

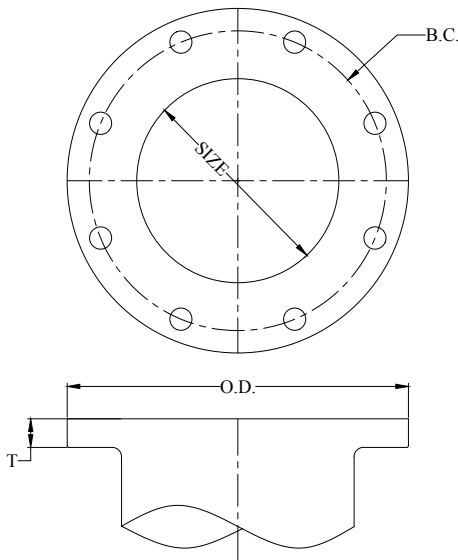
**C110 DUCTILE IRON FULL BODY FITTINGS**

**SAMPLE SPECIFICATIONS**

(Current ANSI/AWWA revisions apply)

Flanged fittings, 2” through 64”, shall be manufactured of ductile iron in accordance with all applicable terms and provisions of standards ANSI/AWWA C110/A21.10. Flange surfaces shall be faced and drilled in accordance with ANSI Class 125, B16.1. All ductile iron flanged fittings shall be rated for water pressure of 250 psi. Flanged ductile iron fittings in 24” (610 mm) and smaller sizes may be rated for 350 psi (2,413 kPa) with the use of special gaskets .

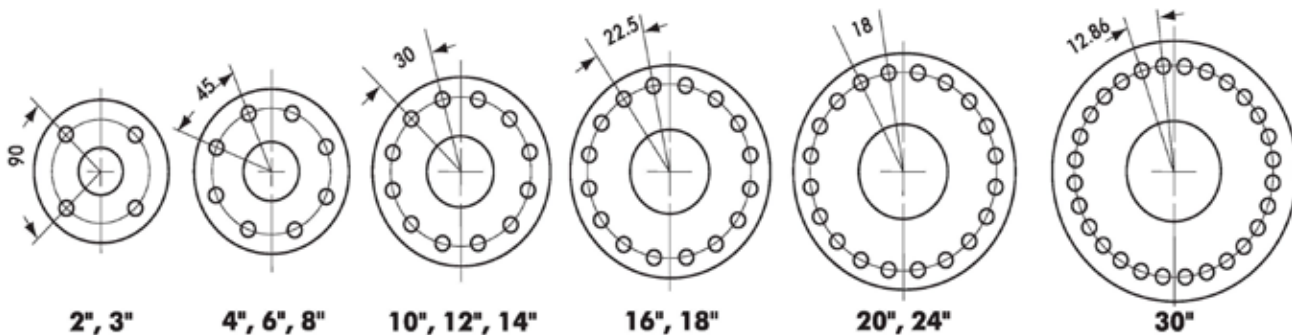
**NOTE:** Fittings are available prime coated, bare or epoxy coated. All coated fittings meet requirements of NSF-61, NSF-372 and Annex G. Interiors of fittings shall be lined and seal coated in accordance with ANSI/AWWA C104/A21.4. Installation of fittings shall be per AWWA C110.



ANSI/AWWA C110 Class 125 Flange Fittings

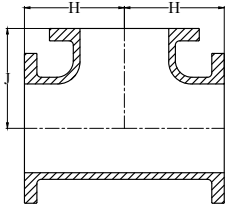
FLANGE DETAILS						
Nominal Pipe Size Inch	Flange O.D.	B.C. Diameter	Flange Thickness T	Bolt Hole Diameter	Number of Bolts	Bolt Dia. and Lengths
2	6.00	4.75	0.62	0.750	4.00	5/8 x 2 1/4
3	7.50	6.00	0.75	0.750	4.00	5/8 x 2 1/2
4	9.00	7.50	0.94	0.750	8.00	5/8 x 3
6	11.00	9.50	1.00	0.880	8.00	3/4 x 3 1/2
8	13.50	11.75	1.12	0.880	8.00	3/4 x 3 1/2
10	16.00	14.25	1.19	1.000	12.00	7/8 x 4
12	19.00	17.00	1.25	1.000	12.00	7/8 x 4
14	21.00	18.75	1.38	1.130	12.00	1 x 4 1/2
16	23.50	21.25	1.44	1.130	16.00	1 x 4 1/2
18	25.00	22.75	1.56	1.250	16.00	1 1/8 x 5
20	27.50	25.00	1.69	1.250	20.00	1 1/8 x 5
24	32.00	29.50	1.88	1.375	20.00	1 1/4 x 5 1/2
30	38.75	36.00	2.12	1.375	28.00	1 1/4 x 6 1/2
36	46.00	42.75	2.38	1.625	32.00	1 1/2 x 7
42	53.00	49.50	2.62	1.625	36.00	1 1/2 x 7 1/2
48	59.50	56.00	2.75	1.625	44.00	1 1/2 x 8
54	66.25	62.75	3.00	2.00	44	1 3/4 x 8 1/2
60	73.00	69.25	3.12	2.00	52	1 3/4 x 9
64	80.00	76.00	3.38	2.00	52	1 3/4 x 9

Contact Tyler Union for 54”–64” flange fitting information.

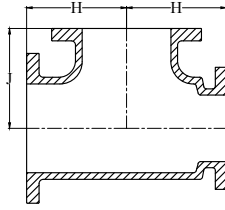


**NOTE:** Drilling templates are in multiples of four so that fittings may be made to face in any quarter. Bolt holes shall straddle the center line.

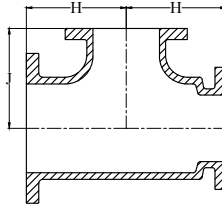
**C110 DUCTILE IRON FULL BODY FITTINGS**



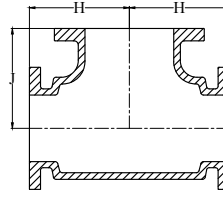
Straight Tees, Reducing on Branch Tees



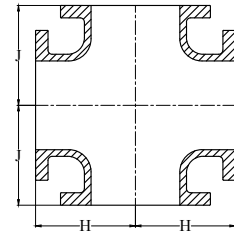
\*Reducing on Run



\*Reducing on Run and Branch



\*Bullhead Tees



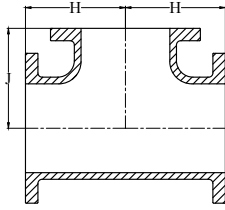
Straight and Reducing Crosses

TEES AND CROSSES									
Sizes					Domestic Weight		Import Weight		
Run	Run	Branch	H	J	Tee	Cross	Tee	Cross	
2	2	2	5.00	4.50	20	—	—	—	
3	3	2	6.00	5.50	35	—	—	—	
3	3	3	6.00	5.50	42	51	40	50	
4	4	2	7.00	5.50	53	—	—	—	
4	4	2	7.00	6.50	55	—	—	—	
4	4	3	7.00	6.50	54	76	60	70	
4	4	4	7.00	6.50	60	—	65	80	
4	4	6	8.00	8.00	88	—	—	—	
*6	4	4	8.00	8.00	85	—	—	—	
6	6	8	9.00	9.00	90	112	85	95	
6	6	4	8.00	8.00	90	141	90	110	
6	6	6	8.00	8.00	98	125	95	120	
*8	6	4	9.00	9.00	130	—	—	—	
*8	6	8	9.00	9.00	154	—	—	—	
8	8	3	9.00	9.00	128	140	—	—	
8	8	4	9.00	9.00	155	155	140	155	
8	8	6	9.00	9.00	148	172	145	165	
8	8	8	9.00	9.00	179	195	155	195	
*8	8	10	11.00	11.00	225	—	—	—	
*8	8	12	12.00	12.00	277	—	—	—	
*†10	6	6	13.00	13.00	278	—	—	—	
*†10	8	6	13.00	13.00	298	—	—	—	
*†10	8	8	13.00	13.00	278	—	—	—	
*†10	8	10	13.00	13.00	325	—	—	—	
10	10	4	11.00	11.00	239	220	205	220	
10	10	6	11.00	11.00	215	242	215	240	
10	10	8	11.00	11.00	254	294	225	265	
10	10	10	11.00	11.00	265	—	270	330	
10	10	12	12.00	12.00	337	—	—	—	
*†12	6	6	14.00	14.00	346	—	—	—	
*†12	6	8	14.00	14.00	362	—	—	—	
*†12	8	6	14.00	14.00	355	—	—	—	
*12	8	8	12.00	12.00	375	—	—	—	
*12	8	12	12.00	12.00	420	—	—	—	
*†12	10	6	14.00	14.00	390	—	—	—	
12	10	8	12.00	12.00	400	—	—	—	
12	10	10	12.00	12.00	420	—	—	—	
12	10	12	12.00	12.00	440	—	—	—	

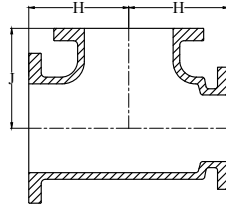
\* Not included in AWWA C110.

† H and J dimensions are two inches longer than straight tees.

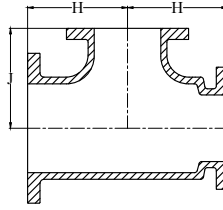
C110 DUCTILE IRON FULL BODY FITTINGS



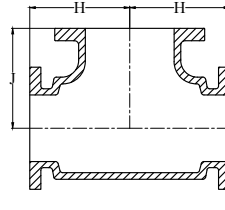
Straight Tees, Reducing on Branch Tees



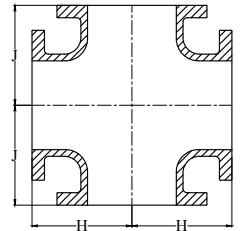
\*Reducing on Run



\*Reducing on Run and Branch



\*Bullhead Tees

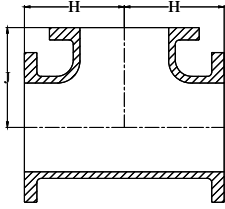


Straight and Reducing Crosses

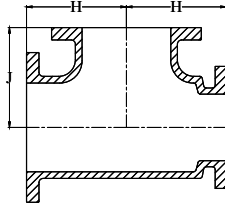
TEES AND CROSSES								
Sizes					Domestic Weight		Import Weight	
Run	Run	Branch	H	J	Tee	Cross	Tee	Cross
12	12	4	12.00	12.00	322	310	290	—
12	12	6	12.00	12.00	297	326	295	—
12	12	8	12.00	12.00	346	351	310	—
12	12	10	12.00	12.00	394	415	360	—
12	12	12	12.00	12.00	369	438	385	—
*14	14	4	14.00	14.00	410	—	—	—
14	14	6	14.00	14.00	420	450	375	—
14	14	8	14.00	14.00	435	475	390	—
14	14	10	14.00	14.00	450	—	400	—
14	14	12	14.00	14.00	470	555	425	—
*14	14	14	14.00	14.00	500	595	435	—
*16	*14	4	15.00	15.00	525	—	—	—
16	*16	6	15.00	15.00	573	565	465	490
16	16	8	15.00	15.00	555	590	475	520
16	16	10	15.00	15.00	565	620	495	555
16	16	12	15.00	15.00	590	665	520	605
16	16	14	15.00	15.00	610	—	530	620
16	16	16	15.00	15.00	635	755	550	665
18	18	6	13.00	13.00	780	—	480	505
18	18	8	13.00	13.00	609	—	495	535
18	18	10	13.00	13.00	585	—	510	560
18	18	12	13.00	13.00	638	706	535	610
18	18	14	16.50	16.50	808	—	630	720
18	18	16	16.50	16.50	760	—	650	765
18	18	18	16.50	16.50	865	915	665	795
20	20	6	14.00	17.00	773	—	610	635
20	20	8	14.00	17.00	720	—	620	665
20	20	10	14.00	17.00	735	—	635	685
20	20	12	14.00	17.00	816	820	660	735
20	20	14	14.00	17.00	770	—	665	745
20	20	16	18.00	18.00	950	1065	810	915
20	20	18	18.00	18.00	965	—	820	945
20	20	20	18.00	18.00	1005	1175	855	1015
24	24	6	15.00	19.00	1089	—	845	875
24	24	8	15.00	19.00	1060	—	860	895
24	24	10	15.00	19.00	1020	—	88	930
24	24	12	15.00	19.00	1125	1100	890	960
24	24	14	15.00	19.00	1050	1125	900	975
24	24	16	15.00	19.00	1070	1160	915	1010
24	24	18	22.00	22.00	1534	—	1220	1365
24	24	20	22.00	22.00	1510	1695	1255	1430
24	24	24	22.00	22.00	1685	1850	1330	1570

\* Not included in AWWA C110.

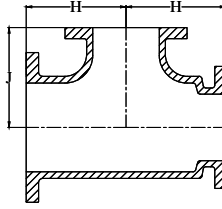
**C110 DUCTILE IRON FULL BODY FITTINGS**



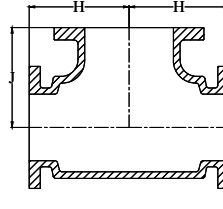
Straight Tees, Reducing on Branch Tees



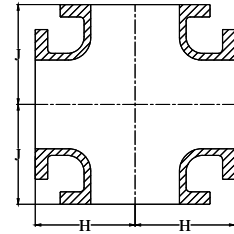
\*Reducing on Run



\*Reducing on Run and Branch



\*Bullhead Tees



Straight and Reducing Crosses

TEES AND CROSSES								
Sizes					Domestic Weight		Import Weight	
Run	Run	Branch	H	J	Tee	Cross	Tee	Cross
30	30	6	18.00	23.00	1725	—	—	—
30	30	8	18.00	23.00	—	—	1490	1565
30	30	10	18.00	23.00	—	—	1490	1565
30	30	12	18.00	23.00	1801	—	1490	1565
30	30	14	18.00	23.00	—	—	1490	1570
30	30	16	18.00	23.00	—	—	1505	1605
30	30	18	18.00	23.00	1852	—	1515	1615
30	30	20	18.00	23.00	—	—	1540	1670
30	30	24	25.00	25.00	2475	2695	2025	2245
30	30	30	25.00	25.00	2615	2985	2150	2500
36	36	12	20.00	26.00	—	—	2170	2240
36	36	14	20.00	26.00	—	—	2175	2240
36	36	16	20.00	26.00	—	—	2185	2270
36	36	18	20.00	26.00	—	—	2190	2280
36	36	20	20.00	26.00	—	—	2210	2325
36	36	24	20.00	26.00	2255	—	2255	2405
36	36	30	28.00	28.00	3000	—	3000	3300
36	36	36	28.00	28.00	3160	6740	3160	3620
42	42	12	23.00	30.00	—	—	3165	3200
42	42	14	23.00	30.00	—	—	3170	3200
42	42	16	23.00	30.00	—	—	3180	3270
42	42	18	23.00	30.00	—	—	3185	3300
42	42	20	23.00	30.00	—	—	3205	3320
42	42	24	23.00	30.00	3245	—	3245	3395
42	42	30	31.00	31.00	4125	—	4125	4375
42	42	36	31.00	31.00	5360	—	5360	5720
42	42	42	31.00	31.00	5580	—	5585	6155
48	48	12	26.00	34.00	—	—	4315	4390
48	48	14	26.00	34.00	—	—	4315	4385
48	48	16	26.00	34.00	—	—	4330	4415
48	48	18	26.00	34.00	—	—	4330	4420
48	48	20	26.00	34.00	—	—	4350	4460
48	48	24	26.00	34.00	4385	—	4385	4535
48	48	30	26.00	34.00	4455	—	4455	4670
48	48	36	34.00	34.00	5555	—	5555	5880
48	48	42	34.00	34.00	7195	—	7195	9630
48	48	48	34.00	34.00	7385	—	7385	8005

\* Not included in AWWA C110.