

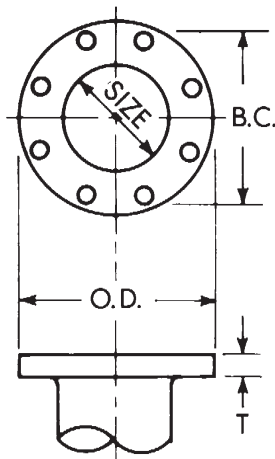


DUCTILE IRON C110 FLANGED FITTINGS

Sizes 3" thru 12" UL Listed for Fire Main Equipment

SAMPLE SPECIFICATION (Current ANSI/AWWA revisions apply)

Flanged fittings, 2" through 48" 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-in. (610 mm) and smaller sizes may be rated for 350 psi (2,413 kPa) with the use of special gaskets. NOTE: Fittings are cement lined and seal coated in accordance with ANSI/AWWA C104/A21.4. Fittings are also 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. Cement mortar lining for ductile iron pipe and fittings for potable water unless otherwise specified. Installation of fittings shall be per AWWA C110.



NOTE: No flange joint material furnished.

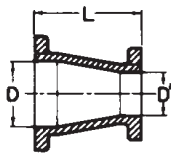
FLANGE DETAILS

Nominal Pipe Size Inch	Flange O.D.	Dia. of Bolt Circle	Flange Thickness T	Bolt Hole Diameter	Number of Bolts	Bolt Dia. and Lengths
2	6	4.75	.62	.75	4	5/8 x 2 1/4
3	7.5	6	.75	.75	4	5/8 x 2 1/2
4	9	7.5	.94	.75	8	5/8 x 3
6	11	9.5	1.00	.875	8	3/4 x 3 1/2
8	13.5	11.75	1.12	.875	8	3/4 x 3 1/2
10	16	14.25	1.19	1.00	12	7/8 x 4
12	19	17	1.25	1.00	12	7/8 x 4
14	21	18.75	1.38	1.125	12	1 x 4 1/2
16	23.5	21.25	1.44	1.125	16	1 x 4 1/2
18	25	22.75	1.56	1.25	16	1 1/8 x 5
20	27.5	25	1.69	1.25	20	1 1/8 x 5
24	32	29.5	1.88	1.375	20	1 1/4 x 5 1/2
30	38.75	36	2.12	1.375	28	1 1/4 x 6 1/2
36	46	42.75	2.38	1.675	32	1 1/2 x 7
42	53	49.50	2.62	1.625	36	1 1/2 x 7 1/2
48	59.50	56.00	2.75	1.625	44	1 1/2 x 8

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.

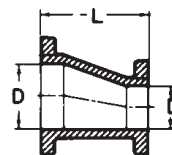
REDUCERS

DUCTILE IRON C110 FLANGED FITTINGS



Concentric Reducer

Size	Dimensions	Wts	Size	Dimensions	Wts
D	D'	L	D	D'	L
3	2	6	17	8	19
4	2	7	23	10	19
4	3	7	29	12	19
6	2	9	30	14	19
6	3	9	44	16	19
6	4	9	46	20	20
6	5	9	56	20	20
8	3	11	61	20	20
8	4	11	63	20	20
8	5	11	70	20	20
8	6	11	75	24	24
10	4	12	98	24	24
10	6	12	107	24	24
10	8	12	116	24	24
12	4	14	119	24	20
12	6	14	130	30	16
12	8	14	152	30	18
12	10	14	178	30	20
14	6	16	165	30	24
14	8	16	185	42	24
14	10	16	205	42	30
14	12	16	235	42	36
16	6	18	210	48	30
16	8	18	230	48	36
16	10	18	255	48	42
16	12	18	285		
16	14	18	315		



***Eccentric Reducer**

Size	Dimensions	Wts	Size	Dimensions	Wts
D	D'	L	D	D'	L
4	3	7	30	18	14
6	3	9	45	18	16
6	4	9	52	20	10
8	4	11	70	20	12
8	6	11	80	20	14
10	4	12	95	20	16
10	6	12	98	20	18
10	8	12	123	24	12
12	4	14	120	24	14
12	6	14	135	24	16
12	8	14	149	24	18
12	10	14	177	24	20
14	6	16	165	30	16
14	8	16	185	30	18
14	10	16	205	30	20
14	12	16	294	30	24
16	6	18	210	36	24
16	8	18	230	36	30
16	10	18	255	42	24
16	12	18	285	42	30
16	14	18	315	42	36
18	8	19	265	48	30
18	10	19	290	48	36
18	12	19	306	48	42

NOTE: Eccentric Reducers not included in AWWA C110

NOTE: Eccentric Reducers Offset
 $\frac{1}{2} D \text{ minus } \frac{1}{2} D' = \text{Offset}$
 Example:
 6x3 Ecc.Reducer
 $3 - 1\frac{1}{2} = 1\frac{1}{2}" \text{ Offset}$