

Ductile Iron AWWA (Cast) Fittings



AWWA FITTINGS

Victaulic fittings for AWWA size pipe are supplied with rigid radius grooves in accordance with ANSI/AWWA C-606. 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.

While most requirements are specified “black” or non-coated, fittings can be supplied with an alkyd-phenolic primer, or bituminous coating. Coal tar epoxy and other coatings are also available. The standard black asphalt coating used on our 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. 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.

Fittings are rated for working pressures to 350psi/2400kPa (ductile iron) in 3 – 12”/80 – 300mm sizes and to 250psi/1725kPa (gray iron) in sizes 3 – 12”/80 – 300mm, and to 250psi/1725kPa (ductile iron), or 150psi/1035kPa (gray iron) for 14”/350mm and larger. Victaulic fittings shown have an end-to-end dimension tolerance of ±1/8” in all sizes and styles.

CAST FITTINGS – TAPPED

Victaulic can supply tapped fittings on order to ANSI B16.1 dimension locations. Specify fitting size, tap location by letter on order.

BASE FITTINGS

Grooved end base 90° elbows and base tees are available with dimensions to ANSI B16.1.

MATERIAL SPECIFICATIONS

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.

* Coatings are applied per manufacturer’s recommended mils.

JOB/OWNER

System No. _____
 Location _____

CONTRACTOR

Submitted By _____
 Date _____

ENGINEER

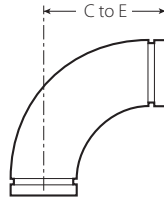
Spec Sect _____ Para _____
 Approved _____
 Date _____

Ductile Iron AWWA (Cast) Fittings

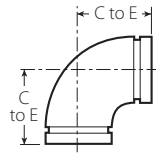
DIMENSIONS

Elbows

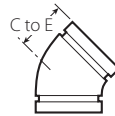
- NO. 100-C** 90° Long Radius Elbow
- NO. 10-C** 90° Elbow
- NO. 11-C** 45° Elbow
- NO. 12-C** 22½° Elbow
- NO. 13-C** 11¼° Elbow



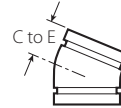
NO. 100-C



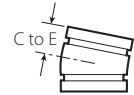
NO. 10-C



NO. 11-C



NO. 12-C



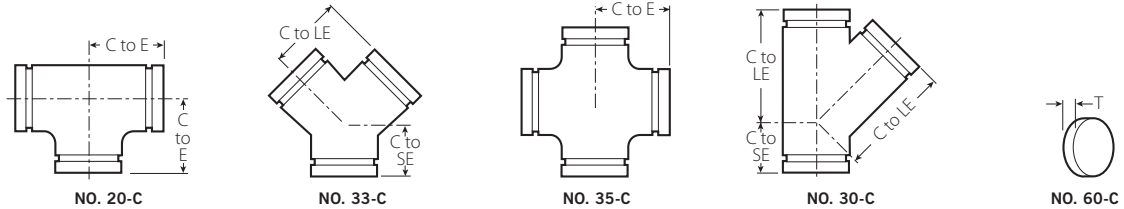
NO. 13-C

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 Size Inches/ mm	Actual Outside Dia. Inches mm	C to E Inches mm	Approx. Weight Each Lbs. kg	C to E Inches mm	Approx. Weight Each Lbs. kg	C to E Inches mm	Approx. Weight Each Lbs. kg	C to E Inches mm	Approx. Weight Each Lbs. kg	C to E Inches mm	Approx. Weight Each Lbs. 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

Ductile Iron AWWA (Cast) Fittings

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

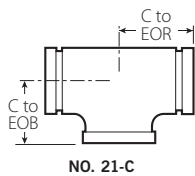


Size		No. 20-C Tee			No. 33-C True Wye			No. 35-C Cross		No. 30-C 45° Lateral			No. 60-C Cap†	
Nominal Size Inches/mm	Actual Outside Dia. Inches/mm	C to E Inches/mm	Approx. Wgt. Each Lbs./kg	C to LE Inches/mm	C to SE Inches/mm	Approx. Wgt. Each Lbs./kg	C to E Inches/mm	Approx. Wgt. Each Lbs./kg	C to LE Inches/mm	C to SE Inches/mm	Approx. Wgt. Each Lbs./kg	T Thickness Inches/mm	Approx. Wgt. Each Lbs./kg	
3 80	3.960 100.6	5.50 140	14.2 6.4	5.50 140	3.00 76	25.00 635	5.50 140	24.0 10.9	10.00 254	3.00 76	28.0 12.7	1.22 31	3.0 1.4	
4 100	4.800 121.9	6.50 165	19.0 8.6	6.50 165	3.00 76	55.0 25.0	6.50 165	40.0 18.1	12.00 305	3.00 76	38.4 12.7	1.16 29	5.0 2.3	
6 150	6.900 175.3	8.00 203	34.0 15.4	8.00 203	3.50 89	90.0 40.8	8.00 203	71.0 32.2	14.50 368	3.50 89	67.0 30.4	1.16 29	9.0 4.1	
8 200	9.050 229.9	9.00 229	59.0 26.8	9.00 229	4.50 114	140.0 63.5	9.00 229	106.0 48.1	17.50 445	4.50 114	120.0 54.4	1.34 34	16.0 7.3	
10 250	11.100 281.9	11.00 279	111.0 50.4	11.00 279	5.00 127	220.0 99.8	11.00 279	225.0 102.1	20.50 521	5.00 127	215.0 97.5	1.53 39	37.2 16.9	
12 300	13.200 335.3	12.00 305	136.0 61.7	12.00 305	5.50 140	315.0 142.9	12.00 305	310.0 140.6	24.50 622	5.50 140	346.0 157.0	1.53 39	52.0 23.6	
14 350	15.300 388.6	14.00 356	262.0 118.8	14.00 356	6.00 152	+	14.00 356	307.0 139.3	27.00 686	6.00 152	492.0 223.2	2.75* 70	55.0 25.0	
16 400	17.400 442.0	15.00 381	304.0 137.9	15.00 381	6.50 165	+	15.00 381	426.0 193.2	30.00 762	6.50 165	696.0 315.7	2.75* 70	68.0 30.9	
18 450	19.500 495.3	16.50 419	408.0 185.1	16.50 419	7.00 178	+	16.50 419	567.0 254.9	32.00 813	7.00 178	870.0 394.6	2.75* 70	90.0 40.8	
20 500	21.600 548.6	18.00 457	552.0 250.4	18.00 457	8.00 203	+	18.00 457	717.0 325.2	35.00 889	8.00 203	1103.0 500.3	2.75* 70	110.0 50.0	
24 600	25.800 655.3	22.00 559	980.0 444.5	22.00 559	9.00 229	+	22.00 559	1177.0 533.9	40.50 1029	9.00 229	1746.0 792.0	2.75* 70	165.0 74.8	
30 750	32.000 762.0	25.00 635	1552.0 704.0	25.00 635	10.00 254	+	25.00 635	1366.0 619.6	49.00 1245	10.00 254	3280.0 1487.8	4.00* 102	300.0 136.1	
36 900	38.300 914.4	28.00 711	2050.0 929.9	28.00 711	15.00 381	+	28.00 711	1885.0 855.0	56.00 1422	15.25 387	5020.0 2277.1	4.00* 102	536.0 243.1	

* Dish caps. + Contact Victaulic for details.
 † Caps from 1/2 – 3”/15 – 80mm tap sizes.

Bullhead Tee

NO. 21-C



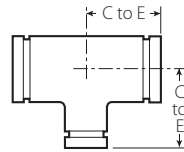
Size		Dimensions – Inches/mm		Approx. Weight Each
Nominal Size Inches/mm		C to EOR	C to EOB	Lbs./kg
4 100	4 100 × 6 150	+	+	47.0 21.3
6 150	6 150 × 8 200	8.00 203	8.00 203	79.0 35.8
8 200	8 200 × 10 250	11.00 279	11.00 279	164.0 74.4
10 250	10 250 × 12 300	+	+	226.0 102.5

+ Contact Victaulic for details.

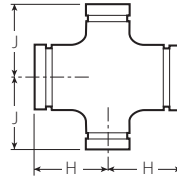
Ductile Iron AWWA (Cast) Fittings

Reducing Fittings

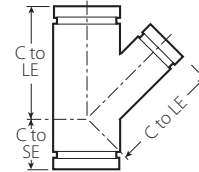
- NO. 25-C** Reducing Tee
- NO. 35-CR** Reducing Cross
- NO. 30-CR** 45° Reducing Lateral



NO. 25-C



NO. 35-CR



NO. 30-CR

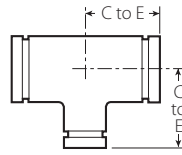
Size	No. 25-C Reducing Tee			No. 35-CR Reducing Cross			No. 30-CR 45° Reducing Lateral				
	Nominal Size Inches/mm	C to EOR Inches mm	C to EOB Inches mm	Approx. Weight Each Lbs. kg	H Inches mm	J Inches mm	Approx. Weight Each Lbs. kg	C to LE Inches mm	C to SE Inches mm	Approx. Weight Each Lbs. kg	
4 100	3 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 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	
	4 100	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 80	9.00	9.00	+	—	—	—	—	—	—	
		229	229								
		4 100	9.00	9.00	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	
6 150	6 150	9.00	9.00	80.0	9.00	9.00	59.0	17.50	4.50	140.0	
		229	229	36.3	229	229	26.8	445	114	63.5	
		229	229								
10 250	4 100	11.00	11.00	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								
6 150	6 150	11.00	11.00	128.0	11.00	11.00	114.0	20.50	5.00	212.0	
		279	279	58.1	279	279	51.7	521	127	96.2	
		279	279								
8 200	8 200	11.00	11.00	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								
12 300	4 100	12.00	12.00	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								
		6 150	12.00	12.00	180.0	12.00	12.00	130.0	24.50	5.50	302.0
		305	305	81.7	305	305	59.0	622	140	137.0	
8 200	8 200	12.00	12.00	186.0	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								
10 250	10 250	12.00	12.00	192.0	12.00	12.00	154.0	24.50	5.50	356.0	
		305	305	87.1	305	305	69.9	622	140	161.5	
		305	305								
14 350	6 150	14.00	14.00	238.0	14.00	14.00	215.0	27.00	6.00	330.0	
		356	356	108.0	356	356	97.5	686	152	149.7	
		356	356								
		8 200	14.00	14.00	241.0	14.00	14.00	221.0	27.00	6.00	346.0
		356	356	109.3	356	356	100.3	686	152	156.9	
10 250	10 250	14.00	14.00	258.0	14.00	14.00	235.0	27.00	6.00	540.0	
		356	356	114.8	356	356	106.6	686	152	244.9	
		356	356								
12 300	12 300	14.00	14.00	267.0	14.00	14.00	244.0	27.00	6.00	625.0	
		356	356	121.1	356	356	110.7	686	152	283.5	
		356	356								
16 400	6 150	15.00	15.00	288.0	15.00	15.00	266.0	30.00	6.50	570.0	
		381	381	130.6	381	381	120.7	762	165	258.6	
		381	381								
		8 200	15.00	15.00	315.0	15.00	15.00	276.0	30.00	6.50	585.0
				381	381	142.9	381	381	125.2	762	165
10 250	10 250	15.00	15.00	319.0	15.00	15.00	291.0	30.00	6.50	630.0	
		381	381	144.7	381	381	132.0	762	165	285.8	
		381	381								
12 300	12 300	15.00	15.00	330.0	15.00	15.00	305.0	30.00	6.50	650.0	
		381	381	149.7	381	381	138.4	762	165	294.8	
14 350	14 350	15.00	15.00	341.0	15.00	15.00	280.0	30.00	6.50	692.0	
		381	381	154.7	381	381	127.0	762	165	313.9	

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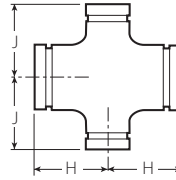
Ductile Iron AWWA (Cast) Fittings

Reducing Fittings

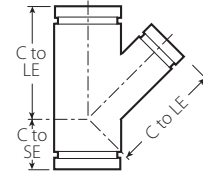
- NO. 25-C** Reducing Tee
- NO. 35-CR** Reducing Cross
- NO. 30-CR** 45° Reducing Lateral



NO. 25-C



NO. 35-CR



NO. 30-CR

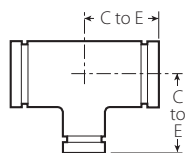
Size		No. 25-C Reducing Tee			No. 35-CR Reducing Cross			No. 30-CR 45° Reducing Lateral		
Nominal Size Inches/mm		C to EOR Inches mm	C to EOB Inches mm	Approx. Weight Each Lbs. kg	H Inches mm	J Inches mm	Approx. Weight Each Lbs. kg	C to LE Inches mm	C to SE Inches mm	Approx. Weight Each Lbs. kg
18 450	8 200	13.00 330	15.50 394	326.0 147.9	13.00 330	15.50 394	272.0 123.4	+	+	+
	10 250	13.00 330	15.50 394	332.0 150.6	13.00 330	15.50 394	277.0 125.6	32.00 813	7.00 178	765.0 347.0
	12 300	13.00 330	15.50 394	339.0 153.8	13.00 330	15.50 394	291.0 132.0	32.00 813	7.00 178	800.0 362.9
	14 350	16.50 419	16.50 419	441.0 200.0	16.50 419	16.50 419	361.0 163.7	32.00 813	7.00 178	865.0 392.4
	16 400	16.50 419	16.50 419	453.0 205.5	16.50 419	16.50 419	367.0 166.5	32.00 813	7.00 178	895.0 406.0
20 500	6 150	14.00 356	17.00 432	+ —	—	—	—	—	—	—
	8 200	14.00 356	17.00 432	412.0 186.9	14.00 356	17.00 432	343.0 155.6	—	—	—
	10 250	14.00 356	17.00 432	419.0 190.1	14.00 356	17.00 432	343.0 155.6	+	+	+
	12 300	14.00 356	17.00 432	426.0 193.2	14.00 356	17.00 432	357.0 161.9	35.00 889	8.00 203	1000.0 453.6
	14 350	14.00 356	17.00 432	443.0 201.0	14.00 356	17.00 432	327.0 148.3	35.00 889	8.00 203	1062.0 481.7
	16 400	18.00 457	18.00 457	571.0 259.0	18.00 457	18.00 457	458.0 207.7	35.00 889	8.00 203	1105.0 501.2
	18 450	18.00 457	18.00 457	584.0 264.9	18.00 457	18.00 457	469.0 212.7	35.00 889	8.00 203	1150.0 521.6
24 600	6 150	15.00 381	19.00 483	+ —	—	—	—	—	—	—
	8 200	15.00 381	19.00 483	+ —	+	+	+	+	+	+
	10 250	15.00 381	19.00 483	+ —	+	+	+	+	+	+
	12 300	15.00 381	19.00 483	593.0 269.0	15.00 381	19.00 483	475.0 215.5	+	+	+
	14 350	15.00 381	19.00 483	610.0 276.7	15.00 381	19.00 483	450.0 204.1	40.50 1029	9.00 229	1510.0 684.9
	16 400	15.00 381	19.00 483	620.0 281.2	15.00 381	19.00 483	446.0 202.3	40.50 1029	9.00 229	1580.0 716.7
	18 450	22.00 559	22.00 559	918.0 416.4	22.00 559	22.00 559	782.0 354.7	40.50 1029	9.00 229	871.0 395.1
	20 500	22.00 559	22.00 559	937.0 425.0	22.00 559	22.00 559	788.0 357.4	40.50 1029	9.00 229	1705.0 773.4

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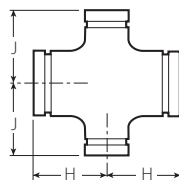
Ductile Iron AWWA (Cast) Fittings

Reducing Fittings

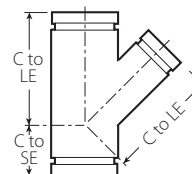
- NO. 25-C** Reducing Tee
- NO. 35-CR** Reducing Cross
- NO. 30-CR** 45° Reducing Lateral



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 Size Inches/mm		C to EOR Inches/mm	C to EOB Inches/mm	Approx. Weight Each Lbs./kg	H Inches/mm	J Inches/mm	Approx. Weight Each Lbs./kg	C to LE Inches/mm	C to SE Inches/mm	Approx. Weight Each Lbs./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		508	660	572.4			
	14 350	20.00	26.00	+	20.00	26.00	1222.0	54.00	15.25	+
		508	660		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		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		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		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		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		711	711	846.0	1422	387	1759.5	

+ Contact Victaulic for details.

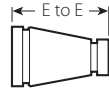
IMPORTANT NOTE:

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

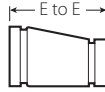
Ductile Iron AWWA (Cast) Fittings

Reducers and Reducing Elbows

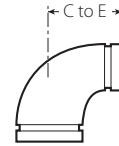
- NO. 50-C** Concentric Reducer
- NO. 51-C** Eccentric Reducer
- NO. 10-CR** 90° Reducing Elbow
- NO. 100-CR** 90° Long Radius Reducing Elbow



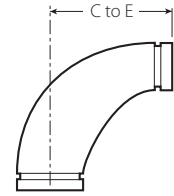
NO. 50-C



NO. 51-C



NO. 10-CR



NO. 100-CR

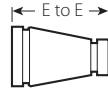
Size	No. 50-C Concentric Reducer		No. 51-C Eccentric Reducer		No. 10-CR 90° Reducing Elbow		No. 100-CR 90° Long Radius Red. El.				
	Nominal Size Inches/mm	E to E Inches/mm	Approx. Weight Each Lbs./kg	E to E Inches/mm	Approx. Weight Each Lbs./kg	C to E Inches/mm	Approx. Weight Each Lbs./kg	C to E Inches/mm	Approx. Weight Each Lbs./kg		
4 × 3	100	80	7.00 178	10.00 4.5	7.00 178	12.00 5.4	6.50 165	17.00 7.7	9.00 229	20.00 8.1	
	6 × 3	150	80	9.00 229	15.00 6.8	9.00 229	20.00 9.1	8.00 203	28.50 12.9	11.50 292	36.00 16.3
4 × 4		100	100	9.00 229	16.50 7.5	9.00 229	25.00 11.3	8.00 203	29.60 13.4	11.50 292	40.00 18.1
	8 × 3	200	80	11.00 279	33.00 15.0	11.00 279	+	—	—	—	—
4 × 4		100	100	11.00 279	28.00 12.7	11.00 279	35.00 15.9	9.00 229	46.50 21.1	14.00 356	60.00 27.2
		6 × 6	150	279	34.00 15.4	11.00 279	44.00 20.0	9.00 229	48.50 22.0	14.00 356	71.00 32.2
10 × 4	250	100	12.00 305	42.00 19.1	12.00 305	54.00 24.5	11.00 279	68.00 30.8	16.50 419	90.00 40.8	
	6 × 6	150	305	46.00 20.9	12.00 305	60.00 27.2	11.00 279	77.00 34.9	16.50 419	106.00 48.1	
		8 × 8	200	305	50.00 22.7	12.00 305	70.00 31.8	11.00 279	88.00 39.9	16.50 419	121.00 54.9
12 × 4	300	100	14.00 356	60.00 27.2	14.00 356	82.00 37.2	12.00 305	+	+	+	
	6 × 6	150	356	70.00 31.8	14.00 356	84.00 38.1	12.00 305	110.00 49.9	19.00 483	143.00 64.9	
		8 × 8	200	356	74.00 33.6	14.00 356	91.00 41.3	12.00 305	126.00 57.2	19.00 483	163.00 73.9
	10 × 10		250	356	84.00 38.1	14.00 356	110.00 49.9	12.00 305	150.00 68.0	19.00 483	188.00 85.3
14 × 6	350	150	16.00 406	89.00 40.4	16.00 406	104.00 47.2	14.00 356	+	+	+	
	8 × 8	200	406	102.00 46.3	16.00 406	121.00 54.9	14.00 356	135.00 61.2	21.50 546	183.00 83.0	
		10 × 10	250	406	112.00 50.8	16.00 406	135.00 61.2	14.00 356	170.00 77.1	21.50 546	213.00 96.6
	12 × 12		300	406	126.00 57.4	16.00 406	150.00 68.0	14.00 356	195.00 88.5	21.50 546	240.00 108.9
16 × 6	400	150	18.00 457	11.00 49.9	18.00 457	140.00 63.5	—	—	+	+	
	8 × 8	200	457	122.00 55.3	18.00 457	160.00 72.6	15.00 381	+	24.00 610	228.00 103.4	
		10 × 10	250	457	135.00 61.2	18.00 457	168.00 76.2	15.00 381	195.00 88.5	24.00 610	263.00 119.3
	12 × 12		300	457	146.00 66.2	18.00 457	190.00 86.2	15.00 381	240.00 108.9	24.00 610	295.00 133.8
	14 × 14	350	457	173.00 78.5	18.00 457	210.00 95.3	15.00 381	280.00 127.0	24.00 610	290.00 131.5	

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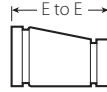
Ductile Iron AWWA (Cast) Fittings

Reducers and Reducing Elbows

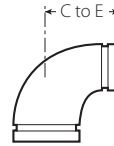
- NO. 50-C** Concentric Reducer
- NO. 51-C** Eccentric Reducer
- NO. 10-CR** 90° Reducing Elbow
- NO. 100-CR** 90° Long Radius Reducing Elbow



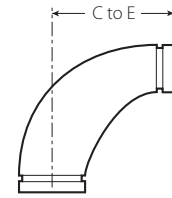
NO. 50-C



NO. 51-C



NO. 10-CR



NO. 100-CR

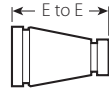
Size		No. 50-C Concentric Reducer		No. 51-C Eccentric Reducer		No. 10-CR 90° Reducing Elbow		No. 100-CR 90° Long Radius Red. El.	
Nominal Size Inches/mm		E to E Inches/mm	Approx. Weight Each Lbs./kg	E to E Inches/mm	Approx. Weight Each Lbs./kg	C to E Inches/mm	Approx. Weight Each Lbs./kg	C to E Inches/mm	Approx. Weight Each Lbs./kg
18 450	8 200	19.00	148.0	19.00	180.0	16.50	+	—	—
		483	67.1	483	81.6	419	+	—	—
	10 250	19.00	158.0	19.00	215.0	16.50	+	26.50	+
		483	71.1	483	97.5	419	+	673	+
	12 300	19.00	173.0	19.00	215.0	16.50	305.0	26.50	336.0
	483	78.5	483	97.5	419	138.3	673	152.4	
14 350	19.00	200.0	19.00	230.0	16.50	345.0	26.50	355.0	
483	90.7	483	104.3	419	156.5	673	161.0		
16 400	19.00	220.0	19.00	275.0	16.50	360.0	26.50	386.0	
483	100.0	483	124.7	419	163.3	673	175.1		
20 500	8 200	20.00	173.0	20.00	+	—	—	—	—
		508	78.5	508	+	—	—	—	—
	10 250	20.00	182.0	20.00	215.0	18.00	+	29.00	+
		508	82.6	508	97.5	457	+	737	+
	12 300	20.00	201.0	20.00	250.0	18.00	365.0	29.00	+
	508	91.2	508	113.4	457	165.6	737	+	
14 350	20.00	230.0	20.00	270.0	18.00	405.0	29.00	+	
508	104.3	508	122.5	457	183.7	737	+		
16 400	20.00	251.0	20.00	300.0	18.00	440.0	29.00	466.0	
508	113.9	508	136.1	457	199.6	737	211.4		
18 450	20.00	275.0	20.00	320.0	18.00	485.0	29.00	507.0	
508	124.7	508	145.2	457	220.0	737	230.0		
24 600	8 200	24.00	257.0	24.00	300.0	+	+	+	+
		610	116.6	610	136.1	+	+	+	+
	10 250	24.00	274.0	24.00	300.0	+	+	+	+
		610	124.3	610	136.1	+	+	+	+
	12 300	24.00	293.0	24.00	395.0	22.00	590.0	34.00	+
		610	132.9	610	179.2	559	267.6	864	+
	14 350	24.00	331.0	24.00	425.0	22.00	630.0	34.00	+
		610	150.1	610	192.8	559	285.8	864	+
16 400	24.00	358.0	24.00	455.0	22.00	690.0	34.00	658.0	
610	162.4	610	206.4	559	313.0	864	298.5		
18 450	24.00	386.0	24.00	465.0	22.00	735.0	34.00	+	
610	175.1	610	210.9	559	333.4	864	+		
20 500	24.00	418.0	24.00	525.0	22.00	815.0	34.00	759.0	
610	189.6	610	238.1	559	369.7	864	344.3		

TABLE CONTINUED ON NEXT PAGE

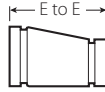
Ductile Iron AWWA (Cast) Fittings

Reducers and Reducing Elbows

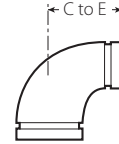
- NO. 50-C** Concentric Reducer
- NO. 51-C** Eccentric Reducer
- NO. 10-CR** 90° Reducing Elbow
- NO. 100-CR** 90° Long Radius Reducing Elbow



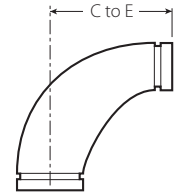
NO. 50-C



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 Red. El.		
	Nominal Size Inches/mm	E to E Inches/mm	Approx. Weight Each Lbs./kg	E to E Inches/mm	Approx. Weight Each Lbs./kg	C to E Inches/mm	Approx. Weight Each Lbs./kg	C to E Inches/mm	Approx. Weight Each Lbs./kg
30 750 ×	8 200	+	+	+	+	+	+	—	—
	10 250	+	+	+	+	+	+	—	—
	12 300	30.00 762	+	30.00 762	+	+	+	—	—
	14 350	30.00 762	+	30.00 762	+	25.00 635.0	+	—	—
	16 400	30.00 762	+	30.00 762	+	25.00 635.0	+	41.50 1054	+
	18 450	30.00 762	+	30.00 762	+	25.00 635.0	+	41.50 1054	+
	20 500	30.00 762	+	30.00 762	+	25.00 635.0	+	41.50 1054	+
	24 600	30.00 762	+	30.00 762	+	25.00 635.0	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.

IMPORTANT NOTE:

For 30"/750mm sizes and larger contact Victaulic for details.

Ductile Iron AWWA (Cast) Fittings

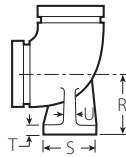
Base Fittings

NO. 10-CB Base Elbow

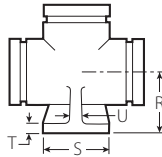
NO. 20-CB Base Tee

NO. 25-CB Reducing Base Tee

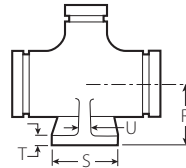
NO. 100-CB Long Radius Base Elbow



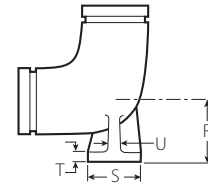
NO. 10-CB



NO. 20-CB



NO. 25-CB



NO. 100-CB



ROUND BASE

Size		Dimensions – Inches/mm					Approx. Weight Each			
Nominal Size Inches/ mm	Actual Outside Dia. Inches mm	R	U	T	S	W	No. 10-CB Base Elbow Lbs. kg	No. 20-CB Base Tee Lbs. kg	No. 100-CB LR Base Elbow Lbs. kg	No. 25-CB Red. Base Tee Lbs. 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.

IMPORTANT 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.

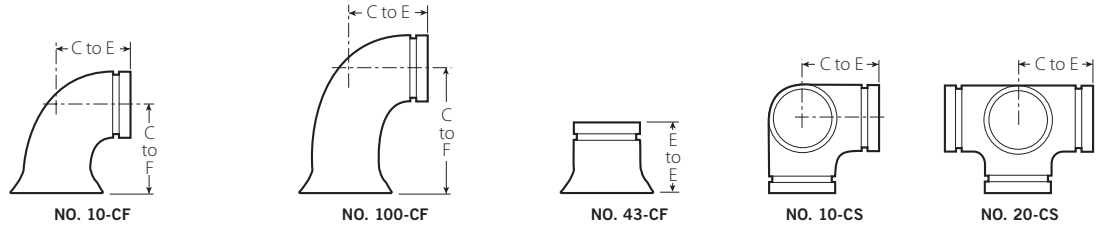
Side base fittings are available. Contact Victaulic for details.

For Center to End dimensions, refer to corresponding fitting without the base.

Ductile Iron AWWA (Cast) Fittings

Flared and Outlet Fittings

- 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		No. 20-CS* Tee Side Outlet	
Nominal Size Inches/ mm	Actual Outside Dia. Inches mm	C to E Inches mm	C to F Inches mm	Approx. Wgt. Each Lbs. kg	C to E Inches mm	C to F Inches mm	Approx. Wgt. Each Lbs. kg	E to E Inches mm	Approx. Wgt. Each Lbs. kg	C to E Inches mm	Approx. Wgt. Each Lbs. kg	C to E Inches mm	Approx. Wgt. Each Lbs. kg
3 80	3.960 100.6	5.50 140	9.00 229	18.0 8.2	7.75 197	11.25 286	23.0 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	496.0 255.0	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	736.0 333.9	+	+	+	+

+ Contact Victaulic for details.

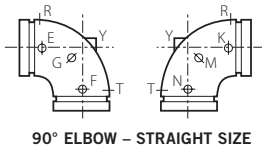
* Reducing side outlet 90° Elbows, Tees, and Crosses are available. Contact Victaulic for details.

Ductile Iron AWWA (Cast) Fittings

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.

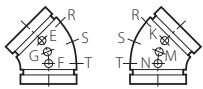
Elbows



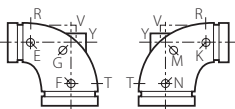
90° ELBOW – STRAIGHT SIZE



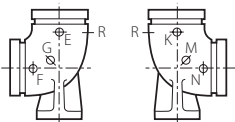
90° ELBOW



45° ELBOW BASE FITTINGS

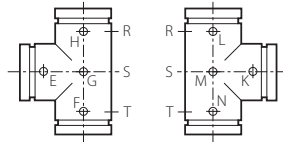


90° ELBOW REDUCING SIZES

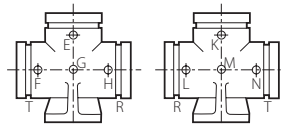


90° BASE ELBOW – STRAIGHT & REDUCING

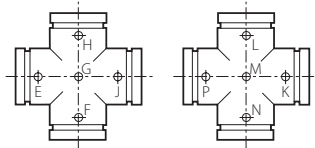
Tees, Crosses, Wyes, and Laterals



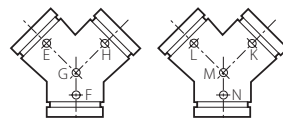
TEE – STRAIGHT SIZES



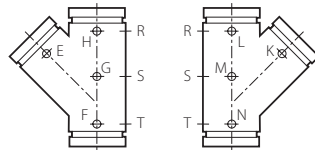
BASE TEE



CROSS – STRAIGHT SIZE

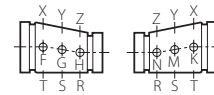


TRUE WYE

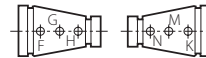


45° LATERAL – STRAIGHT & REDUCING

Reducers



ECCENTRIC REDUCER



CONCENTRIC REDUCER

WARRANTY

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

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.

