.0	
		178	4.5	178	5.4	165	7.7	229	8.1	
6 150	x 80	9.00	15.0	9.00	20.0	8.00	28.5	11.50	36.0	
		229	6.8	229	9.1	203	12.9	292	16.3	
		100	7.5	229	11.3	203	13.4	292	18.1	
8 200	x 80	11.00	33.0	11.00	*	—	—	—	—	
		279	15.0	279	—	—	—	—	—	
		4	28.0	11.00	35.0	9.00	46.5	14.00	60.0	
		279	12.7	279	15.9	229	21.1	356	27.2	
10 250	x	6	34.0	11.00	44.0	9.00	48.5	14.00	71.0	
		279	15.4	279	20.0	229	22.0	356	32.2	
		4	42.0	12.00	54.0	11.00	68.0	16.50	90.0	
		100	19.1	305	24.5	279	30.8	419	40.8	
		6	46.0	12.00	60.0	11.00	77.0	16.50	106.0	
12 300	x	150	20.9	305	27.2	279	34.9	419	48.1	
		8	50.0	12.00	70.0	11.00	88.0	16.50	121.0	
		200	22.7	305	31.8	279	39.9	419	54.9	
		4	60.0	14.00	82.0	12.00	*	*	*	
		100	27.2	356	37.2	305	*	*	*	
14 350	x	6	70.0	14.00	84.0	12.00	110.0	19.00	143.0	
		150	31.8	356	38.1	305	49.9	483	64.9	
		8	74.0	14.00	91.0	12.00	126.0	19.00	163.0	
		200	33.6	356	41.3	305	57.2	483	73.9	
		10	84.0	14.00	110.0	12.00	150.0	19.00	188.0	
		250	38.1	356	49.9	305	68.0	483	85.3	
16 400	x	6	89.0	16.00	104.0	14.00	*	*	*	
		150	40.4	406	47.2	356	*	*	*	
		8	102.0	16.00	121.0	14.00	135.0	21.50	183.0	
		200	46.3	406	54.9	356	61.2	546	83.0	
		10	112.0	16.00	135.0	14.00	170.0	21.50	213.0	
		250	50.8	406	61.2	356	77.1	546	96.6	
16 400	x	12	126.0	16.00	150.0	14.00	195.0	21.50	240.0	
		300	57.4	406	68.0	356	88.5	546	108.9	
		6	11.0	18.00	140.0	—	—	*	*	
		150	49.9	457	63.5	—	—	*	*	
		8	122.0	18.00	160.0	15.00	*	24.00	228.0	
		200	55.3	457	72.6	381	*	610	103.4	
		10	135.0	18.00	168.0	15.00	195.0	24.00	263.0	
250	61.2	457	76.2	381	88.5	610	119.3			
16 400	x	12	146.0	18.00	190.0	15.00	240.0	24.00	295.0	
		300	66.2	457	86.2	381	108.9	610	133.8	
		14	173.0	18.00	210.0	15.00	280.0	24.00	290.0	
350	78.5	457	95.3	381	127.0	610	131.5			

* Contact Victaulic for details.

4.4 DIMENSIONS (Continued)

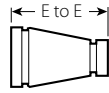
Reducers and Reducing Elbows

No. 50-C Concentric Reducer

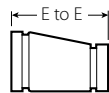
No. 51-C Eccentric Reducer

No. 10-CR 90° Reducing Elbow

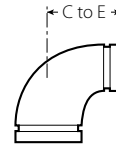
No. 100-CR 90° Long Radius Reducing Elbow



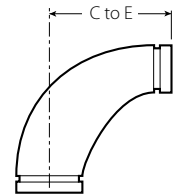
No. 50-C



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	x	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
	10 250	19.00 483	158.0 71.1	19.00 483	215.0 97.5	16.50 419	*	26.50 673	*
	12 300	19.00 483	173.0 78.5	19.00 483	215.0 97.5	16.50 419	305.0 138.3	26.50 673	336.0 152.4
	14 350	19.00 483	200.0 90.7	19.00 483	230.0 104.3	16.50 419	345.0 156.5	26.50 673	355.0 161.0
	16 400	19.00 483	220.0 100.0	19.00 483	275.0 124.7	16.50 419	360.0 163.3	26.50 673	386.0 175.1
20 500	8 200	20.00 508	173.0 78.5	20.00 508	*	—	—	—	—
	10 250	20.00 508	182.0 82.6	20.00 508	215.0 97.5	18.00 457	*	29.00 737	*
	12 300	20.00 508	201.0 91.2	20.00 508	250.0 113.4	18.00 457	365.0 165.6	29.00 737	*
	14 350	20.00 508	230.0 104.3	20.00 508	270.0 122.5	18.00 457	405.0 183.7	29.00 737	*
	16 400	20.00 508	251.0 113.9	20.00 508	300.0 136.1	18.00 457	440.0 199.6	29.00 737	466.0 211.4
	18 450	20.00 508	275.0 124.7	20.00 508	320.0 145.2	18.00 457	485.0 220.0	29.00 737	507.0 230.0
24 600	8 200	24.00 610	257.0 116.6	24.00 610	300.0 136.1	*	*	*	*
	10 250	24.00 610	274.0 124.3	24.00 610	300.0 136.1	*	*	*	*
	12 300	24.00 610	293.0 132.9	24.00 610	395.0 179.2	22.00 559	590.0 267.6	34.00 864	*
	14 300	24.00 610	331.0 150.1	24.00 610	425.0 192.8	22.00 559	630.0 285.8	34.00 864	*
	16 400	24.00 610	358.0 162.4	24.00 610	455.0 206.4	22.00 559	690.0 313.0	34.00 864	658.0 298.5
	18 450	24.00 610	386.0 175.1	24.00 610	465.0 210.9	22.00 559	735.0 333.4	34.00 864	*
	20 500	24.00 610	418.0 189.6	24.00 610	525.0 238.1	22.00 559	815.0 369.7	34.00 864	759.0 344.3

* Contact Victaulic for details.

4.4 DIMENSIONS (Continued)

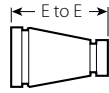
Reducers and Reducing Elbows

No. 50-C Concentric Reducer

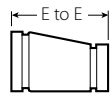
No. 51-C Eccentric Reducer

No. 10-CR 90° Reducing Elbow

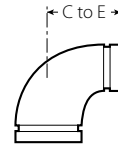
No. 100-CR 90° Long Radius Reducing Elbow



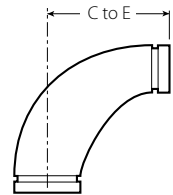
No. 50-C



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	x	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
	10 250	*	*	*	*	*	*	—	—
	12 300	30.00 762	*	30.00 762	*	*	*	—	—
	14 350	30.00 762	*	30.00 762	*	25.50 635	*	—	—
	16 400	30.00 762	*	30.00 762	*	25.50 635	*	41.50 1054	*
	18 450	30.00 762	*	30.00 762	*	25.50 635	*	41.50 1054	*
	20 500	30.00 762	*	30.00 762	*	25.50 635	*	41.50 1054	*
	24 600	30.00 762	*	30.00 762	*	25.50 635	1170.0 530.7	41.50 1054	*
36 900	8 200	*	*	*	*	*	*	—	—
	10 250	*	*	*	*	*	*	—	—
	12 300	*	*	*	*	*	*	—	—
	14 350	36.00 914	*	36.00 914	*	*	*	—	—
	16 400	36.00 914	*	36.00 914	*	*	*	—	—
	18 450	36.00 914	*	36.00 914	*	*	*	—	—
	20 500	36.00 914	1280.0 580.6	36.00 914	*	*	*	49.00 1245	*
	24 600	36.00 914	1370.0 621.4	36.00 914	*	*	*	49.00 1245	*
	30 750	36.00 914	1450.0 657.7	36.00 914	*	*	*	49.00 1245	*

* Contact Victaulic for details.

NOTE

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

4.5 DIMENSIONS

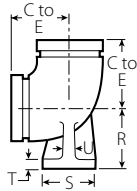
Base Fittings

No. 10-CB Base Elbow

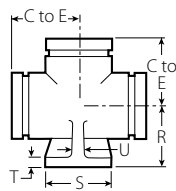
No. 20-CB Base Tee

No. 25-CB Reducing Base Tee

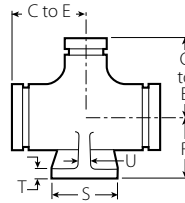
No. 100-CB Long Radius Base Elbow



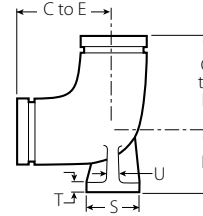
No. 10-CB



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 80	3.960 100.6	4.88 124	0.50 13	0.56 14	5.00 127	3.88 99	19.0 8.6	19.0 8.6	—	+
4 100	4.800 121.9	5.50 140	0.50 13	0.62 16	6.00 152	4.75 121	23.6 10.7	26.0 11.8	—	+
6 150	6.900 175.3	7.00 178	0.62 16	0.69 18	7.00 178	5.50 140	42.0 19.1	50.0 22.7	—	+
8 200	9.050 229.9	8.38 213	0.88 22	0.94 24	9.00 229	7.50 191	75.0 34.0	92.0 41.7	—	+
10 250	11.100 281.9	9.75 248	0.88 22	0.94 24	9.00 229	7.50 191	114.0 51.7	125.0 56.7	—	+
12 300	13.200 335.3	11.25 286	1.00 25	1.00 25	11.00 279	9.50 241	152.0 69.0	183.0 83.0	—	+
14 350	15.300 388.6	12.50 318	1.00 25	1.00 25	11.00 279	9.50 241	—	—	340.0 154.2	+
16 400	17.400 442.0	13.75 349	1.00 25	1.00 25	11.00 279	9.50 241	—	—	425.0 192.8	+
18 450	19.500 495.3	15.00 381	1.12 29	1.12 29	13.50 343	11.75 299	—	—	591.0 268.1	+
20 500	21.600 548.6	16.00 406	1.12 29	1.12 29	13.50 343	11.75 299	—	—	717.0 325.2	+
24 600	25.800 655.3	18.50 470	1.12 29	1.12 29	13.50 343	11.75 299	—	—	1056.0 479.0	+

+ 90° reducing elbows 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

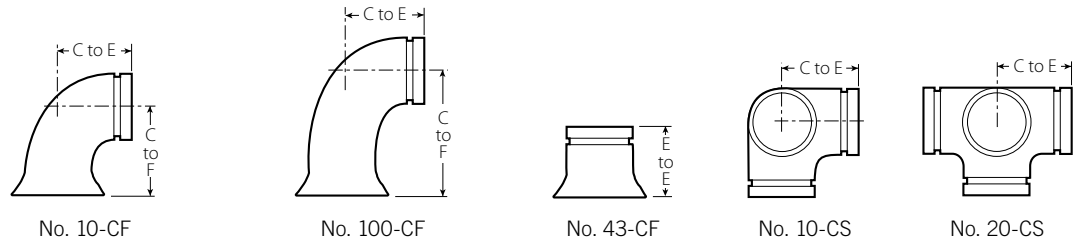
No. 10-CF 90° Flare

No. 100-CF 90° Long Radius Flare

No. 43-CF Straight Flare

No. 10-CS 90° Side Outlet

No. 20-CS Tee Side Outlet



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 inches DN	Actual Outside Diameter inches mm	C to E inches mm	C to F inches mm	Approx. Weight (Each) lb kg	C to E inches mm	C to F 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
3 80	3.960 100.6	5.50 140	9.00 229	18.0 8.2	7.75 197	11.25 286	23.00 10.4	8.00 203	13.0 5.9	5.50 140	13.0 5.9	5.50 140	28.0 12.7
4 100	4.800 121.9	6.50 165	9.50 241	35.0 15.9	9.00 229	12.50 318	42.0 19.1	8.00 203	17.0 7.7	6.50 165	30.0 13.6	6.50 165	42.0 19.1
6 150	6.900 175.3	8.00 203	11.50 292	70.0 31.8	11.50 292	15.00 381	68.0 30.9	8.00 203	23.0 10.4	8.00 203	58.0 26.3	8.00 203	85.0 38.6
8 200	9.050 229.9	9.00 229	13.50 343	120.0 54.4	14.00 356	18.50 470	118.0 53.5	10.00 254	43.0 19.5	9.00 229	90.0 40.8	9.00 229	114.0 51.7
10 250	11.100 281.9	11.00 279	16.50 419	157.0 71.2	16.50 419	22.50 572	188.0 85.3	10.00 254	58.0 26.3	11.00 279	124.0 56.3	11.00 279	219.0 99.3
12 300	13.200 335.3	12.00 305	18.50 470	190.0 86.2	19.00 483	25.50 648	275.0 124.7	12.00 305	100.0 45.4	12.00 305	170.0 77.1	12.00 305	295.0 133.8
14 350	15.300 388.6	14.00 356	21.50 546	235.0 106.6	21.50 546	29.00 737	325.0 147.4	12.00 305	90.0 40.8	14.00 356	*	*	*
16 400	17.400 442.0	15.00 381	23.00 584	300.0 136.1	24.00 610	32.00 813	435.0 197.3	16.00 406	145.0 65.8	15.00 381	*	*	*
18 450	19.500 495.3	16.50 419	25.00 635	391.0 177.4	26.50 673	35.00 889	571.0 259.0	16.00 406	205.0 93.0	16.50 419	*	*	*
20 500	21.600 548.6	18.00 457	27.00 686	496.0 225.0	29.00 737	38.00 965	731.0 331.6	18.00 457	221.0 100.3	18.00 457	*	*	*
24 600	25.800 655.3	22.00 559	32.50 826	808.0 366.5	34.00 864	44.50 1130	1642.0 744.8	18.00 457	293.0 132.9	22.00 559	*	*	*
30 750	32.000 762.0	*	*	*	*	*	*	24.00 610	567.0 257.2	*	*	*	*
36 900	38.300 914.4	*	*	*	*	*	*	24.00 610	736.0 333.0	*	*	*	*

* Contact Victaulic for details.

³ Reducing side outlet 90° Elbows, Tees, and Crosses 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, 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.

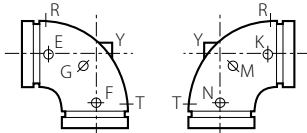
Failure to follow these instructions could result in death or serious personal injury and property damage.

7.0 REFERENCE MATERIALS

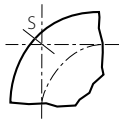
Tapped Fittings

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.

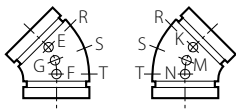
Elbows



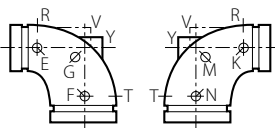
90° ELBOW – STRAIGHT SIZE



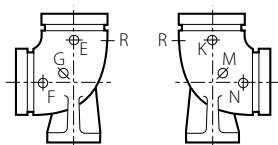
90° ELBOW



45° ELBOW BASE FITTINGS

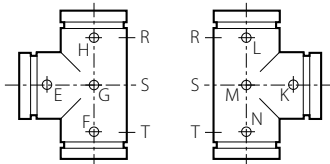


90° ELBOW REDUCING SIZES

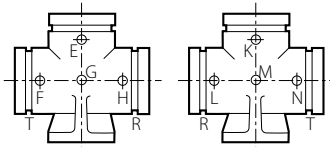


90° BASE ELBOW – STRAIGHT & REDUCING

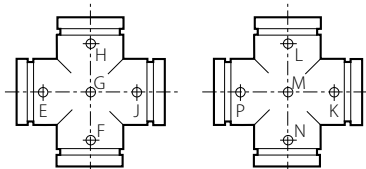
Tees, Crosses, Wyes, and Laterals



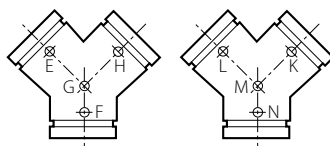
TEE – STRAIGHT SIZES



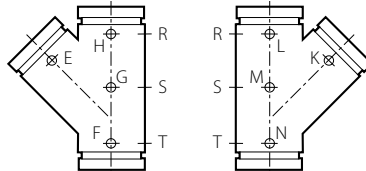
BASE TEE



CROSS – STRAIGHT SIZE

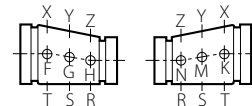


TRUE WYE

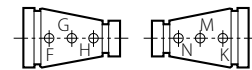


45° LATERAL – STRAIGHT & REDUCING

Reducers



ECCENTRIC REDUCER



CONCENTRIC REDUCER

[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](#)

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

This product shall be manufactured by Victaulic or to Victaulic specifications. All products to be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.

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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